# STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

# THIS CERTIFIES THAT

Clarksdale Public Utilities, Crossroads Energy Center
19th and West Tallahatchie Street
Clarksdale, Mississippi
Coahoma 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: JUL 2 6 2018

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

**Expires:** 

JUN 3 0 2023

Permit No.: 0540-00079

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# **OTHER RELATED DOCUMENTS:**

Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Issued April 19, 2001, Modified February 17, 2006

40 CFR Part 60, Subpart A: General Provisions 40 CFR Part 60, Subpart GG: Standards of Performance for Stationary Gas Turbines

# 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 (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) Reopening's 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).)

1.10 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.)

- 1.20 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 Part 52.21 or under regulations approved pursuant to 40 CFR Part 51.166; or
    - (2) the source is approved to use under any permit issued under 40 CFR Part 52.21 or under regulations approved pursuant to 40 CFR Part 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 Part 52.21 or under regulations approved pursuant to 40 CFR Part Subpart I or 40 CFR Part 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, shutdowns and maintenance.
  - a. Upsets (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.KK.)
    - (1) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:

- (i) an upset occurred and that the permittee can identify the cause(s) of the upset;
- (ii) the source was at the time being properly operated;
- (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
- (iv) the permittee submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and
- (v) the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.
- (2) In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- (3) This provision is in addition to any upset provision contained in any applicable requirement.
- b. Startups and Shutdowns (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.HH. & R. 1.2.CC.)
  - (1) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows:
    - (i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above;
    - (ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or
    - (iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit.
  - (2) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof.
  - (3) In the event this startup and shutdown provision conflicts with another applicable requirement, the more stringent requirement shall apply.

#### c. Maintenance.

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

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

1.26 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	Reference Number	Description
AA-001	MEPCP EP-01	Combustion Turbine 869.1 MMBtu/hr (77 MW), Simple Cycle, Natural Gas-fired with Dry low NO <sub>x</sub> burners
AA-002	MEPCP EP-02	Combustion Turbine 869.1 MMBtu/hr (77 MW), Simple Cycle, Natural Gas-fired with Dry low NO <sub>x</sub> burners
AA-003	MEPCP EP-03	Combustion Turbine 869.1 MMBtu/hr (77 MW), Simple Cycle, Natural Gas-fired with Dry low NO <sub>x</sub> burners
AA-004	MEPCP EP-04	Combustion Turbine 869.1 MMBtu/hr (77 MW), Simple Cycle, Natural Gas-fired with Dry low NO <sub>x</sub> burners
AA-005	EP-05	Fuel Line Heater 6.2 MMBtu/hr Natural Gas-fired

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

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Issued: April 19, 2001 Modified: February 17, 2006 Standards of Performance for Stationary Gas Turbines 40 CFR Part 60, Subpart GG (60.330) General Provisions 40 CFR Part 60, Subpart A	3.B.1	NO <sub>x</sub> SO <sub>2</sub>	General Applicability
		3.B.2	Startup and Shutdown	Operational Requirements
		3.B.3	PM/PM <sub>10</sub>	10 lbs/hr and 43.8 TPY
		3.B.4	$SO_2$	2.4 lbs/hr and 10.3 TPY
	Federally Enforceable Permit to Construct for the Prevention of Significant	3.B.5	NO <sub>x</sub>	35 lbs/hr and 140.2 TPY
	Deterioration Issued: April 19, 2001	3.B.6	СО	58 lbs/hr and 232.1 TPY
	Modified: <u>February 17, 2006</u>	3.B.7	VOC	1.8 lbs/hr and 7.9 TPY
AA-001		3.B.8	Opacity	10%
AA-002 AA-003		3.B.9	Operating Restriction	Load Requirement
AA-003		3.B.10	Type of Fuel	Shall not fire any fuel other than natural gas.
	40 CFR Part 60, Subpart GG (60.333(b))  Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Issued: April 19, 2001 Modified: February 17, 2006	3.B.11	Fuel Sulfur Content	Burn only fuel that contains less than 0.8% by weight sulfur content
	40 CFR Part 72, Permits Regulation 40 CFR Part 73, Sulfur Dioxide Allowance System 40 CFR Part 74, Sulfur Dioxide Opt-Ins 40 CFR Part 75, Continuous Emission Monitoring 40 CFR Part 76, Acid Rain Nitrogen Oxides Emission Reduction Program 40 CFR Part 77, Excess Emissions 40 CFR Part 78, Appeal Procedures	3.B.12	Acid Rain	Subject to the Acid Rain Regulations with the Acid Rain Permit attached in Appendix B.
	CSPAR NO <sub>x</sub> Ozone Season Group 1 Trading Program 40 CFR Part 97, Subpart BBBBB (97.504(a)(1))	3.B.13	NO <sub>x</sub> Ozone	General Applicability

