

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

**TO OPERATE AIR EMISSIONS EQUIPMENT**

**THIS CERTIFIES THAT**

TVA Ackerman Combined Cycle  
2510 Pensacola Road  
Ackerman, Mississippi  
Choctaw 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:** December 28, 2023

**Effective Date:** As specified herein.

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**



**AUTHORIZED SIGNATURE**

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Expires: November 30, 2028**

**Permit No.: 0400-00019**

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**APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT**

## SECTION 1. GENERAL CONDITIONS

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

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

1.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

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

1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

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

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

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

(1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of 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).)

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

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

- (d) The fee shall be due September 1 of each year. By July 1 of each year, the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the 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.)

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

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

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

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

- 1.10 Any document required by this permit to be submitted to the 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 emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

- (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

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

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

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

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

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

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

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

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

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

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

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

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

- 1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V 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 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I, or 40 CFR 51.166; or
  - (2) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I, or 40 CFR 51.166;
- (e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or
- (f) any change in ownership of the stationary source.

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

- 1.21 Any change in ownership or operational control must be approved by the Permit Board.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)
- 1.22 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B(1).)
- 1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, 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 airfields, 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 in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
- (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:
    - (i) An upset occurred and that the source can identify the cause(s) of the upset;
    - (ii) The source was at the time being properly operated;
    - (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
    - (iv) That within 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 in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
- (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 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.

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

**SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES**

Emission Point	Description
AA-001	2737 MMBTU/hr (HHV) natural gas-fired combined cycle combustion turbine generator (CTG) with dry low NOx burners and a heat recovery steam generator (HRSG) with a supplemental heat input of up to 207 MMBTU/hr. The unit is equipped with a selective catalytic reduction (SCR) unit for control of NOx emissions.
AA-002	2737 MMBTU/hr (HHV) natural gas-fired combined cycle combustion turbine generator (CTG) with dry low NOx burners and a heat recovery steam generator (HRSG) with a supplemental heat input of up to 207 MMBTU/hr. The unit is equipped with a selective catalytic reduction (SCR) unit for control of NOx emissions.
AA-003	265 hp (1.96 MMBTU/hr) diesel fuel-fired emergency fire pump engine (2003 model)
AA-004	12-cell mechanical draft cooling tower
AA-005	5.6 MMBTU/hr natural gas-fired fuel gas heater
AA-006	Natural Gas- or Distillate Fuel-Fired Temporary Boiler (rated up to 20 MMBTU/hr)

**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 Condition 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets.

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

3.A.3 For the entire facility, the permittee shall not cause, permit, or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.

- (a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.
- (b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gasborne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

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

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

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-001 AA-002	11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD	3.B.1		Applicability
		3.B.2	PM/PM <sub>10</sub> SO <sub>2</sub>	Emission Limitations

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
	Construction Permit issued on December 13, 2001, and Modified on May 16, 2003, and September 4, 2009  (PSD BACT Limits)		NO <sub>x</sub> CO VOC Opacity	
		3.B.3	Startup and Shutdown Provisions	The permittee must comply with the short-term lb/hr emission limitations except during periods of startups and shutdowns and with the long-term tons/year emission limitations even during periods of startup and shutdown.
		3.B.4		Control practices including the SCR system
		3.B.5	Fuel	Natural Gas Only
		3.B.6		≤ 0.5 grains of sulfur per 100 dry standard cubic feet.
		3.B.7	Operational Restriction	The heat input from the duct burners shall only be used during periods of the maximum capable combustion turbine output.
40 CFR 72-78, Acid Rain Program Regulations	3.B.8	SO <sub>2</sub> NO <sub>x</sub>	Acid Rain Permit and regulation requirements	
40 CFR 97, Subpart BBBBBB (Cross State Air Pollution Rule NO <sub>x</sub> Ozone Season Group 1 Trading Program) 40 CFR 97.504(a), Subpart BBBBBB	3.B.9 and Section 9	NO <sub>x</sub>	CSAPR Requirements	
40 CFR 63, Subpart YYYY (National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines) 40 CFR 63.6090(b)(4), Subpart YYYY	3.B.10	HAP	Applicability only. No requirements from this standard.	
AA-001 AA-002 AA-006	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.11	PM	$E = 0.8808 \times I^{-0.1667}$
AA-003	40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines) 40 CFR 63.6585, Subpart ZZZZ	3.B.12	HAP	Applicability
	40 CFR 63.6605(b), Subpart ZZZZ	3.B.13		Good Combustion Practices
	40 CFR 63.6640(f)(1), (2), and (4), and 63.6675, Subpart ZZZZ	3.B.14		Emergency Operation

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
	40 CFR 63.6625(e)(3), (f), and (h), 63.6640(a), and Table 2d and 6, Subpart ZZZZ	3.B.15		Operation and Maintenance Requirements
AA-003 AA-005	11 Miss. Admin. Code Pt. 2, R. 1.3.A(1).	3.B.16	PM	≤ 0.6 lb/MMBTU
AA-005 AA-006	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.B.17	SO <sub>2</sub>	≤ 4.8 lb/MMBTU
AA-006	40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) 40 CFR 60.40c, Subpart Dc	3.B.18	PM SO <sub>2</sub>	Applicability
	11 Miss. Admin. Code Pt. 2, R. 2.15C., as established in the TVOP issued September 4, 2009	3.B.19	Fuel Restriction	Limited to Natural Gas or Distillate Oil Only. If using distillate oil, the sulfur content of the distillate oil shall not be greater than 0.05% by weight.
	40 CFR 63, Subpart JJJJJ (National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources) 40 CFR 63.11195(h) and 63.11237, Subpart JJJJJ	3.B.20	PM	Limited to Temporary Boiler Status

