

STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Cooperative Energy, a Mississippi electric cooperative, Sylvarena Generating Plant
3012 Smith County Road 97
Raleigh, Mississippi
Smith 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: _____

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

**AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Expires: _____

Permit No.: 2500-00048

TABLE OF CONTENTS

SECTION 1.	GENERAL CONDITIONS	2
SECTION 2.	EMISSION POINTS & POLLUTION CONTROL DEVICES	14
SECTION 3.	EMISSION LIMITATIONS & STANDARDS.....	15
SECTION 4.	COMPLIANCE SCHEDULE.....	32
SECTION 5.	MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS ..	33
SECTION 6.	ALTERNATIVE OPERATING SCENARIOS.....	45
SECTION 7.	TITLE VI REQUIREMENTS	46
SECTION 8.	ACID RAIN REQUIREMENTS	48
SECTION 9.	CROSS-STATE AIR POLLUTION RULE	49
APPENDIX A	LIST OF ABBREVIATIONS USED IN THIS PERMIT	
APPENDIX B	ACID RAIN PERMIT	

SECTION 1. GENERAL CONDITIONS

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

(Ref.: 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 Part 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 Part 61, Subpart M, as adopted by reference in Regulation 11 Miss Admin. Code Pt. 2, R. 1.8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

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

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-001	417.7 MMBtu/hr Natural Gas-Fired Simple Cycle Combustion Turbine Continuous Emission Monitoring System with Water Injection for NO _x emissions control Construction Date: April 1, 2002 New combustors: To be constructed
AA-002	417.7 MMBtu/hr Natural Gas-Fired Simple Cycle Combustion Turbine Continuous Emission Monitoring System with Water Injection for NO _x emissions control Construction Date: April 1, 2002 New combustors: To be constructed
AA-003	417.7 MMBtu/hr Natural Gas-Fired Simple Cycle Combustion Turbine Continuous Emission Monitoring System with Water Injection for NO _x emissions control Construction Date: April 1, 2002 New combustors: To be constructed
AA-004	6.6 MMBtu/hr (896 hp) Emergency Generator Diesel-fired 4-Stroke Blackstart Compression Ignition Combustion Engine Non-resettable Hour Meter Construction Date: April 1, 2002
AA-006	Three (3) 2-cell Mechanical Draft Cooling Towers Replaced (like-kind): 2026
AA-007	1.32 MMBtu/hr (189 hp) Emergency Fire Pump Diesel-fired Compression Ignition Combustion Engine Construction Date: 2025

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.)

B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-001 AA-002 AA-003	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.1	PM (Filterable Only)	$E = 0.8808 * I^{-0.1667}$
	11 Miss. Admin. Code Pt. 2, R.2.2.B(10)., as established in the Permit to Construct issued May 29, 2002. Prevention of Significant Deterioration (PSD) Avoidance Limit	3.B.2	Operational Restriction	Limited to 9,000 hours/year of combined operation of the three turbines until all combustors are replaced then Limited to 11,133 hours/year of combined operation of the three turbines.
		3.B.3	NOx	25 PPM corrected to 15% oxygen on a dry basis, not to exceed 42.0 lb/hr, both limits are based on a 24-hour operating rolling average, and 172.0 tons per year, based on a 12-month rolling total until all combustors are replaced Then 25 PPM corrected to 15% oxygen on a dry basis, not to exceed 42.0 lb/hr, both limits are based on a 24-hour operating rolling average, and 240.4 tons per year, based on a 12-month rolling total.
		3.B.4	CO	64 PPM corrected to 15% oxygen on a dry basis, not to exceed 65.0 lb/hr, both limits are based on a 24-hour operating rolling average, and 241.9 tons/year, based on a 12-month rolling total until all combustors are replaced Then 40 PPM corrected to 15% oxygen on a dry basis, not to exceed 65.0 lb/hr, both limits are based on a 24-hour operating rolling average, and 244.5 tons/year, based on a 12-month rolling total.