- 3.B.1 For the entire facility, the permittee employs the use of stationary gas turbines with a heat input at peak load greater than 10 MMBtu/hr, and commenced construction after October 3, 1977; therefore, the permittee is subject to and shall comply with all applicable requirements of the Standards of Performance for Stationary Gas Turbines (40 CFR Part 60, Subpart GG) and General Provisions (40 CFR Part 60, Subpart A).
  - The emission rates established in the PSD Permit to Construct and the Title V Permit to Operate were based on the most stringent emission rates calculated from the three regulations, which were driven by the BACT review and National Ambient Air Quality Standard analysis.
  - (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006, and 60.330)
- 3.B.2 For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee shall comply with the following startup or shutdown requirements:
  - a. A startup event begins at the moment the startup sequence is initiated by the facility operator and fuel flow is initiated into the specific combustion turbine and ends at a point not to exceed 10 minutes past the attainment of pre-mix steady-state mode. Initial pre-mix steady state mode will not exceed 60% load.
  - b. For periods of startup, the permittee shall limit the period of each turbine startup to one (1) hour or less.
  - c. A shutdown event begins at the moment the specific combustion turbine reduces load and exits pre-mix steady-state mode (i.e. less than 60% load) during a normal shutdown sequence initiated by the facility operator and ends with the termination of fuel flow to the specific combustion turbine.
  - d. For periods of shutdown, the permittee shall limit the period of each turbine shutdown time to one (1) hour or less.
  - e. The permittee shall not use emission rates during periods of startup or shut down for determining compliance with the 3-hour rolling average emission rates specified above. However, the permittee shall use emission rates during periods of startup or shut down for determining compliance with the long-term annual emission.
  - f. For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee shall operate the combustion turbines in a manner consistent with good air pollution control practices to minimize emissions during startup and shutdowns. This operation shall occur in accordance with the manufacturer's written instructions or other written instructions developed and maintained by the permittee which shall include

- review of the operating parameters of the unit during startup or shutdowns as necessary to make adjustments to reduce or eliminate excess emissions.
- (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 3.B.3 For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee shall be limited to a particulate matter (PM) and/or PM<sub>10</sub> emission rate of 10 lbs/hr and 43.8 tons per year (TPY) or less for each turbine.

  (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 3.B.4 For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee shall be limited to a sulfur dioxide (SO<sub>2</sub>) emission rate of 2.4 lbs/hr and 10.3 TPY or less for each turbine.
  - (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 3.B.5 For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee shall be limited to a nitrogen oxides (NO<sub>x</sub>) emission rate of 9 PPMV at 15% oxygen on a dry basis, not to exceed 35 lbs/hr, both limits are based on a 3-hour rolling average, and 140.2 TPY or less for each turbine.
  - (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 3.B.6 For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee shall be limited to a carbon monoxide (CO) emission rate of 25 PPMV at 15% oxygen on a dry basis, not to exceed 58 lbs/hr, both limits are based on a 3-hour rolling average, and 232.1 TPY or less for each turbine.
  - (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 3.B.7 For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee shall be limited to a volatile organic compound (VOC) emission rate of 1.8 lbs/hr and 7.9 TPY or less for each turbine.
  - (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)

- 3.B.8 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall be limited to an opacity of 10% or less for each turbine.(Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 3.B.9 For Emission Points AA-001, AA-002, AA-003 and AA-004, except for upsets, startups, shutdowns, maintenance, or emergencies, the permittee shall not operate the combustion turbines at less than 60% load. Upsets, startups, shutdowns, and maintenance are defined in Mississippi Air Regulation 11 Miss. Admin. Code Pt. 2, Ch. 1. and emergencies are defined in Mississippi Air Regulation 11 Miss. Admin. Code Pt. 2, Ch. 6. (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 3.B.10 For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee shall not fire any fuel other than natural gas.