3.B.1 For Emission Points AA-001 and AA-002, the associated combustion turbines are subject to the following:

- 40 CFR 60.7 Notification and Recordkeeping Requirements,
- 40 CFR 60.8 Performance Testing Requirements,
- 40 CFR 60 Subpart GG (Stationary Gas Turbines),
- 40 CFR 52.21 Prevention of Significant Deterioration (specifically BACT and National Ambient Air Quality Standard determinations) regulations; and/or
- 11 Miss. Admin. Code Rule 1.3 D(1)(b).

The duct burners associated with Emission Points AA-001, and AA-002, are subject to the following:

- 40 CFR 60.7 Notification and Recordkeeping Requirements,
- 40 CFR 60.8 Performance Testing Requirements,
- 40 CFR 60 Subpart Db (Standards of Performance for Electric Utility Steam Generating Units)
- 40 CFR 52.21 Prevention of Significant Deterioration (specifically BACT and National Ambient Air Quality Standard determinations) regulations; and/or

- 11 Miss. Admin. Code Rule 1.3 D(1)(b).

The emission rates established in the PSD Permit to Construct and the original Title V Permit to Operate were based on the most stringent emission rates calculated from these regulations, which were driven by the BACT review and National Ambient Air Quality Standard analysis and resulting control equipment selection.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Construction Permit issued on December 13, 2001, and modified May 16, 2003, and September 4, 2009)

- 3.B.2 For Emission Points AA-001 and AA-002, the permittee is subject to and shall comply with the emission limitations specified below:

PM/PM10 (Filterable Only)	31.1 lb/hr and 136.2 tons/year (12-month rolling total), as determined by EPA Reference Methods 1-5, 40 CFR 60, Appendix A and EPA Reference Methods 201/ 201A in conjunction with Reference Method 202, 40 CFR 51, Appendix M.
Sulfur Dioxide	4.1 lb/ hr and 18.1 tons/year (12-month rolling total) as determined by EPA reference method 6C, 40 CFR 60, Appendix A, or an EPA approved fuel sampling and analysis program.
Nitrogen Oxides	3.5 ppmv @ 15% oxygen on a dry basis, not to exceed 37.8 lb/hr, both limits are based on a 24-hr operating rolling average, and 148.1 tons/year (12-month rolling total) as determined by EPA Reference Method 20, 40 CFR 60, Appendix A.
Carbon Monoxide	22.3 ppmv @ 15% oxygen on a dry basis, not to exceed 142.6 lb/hr, both limits are based on a 24-hr operating rolling average, and 564.2 tons/year (12-month rolling total) as determined by EPA Reference Method 10, 40 CFR 60, Appendix A.
Volatile Organic Compounds	4.0 ppmv @ 15% oxygen on a dry basis, not to exceed 13.5 lb/hr, both limits are based on a 3-hr block average, and 59.1 tons/year (12-month rolling total) as determined by EPA Reference Method 25A/18, 40 CFR 60, Appendix A.
Opacity	10% as determined by EPA Reference Method 9, 40 CFR 60, Appendix A.



(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Construction Permit issued on December 13, 2001, and modified on May 16, 2003, and September 4, 2009)

- 3.B.3 For Emission Points AA-001 and AA-002, the permittee shall comply with the emission limitations (lb/hr) and monitoring requirements specified in this permit, except during periods of startups and shutdowns. However, the permittee shall include emissions from startups and shutdowns when meeting the tons/year emission limits.

Turbine Startup is defined as that period of time from initiation of firing until the unit reaches  $\geq 70\%$  of normalized load for 15 minutes. Turbine Shutdown is defined as that period of time when "Normal Stop" is initiated or the load is  $<50\%$  until cessation of combustion turbine firing.

For periods of startup, the permittee shall limit the total startup time to eight (8) hours or less per occurrence. For periods of shutdown, the permittee shall limit the total shutdown time to three (3) hours or less per occurrence.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Construction Permit issued on December 13, 2001, and modified on May 16, 2003, and September 4, 2009)

- 3.B.4 For Emission Points AA-001 and AA-002, the permittee shall operate equipment in a manner consistent with good air pollution control practices to minimize emissions during startups, and shutdowns including:

- (a) Operation in accordance with the manufacturer's written instructions or other written instructions developed and maintained by the permittee, which shall include at a minimum the following measures:
  - (1) Review of operating parameters of the unit during startups or shutdowns as necessary to make adjustments to reduce or eliminate excess emissions;
  - (2) Operation of the SCR system as soon as and as long as the unit operating conditions are amenable to its effective use.
- (b) Maintenance of the SCR systems in accordance with written procedures developed and maintained by the permittee, these procedures shall be reviewed at least annually.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Construction Permit issued on December 13, 2001, and modified on May 16, 2003, and September 4, 2009)

- 3.B.5 For Emission Points AA-001 and AA-002, the permittee shall not fire any fuel other than natural gas.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Construction Permit issued on December 13, 2001, and modified on May 16, 2003, and September 4, 2009)

- 3.B.6 For Emission Points AA-001 and AA-002, the permittee shall not burn any fuel that contains sulfur in excess of 0.5 grains per 100 dry standard cubic feet.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Construction Permit issued on December 13, 2001, and modified on May 16, 2003, and September 4, 2009)

- 3.B.7 For Emission Points AA-001 and AA-002, the permittee shall use the heat input from duct burners only during periods of the maximum capable combustion turbine output.