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
		3.B.5	NO _x CO	Comply with short-term emission limits at all times except startups and shutdowns. Comply with tpy emission limits at all times, including startups and shutdowns.
		3.B.6	Fuel Restriction	Natural Gas Only
	11 Miss. Admin. Code Pt. 2, R.2.15.C, as established in the TVOP modified June 10, 2009. PSD Avoidance Limit	3.B.7	Startup	Duration shall be limited to 30 minutes
			Shutdown	Duration shall be limited to 30 minutes
AA-001 AA-002 AA-003	40 CFR 60, Subpart GG (Standards of Performance for Stationary Gas Turbines) 40 CFR 60.330(a) and 60.331(a), (b), (q), and (u), Subpart GG	3.B.8	NO _x SO ₂	Applicability
	40 CFR 60.332(a)(1) and (4), and (b), Subpart GG	3.B.9	NO _x	$NO_x \leq 0.0075 * (14.4/Y) + F$; expressed as percent by volume at 15% O ₂ on a dry basis
	40 CFR 60.333(b), Subpart GG	3.B.10	Fuel Sulfur Content	0.8 percent by weight
	Acid Rain Program and Continuous Emission Monitoring System Regulations, 40 CFR Parts 72-78	3.B.11	NO _x SO ₂ CO ₂	Applicability
AA-001 AA-002 AA-003	40 CFR 97, Subpart EEEEE (Cross State Air Pollution Rule (CSAPR) NO _x Ozone Season Group 2 Trading Program) 40 CFR 97.804, Subpart EEEEE	3.B.12	NO _x	Applicability
AA-004	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.13	PM (Filterable Only)	0.6 lbs/MMBtu
	40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) 40 CFR 63.6585(a) and (c), 63.6590(a)(1)(iii) and (c)(1), Subpart ZZZZ	3.B.14	HAP	Applicability
	40 CFR 63.6605, Subpart ZZZZ	3.B.15		Safety and Good Air Pollution Control Practices
	40 CFR 63.6625(e)(3), 63.6655(d), Item 9 of Table 6 to Subpart ZZZZ, Subpart ZZZZ	3.B.16		Operational Requirement
	40 CFR 63.6625(f), Subpart ZZZZ	3.B.17		Install and Maintain a Non-Resettable Hour Meter

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
	40 CFR 63.6625(h), Subpart ZZZZ	3.B.18		Minimize Idle Time
	40 CFR 63.6640(f)(1), (2)(i), (4), Subpart ZZZZ	3.B.19		Emergency Engine Standards
AA-007	40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) 40 CFR 60.4200(a)(2), Subpart IIII	3.B.20	NO _x CO	Applicability
	40 CFR 60.4202(a)(2), 60.4205(c), Table 4, Subpart IIII	3.B.21	NMHC NO _x CO PM	Emissions Standards
	40 CFR 60.4207(b), Subpart IIII, and 40 CFR 80.510(b)	3.B.22	Fuel Requirement	Diesel fuel standards: a) Max sulfur content of 15 ppm, and b) Minimum cetane index of 40 or a maximum aromatic content of 35 volume percent
	40 CFR 60.4209(a), Subpart IIII	3.B.23	Hours of Operation	Install a non-resettable hour meter
	40 CFR 60.4211(c), Subpart IIII	3.B.24	NO _x CO	Purchase certified engine
	40 CFR 60.4211(f), Subpart IIII	3.B.25	Hours of Operation	Operating Requirements

- 3.B.1 For Emission Points AA-001, AA-002, and AA-003, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of equal to or greater than 10 MMBtu/hr heat input but less than 10,000 MMBtu/hr heat input shall not exceed an emission rate as determined by the relationship

$$E = 0.8808 * I^{-0.1667}$$

where E is the emission rate in pound per MMBtu/hr heat input and I is the heat input in millions of BTU per hour.

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

- 3.B.2 For Emission Points AA-001, AA-002, and AA-003, prior to installation of the new combustors on all three emission points, the permittee shall limit the combined operating hours to 9,000 hours per year (hrs/yr) as determined on a 365-day rolling total. Hours of operation shall include periods of startup and shutdown.

For Emission Points AA-001, AA-002, and AA-003, after the completion of installation of the new combustors on all three emission points, the permittee shall limit the combined operating hours to 11,133 hrs/yr as determined on a 365-day rolling total. Hours of operation shall include periods of startup and shutdown.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.2.2.B(10)., as initially established in the Permit to Construct issued May 29, 2002 and updated limit established in Title V Permit to Operate modified XXXX, XX, 2026. [PSD Avoidance Limit])

- 3.B.3 For Emission Points AA-001, AA-002, and AA-003, prior to installation of the new combustors on all three emission points, the permittee shall limit the Nitrogen Oxide (NOx) emissions for each individual turbine to 25 parts per million (PPM) corrected to 15% oxygen on dry basis, not to exceed 42.0 lb/hr, based on a 24-hour operating rolling average. The permittee shall limit combined NOx emissions to 172.0 tpy determined on a monthly basis and for each consecutive 12-month period on a rolling basis. The permittee shall demonstrate compliance with a CEMS. The lb/hr emission limitations apply to each of the three combustion turbines individually, and the tons/year limit is the combined emission rate for all three combustion turbines operating for 9,000 hours/year combined.

