STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Entergy Mississippi, LLC - Hinds County Plant
3889 Beasley Road
Jackson, Mississippi
Hinds 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: MAR 31 2020

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

Krystal Rudolph

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: FEB 28 2025

Permit No.: 1080-00230

12051 PER20190001

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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	1,732 MMBTU/hr natural gas-fired combustion turbine with heat recovery steam generator (HRSG). The unit is equipped with dry low NO_x burners and selective catalytic reduction (SCR) for the control of NO_x emissions.
AA-002	1,732 MMBTU/hr natural gas-fired combustion turbine with HRSG. The unit is equipped with dry low NO_x burners and SCR for the control of NO_x emissions.
AA-003	22 MMBTU/hr natural gas-fired auxiliary boiler.
AA-004	251 HP (1.76 MMBTU/hr; 187 kW) diesel-fired fire-water pump engine (Caterpillar Model #3208/Model Yr. 2000).
AA-005	9-cell cooling tower.
AA-006	599 HP (4.19 MMBTU/hr; 447 kW) diesel-fired backup generator (Caterpillar Model #3406/Model Yr. 2000).
AA-008	326.7 MMBTU/hr natural gas-fired simple cycle combustion turbine equipped with dry low-NO_x burners.
AA-009	1,194 HP (8.36 MMBTU/hr; 890 kW) diesel-fired emergency generator (MTU Model#12V2000 G85 TB/Model Yr. 2018).

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	PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004	3.B.1	PM/PM_{10} (filterable only)	18 lbs/hr and 79 tons/year
			SO_2	11 lbs/hr and 48.18 tons/year
			NO_x	3.5 ppm @ 15% oxygen on a dry basis (BACT Limit) , not to exceed 25 lbs/hr (24-hour rolling average) and 110 tons/year
			CO	20 ppm @ 15% oxygen on a dry basis (BACT Limit), not to exceed 69 lbs/hr (24-hour rolling average) and 302.22 tons/year
			Opacity	10% (BACT Limit)
			Fuel Restriction	Natural gas only
		3.B.2	Startup and Shutdown	Startup events shall not exceed 6.0 hours and shutdown events shall not exceed 2.0 hours (BACT Limit)
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.3	PM (filterable only)	$E = 0.8808*I^{-0.1667}$
	40 CFR 60, Subpart GG Standards of Performance for Stationary Gas Turbines 40 CFR 60.330, Subpart GG	3.B.4	NO_x SO_2	Applicability
	40 CFR 60.332(a)(1) and (b), Subpart GG	3.B.5	NO_x	$STD = 0.0075*(14.4/Y) + F$
	40 CFR 60.333(b), Subpart GG	3.B.6	SO_2	Fuel must contain less than 0.8% sulfur by weight
AA-003	40 CFR 60, Subpart Dc Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units 40 CFR 60.40c(a), Subpart Dc	3.B.7	SO_2 PM	Applicability

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-003	PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004	3.B.8	Heat Input	87,871 MMBTU/year (rolling 12-month total)
AA-004 AA-006 AA-009	40 CFR 63, Subpart ZZZZ NESHAP for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6580, 63.6585(a) and (c), and 63.6590(a)(1)(iii), (a)(2)(iii), and (c), Subpart ZZZZ	3.B.9	HAP	Applicability
AA-004 AA-006	40 CFR 63.6640(f)(1), (2), and (4), Subpart ZZZZ	3.B.10	HAP	Operating requirements
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.17	PM (filterable only)	0.6 lbs/MMBTU
AA-008 AA-009	Moderate Modification per 11 Miss. Admin. Code Pt. 2, R. 2.15.C and Title V Operating Permit (TVOP) issued June 26, 2015, and modified June 5, 2017 (PSD Avoidance)	3.B.11	NO_x	39.9 tons/year (rolling 12-month total)
		3.B.12	PM (filterable only) $PM_{10}/PM_{2.5}$ (filterable and condensable)	9.0 tons/year (rolling 12-month total)
AA-008	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.3	PM (filterable only)	$E = 0.8808*I^{-0.1667}$
	11 Miss. Admin. Code Pt. 2, R. 2.2.(B)(10). and TVOP issued June 26, 2015, and modified June 5, 2017 (PSD Avoidance)	3.B.13	Hours of Operation	2,550 hours/year (rolling 12-month total)
AA-008	40 CFR Part 60, Subpart KKKK Standards of Performance for Stationary Combustion Turbines 40 CFR 60.4300, 60.4305, 60.4315, and 60.4333(a), Subpart KKKK	3.B.14	NO_x SO_2	Applicability
	40 CFR 60.4320(a) and Table 1, Subpart KKKK	3.B.15	NO_x	25 ppm @ 15% oxygen (1.2 lb/MWh)
	40 CFR 60.4330(a)(2), Subpart	3.B.16	SO_2	Fuel shall not contain total potential sulfur emissions in excess of 0.060