(Ref.: PSD Construction Permit issued on December 13, 2001, and modified on May 16, 2003, and September 4, 2009)

- 3.B.8 For Emission Points AA-001 and AA-002, the permittee is subject to and shall comply with the Acid Rain Program Regulations as specified in 40 CFR 72-78, and the permittee shall comply with all applicable requirements of said standards. The permittee shall comply with the applicable requirements as specified in the Acid Rain Permit in Appendix B of this permit.

(Ref.: 40 CFR 72-78)

- 3.B.9 For Emission Points AA-001 and AA-002, the permittee is subject to and shall comply with the applicable requirements of the Cross-State Air Pollution Rule (CSAPR) as set forth in 40 CFR 97, Subpart BBBBBB – Transport Rule (TR) NO<sub>x</sub> Ozone Season Trading Program. The permittee shall 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 for additional requirements.

(Ref.: 40 CFR 97.506(c)(3)(i), Subpart BBBBBB)

- 3.B.10 For Emission Points AA-001 and AA-002, the permittee is subject to the National Emission Standards for Hazardous Air Pollutants specified in 40 CFR 63, Subpart YYYY (Stationary Combustion Turbines). This unit is an existing stationary combustion turbine and is not required to meet the requirements of this standard or General Provisions, 40 CFR 63, Subpart A.

(Ref.: 40 CFR 63.6090(b)(4), Subpart YYYY)

- 3.B.11 For Emission Points AA-001, AA-002, and AA-006, except as otherwise specified or limited herein, the permittee shall not exceed the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations greater than 10 million BTU per hour heat input an emission rate as determined by the relationship:

$$E=0.8808 \times I^{-0.1667}$$

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.12 For Emission Point AA-003, the permittee is subject to and shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants specified in 40 CFR 63, Subpart ZZZZ (Reciprocating Internal Combustion Engines), and in 40 CFR 63, Subpart A (General Provisions).

(Ref.: 40 CFR 63.6585, Subpart ZZZZ)

3.B.13 For Emission Point AA-003, the permittee shall, at all times, operate and maintain the source, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

(Ref.: 40 CFR 63.6605(b), Subpart ZZZZ)

3.B.14 For Emission Point AA-003, the permittee shall operate the emergency stationary RICE according to the requirements below. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year is prohibited. If the permittee does not operate the engine according to the requirements below, the engine will not be considered an emergency engine and will need to meet all requirements for non-emergency engines.

(a) There is no limit on the use of emergency stationary RICE in emergency situations.

(b) The permittee may operate the emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per calendar year. The permittee may petition the MDEQ for approval of additional hours for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicated that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours a year.

(c) The permittee may operate the emergency stationary RICE up to 50 hours per year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year for maintenance and testing provided in paragraph (b). Except as provided in 63.6640(f)(4)(i) and (ii), 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 the facility to an electric grid or otherwise supply power as a part of a financial arrangement with another entity.

(Ref.: 40 CFR 6640(f)(1), (2), and (4), Subpart ZZZZ)

3.B.15 For Emission Point AA-003, the permittee shall comply with the following requirements:

(a) Operate and maintain the engine according to the manufacturer's emission-related written instructions or develop and follow a maintenance plan which provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution practice for minimizing emissions.

(b) Install and maintain a non-resettable hour meter on the engine.

(c) The permittee shall 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)(3), (f), and (h), 63.6640(a), and Tables 2d and 6, Subpart ZZZZ)

- 3.B.16 For Emission Points AA-003 and AA-005, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A(1).)
- 3.B.17 For Emission Points AA-005 and AA-006, 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.B.18 For Emission Point AA-006, any temporary boiler brought onsite and has a maximum design heat input capacity of 10 MMBTU/hr or greater but less than 20 MMBTU/hr, the permittee is subject to and shall comply with all applicable requirements of the New Source Performance Standards specified in 40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), and in 40 CFR 60, Subpart A (General Provisions).  
(Ref.: 40 CFR 60.40c, Subpart Dc)
- 3.B.19 For Emission Point AA-006, the permittee shall not fire any fuel other than natural gas or distillate fuel with a sulfur content not to exceed 0.05% by weight. The fuel oil sulfur limits apply at all times, including periods of startup, shutdown, and malfunction.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15C., as established in the TVOP originally issued September 4, 2009)
- 3.B.20 For Emission Point AA-006, the boiler shall meet the definition of a temporary boiler as defined in 40 CFR 63.11237. As such, the boiler is exempt from the requirements of 40 CFR 63, Subpart JJJJJ.  
(Ref.: 40 CFR 63.11195(h) and 40 CFR 63.11237, Subpart JJJJJ)

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

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 lb/MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	SO <sub>2</sub>	≤ 4.8 lb/MMBTU

- 3.C.1 The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).)
- 3.C.2 The maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.