For Emission Points AA-001, AA-002, and AA-003, after the completion of installation of the new combustors on all three emission points, the permittee shall limit the Nitrogen Oxide (NO_x) emissions for each individual turbine to 25 parts per million (PPM) corrected to 15% oxygen on dry basis, not to exceed 42.7 lb/hr, based on a 24-hour operating rolling average. The permittee shall limit combined NO_x emissions to 240.4 tpy determined on a monthly basis and for each consecutive 12-month period on a rolling basis. The permittee shall demonstrate compliance with a CEMS. The lb/hr emission limitations apply to each of the three combustion turbines individually, and the tons/year limit is the combined emission rate for all three combustion turbines operating for 11,133 hours/year combined.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.2.2.B(10)., as initially established in the Permit to Construct issued May 29, 2002 and updated limit established in Title V Permit to Operate modified XXXX, XX, 2026. [PSD Avoidance Limit])

- 3.B.4 For Emission Points AA-001, AA-002, and AA-003, prior to installation of the new combustors on all three emission points, the permittee shall limit the Carbon Monoxide (CO) emissions for each individual turbine to 64 PPM corrected to 15% oxygen on dry basis, not to exceed 65.0 lb/hr, based on a 24-hour operating rolling average. The permittee shall limit combined CO emissions to 241.9 tpy determined on a monthly basis and for each consecutive 12-month period on a rolling basis. The permittee shall determine CO emissions by conducting a performance test according to EPA Test Method 10 of 40 CFR 60, Appendix A, or an EPA approved equivalent. The lb/hr emission limitations apply to each of the three combustion turbines individually, and the tons/year limit is the combined emission rate for all three combustion turbines operating for 9,000 hours/year combined.

For Emission Points AA-001, AA-002, and AA-003, after the completion of installation of the new combustors on all three emission points, the permittee shall limit the Carbon Monoxide (CO) emissions for each individual turbine to 40 PPM corrected to 15% oxygen on dry basis, not to exceed 41.6 lb/hr, based on a 24-hour operating rolling average. The permittee shall limit combined CO emissions to 244.5 tpy determined on a monthly basis and for each consecutive 12-month period on a rolling basis. The

permittee shall determine CO emissions by conducting a performance test according to EPA Test Method 10 of 40 CFR 60, Appendix A, or an EPA approved equivalent. The lb/hr emission limitations apply to each of the three combustion turbines individually, and the tons/year limit is the combined emission rate for all three combustion turbines operating for 11,133 hours/year combined.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.2.2.B(10)., initially established in the Permit to Construct issued May 29, 2002 and updated limit established in Title V Permit to Operate modified XXXX, XX, 2026. [PSD Avoidance Limit])

- 3.B.5 For Emission Point AA-001, AA-002, and AA-003, the permittee shall comply with the long term (ton per year, tpy) limitations of Conditions 3.B.3 and 3.B.4 at all times, including periods of startup and shutdown. The short term (pounds per hour, lb/hr) limitations of Condition 3.B.3 and 3.B.4 do not apply during periods of startup and shutdown.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.2.2.B(10)., as established in the Permit to Construct issued May 29, 2002. [PSD Avoidance Limit])

- 3.B.6 For Emission Points AA-001, AA-002, and AA-003, the permittee shall only combust natural gas, to be determined using a valid purchase contract, tariff sheet, transportation contract for the gaseous fuel, representative fuel sampling data, or EPA approved equivalent.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.2.2.B(10)., as established in the Permit to Construct issued May 29, 2002. [PSD Avoidance Limit])

- 3.B.7 For Emission Points AA-001, AA-002, and AA-003, turbine startup begins at the moment the startup sequence is initiated by the facility operator and fuel flow is initiated into the specific combustion turbine. Startup ends with the attainment of 50% load. Shutdown begins at the moment the specific combustion turbine reduces load below 50% during a normal shutdown sequence initiated by the facility operator. Shutdown ends with the termination of fuel flow to the specific combustion turbine. A startup event shall not exceed (30) thirty minutes, and a shutdown event shall not exceed (30) thirty minutes. There are no limitations to the number of startups as long as the opacity remains less than

40% during startup operations.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.2.15.C., as established in the TVOP issued June 10, 2009. [PSD Avoidance Limit])

- 3.B.8 For Emission Points AA-001, AA-002, and AA-003, the permittee is subject to and shall comply with all applicable requirements of the Standards of Performance for Stationary Gas Turbines (40 CFR 60, Subpart GG) and General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.330(a) and 60.331(a), (b), (q), and (u), Subpart GG)

- 3.B.9 For Emission Points AA-001, AA-002, and AA-003, the permittee shall not discharge any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

where:

STD = allowable ISO corrected (if required as given in 40 CFR 60.335(b)(1), Subpart GG) NO_x emission concentration (percent by volume at 15 percent oxygen and on a dry basis),

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour, and

F = NO_x emission allowance for fuel-bound nitrogen as defined by 40 CFR 60.332(a)(4), Subpart GG.

(Ref.: 40 CFR 60.332(a)(1) and (4), and (b), Subpart GG)

- 3.B.10 For Emission Points AA-001, AA-002, and AA-003, the permittee shall not burn any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw), as determined by Condition 5.B.7 (40 CFR 60.334(h)(1) and (3), Subpart GG).