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
	KKKK			lbs SO_2/MMBTU heat input
AA-009	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.17	PM (filterable only)	0.6 lbs/MMBTU
	40 CFR 60, Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines 40 CFR 60.4200(a)(2)(i), Subpart IIII	3.B.18	NMHC + NO_x CO PM (filterable) SO_2	Applicability
	40 CFR 60.4205(b), 60.4202(a)(2), 60.4206, Subpart IIII and 40 CFR 89.112(a) and 89.113(a), Subpart B	3.B.19	NMHC+NO_x CO PM (filterable only)	6.4 g/kW-hr 3.5 g/kW-hr 0.2 g/kW-hr
		3.B.20	Opacity	≤20% during acceleration ≤15% during lugging mode ≤50% during the peaks in either acceleration or lugging mode
	40 CFR 60.4207(b), Subpart IIII and 40 CFR 80.510(b), Subpart I	3.B.21	SO_2 (Diesel fuel requirements)	Sulfur content of 15 ppm max **AND** Minimum cetane index of 40 **OR** maximum aromatic content of 35 volume percent
	40 CFR 60.4211(a)(1)-(3) and (c), Subpart IIII	3.B.22	NMHC+NO_x CO PM (filterable only)	Certified engine requirements
	40 CFR 60.4211(f)(1)-(3), Subpart IIII	3.B.23		Operating requirements
AA-001 AA-002 AA-008	40 CFR 72-78 Acid Rain Program Provisions 40 CFR 72.6, Subpart A	3.B.24	NO_x SO_2	Applicability
	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.25	NO_x	Applicability

3.B.1 For Emission Points AA-001 and AA-002, the turbines are limited to burning natural gas only and must comply with the following emission limits for each unit:

(a) Particulate Matter(PM)/PM_{10} (filterable only) – 18 lbs/hr and 79 tons/year as determined by EPA Reference Methods 1-5, 40 CFR 60, Appendix A.

(b) Sulfur Dioxide (SO_2) – 11 lbs/hr and 48.18 tons/year as determined by EPA Reference Method 6C, 40 CFR 60, Appendix A.

(c) Nitrogen Oxides (NO_x) – 3.5 ppm @ 15% oxygen on a dry basis, not to exceed 25 lbs/hr, both limits are based on a 24-hour rolling average, and 110 tons/year as determined by EPA Reference Method 20, 40 CFR 60, Appendix A.

(d) Carbon Monoxide (CO) – 20 ppm @ 15% oxygen on a dry basis, not to exceed 69 lbs/hr, both limits are based on a 24-hour rolling average, and 302.22 tons/year as determined by EPA Reference Method 10, 40 CFR 60, Appendix A.

(e) Opacity – 10% as determined by EPA Reference Method 9, 40 CFR 60, Appendix A.

All annual emission limits specified above are to be determined on a rolling 12-month total.

(Ref.: PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004)

3.B.2 For Emission Points AA-001 and AA-002, the permittee shall comply with the emission limitations and monitoring requirements specified in this permit, except during periods of startup and shutdown. However, the permittee shall include emissions that occur during startups and shutdowns when demonstrating compliance with the tons/year emission limits.

Except during upsets, startups, and shutdowns, the permittee shall operate in Mode 6, as indicated by the digital signal sent from the plant control system to the CEMS computer.

A startup event shall not exceed 6.0 hours and a shutdown shall not exceed 2.0 hours. Startup is defined as commencing when fuel is first combusted in the combustion turbine and ending upon initiation of dry low NO_x operation as indicated by receipt of a Mode 6 signal from the turbine control system. Shutdown shall be defined as the period beginning when the combustion turbine leaves operational Mode 6 and ending when combustion has ceased.