  (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 3.B.11 For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee shall burn only fuel that contains less than 0.8 percent by weight fuel sulfur content. (Ref.: 60.333(b) and PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 3.B.12 Emission Points AA-001, AA-002, AA-003 and AA-004 are subject to the Acid Rain Program Regulations as specified in 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78. The permittee must comply with all applicable requirements of said standards as specified in the Acid Rain Permit and attached to this permit in Appendix B. (Ref.: 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78)
- 3.B.13 For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee employs the use of fossil-fuel-fired combustion turbine serving after January 1, 2005 which generates more than 25 MW producing electricity for sale; therefore, the permittee is subject to and shall comply with all applicable requirements of the Cross-State Air Pollution Rule (CSAPR) as set forth in 40 CFR Part 97, Subpart BBBBB 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.: 97.504(a)(1))

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

Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.C.1	PM	0.6 lbs/MMBtu
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	$SO_2$	4.8 lbs/MMBtu

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

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

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

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

# SECTION 4. COMPLIANCE SCHEDULE

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

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

# SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

- A. General Monitoring, Recordkeeping and Reporting Requirements
- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.
- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
  - a. the date, place as defined in the permit, and time of sampling or measurements;
  - b. the date(s) analyses were performed;
  - c. the company or entity that performed the analyses;
  - d. the analytical techniques or methods used;
  - e. the results of such analyses; and
  - f. the operating conditions existing at the time of sampling or measurement.

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

5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

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

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

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

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

  (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(2).)
- 5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the DEQ and the EPA.
- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.

# B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	
		5.B.1	NO <sub>x</sub>	Install, calibrate, maintain and operate	
		J.D.1	СО	Continuous Monitoring Systems	
		5.B.2	$NO_x$	Demonstrate compliance with using	
	Federally Enforceable Permit to Construct for the	J.D.2	СО	Continuous Monitoring Systems.	
	Prevention of Significant Deterioration	Prevention of Significant Deterioration	5.B.3	СО	Demonstrate compliance with using Continuous Monitoring Systems.
AA-001	Issued: <u>April 19, 2001</u> Modified: <u>February 17, 2006</u>	5.B.4	$NO_x$	Monitoring Poguiroment	
AA-002		J.D.4	СО	Monitoring Requirement	
AA-003			5.B.5	$NO_x$	Startup and Shutdown Recordkeeping
AA-004		3.0.3	СО	Requirement	
	40 CFR Part 60, Subpart GG (60.334(h)(3))				
	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Issued: April 19, 2001 Modified: February 17, 2006	5.B.6	Fuel	Monitoring Requirement	

- 5.B.1 For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee shall install, calibrate, maintain and operate continuous monitoring systems for NO<sub>X</sub> (as specified in 40 CFR Part 60.334, Appendix B and 40 CFR Part 75). The monitoring systems must comply with all applicable requirements specified in 60.334, 60.13, and Appendix B of 40 CFR Part 60 and 40 CFR Part 75. In addition, the permittee must comply with the reporting and recordkeeping requirements specified in 40 CFR Part 60.7 and 40 CFR Part 75.
  - (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 5.B.2 For Emission Point AA-001, AA-002, AA-003, and AA-004, the permittee shall demonstrate compliance with NO<sub>x</sub>, and CO emission limitations using CEMS. Demonstrating compliance with NO<sub>X</sub> and CO limits using CEMs data in lieu of EPA Reference Methods is an acceptable practice provided that the permittee meets the guidelines established in EPA's general guidance on "Alternative Testing and Monitoring Procedures for Combustion Turbines Regulated under New Source Performance Standards". This includes use of reference method test data collected during the Relative Accuracy Test Audits (RATA) required under 40 CFR Part 75. (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 5.B.3 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall install, calibrate, maintain and operate continuous monitoring systems for CO (as specified in 40 CFR Part 60, Appendix B and Appendix F). The CGA, RA Audits shall be conducted according to 40 CFR Part 60, Appendix B and F. However, the frequency of the audit shall be as specified in 40 CFR Part 75, Appendix B, Section 2.2. The RATA required under 40 CFR Part 60, Appendix F, shall be at the frequency specified in 40 CFR Part 75, Appendix B, Section 2.3.1 and is as follows:
  - A calendar quarter that does not qualify as QA operating quarter shall be excluded in determining the deadline for the next RATA. No more than eight successive calendar quarters shall elapse after the quarter in which a RATA was last performed without a subsequent RATA having been conducted. If the RATA has not been completed by the end of the eighth calendar quarter since the quarter of the last RATA, then the RATA must be completed within a 720 unit (or stack) operating hour grace period following the end of the eighth successive elapsed calendar quarter. For the diluent monitors RATA may be performed annually (i.e., once every four successive QA operating quarters, rather than once every two successive QA operating quarters.
  - (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 5.B.4 For Emission Points AA-001, AA-002, AA-003 and AA-004, the NO<sub>X</sub>, CO, and O<sub>2</sub> CEM systems shall also be capable of and certified to accurately read/measure NO<sub>X</sub> and CO

concentrations to comply with the TPY limit. The permittee will use this data to calculate the TPY for  $NO_x$  and CO.

(Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)

- 5.B.5 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall demonstrate compliance with Condition 3.B.3 by keeping records of the duration of all startups or shutdowns of the combustion turbines. These records shall include the time and date of such startups and shutdowns and confirmation that good air pollution control practices were followed.
  - (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 5.B.6 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 60.331(u), regardless of whether an existing custom schedule approved by the DEQ for Subpart GG requires such monitoring. The permittee shall use one of the following sources of information to make the required demonstration:
  - a. The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
  - b. Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 of Appendix D to 40 CFR Part 75 required.

Should the permittee no longer hold a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less, the permittee may propose and implement, with 30 days advanced notice, one of the other SO<sub>2</sub> monitoring provisions as approved in the New Source Performance Standards, 40 CFR Part 60.334 without modifying this permit.

(Ref.: 60.334(h)(3) and PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)

# C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Reporting Requirement
AA-001		5.C.1		Notification Requirements
AA-002	PSD Permit to Construct Issued: April 19, 2001	5.C.2	$NO_x$	Semiannual Reporting Requirements
AA-003 AA-004	Modified: <u>February 17, 2006</u>	5.C.3	СО	Startup and shutdown Reporting Requirements

- 5.C.1 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall comply with the reporting requirements listed in 40 CFR Part 60.7, 40 CFR Part 60.330, and 40 CFR Part 75.
  - (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 5.C.2 For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee shall submit, in accordance with Condition 5.A.4, semiannual reports providing the summary of emissions in TPY of NO<sub>x</sub> and CO based on CEM data for each consecutive 365-day rolling total.
  - (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)
- 5.C.3 For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee shall submit startup and shutdown duration information as specified in 40 CFR Part 60.7 and 40 CFR Part 75 in accordance with Condition 5.A.4
  - (Ref.: PSD Permit to Construct Issued April 19, 2001, Modified February 17, 2006)

# SECTION 6. ALTERNATIVE OPERATING SCENARIOS

None permitted.

# SECTION 7. TITLE VI REQUIREMENTS

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

- 7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A Production and Consumption Controls.
- 7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B Servicing of Motor Vehicle Air Conditioners.
- 7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E

   The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:
  - a. All containers in which a class I or class II substance is stored or transported;
  - b. All products containing a class I substance; and
  - c. All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.
- 7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F Recycling and Emissions Reduction:
  - a. Servicing, maintaining, or repairing appliances;
  - b. Disposing of appliances, including small appliances and motor vehicle air conditioners; or
  - c. Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations,

persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

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

# SECTION 8. ACID RAIN REQUIREMENTS

8.1 The permittee shall comply with all requirements of the Acid Rain Permit attached as Appendix B of this permit. All conditions of the Acid Rain Permit are affective for the dates specified in the Acid Rain Permit; however, those conditions may be revised by the DEQ during the permitted period.

# 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 Table. These units are subject to the requirements for the TR NOx Ozone Season Trading Program.

Unit ID: Emission	Unit ID: Emission Points AA-001, AA-002, AA-003, and AA-004							
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 Part 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR Part 75, Subpart E			
$SO_2$								
NO <sub>X</sub>	X							
Heat Input								

- 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 Parts 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 DEQ a monitoring plan for each unit in accordance with 40 CFR Parts 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website at http://www.epa.gov/airmarkets/emissions/monitoringplans.html.
- 9.4 The permittee that wants to use an alternative monitoring system must submit to the DEQ a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR Parts 75.66 and 97.535. The DEQ's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at http://www.epa.gov/airmarkets/ emissions/petitions.html.
- 9.5 The permittee that wants to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR Parts 97.530 through 97.534 must submit to the DEQ a petition requesting approval of the alternative in accordance with 40 CFR Parts 75.66 and 97.535. The DEQ'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 Parts 97.530 through 97.534, and therefore minor permit modification procedures, in accordance with 40 CFR Part 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 NO<sub>x</sub> Ozone Season Trading Program Requirements (40 CFR Part 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 Parts 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 Part 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), 97.533 (notifications concerning monitoring), 97.534 (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).
    - through 97.535 shall be used to calculate allocations of TR NO<sub>X</sub> Ozone Season allowances under 40 CFR Parts 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 Parts 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 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 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 Part 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 permittee 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 Part 97.524(d); and
  - (B) The permittee 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 permittee 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 permittee of such group) TR NO<sub>X</sub> Ozone Season allowances available for deduction for such control period under 40 CFR Part 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the DEQ in accordance with 40 CFR Part 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 NO<sub>X</sub> 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 Part 97.510(a) and the state's variability limit under 40 CFR Part 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  $NO_X$  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<sub>X</sub> 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 Records.
  - (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 Part 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 Part 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  $NO_X$  Ozone Season Trading Program; and
  - (ii) Notwithstanding any other provision of 40 CFR Part 97, Subpart BBBBB, the DEQ has the authority to terminate or limit the use and duration of such authorization to the extent the DEQ 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 Part 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 Part 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 Part 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 DEQ.
    - (i) The certificate of representation under 40 CFR Part 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 Part 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 Part 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  $NO_X$  Ozone Season Trading Program that applies to a TR  $NO_X$  Ozone Season unit or the designated representative of a TR  $NO_X$  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 Part 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