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

D. Work Practice Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-003	40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines)  40 CFR 63.6625(i) and Table 2d(4), Subpart ZZZZ	3.D.1	HAP	Maintenance Requirements

3.D.1 For Emission Point AA-003, the permittee shall comply with the following requirements:

- (a) Change the 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 in accordance with 63.6625(i).
- (b) Inspect air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary.
- (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

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

(Ref.: 40 CFR 63.6625(i) and Table 2d, Subpart ZZZZ)

#### 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. If the permit was reissued or modified during the course of the preceding calendar year, the compliance certification shall address each version of the permit. Each compliance certification shall include the following:
- (a) the identification of each term or condition of the permit that is the basis of the certification;
  - (b) the compliance status;
  - (c) whether compliance was continuous or intermittent;
  - (d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
  - (e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit.

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

## SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

### A. General Monitoring, Recordkeeping and Reporting Requirements

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

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

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

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

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

5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. 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. For applicable periodic reporting requirements in 40 CFR Parts 60, 61, and 63, the permittee shall comply with the deadlines in this condition for reporting conducted on a semiannual basis. Additionally, any required quarterly reports shall be submitted by the end of the month following each calendar quarter (i.e., April 30th, July 31st, October 31st, and January 31st), and any required annual reports shall be submitted by January 31st following each calendar year.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1), 40 CFR 60.19(c), 61.10(g), and 63.10(a)(5))

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) working days of the time the deviation began.

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

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

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

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

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

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

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

**B. Specific Monitoring and Recordkeeping Requirements**

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-001 AA-002	40 CFR 60, Subpart GG (Standards of Performance for Stationary Gas Turbines) 40 CFR 60.330, Subpart GG	5.B.1	NO <sub>x</sub> SO <sub>2</sub>	Monitoring, Recordkeeping, and Testing
	11 Miss. Admin. Code Pt. 2, R. 6.3(3)..40 CFR 60.334(h)(3), Subpart GG	5.B.2	Fuel	
	11 Miss. Admin. Code Pt. 2, R. 6.3(3)..	5.B.3	SO <sub>2</sub>	
	11 Miss. Admin. Code Pt. 2, R. 6.3(3)..40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) 40. CFR 60.48b and 60.49b, Subpart Db	5.B.4	PM NO <sub>x</sub>	
	40 CFR 75, Continuous Emission Monitoring	5.B.5	NO <sub>x</sub> CO O <sub>2</sub>	Continuous Emissions Monitoring
	11 Miss. Admin. Code Pt. 2, R. 6.3(3).40 CFR 60.334, Subpart GG	5.B.6		
	40 CFR Subpart 75	5.B.7		
	11 Miss. Admin. Code	5.B.8		



Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
	Pt. 2, R. 6.3(3).	5.B.9	Startups and Shutdowns	Monitor and Record Startups, Shutdowns, and Upsets
	11 Miss. Admin. Code Pt. 2, R. 6.3(3)(a)(2).	5.B.10	Turbine Output	Monitor and Record Turbine Output when using Duct Burners
	40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines) 40 CFR 63.6625(i) and 63.6655(a), (d), (e)(2), and (f)(2), Subpart ZZZZ	5.B.11	Maintenance, Malfunction, and Operation	General Recordkeeping
	40 CFR 63.6660, Subpart ZZZZ	5.B.12	Records	Record Retention
AA-006	40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) 40 CFR 60.48c(g)(2), Subpart Dc 11 Miss. Admin. Code Pt. 2, R. 6.3(3).	5.B.13	Fuel Monitoring	Monitor the Fuel Combusted on a Monthly Basis
	40 CFR 60.48c(e) and (f), Subpart Dc 11 Miss. Admin. Code Pt. 2, R. 6.3(3).	5.B.14	Sulfur Monitoring	Maintain Fuel Supplier Certifications for Sulfur Content

5.B.1 For Emission Points AA-001 and AA-002, the permittee is subject to and shall comply with the monitoring and testing requirements listed in 40 CFR 60.334 and 60.335, Subpart GG. (Ref.: 40 CFR 60, Subpart GG)

5.B.2 For Emission Points AA-001 and AA-002, the permittee shall monitor, record, and maintain the fuel combusted each day and the sulfur content of the fuel being fired. The permittee shall monitor the total sulfur content of the gaseous fuel combusted, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u). 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 part 75 of this chapter is required.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3(3).., and 40 CFR 60.334, Subpart GG)

- 5.B.3 For Emission Points AA-001 and AA-002, 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, one of the other SO<sub>2</sub> monitoring provisions as approved in the New Source Performance Standards, 40 CFR 60.334, by submitting an application for a minor modification as specified in Mississippi Air Regulation 11 Miss. Admin. Code Pt. 2, R. 6.4.E(1).