(Ref.: PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004)

3.B.3 For Emission Points AA-001 and AA-002, the permittee shall not have particulate emissions from fossil fuel burning installations of greater than 10 million BTU per hour heat input that exceeds the emission rate as determined by the relationship:

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

Where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour.

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

3.B.4 Emission Points AA-001 and AA-002 are subject to and shall comply with all applicable requirements of the Standards of Performance for Stationary Gas Turbines, 40 CFR 60, Subpart GG and the General Provisions, 40 CFR 60, Subpart A.

(Ref.: 40 CFR 60.330, Subpart GG)

3.B.5 For Emission Points AA-001 and AA-002, the permittee shall meet the NO_x emission limit established using the following equation:

$STD = 0.0075*(14.4/Y) + F$

Where STD is the allowable NO_x emission concentration (percent by volume on a dry basis at 15 percent oxygen), Y is the manufacturer's rated heat rate at manufacturer's rated peak 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 (value of Y shall not exceed 14.4 kilojoules per watt hour), and F is the NO_x emission allowance for fuel-bound nitrogen as defined in 60.332(a)(4).

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

3.B.6 For Emission Points AA-001 and AA-002, the permittee shall not burn any fuel which contains total sulfur in excess of 0.8 percent by weight.

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

3.B.7 Emission Point AA-003 is subject to and shall comply with all applicable requirements of the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc. Since the unit is fired with natural gas, there are no applicable PM or SO_2 emission standards.

(Ref.: 40 CFR 60.40c(a), Subpart Dc)

3.B.8 Emission Point AA-003 is limited to an annual heat input rate not to exceed 87,871

MMBTU per year measured on a rolling 12-month total.

(Ref.: PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004)

3.B.9 Emission Points AA-004, AA-006, and AA-009 are subject to and shall comply with all applicable requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63, Subpart ZZZZ.

For purposes of this subpart, Emission Points AA-004 and AA-006 are considered existing, emergency, compression ignition (CI) stationary RICE at an area source of HAP emissions and shall comply with the applicable requirements of Subpart ZZZZ.

Emission Point AA-009 is considered a new, emergency, CI stationary RICE at an area source of HAP emissions. As such, the permittee shall comply with Subpart ZZZZ by complying with the applicable requirements of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII.

(Ref.: 40 CFR 63.6580, 63.6585(a) and (c), and 63.6590(a)(1)(iii), (a)(2)(iii), and (c), Subpart ZZZZ)

3.B.10 Emission Points AA-004 and AA-006 shall be considered emergency stationary RICE under Subpart ZZZZ provided the engines only operate in an emergency, during maintenance and testing, and during non-emergency situations for 50 hours per year as described in (c) below. If the permittee does not operate an engine according to the requirements in (a)-(c) below, the engine will not be considered an emergency engine under Subpart ZZZZ and must meet all requirements for non-emergency engines.

(a) There is no limit on the use of an engine during an emergency situation.

(b) The permittee may operate an engine for maintenance checks and readiness testing for a maximum of 100 hours per calendar year provided the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or insurance company associated with an engine. The permittee may petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating the federal, state, or local standards require maintenance testing of an engine beyond 100 hours per calendar year.

(c) Emergency engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (b). Except as provided in 63.6640(f)(4)(i) and (ii), the 50

hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

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

3.B.11 For Emission Points AA-008 and AA-009, the permittee shall limit the total combined emissions of NO_x to no more than 39.9 tons per year for each rolling 12-month period.

(Ref.: Moderate modification per 11 Miss. Admin. Code Pt. 2, R. 2.15.C. and Title V Operating Permit issued June 26, 2015, and modified June 5, 2017)

3.B.12 For Emission Points AA-008 and AA-009, the permittee shall limit the total combined emissions of PM (filterable only), PM_{10} (filterable and condensable), $PM_{2.5}$ (filterable and condensable) to no more than 9.0 tons per year (each) for each rolling 12-month period.