(Ref.: 40 CFR 60.333(b), Subpart GG)

- 3.B.11 For Emission Points AA-001, AA-002, and AA-003, the permittee is subject to the Acid

Rain Program and Continuous Emission Monitoring System Regulations as specified in 40 CFR Parts 72-78. The permittee shall comply with all applicable requirements of said standards as included in Section 8.0 and specified in the Acid Rain Permit attached to this permit in Appendix B.

(Ref.: 40 CFR Parts 72-78)

- 3.B.12 For Emission Points AA-001, AA-002, and AA-003, the permittee is subject to and shall comply with the applicable requirements of the Cross State Air Pollution Rule (CSAPR) NO_x Ozone Season Group 2 Trading Program, 40 CFR 97, Subpart EEEEE and shall comply with the applicable provisions in Section 9.0 of this permit.

(Ref.: 40 CFR 97.804, Subpart EEEEE)

- 3.B.13 For Emission Point AA-004 the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations less than 10 MMBtu/hr heat input shall not exceed an emission rate of 0.6 pounds per million BTU per hour heat input.

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

- 3.B.14 For Emission Points AA-004 and AA-007, the permittee is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ) and General Provisions (40 CFR 63, Subpart A).

Emission Point AA-007 is a new RICE located at an area source of HAPs. Therefore, compliance with 40 CFR Part 63, Subpart ZZZZ shall be achieved by meeting all applicable requirements of 40 CFR Part 60, Subpart IIII. No further requirements apply for such engines under NESHAP Subpart ZZZZ.

(Ref.: 40 CFR 63.6585(a) and (c), 63.6590(a)(1)(iii) and (c)(1), Subpart ZZZZ)

- 3.B.15 For Emission Point AA-004, the permittee shall be in compliance with the emission limitations, operating limitations, and other requirements of Subpart ZZZZ that apply at all times.

At all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner

consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the DEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(Ref.: 40 CFR 63.6605, Subpart ZZZZ)

- 3.B.16 For Emission Point AA-004, the permittee shall operate and maintain each stationary RICE according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(Ref.: 40 CFR 63.6625(e)(3), 63.6655(d), Item 9 of Table 6 to Subpart ZZZZ, Subpart ZZZZ)

- 3.B.17 For Emission Point AA-004 , the permittee shall install a non-resettable hour meter if one is not already installed.

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

- 3.B.18 For Emission Point AA-004, 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(h), Subpart ZZZZ)

- 3.B.19 For Emission Point AA-004, the permittee shall operate each emergency stationary RICE according to the requirements in paragraphs (a) through (c) below. In order for each engine to be considered an emergency stationary RICE under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (a) through (c) below, is prohibited. If the permittee does not operate the engines according to the requirements in paragraphs (a) through (c) below,

the engines will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and must meet all requirements for non-emergency engines.

- (a) There is no time limit on the use of emergency stationary RICE in emergency situations.
- (b) The permittee may operate each emergency stationary RICE for the purposes specified in the following paragraph for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (c) counts as part of the 100 hours per calendar year allowed by paragraph (b).

Each emergency stationary RICE may be operated for 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 the insurance company associated with the engine. The permittee may petition the DEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

- (c) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (b) above.

(Ref.: 40 CFR 63.6640(f)(1), (2)(i), (4), Subpart ZZZZ)

- 3.B.20 For Emission Point AA-007, the permittee is subject to and shall comply with all applicable requirements of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart IIII.

(Ref.: 40 CFR 60.4200(a)(2)(i), Subpart IIII)

- 3.B.21 For Emission Point AA-007, the permittee shall comply with the following emissions standards for emergency fire pumps:

(a) NMHC + NO_x – 4.0g/KW-hr

(b) CO – 3.5g/KW-hr

(c) PM – 0.20g/KW-hr

(Ref.: 40 CFR 60.4202(a)(2), 40 CFR 60.4205(c), and Item 14 of Table 4, Subpart IIII)

3.B.22 For Emission Point AA-007, the permittee shall use only diesel fuel that meets the following requirements for non-road diesel:

(a) A maximum sulfur content of 15 ppm, and

(b) A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent.

(Ref.: 40 CFR 60.4207(b), Subpart IIII and 40 CFR 1090.305)

3.B.23 For Emission Point AA-007, the permittee shall install a non-resettable hour meter prior to startup of the engine.

(Ref.: 40 CFR 60.4209(a), Subpart IIII)

3.B.24 For Emission Point AA-007, the engine shall be certified to the emission standards in Condition 3.B.21 and shall be installed and configured according to the manufacturer's emission-related specifications.

(Ref.: 40 CFR 60.4211(c), Subpart IIII)

3.B.25 For Emission Point AA-007, the permittee shall operate the emergency stationary ICE according to the requirements in (a) through (c) below. In order for the engine to be considered emergency stationary ICE under 40 CFR 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described below, is prohibited. If you do not operate the engine according to the requirements below, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.