Quality

11 Miss. Admin. Code Pt. 2, Ch. 6. Air Emissions Operating Permit Regulations for the Purposes of

Title V of the Federal Clean Air Act

11 Miss. Admin. Code Pt. 2, Ch. 7. Acid Rain Program Permit Regulations for Purposes of Title IV of

the Federal Clean Air Act

BACT Best Available Control Technology CEM Continuous Emission Monitor

CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

CO Carbon Monoxide

COM Continuous Opacity Monitor

COMS Continuous Opacity Monitoring System

DEQ Mississippi Department of Environmental Quality EPA United States Environmental Protection Agency

gr/dscf Grains Per Dry Standard Cubic Foot

HP Horsepower

HAP Hazardous Air Pollutant lbs/hr Pounds per Hour

M or K Thousand

MACT Maximum Achievable Control Technology

MM Million

MMBTUH Million British Thermal Units per Hour

NA Not Applicable

NAAQS National Ambient Air Quality Standards

NESHAP National Emissions Standards for Hazardous Air Pollutants, 40 CFR 61

or

National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR 63

NMVOC Non-Methane Volatile Organic Compounds

NO<sub>x</sub> Nitrogen Oxides

NSPS New Source Performance Standards, 40 CFR 60

O&M Operation and Maintenance

PM Particulate Matter

PM<sub>10</sub> Particulate Matter less than 10 µm in diameter

ppm Parts per Million

PSD Prevention of Significant Deterioration, 40 CFR 52

SIP State Implementation Plan

SO2Sulfur DioxideTPYTons per YearTRSTotal Reduced Sulfur

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

# APPENDIX B.

# **ACID RAIN PERMIT**

**Issued to:** 

Clarksdale Public Utilities, Crossroads Energy Center

Operated by:

**Clarksdale Public Utilities** 

ORIS code:

55395

**Effective:** 

JUL 2 6 2018

through

JUN 3 0 2023

# **Summary of Previous Actions:**

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

Action	Date
1 Draft permit for public and EPA comment.	November 19, 2001
2 Final permit issued.	January 2, 2002
3 Renewal of Title V and Acid Rain Permit.	February 17, 2006
4 Renewal of Title V and Acid Rain Permit.	December 11, 2011
5 Renewal of Title V and Acid Rain Permit.	JUL 2 6 2018

# **Present Action**

1. Permit renewal.

JUL 2 6 2018

Signature

Date

Krystal Rudolph, PE, Chief

**Environmental Permits Division Mississippi Department of Environmental Quality** 

P.O. Box 2261

Jackson, MS 39225

Telephone: (601)961-5171 Fax: (601)961-5703

# **ACID RAIN PERMIT**

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# **ACID RAIN PERMIT CONTENTS**

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

# 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 Federal 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 VI of the Federal Clean Air Act, Regulation APC-S-7.

# SO<sub>2</sub> ALLOWANCE ALLOCATION AND NO<sub>X</sub> REQUIREMENTS FOR EACH AFFECTED UNIT

		2017	2018	2019	2020	2021
Unit AA-001 (CT-1)	SO <sub>2</sub> allowances, under Tables	NA	NA	NA	NA	NA
Unit AA-002 (CT-2)	2, 3, or 4 of 40 CFR 73					
Unit AA-003 (CT-3)	NO <sub>x</sub> Limit	NA	NA	NA	NA	NA
Unit AA-004 (CT-4)						

#### **COMMENTS, NOTES AND JUSTIFICATION**

All affected units are natural gas fired units; therefore, the affected units are not subject to the NO<sub>x</sub> requirements outlined in 40 CFR 75. Additionally, these are new units that were not listed in 40 CFR Part 73, Tables 2, 3, or 4, and have not been allocated any SO<sub>2</sub> allowances.

# **PERMIT APPLICATION**

(Attached)