(Ref.: Moderate modification per 11 Miss. Admin. Code Pt. 2, R. 2.15.C. and Title V Operating Permit issued June 26, 2015, and modified June 5, 2017)

3.B.13 For Emission Point AA-008, the permittee shall limit the hours of operation of the turbine to no more than 2,550 hours per year for each rolling 12-month period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). and TVOP issued June 26, 2015, and modified June 5, 2017)

3.B.14 Emission Point AA-008 is subject to and shall comply with all applicable requirements of the Standards of Performance for Stationary Combustion Turbines, 40 CFR 60, Subpart KKKK. The permittee shall operate and maintain the combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

(Ref.: 40 CFR 60.4300, 60.4305, 60.4315, and 60.4333(a), Subpart KKKK)

3.B.15 For Emission Point AA-008, the permittee shall limit the emissions of NO_x to no more than 25 parts per million (ppm) at 15 percent Oxygen (1.2 lbs/MWh).

(Ref.: 40 CFR 60.4320(a) and Table 1, Subpart KKKK)

3.B.16 For Emission Point AA-008, the permittee shall only burn fuels which contain less than 0.060 pounds SO_2 per MMBTU heat input.

(Ref.: 40 CFR 60.4330(a)(2), Subpart KKKK)

3.B.17 For Emission Point AA-009, 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.B.18 Emission Point AA-009 is subject to and shall comply with all applicable requirements of the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII.

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

3.B.19 For Emission Point AA-009, the permittee shall operate and maintain the engine such that it achieves the following emission standards for the life of the engine:

(a) Non-methane hydrocarbon and nitrogen oxides (NMHC + NO_x) ≤ 6.4 g/kW-hr

(b) CO ≤ 3.5 g/kW-hr

(c) PM (filterable only) ≤ 0.2 g/kW-hr

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

3.B.20 For Emission Point AA-009, the permittee shall limit the opacity of the exhaust to the following:

(a) ≤ 20 % during the acceleration mode;

(b) ≤ 15 % during the lugging mode;

(c) ≤ 50% during the peaks in either acceleration or lugging mode.

(Ref.: 40 CFR 60.4205(b) and 60.4202(a)(2), Subpart IIII and 40 CFR 89.113(a), Subpart B)

3.B.21 For Emission Point AA-009, the permittee shall use diesel fuel that meets the following per gallon standards:

(a) Maximum sulfur content of 15 ppm, **AND**

(b) Minimum cetane index of 40 **OR** maximum aromatic content of 35 volume percent.

(Ref.: 40 CFR 60.4207(b), Subpart IIII and 40 CFR 80.510(b), Subpart I)

3.B.22 For Emission Point AA-009, the permittee shall comply with the applicable emission standards by purchasing, installing, operating, and maintaining the engines certified to meet

the emission standards. The permittee shall operate and maintain the engines in accordance with the manufacturer's emission-related written instructions and can only change the emission-related settings that are permitted by the manufacturer.

(Ref.: 40 CFR 60.4211(a)(1)-(3) and (c), Subpart IIII)

3.B.23 For Emission Point AA-009, the engine shall be considered an emergency stationary RICE under Subpart IIII provided the engine only operates in an emergency, during maintenance and testing, and during non-emergency situations for 50 hours per year as described in (c) below. If the permittee does not operate the engine in accordance with the requirements in (a)-(c) below, the engine will not be considered an emergency engine under Subpart IIII and it must then meet all applicable requirements for non-emergency engines.

(a) There is no limit on the use of the engine during an emergency situation.

(b) The permittee may operate the engine for maintenance checks and readiness testing for a maximum of 100 hours per calendar year provided the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or insurance company associated with the engines. 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 owner or operator maintains records indicating the federal, state, or local standards require maintenance testing of the engine beyond 100 hours per calendar year.

(c) The emergency engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (b). Except as provided in 40 CFR 60.4211 (f)(3)(i), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 60.4211(f)(1), (2)(i), and (3), Subpart IIII)

3.B.24 Emission Points AA-001, AA-002, and AA-008 are subject to the Acid Rain Program Requirements as specified in 40 CFR 72-78. The permittee shall comply with all applicable requirements of said standards as specified in the Acid Rain Permit attached to this permit in Appendix C.