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

- 5.B.4 For the Duct Burners associated with Emission Points AA-001 and AA-002, the permittee is subject to and shall comply with the monitoring and recordkeeping requirements listed in 40 CFR 60.48b and 60.49b, Subpart Db, or an alternate monitoring method approved by EPA.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3(3).., and 40 CFR 60.48b and 60.49b, Subpart Db)

- 5.B.5 For Emission Points AA-001 and AA-002, the permittee shall monitor and record emissions (e.g., CEMS) in accordance with 40 CFR 75 (e.g., Parts 75.10-18, 20-57, etc.) for each affected unit. The permittee shall maintain a file on site of all measurements, data, reports, and other information required in 40 CFR 75.57 for each affected unit for a period of three (3) years.

(Ref.: 40 CFR 75)

- 5.B.6 For Emission Points AA-001 and AA-002, the permittee shall install, calibrate, maintain, and operate a continuous monitoring system for NO<sub>x</sub> (as specified in 40 CFR 60.334, Appendix B of 40 CFR 60, and 40 CFR 75). The permittee shall also install an O<sub>2</sub> diluent gas monitor. The monitoring systems shall comply with all applicable requirements specified in 40 CFR 60.334, 60.13, Appendix B of 40 CFR 60, and 40 CFR 75. In addition, the permittee must comply with the reporting and recordkeeping requirements specified in 40 CFR 60.7 and 40 CFR 75.

The permittee shall also install, calibrate, maintain, and operate a continuous monitoring system for CO (as specified in 40 CFR 60, Appendix B and Appendix F). The cylinder gas audit (CGA) and RA Assessment shall be conducted according to 40 CFR 60, Appendix B and F. However, the frequency of the audit shall be as specified in 40 CFR 75, Appendix B, Section 2.2. The RATA required under 40 CFR 60, Appendix F, shall be at the frequency specified in 40 CFR 75, Appendix B, Section 2.3.1.

In addition, the permittee shall comply with the reporting and recordkeeping requirements specified in 40 CFR 60 and 40 CFR 75. Since the permittee has installed a CEMS to meet the requirements of 40 CFR 75, the CEMS shall be used to meet the requirements of Part 60, except that the missing data substitution methodology provided for in 40 CFR 75, Subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data shall be reported as monitor downtime in the excess emissions and monitoring performance report required in 40 CFR 60.7(c).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3(3).., 40 CFR 60.334, Subpart GG, and 40 CFR 75)

- 5.B.7 For Emission Points AA-001 and AA-002, the permittee shall demonstrate compliance with

nitrogen oxides and carbon monoxide emission limitations by using a 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 75.

(Ref.: Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3(3), 40 CFR 60.334, Subpart GG, and 40 CFR 75)

- 5.B.8 For Emission Points AA-001 and AA-002, these NO<sub>x</sub>, CO, and O<sub>2</sub> CEM systems shall be capable of and certified to accurately read/measure NO<sub>x</sub> and CO concentrations to comply with the tons per year limit (on a 365-day rolling total). The permittee shall maintain the CEM systems in accordance with the requirements of 40 CFR 60, Subpart A (General Provisions), and 40 CFR 60, Subpart GG.

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

- 5.B.9 For Emission Points AA-001 and AA-002, a record of all startups or shutdowns of the associated combustion turbines, duct burners, and SCR systems shall be kept and retained for a period of three (3) years and shall be made available to the Mississippi Department of Environmental Quality Office of Pollution Control, the Mississippi Environmental Quality Permit Board and/or their authorized representatives upon request. Such records shall include the time and date of such startups and shutdowns and confirmation that good air pollution control practices were followed.

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

- 5.B.10 For Emission Points AA-001 and AA-002, the permittee shall monitor and record the turbine output (MW) when the duct burners are in use. The records shall be maintained in log form and available for inspection upon request by the Office of Pollution Control.

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

- 5.B.11 For Emission Point AA-003, the permittee shall keep the following records:

- (a) A copy of each report submitted to comply with Subpart ZZZZ.
- (b) Documentation of each occurrence and the duration of malfunctions of process equipment and the actions taken to minimize emissions during the malfunction, including corrective actions to restore the equipment to normal operation.
- (c) Documentation of the maintenance conducted on the engine in order to demonstrate that the engine is being operated and maintained according to the manufacturer's emission-related operation and maintenance instructions of your own maintenance plan.
- (d) If using an oil analysis program, documentation of the parameters that were analyzed, the results of the analysis, and the oil changes for the engine.
- (e) Documentation of the hours of operation of the engine that is recorded through the non-resettable hour meter. The records must indicate how many hours are spent in emergency operation, including what classified the operation as emergency, and how

many hours are spent in non-emergency operation and the type of non-emergency operation.

(Ref.: 40 CFR 63.6625(i) and 63.6655(a), (d), (e)(2), and (f)(2), Subpart ZZZZ)

5.B.12 For Emission Point AA-003, the permittee shall keep records in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). The permittee shall keep readily accessible records in hard copy or electronic form for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1).

(Ref.: 40 CFR 63.6660, Subpart ZZZZ)

5.B.13 For Emission Point AA-006, upon bringing a temporary boiler onsite, the permittee shall record and maintain records of the amount of each fuel combusted during each calendar month.

(Ref.: 40 CFR 60.48c(g)(2) and 11 Miss. Admin. Code Pt. 2, R. 6.3(3).)