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

- (b) Emergency stationary ICE may be operated for maintenance checks and readiness testing for a maximum of a 100 hours per calendar year, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the DEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indication that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
- (c) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 60.4211(f), Subpart IIII)

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 lbs/MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	SO ₂	4.8 lbs/MMBTU

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

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

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

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

D. Work Practice Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-004	40 CFR 63.6603(a), Item 4 of Table 2d to Subpart ZZZZ, Subpart ZZZZ	3.D.1	HAP	Work Practice Standards
	40 CFR 63.6625(i), Subpart ZZZZ	3.D.2		Work Practice Standards
AA-007	40 CFR 60.4206, Subpart IIII	3.D.3	HAP	Maintain emissions standards
	40 CFR 60.4211(a), Subpart IIII	3.D.4		Operate and maintain according to manufacturer's written instructions

3.D.1 For Emission Point AA-004, the permittee shall comply with the following work practice standards:

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

The permittee has the option to utilize an oil analysis program as described in Condition 3.D.2 (40 CFR 63.6625(i), Subpart ZZZZ) in order to extend the specified oil change requirement above.

If the emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required, 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. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

(Ref.: 40 CFR 63.6603(a), Item 4 of Table 2d to Subpart ZZZZ, Subpart ZZZZ)

- 3.D.2 For Emission Point AA-004, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Condition 3.D.1. The oil analysis must be performed at the same frequency specified for changing the oil in Condition 3.D.1. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee shall change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee shall change the oil within 2 business days or before commencing operation, whichever is later. The permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(Ref.: 40 CFR 63.6625(i), Subpart ZZZZ)

- 3.D.3 For Emission Point AA-007, the permittee shall operate and maintain the stationary Compression Ignition (CI) Internal Combustion Engine (ICE) so that it meets the emission standards in Conditions 3.B.21 for the entire life of the engine.

(Ref.: 40 CFR 60.4206, Subpart IIII)

- 3.D.4 For Emission Point AA-007, the permittee shall comply with the following:

- (a) Operate and maintain the stationary CI ICE and control device according to the manufacturer's emission-related written instructions;

(b) Change only those emission-related settings that are permitted by the manufacturer;
and

(c) Meet the requirements of 40 CFR parts 89, 94, and/or 1068, as they apply.

(Ref.: 40 CFR 60.4211(a), Subpart IIII)

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 31st and January 31st 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 AA-003	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.B.1	NO _x	Monitor and Record Emissions Using CEMS
		5.B.2	NO _x	DAHS Recordkeeping Requirement
		5.B.3	CO	Conduct Biennial Stack Test
		5.B.4	Hours of Operation	Monitor and Recordkeeping Requirement
		5.B.5	Startup and Shutdown	Monitor and Record Hours of Startup and Shutdown
		5.B.6	CO	One time stack test
	40 CFR 60.334(b)(1)(ii), (2), and (3), Subpart GG	5.B.7	NO _x	Maintain Continuous Emission Monitoring System
	40 CFR 60.334(h)(1) and (3), Subpart GG	5.B.8	Fuel Sulfur Content	Monitoring and Recordkeeping Requirement
	40 CFR Part 75	5.B.9	CEMS	Applicability
AA-004	40 CFR 63.6655(a)(1), (2), (4), and (5), Subpart ZZZZ	5.B.10	HAP	Notification Recordkeeping Requirement
				Record Malfunctions Events
				Maintenance Recordkeeping Requirement
				Record Actions to Minimize Emissions During Malfunctions
	40 CFR 63.6655(e)(3), Subpart ZZZZ	5.B.11	Recordkeeping	Maintenance Recordkeeping Requirement
	40 CFR 63.6655(f)(2), Subpart ZZZZ	5.B.12	Hours of Operation	Recordkeeping Requirement
	40 CFR 63.6660, Subpart ZZZZ	5.B.13	Recordkeeping	Shall keep records in a form suitable and readily available for expeditious review.
AA-007	40 CFR 60.4214(b), Subpart IIII	5.B.14	Recordkeeping	Maintain records of hours of operation

5.B.1 For Emission Points AA-001, AA-002 and AA-003, the permittee shall demonstrate compliance with NO_x emission limitations using CEMS. Demonstrating compliance with NO_x limits using CEMS data in lieu of EPA Reference Methods is an acceptable practice. This includes use of reference method test data collected during the Relative Accuracy Test Audits (RATA) required under 40 CFR Part 75.

The permittee shall use information obtained per DEQ approved data substitution procedures to demonstrate compliance with the annual NO_x limits in the event there is a malfunction with the CEMS.

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

- 5.B.2 For Emission Points AA-001, AA-002, and AA-003, the NO_x and O₂ CEMS shall also be capable of and certified to accurately read/measure NO_x concentrations to comply with Condition 3.B.4. The permittee shall use data from the Data Acquisition Handling System (DAHS) to calculate the lb/hr NO_x emission rate for each rolling 24-hour operating period and the tons of NO_x emissions on a monthly basis and for each consecutive 12-month period on a rolling basis.