(Ref.: 40 CFR 72.6, Subpart A)

3.B.25 For Emission Points AA-001, AA-002, and AA-008, the permittee is subject to 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)

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 AA-006	40 CFR 63.6603(a) and Table 2d, Subpart ZZZZ	3.D.1	HAP	Maintenance requirements
	40 CFR 63.6605(a) and (b), Subpart ZZZZ	3.D.2		General compliance requirements
	40 CFR 63.6625(e) and (h), 63.6640(a), and Table 6, Subpart ZZZZ	3.D.3		Operating requirements

3.D.1 For Emission Points AA-004 and AA-006, the permittee shall comply with the following requirements:

(a) Change oil and filter every 500 hours of operation or annually, whichever comes first, or perform an oil analysis at the same frequency in order to extend the oil change requirement in accordance with 40 CFR 63.6625(i).

(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.

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

(Ref.: 40 CFR 63.6603(a) and Table 2d, Subpart ZZZZ)

3.D.2 For Emission Points AA-004 and AA-006, the permittee shall, at all times, be in compliance with the applicable emission and operating limitations of Subpart ZZZZ and operate and maintain the engine, including associated air pollution control 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 Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which may

include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

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

3.D.3 For Emission Points AA-004 and AA-006, the permittee shall operate and maintain the engines according to the manufacturer's emission-related written instructions or develop your own 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 practices for minimizing emissions. The permittee shall minimize each engine's time spent at idle during startup and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

(Ref.: 40 CFR 63.6625(e)(3) and (h), 63.6640(a), and Table 6, Subpart ZZZZ)

SECTION 4. COMPLIANCE SCHEDULE

4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.

4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, by January 31 for the preceding calendar year. Each compliance certification shall include the following:

(a) the identification of each term or condition of the permit that is the basis of the certification;

(b) the compliance status;

(c) whether compliance was continuous or intermittent;

(d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;

(e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit.

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

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

A. General Monitoring, Recordkeeping and Reporting Requirements

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

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

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

(a) the date, place as defined in the permit, and time of sampling or measurements;

(b) the date(s) analyses were performed;

(c) the company or entity that performed the analyses;

(d) the analytical techniques or methods used;

(e) the results of such analyses; and

(f) the operating conditions existing at the time of sampling or measurement.

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

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

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

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

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

5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit

requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) 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).)

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-001 AA-002	PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004 40 CFR 60.334(b), Subpart GG	5.B.1	NO_x CO	Monitor emissions with CEMS to demonstrate compliance with short-term emission limits
	PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004	5.B.2		CEMS
		5.B.3		Monitor emissions with CEMS to demonstrate compliance with annual emission limits (rolling 12-month total)
	40 CFR 75.57(a), Subpart F	5.B.4	NO_x SO_2	General recordkeeping requirement
	PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004	5.B.5	Startups and Shutdowns	Monitoring and recordkeeping
	40 CFR 60.334(h), Subpart GG	5.B.6	Fuel Standards	Fuel monitoring
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.7	Opacity	Visual observation/VEE
AA-003	PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004	5.B.8	Heat Input	Monitoring and recordkeeping of the annual heat input rate (rolling 12-month total)
	40 CFR 60.48c(g)(1), Subpart Dc	5.B.9	Fuel Usage	Monitor and record amount of fuel combusted (daily)
AA-004 AA-006	40 CFR 63.6625(f) and 63.6655(f)(2), Subpart ZZZZ	5.B.10	HAP	Install non-resettable hour meter and record hours of operation
	40 CFR 63.6655(a)(1), (2), and (5), and (e)(2), and 63.6660, Subpart ZZZZ	5.B.11		General recordkeeping
AA-008 AA-009	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.B.12	NO_x PM PM_{10} $PM_{2.5}$	Monitor hours of operation and calculate emissions (monthly and rolling 12-month total)

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-008	40 CFR 60.4340(b)(1), 60.4335(b)(1)-(3), and 60.4345(a)-(e), Subpart KKKK	5.B.13	NO_x	Monitor emissions with CEMS
	40 CFR 60.4350(a)-(g), Subpart KKKK	5.B.14		Identifying excess emissions
	40 CFR 60.4360 and 60.4365(a), Subpart KKKK	5.B.15	SO_2	Fuel monitoring
	40 CFR 75.57(a), Subpart F	5.B.4	NO_x SO_2	General recordkeeping requirement
AA-009	40 CFR 60.4209(a) and 60.4214(b), Subpart IIII	5.B.16	NMHC + NO_x, PM (filterable only) CO	Install non-resettable hour meter and record hours of operation