5.B.14 For Emission Point AA-006, upon bringing a temporary boiler onsite, the permittee shall demonstrate compliance with the fuel sulfur limitations by maintaining fuel supplier certifications (as specified in 40 CFR 60.48c). Fuel supplier certification is required for the unit, irrespective of whether the unit being brought on-site is subject to NSPS Subpart Dc or not. The permittee shall record and maintain records of fuel supplier certifications for a period of five years.

(Ref.: 40 CFR 60.48c(e) and (f), Subpart Dc, and 11 Miss. Admin. Code Pt. 2, R. 6.3(3))

C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Reporting Requirement
AA-001 AA-002	40 CFR 60, Subpart Db (Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units) 40 CFR 60.49b, Subpart Db 40 CFR 60, Subpart GG (Standards of Performance for Stationary Gas Turbines) 40 CFR 60.334, Subpart GG 40 CFR Part 75, Continuous Emission Monitoring	5.C.1	NOx SO <sub>2</sub> PM	Comply with the reporting requirements listed in 40 CFR 60.7 and 60.8, Subpart A; 40 CFR 60, Subpart Db; 40 CFR 60, Subpart GG; and 40 CFR 75
	11 Miss. Admin. Code Pt. 2, R. 6.3(3)(c).	5.C.2	PM VOC	Submittal of Stack Test

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Reporting Requirement
	11 Miss. Admin. Code Pt. 2, R. 6.3(3)(c).	5.C.3	NO <sub>x</sub> CO	Semi-annual Report
	40 CFR 60, Subpart A (General Provisions) 40 CFR 60.7, Subpart A 40 CFR 75, Continuous Emission Monitoring	5.C.4	Startups and Shutdowns	Semi-annual Report
AA-003	11 Miss. Admin. Code Pt. 2, R. 6.3(3)(c).	5.C.5	Hours of Operation	Semi-annual Report
	40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines) 40 CFR 63.6640(b), Subpart ZZZZ	5.C.6	Maintenance Deviations	Notification of deviations
AA-006	11 Miss. Admin. Code Pt. 2, R. 6.3(3)(c).	5.C.7	Notification of use	Notification of bringing a temporary boiler onsite and removal
	40 CFR 60, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units) 40 CFR 60.48c(f)(1) and (4), Subpart Dc 11 Miss. Admin. Code Pt. 2, R. 6.3(3)(c).	5.C.8	Fuel Supplier Certifications	Submit a report of fuel supplier certifications in accordance with 40 CFR 60, Subpart Dc for both NSPS units and non-NSPS units

5.C.1 For Emission Points AA-001 and AA-002, the permittee shall comply with the reporting requirements listed in 40 CFR 60.7, Subpart A; 40 CFR 60.330, Subpart GG; 40 CFR 60.49b, Subpart Db; and 40 CFR 75.

(Ref.: 40 CFR 60.49b, Subpart Db; 40 CFR 60.334, Subpart GG; and 40 CFR 75)

5.C.2 For Emission Points AA-001 and AA-002, the required stack test reports shall be submitted no later than sixty (60) days from the date testing was completed.

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

5.C.3 For Emission Points AA-001 and AA-002, the permittee shall submit, in accordance with the provision 5.A.4, semiannual reports providing the summary of emissions in tons/year of NO<sub>x</sub> and CO based on CEM data for each consecutive 12-month rolling total.

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

5.C.4 For Emission Points AA-001 and AA-002, the permittee shall submit semi-annual reports in

accordance with Condition 5.A.4 that include the startup and shutdown duration information as specified in 40 CFR 60.7, 40 CFR 75 and Condition 5.B.9.

(Ref.: 40 CFR 60.7, Subpart A, 40 CFR 75 and 11 Miss. Admin. Code Pt. 2, R. 6.3(3)(c).)

- 5.C.5 For Emission Points AA-003, the permittee shall submit semi-annual reports in accordance with Condition 5.A.4 of the records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter.

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

- 5.C.6 For Emission Point AA-003, the permittee shall report each instance in which the maintenance practices are not completed in a timely manner. Such instances are considered deviations and should be reported in accordance with Condition 5.A.5 of this permit. If the maintenance practice was not performed on the required schedule because it posed an unacceptable risk under Federal, State, or local law at the time of the required schedule maintenance, the report must include the Federal, State, or local law under which the risk was deemed unacceptable.

(Ref.: 40 CFR 63.6640(b), Subpart ZZZZ)

- 5.C.7 For Emission Point AA-006, the permittee shall provide written notification to the Department within fifteen (15) days of bringing a temporary boiler onsite. The notification shall include but is not limited to the following information:

- (a) the maximum rated heat input capacity of the boiler;
- (b) the anticipated date of startup;
- (c) the date of construction, reconstruction, or modification of the boiler;
- (d) the fuel(s) to be used in the boiler
- (e) applicability of NSPS Subpart Dc and if triggered, the initial notification as required by 40 CFR 60.48c(a)

The permittee shall also provide written notification to the Department within 30 days after the boiler has been taken out of service and/or removed from the site. The notification should include the total number of days the temporary boiler was located on site prior to removal.