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

- 5.B.3 For Emission Points AA-001, AA-002 and AA-003, the permittee shall demonstrate compliance with CO emission limitations by conducting biennial stack testing in accordance with EPA Reference Method 10, or an EPA approved equivalent, no later than 25 months following the previous stack test. For each turbine, the permittee shall use the results of the most recent stack test and hours of operation to calculate the monthly CO emissions in tons and the 12-month rolling total in tpy.

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

- 5.B.4 For Emission Points AA-001, AA-002, and AA-003, the permittee shall monitor and record the hours of operation on a daily basis, as determined on a 365-day rolling total.

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

- 5.B.5 For Emission Points AA-001, AA-002, and AA-003, the permittee shall monitor and maintain records of the duration of time, in hours, each emission point engages in periods of both startups and shutdowns. The permittee shall operate the combustion turbines in a manner consistent with good combustion practices, in accordance with the manufacturer's guidelines and procedures to minimize emissions during startup and shutdown.

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

- 5.B.6 For Emission Points AA-001, AA-002, and AA-003, the permittee shall perform a one time stack test of CO within 90 days of startup after the completion of installation of the new combustors on all three emission points..

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

- 5.B.7 For Emission Points AA-001, AA-002, and AA-003, the permittee shall install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_x and O₂ monitors. As an alternative, a CO₂ monitor may be used to adjust the measured NO_x concentrations to 15 percent O₂ by either converting the CO₂ hourly averages to equivalent O₂ concentrations using Equation F-14a or F-14b in 40 CFR 75, Appendix F and making the adjustments to 15 percent O₂, or by using the CO₂ readings directly to make the adjustments, as described in EPA Test Method 20.

- (a) The permittee shall install and certify each CEMS according to PS 2 and 3 (for diluent) of 40 CFR 60, Appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. 40 CFR 75, Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NO_x and diluent monitors may be performed individually or on a combined basis, *i.e.*, the relative accuracy tests of the CEMS may be performed on a ppm at 15 percent O₂ basis.
- (b) During each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.
- (c) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in 40 CFR 60.13(h), Subpart A.
 - (1) For each unit operating hour in which a valid hourly average, as described in paragraph (b) above, is obtained for both NO_x and diluent, the data acquisition and handling system must calculate and record the hourly NO_x emissions in

the units of the applicable NO_x emission standard under Condition 3.B.9, *i.e.*, percent NO_x by volume, dry basis, corrected to 15 percent O₂ and International Organization for Standardization (ISO) standard conditions (if required as given in 40 CFR 60.335(b)(1), Subpart GG). For any hour in which the hourly average O₂ concentration exceeds 19.0 percent O₂, a diluent cap value of 19.0 percent O₂ may be used in the emission calculations.

- (2) A worst-case ISO correction factor may be calculated and applied using historical ambient data. For the purpose of this calculation, substitute the maximum humidity of ambient air (H_o), minimum ambient temperature (T_a), and minimum combustor inlet absolute pressure (P_o) into the ISO correction equation.
- (3) If the permittee has installed a NO_x CEMS to meet the requirements of 40 CFR 75 and is continuing to meet the ongoing requirements of 40 CFR 75, the CEMS may be used to meet the requirements of this condition, except that the missing data substitution methodology provided for at 40 CFR 75, Subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in 40 CFR 60.7(c), Subpart A.

(Ref.: 40 CFR 60.334(b)(1)(ii), (2), and (3), Subpart GG)

5.B.8 For Emission Points AA-001, AA-002, and AA-003, the permittee shall monitor the total sulfur content of the fuel being fired in the turbine; however, the permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u), Subpart GG. The permittee shall use one of the following sources of information to make the required demonstration:

- (a) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

- (b) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 of Appendix D to 40 CFR 75 is required.

(Ref.: 40 CFR 60.334(h)(1) and (3), Subpart GG)

- 5.B.9 For Emission Points AA-001, AA-002, and AA-003, the permittee is subject to 40 CFR Part 75 and shall monitor and keep records of emissions in accordance with 40 CFR Part 75. The permittee shall maintain a file on site of all measurements, data, reports, and other information required in 40 CFR Part 75.57 for each affected unit.

(Ref.: 40 CFR Part 75)

- 5.B.10 For Emission Point AA-004, the permittee shall keep the following records:

- (a) A copy of each notification and report submitted to comply with 40 CFR 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv), Subpart A.
- (b) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
- (c) Records of all required maintenance performed on the air pollution control and monitoring equipment.
- (d) Records of actions taken during periods of malfunction to minimize emissions in accordance with Condition 3.B.15, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(Ref.: 40 CFR 63.6655(a)(1), (2), (4), and (5), Subpart ZZZZ)

- 5.B.11 For Emission Point AA-004, the permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the maintenance plan.