5.B.1 For Emission Points AA-001 and AA-002, the permittee shall demonstrate compliance with the NO_x and CO emission limits using a continuous emission monitoring system (CEMS). Demonstrating compliance with NO_x and CO limits using CEMS data in lieu of EPA Reference Methods is an acceptable practice provided that the permittee meets the guidelines established in EPA's general guidance on "Alternative Testing and Monitoring Procedures for Combustion Turbines Regulated under New Source Performance Standards". This includes use of reference method test data collected during the Relative Accuracy Test Audits (RATA) required under 40 CFR 75.

(Ref.: PSD Construction Permit issued January 7, 2000, modified November 7, 2001, and May 13, 2004, and 40 CFR 60.334(b), Subpart GG)

5.B.2 For Emission Points AA-001 and AA-002, the permittee shall install, calibrate, maintain, and operate continuous monitoring systems for NO_x. The monitoring systems must comply with all applicable requirements specified in 40 CFR 60.334, 60.13, and Appendix B and 40 CFR 75. In addition, the permittee shall comply with the reporting and recordkeeping requirements specified in 40 CFR 60.7 and 40 CFR 75. As allowed by 40 CFR 60.334(b)(3)(iii), the permittee may use the NO_x CEMS, installed to meet the requirements of 40 CFR 75, to meet the requirements of 40 CFR 60.334, 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).

The permittee shall also install, calibrate, maintain, and operate continuous monitoring systems for CO. The cylinder gas/relative accuracy audits (CGA/RAA) shall be conducted

according to 40 CFR 60, Appendix B and F. However, the frequency of the audit shall be as specified in 40 CFR 75, Appendix B, Section 2.2. The RATA required under 40 CFR 60, Appendix F shall be at the frequency found in 40 CFR 75, Appendix B, Section 2.3.1 and is as follows:

A calendar quarter that does not qualify as a QA operating quarter shall be excluded in determining the deadline for the next RATA. No more than eight (8) successive calendar quarters shall elapse after the quarter in which a RATA was last performed without a subsequent RATA having been conducted. If the RATA has not been completed by the end of the eighth calendar quarter since the quarter of the last RATA, then the RATA must be completed within a 720 unit (or stack) operating hour grace period following the end of the eighth successive elapsed quarter. For the diluent monitors, a RATA may be performed annually (i.e., once every four successive QA operating quarters, rather than once every two successive QA operating quarters).

(Ref.: PSD Construction Permit issued January 7, 2000, modified November 7, 2001, and May 13, 2004)

5.B.3 The continuous monitoring systems shall be capable of and certified to accurately read and measure NO_x and CO concentrations to comply with the tons/year limits (rolling 12-month total). The permittee shall use the submitted and approved data substitution protocol for the CEMS in case of a malfunction to calculate emissions that occur during a malfunction. The approved protocol shall be implemented into the Data Acquisition Handling System (DAHS) and the emissions calculated during any CEMS malfunctions shall be included in determining compliance with the annual tons/year limits.

(Ref.: PSD Construction Permit issued January 7, 2000, modified November 7, 2001, and May 13, 2004)

5.B.4 For Emission Points AA-001, AA-002, and AA-008, the permittee shall monitor and keep records of emissions in accordance with 40 CFR 75. The permittee shall maintain a file on site of all measurements, data, reports, and other required information for each affected unit for a period of at least three (3) years from the date of each record.

(Ref.: 40 CFR 75.57(a), Subpart F)

5.B.5 For Emission Points AA-001 and AA-002, the permittee shall monitor and maintain records of the duration of time that 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 and in accordance with the manufacturer's guidelines and procedures to minimize emissions during startup and shutdown.

(Ref.: PSD Construction Permit issued January 7, 2000, modified November 7, 2001, and May 13, 2004)

5.B.6 For Emission Points AA-001 and AA-002, the permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine as long as it meets the definition of natural gas found in 40 CFR 60.331(u). The permittee may demonstrate the maximum total sulfur content of the fuel is 20.0 grains/100 scf by using a current, valid purchase contract, tariff sheet or transportation contract specifying what the gas quality characteristics are or may use representative fuel sampling data. If the permittee chooses to use fuel sampling data, the amount of data specified in 2.3.1.4 or 2.3.2.4 of Appendix D of 40 CFR 75 is required.