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

- 5.C.8 For Emission Point AA-006, the permittee shall comply with all the recordkeeping and reporting requirements for distillate oil-fired and natural gas fired units contained in 40 CFR 60.48c for both NSPS Subpart Dc subject units and non-NSPS Subpart Dc units. The reports shall include the calendar dates covered in the reporting period (i.e. each six-month period) and records of fuel supplier certifications. A fuel supplier certification shall include the following information:

- (a) For distillate oil:
  - (i) The name of the oil supplier;
  - (ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and

- (iii) The sulfur content of the oil.
- (b) For natural gas:
- (i) The name of the supplier of the fuel;
  - (ii) The potential sulfur emissions rate of the fuel in ng/J heat input;
  - (iii) The method used to determine the potential sulfur emissions rate of the fuel.

In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the permittee that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(Ref.: 40 CFR 60.48c(f)(1) and (4), Subpart Dc, and 11 Miss. Admin. Code Pt. 2, R. 6.3(3)(c).)

## SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 None permitted.



## SECTION 7. TITLE VI REQUIREMENTS

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

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

the acceptable alternative substance.

- 7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H – Halon Emissions Reduction:
- (a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;
  - (b) Any person disposing of halons;
  - (c) Manufacturers of halon blends; or
  - (d) Organizations that employ technicians who service halon-containing equipment.

**SECTION 8.**

The permittee shall comply with all requirements of the Phase II Acid Rain Permit attached as Appendix B of this permit. All conditions of the Phase II Acid Rain Permit are effective until November 30, 2028; however, these conditions may be revised by MDEQ during the permitted period.

SECTION 9.

9.1 Description of Cross-State Air Pollution Rule (CSAPR) Monitoring Provisions

The CSAPR 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 CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program.

Unit ID: Emission Points AA-001, AA-002, AA-003, and AA-004					
Parameter	CEMS requirements pursuant to 40 CFR part 75, subpart B (for SO <sub>2</sub> monitoring) and 40 CFR part 75, subpart H (for NO <sub>x</sub> 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 alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
SO <sub>2</sub>					
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 97.830 through 97.835. The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR 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 <https://www.epa.gov/airmarkets/monitoring-plans-part-75-sources>.

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 97.835. The Administrator’s response approving or disapproving any petition for an alternative monitoring system is available on the EPA’s website at <https://www.epa.gov/airmarkets/part-75-petition-responses>.

9.5 The permittee that wants to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.830 through 97.834 must submit to the

Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.835. 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 <https://www.epa.gov/airmarkets/part-75-petition-responses>.

- 9.6 The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.830 through 97.834, 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 CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program Requirements (40 CFR 97.806)
- (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 97.813 through 97.818.
  - (b) Emissions monitoring, reporting, and recordkeeping requirements.
    - (1) The permittee, and the designated representative, of each CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.830 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.831 (initial monitoring system certification and recertification procedures), 97.832 (monitoring system out-of-control periods), 97.833 (notifications concerning monitoring), 97.834 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
    - (2) The emissions data determined in accordance with 40 CFR 97.830 through 97.835 shall be used to calculate allocations of CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances under 40 CFR 97.811(a)(2) and (b) and 97.812 and to determine compliance with the CSAPR NO<sub>x</sub> Ozone Season Group 2 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 97.830 through 97.835 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) CSAPR NO<sub>x</sub> Ozone Season Group 2 emissions limitation.

- (i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.824(a) in an amount not less than the tons of total NO<sub>x</sub> emissions for such control period from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at the source.
  - (ii) If total NO<sub>x</sub> emissions during a control period in a given year from the CSAPR NO<sub>x</sub> Ozone Season Group 2 units at a CSAPR NO<sub>x</sub> Ozone Season Group 2 source are in excess of the CSAPR NO<sub>x</sub> Ozone Season Group 2 emissions limitation set forth in paragraph (c)(1)(i) above, then:
    - (A) The owners and operators of the source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall hold the CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances required for deduction under 40 CFR 97.824(d); and
    - (B) The owners and operators of the source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 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 EEEEE and the Clean Air Act.
- (2) CSAPR NO<sub>x</sub> Ozone Season Group 2 assurance provisions.
- (i) If total NO<sub>x</sub> emissions during a control period in a given year from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 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) CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.825(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 97.825(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 CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 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 CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances required under paragraph (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 CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 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 Group 2 trading budget under 40 CFR 97.810(a) and the state's variability limit under 40 CFR 97.810(b).
- (iv) It shall not be a violation of 40 CFR part 97, subpart EEEEE or of the Clean Air Act if total NO<sub>x</sub> emissions from all CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 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 CSAPR NO<sub>x</sub> Ozone Season Group 2 units at CSAPR NO<sub>x</sub> Ozone Season Group 2 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 CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs (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 CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance that the permittee fails to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart EEEEE and the Clean Air Act.
- (3) Compliance periods.
- (i) A CSAPR NO<sub>x</sub> Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1) 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 97.830(b) and for each control period thereafter.
  - (ii) A base CSAPR NO<sub>x</sub> Ozone Season Group 2 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 97.830(b) and for each control period thereafter.
- (4) Vintage of allowances held for compliance.
- (i) A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
  - (ii) A CSAPR NO<sub>x</sub> Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NO<sub>x</sub> Ozone Season Group 2 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 CSAPR NO<sub>x</sub> Ozone Season Group 2 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 EEEEE.
- (6) Limited authorization. A CSAPR NO<sub>x</sub> Ozone Season Group 2 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 CSAPR



NO<sub>x</sub> Ozone Season Group 2 Trading Program; and

- (ii) Notwithstanding any other provision of 40 CFR part 97, subpart EEEEE, 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 CSAPR NO<sub>x</sub> Ozone Season Group 2 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 CSAPR NO<sub>x</sub> Ozone Season Group 2 allowances in accordance with 40 CFR part 97, subpart EEEEE.
  - (2) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.830 through 97.835, 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 CSAPR 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 97.806(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 CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 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 97.816 for the designated representative for the source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 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 97.816 changing the designated representative.