(Ref.: 40 CFR 63.6655(e)(3), Subpart ZZZZ)

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

(Ref.: 40 CFR 63.6655(f)(2), Subpart ZZZZ)

5.B.13 For Emission Point AA-004, the permittee shall keep records in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1), Subpart A. The permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee shall keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1), Subpart A.

(Ref.: 40 CFR 63.6660, Subpart ZZZZ)

5.B.14 For Emission Point AA-007, the permittee shall keep records of the operation of the engines in emergency and non-emergency service that are recorded through the non-resettable hour meter required by Condition 3.B.23. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time.

(Ref.: 40 CFR 60.4214(b), Subpart IIII)

C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Reporting Requirement
AA-001 AA-002 AA-003	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.C.1	NO _x CO	Semiannual Emissions Report
		5.C.2	CO	Biennial Stack Test Report
		5.C.3	Hours of Operation	Semiannual Report
		5.C.4	Startup and Shutdown	Semiannual Deviation Report
		5.C.5	CO	One time stack test
	40 CFR 60.334(j)(1)(iii), Subpart GG	5.C.6	NO _x CO	Semiannual Excess Emissions Report
AA-004 AA-007	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.C.7	Hours of Operation	Semiannual Report
AA-004	40 CFR 63.6640(b), 63.6650(a) through (d), and Footnote 2 to Table 2d of Subpart ZZZZ, Subpart ZZZZ	5.C.8	Management Practices	Deviation Report

5.C.1 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit a semiannual report, in accordance with Condition 5.A.4, providing a summary of CO and NO_x emissions on a monthly basis and for each consecutive 12-month period on a rolling basis. Emissions shall be based on, but not limited to, collected CEMS data, stack test reports, and engineering calculations. The reported emissions shall include periods of both startups and shutdowns.

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

5.C.2 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit a biennial stack test report for CO emissions within 60 days of completing the test.

As part of the test report, the permittee shall provide the average operating rate during testing of the process associated with the units being tested.

For all required testing, the permittee shall submit a written test protocol at least 30 days prior to the intended test date(s) to ensure that all test methods and procedures are

acceptable to DEQ. Also, the permittee shall notify DEQ in writing at least 10 days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness the test.

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

- 5.C.3 For Emission Points AA-001, AA-002 and AA-003, the permittee shall submit a semiannual report, in accordance with Condition 5.A.4, detailing the hours of operation on a daily basis and a 365-day rolling total.

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

- 5.C.4 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit a semiannual report, in accordance with Condition 5.A.4, detailing the startup and shutdown duration time deviations and the total startup and shutdown percent deviations.

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

- 5.C.5 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit the results of a one time stack test, required by Condition 5.B.6, in accordance with Condition 5.A.2 within 60 days of completing the test after the installation of the combustors in 2026.

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

- 5.C.6 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit a semiannual report, in accordance with Condition 5.A.4, of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c), Subpart A. Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of the reports required under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined in 40 CFR 60.334(j)(1)(iii), Subpart GG.

(Ref.: 40 CFR 60.334(j)(1)(iii), Subpart GG)

- 5.C.7 For Emission Points AA-004 and AA-007, the permittee shall submit a semiannual report, in accordance with Condition 5.A.4, summarizing the hours of operation for each engine in the calendar year. This report shall also include what hours were for emergency use and what constituted the emergency and what hours were for non-emergency use.

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

5.C.8 For Emission Point AA-004, the permittee shall report in accordance with Condition 5.A.4 each instance in which the work practices listed in Condition 3.D.1 were not met. These deviations shall be reported according to the following requirements:

- (a) If there were no deviations from any applicable emission limitations or operating limitations, a statement shall be included that there were no deviations from the emission limitations or operating limitations during the reporting period; or
- (b) If there was a deviation from any emission limitation or operating limitation during the reporting period, then the compliance report shall contain the following information:
 - (1) Company name and address.
 - (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - (3) Date of report and beginning and ending dates of the reporting period.
 - (4) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
 - (5) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- (c) If there was a malfunction during the reporting period, the compliance report shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report shall also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with Condition 3.B.16, including actions taken to correct a malfunction.

(Ref.: 40 CFR 63.6640(b), 63.6650(a) through (d), and Footnote 2 to Table 2d of Subpart ZZZZ, Subpart ZZZZ)

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;
 - (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. ACID RAIN REQUIREMENTS

- 8.1 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 for the dates specified in the Acid Rain Permit; however, these conditions may be revised by the DEQ during the permitted period.

SECTION 9. CROSS-STATE AIR POLLUTION RULE

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_x Ozone Season Group 2 Trading Program.