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

5.B.7 For Emission Points AA-001 and AA-002, the permittee shall demonstrate compliance annually with the opacity limit by conducting a Visual Determination using EPA Reference Method 22 from 40 CFR 60, Appendix A for a period of six (6) consecutive minutes. If visible emissions are observed during the annual Method 22 evaluation, the permittee shall conduct a Visible Emissions Evaluation (VEE) per EPA Reference Method 9 from 40 CFR 60, Appendix A within seven (7) days of the Method 22 evaluation to demonstrate compliance with the 10% opacity limit.

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

5.B.8 For Emission Point AA-003, the permittee shall monitor and maintain records of the total heat input by monitoring fuel usage for the unit on a rolling 12-month total basis.

(Ref.: PSD Construction Permit issued January 7, 2000, modified November 7, 2001, and May 13, 2004)

5.B.9 For Emission Point AA-003, the permittee shall record and maintain records of the amount of fuel combusted during each calendar month.

(Ref.: 40 CFR 60.48c(g)(2), Subpart Dc)

5.B.10 For Emission Points AA-004 and AA-006, the permittee shall install a non-resettable hour meter on each engine (if not already installed). The permittee shall keep records of the hours of operation of each engine that are recorded through the hour meters. The permittee shall 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 63.6625(f) and 63.6655(f)(2), Subpart ZZZZ)

5.B.11 For Emission Points AA-004 and AA-006, the permittee shall keep the following records:

(a) A copy of each notification and report submitted to comply with Subpart ZZZZ.

(b) Records of the occurrence and duration of each malfunction of an engine or hour

meter.

(c) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore a malfunctioning engine or hour meter to its normal manner of operation.

(d) Records of the maintenance conducted on each engine in order to demonstrate the engines were operated and maintained in accordance to the maintenance plan.

All records shall be in a form suitable and ready for expeditious review for a period of five (5) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. These records may be kept in an electronic or hard copy format.

(Ref.: 40 CFR 63.6655(a)(1), (2), and (5) and (e)(2) and 63.6660, Subpart ZZZZ)

5.B.12 For Emission Points AA-008 and AA-009, the permittee shall demonstrate compliance with the permitted emission limits by maintaining the following monthly records:

(a) The number of hours each unit is in operation on a monthly basis and for each rolling 12-month period. For Emission Point AA-008, the operating records shall include the number and duration of time for each startup and shutdown;

(b) The amount and type of fuel used for each unit; and

(c) All applicable calculations for each unit demonstrating that the tons per year emission limits for NO_x and $PM/PM_{10}/PM_{2.5}$ have been met. The annual emissions from Emission Point AA-008 shall be calculated using the permitted short term emission rates or approved emission factors and the recorded hours of operation of the unit during normal operation plus the vendor guaranteed startup and shutdown emission values with the number and duration of startup and shutdown events. The emission calculations for Emission Point AA-009 shall utilize the emission limitations and the recorded number of hours of operation.

For Emission Point AA-008, the permittee may use the CEMS required by Subpart KKKK to demonstrate compliance with the NO_x tons per year limit provided the CEMS is also capable of and certified to accurately read/measure NO_x concentrations to comply with the limit. If the permittee chooses to use the CEMS to comply, the permittee shall submit a data substitution protocol within 60 days before using the CEMS to demonstrate compliance with the annual emission limit that addresses how emissions will be calculated during periods where the CEMS has malfunctioned. Within 90 days of approval, the permittee shall implement the provisions of the substitution protocol into the DAHS so that emissions that occur during periods where the CEMS has malfunctioned can be accounted for and used to demonstrate compliance with the annual emission limit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.B.13 For Emission Point AA-008, the permittee shall demonstrate compliance with the NO_x

emission limits by installing, certifying, maintaining, and operating a CEMS consisting of a NO_x monitor and a diluent gas (O_2 or CO_2) monitor to determine the hourly NO_x emission rate in parts per million (ppm) or pounds per million British thermal units (lb/MMBTU). If the permittee chooses to demonstrate compliance with the output-based emission standard (i.e., 1.2 lb NO_x/MWh), then the permittee shall also install, calibrate, maintain, and operate a fuel flow meter to continuously measure the heat input of the turbine **AND** a watt meter to continuously measure the gross electrical output of the turbine in megawatt-hours.