- (ii) All emissions monitoring information, in accordance with 40 CFR part 97, subpart EEEEE.
    - (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 CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program.
  - (2) The designated representative of a CSAPR NO<sub>x</sub> Ozone Season Group 2 source and each CSAPR NO<sub>x</sub> Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program, except as provided in 40 CFR 97.818. 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 CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program that applies to a CSAPR NO<sub>x</sub> Ozone Season Group 2 source or the designated representative of a CSAPR NO<sub>x</sub> Ozone Season Group 2 source shall also apply to the permittee of such source and of the CSAPR NO<sub>x</sub> Ozone Season Group 2 units at the source.
  - (2) Any provision of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program that applies to a CSAPR NO<sub>x</sub> Ozone Season Group 2 unit or the designated representative of a CSAPR NO<sub>x</sub> Ozone Season Group 2 unit shall also apply to the permittee of such unit.
- (g) Effect on other authorities - No provision of the CSAPR NO<sub>x</sub> Ozone Season Group 2 Trading Program or exemption under 40 CFR 97.805 shall be construed as exempting or excluding the permittee, and the designated representative, of a CSAPR NO<sub>x</sub> Ozone Season Group 2 source or CSAPR NO<sub>x</sub> Ozone Season Group 2 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

BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
lb/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards for Hazardous Air Pollutants, 40 CFR 61, or National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR 63
NMVOG	Non-Methane Volatile Organic Compounds
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM <sub>10</sub>	Particulate Matter less than 10 µm in diameter
PM <sub>2.5</sub>	Particulate Matter less than 2.5 µm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOHAP	Volatile Organic Hazardous Air Pollutant
VOC	Volatile Organic Compound

**APPENDIX B**  
**PHASE II ACID RAIN PERMIT**

**Issued to:** TVA Ackerman Combined Cycle  
**Operated by:** TVA Ackerman Combined Cycle  
**ORIS code:** 55694  
**Effective** December 28, 2023 through November 30, 2028

**Summary of Previous Actions:**

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

- |  |                   |
|--|-------------------|
| 1) Draft permit for public and EPA comment.      | November 3, 2000  |
| 2) Permit finalized and issued                   | December 28, 2000 |
| 3) Permit transfer                               | October 11, 2004  |
| 4) Draft permit for public comment               | October 18, 2006  |
| 5) Draft permit for EPA review                   | November 18, 2006 |
| 6) Renewal permit issued                         | January 11, 2007  |
| 7) Permit modification for public and EPA review | November 15, 2011 |
| 8) Acid rain permit renewal                      | January 3, 2012   |
| 9) Acid rain permit transferred                  | February 15, 2012 |
| 10) Acid rain permit renewal                     | June 4, 2018      |

**Present Action:**

- |                             |                          |
|-----------------------------|--------------------------|
| 1) Acid rain permit renewal | <u>December 28, 2023</u> |
|-----------------------------|--------------------------|



Signature



Date

**Chris Sander, P.E.**  
**Office Head, Office of Pollution Control**  
**Mississippi Department of Environmental Quality**  
**P.O. Box 10385**  
**Jackson, MS 39289-0385**  
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# PHASE II ACID RAIN PERMIT

**Issued to:** TVA Ackerman Combined Cycle  
**Operated by:** TVA Ackerman Combined Cycle  
**ORIS code:** 55694  
**Effective** December 28, 2023 through November 30, 2028

**ACID RAIN PERMIT CONTENTS:**

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

**1) STATEMENT OF BASIS:**

**Statutory and Regulatory Authorities:** In accordance with the Mississippi Air and Water Pollution Control Law, specifically Miss. Code Ann. 49-17-1 through 49-17-43, and any subsequent amendments, and Titles IV and V of the Clean Air Act, the Mississippi Department of Environmental Quality issues this permit pursuant to the 11 Miss Admin. Code Pt. 2 Ch. 6 Air Emission Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act, and 11 Miss. Admin. Code Pt. 2 Ch. 7 Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act.

**2) SO<sub>2</sub> ALLOWANCE ALLOCATIONS AND NO<sub>x</sub> REQUIREMENTS FOR EACH AFFECTED UNIT:**

		2015	2016	2017	2018	2019
AA-001 AA-002	SO <sub>2</sub> allowances, under Tables 2, 3, or 4 of 40 CFR Part 73.	NA	NA	NA	NA	NA
	NO <sub>x</sub> limit	NA	NA	NA	NA	NA

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

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 Part 76. 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.

**4) PHASE II PERMIT APPLICATION: Attached**