Unit ID: Emission Points AA-001, AA-002, AA-003					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO ₂ monitoring) and 40 CFR part 75, subpart H (for NO _x 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
NO _x	X				
Heat Input		X			

9.2 The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.830 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_x Ozone Season Group 2 Trading Program Requirements (40 CFR 97.806)
- (a) Designed 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_x Ozone Season Group 2 source and each CSAPR NO_x 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_x 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_x 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_x emissions requirements.
 - (1) CSAPR NO_x 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_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO_x 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_x emissions for such control period from all CSAPR NO_x Ozone Season Group 2 units at the source.
 - (ii) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 2 units at a CSAPR NO_x Ozone Season Group 2 source are in excess of the CSAPR NO_x 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_x Ozone Season Group 2 unit at the source shall hold the CSAPR NO_x 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_x 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_x Ozone Season Group 2 assurance provisions.
- (i) If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x 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_x 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_x 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_x 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_x emissions exceeds the respective common designated representative's assurance level; and

- (B) The amount by which total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x 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_x 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_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x 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_x emissions exceed the sum, for such control period, of the State NO_x 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_x emissions from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x 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_x emissions from the CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x 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_x 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_x 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_x 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_x 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_x 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_x Ozone Season Group 2 allowance that was allocated for such control period or a control period in a prior year.
 - (ii) A CSAPR NO_x 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_x 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_x 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_x Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO_x 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_x 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_x 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_x 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_x Ozone Season Group 2 source and each CSAPR NO_x 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_x 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_x Ozone Season Group 2 Trading Program.
- (2) The designated representative of a CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall make

all submissions required under the CSAPR NO_x 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_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the permittee of such source and of the CSAPR NO_x Ozone Season Group 2 units at the source.
- (2) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 unit or the designated representative of a CSAPR NO_x Ozone Season Group 2 unit shall also apply to the permittee of such unit.

(g) Effects on other authorities - No provision of the CSAPR NO_x 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_x Ozone Season Group 2 source or CSAPR NO_x 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) Effects on units in Indian country. Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regards to any source or unit, in Indian country within the borders of the state.

APPENDIX A

List of Abbreviations Used In this Permit

11 Miss. Admin. Code Pt. 2, Ch. 1.	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
11 Miss. Admin. Code Pt. 2, Ch. 2.	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
11 Miss. Admin. Code Pt. 2, Ch. 3. Episodes	Regulations for the Prevention of Air Pollution Emergency
11 Miss. Admin. Code Pt. 2, Ch. 4.	Ambient Air Quality Standards
11 Miss. Admin. Code Pt. 2, Ch. 5.	Regulations for the Prevention of Significant Deterioration of Air Quality
11 Miss. Admin. Code Pt. 2, Ch. 6.	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
11 Miss. Admin. Code Pt. 2, Ch. 7.	Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act
BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
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
NMVOC	Non-Methane Volatile Organic Compounds
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 µm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound

APPENDIX B

Phase II Acid Rain Permit

PHASE II ACID RAIN PERMIT

Issued to: Sylvarena Generating Plant
Operated by: Cooperative Energy, a Mississippi electric cooperative
ORIS code: 7989
Effective: May 24, 2022 through April 30, 2027

Summary of Previous Actions:

This page will be replaced to document new actions each time a new action is taken by the Mississippi Department of Environmental Quality.

1) Draft permit for public and EPA comment.	November 15, 2002
2) Final Permit issued.	January 8, 2003
3) Draft Permit sent to Public Notice and EPA Review.	April 3, 2009
4) Permit finalized and issued.	June 10, 2009
5) Draft renewal Title V Permit for public and EPA review.	January 17, 2017
6) Permit finalized and issued	March 31, 2017
7) Draft permit for public and EPA comment	March 31, 2022
8) Permit finalized and issued	May 24, 2022

Present Action:

9)	
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Signature

Date

Jaricus Whitlock, P.E.
Chief, Air Division
Mississippi Department of Environmental Quality
P.O. Box 2261
Jackson, MS 39225-2261
Telephone (601) 961-5171
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PHASE II ACID RAIN PERMIT

Issued to: Sylvarena Generating Plant
Operated by: Cooperative Energy, a Mississippi electric cooperative
ORIS code: 7989
Effective: May 24, 2022 through April 30, 2027

ACID RAIN PERMIT CONTENTS:

- 1) Statement of Basis.
- 2) SO₂ allowances allocated under this permit and NO_x 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 sources must comply with the standard requirements and special provisions set forth in the application.

1) STATEMENT OF BASIS:

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

2) SO₂ ALLOWANCE ALLOCATIONS AND NO_x REQUIREMENTS FOR EACH AFFECTED UNIT:

		2020	2021	2022	2023	2024	2026
AA-001 AA-002 AA-003	SO ₂ allowances, under Table 2 of 40 CFR Part 73.	NA	NA	NA	NA	NA	NA
	NO _x limit	172.0 tpy					240.4 tpy

3) COMMENTS, NOTES AND JUSTIFICATIONS:

All affected units are natural gas fired units; therefore, the affected units are not subject to the NO_x requirements outlined in 40 CFR Part 76. Additionally, these are new units that were not listed in 40 CFR 73, Tables 2, 3, or 4, and have not been allocated any SO₂ allowances.

4) **PHASE II PERMIT APPLICATION:**

Attached.