The CEMS equipment shall meet the following requirements:

(a) Each NO_x diluent CEMS must be installed and certified according to Performance Specification 2 (PS 2) in Appendix B to 40 CFR 60, except the 7-day calibration drift is based on unit operating days, not calendar days. Correspondence from MDEQ dated March 21, 2019, (Appendix D), confirms Procedure 1 in Appendix F to 40 CFR 60 is not required. Alternatively, a NO_x diluent CEMS that is installed and certified according to Appendix A of 40 CFR 75 is acceptable for use under Subpart KKKK. The RATA of the CEMS shall be performed on a lb/MMBTU basis.

(b) As specified in 40 CFR 60.13(e)(2), during each full unit operating hour, both the NO_x monitor and the diluent 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 with each monitor 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 for each monitor to validate the NO_x emission rate for the hour.

(c) Each fuel flow meter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Correspondence from MDEQ dated March 21, 2019, (Appendix D) confirms that fuel flow meters that meet the installation, certification, and quality assurance requirements of Appendix D to 40 CFR 75 are acceptable for use under this subpart.

(d) Each watt meter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions.

(e) The permittee shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in (a), (c), and (d) above. For the CEMS and fuel flow meters, correspondence from MDEQ dated March 21, 2019, (Appendix D) confirms that the permittee may satisfy the requirements of this paragraph by implementing the QA program and plan described in Section 1 of Appendix B to 40 CFR 75.

(Ref.: 40 CFR 60.4340(b)(1), 60.4335(b)(1)-(3), and 60.4345(a)-(e), Subpart KKKK)

5.B.14 For Emission Point AA-008, the permittee shall CEMS to identify excess emissions in accordance with the following:

(a) All CEMS data must be reduced to hourly averages as specified in 40 CFR 60.13(h).

(b) For each unit operating hour in which a valid hourly average, as described in 40 CFR 60.4345(b), is obtained for both NO_x and diluent monitors, the DAHS must calculate and record the hourly NO_x emission rate in units of ppm or lb/MMBTU, using the appropriate equation from Method 19 in Appendix A of Part 60. For any hour in which the hourly average O_2 concentration exceeds 19.0 percent or the hourly average CO_2 concentration is less than 1.0 percent, the permittee may use a diluent cap value of 19.0 percent for O_2 or 1.0 percent for CO_2 (as applicable) in the emission calculations.

(c) Correction of measured NO_x concentrations to 15 percent O_2 is not allowed.

(d) If the permittee has installed and certified a NO_x diluent CEMS to meet the 40 CFR 75 requirements, correspondence from MDEQ dated March 21, 2019, (Appendix D) confirms that only quality assured data from the CEMS shall be used to identify excess emissions under Subpart KKKK. Periods where the missing data substitution procedures in Subpart D of 40 CFR 75 are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under 40 CFR 60.7(c).

(e) All required fuel flow rate, steam flow rate, temperature, pressure, and megawatt data must be reduced to hourly averages.

(f) Calculate the hourly average NO_x emission rates, in units of the emission standards under 40 CFR 60.4320, using either ppm for units complying with the concentration limit or the following equation for units complying with the output based standard:

For simple-cycle operation, the permittee shall use Equation 1 below:

$$E = \frac{(NO_x)_h * (HI)_h}{P} \quad \text{(Eq. 1)}$$

where:

E = hourly NO_x emission rate in lb/MWh,

$(NO_x)_h$ = hourly NO_x emission rate, in lb/MMBTU

$(HI)_h$ = hourly heat input rate to the unit, in MMBTU/h, measured using the fuel flow meter, e.g., calculated using Equation D-15a in Appendix D to 40 CFR 75, and

P = gross energy output of the combustion turbine in MW

(g) Use the calculated hourly average emission rates from paragraph (f) to assess excess emissions on a 4-hour rolling average basis, as described in 40 CFR 60.4389(b)(1).

(Ref.: 40 CFR 60.4350(a)-(g), Subpart KKKK)

5.B.15 For Emission Point AA-008, the permittee must monitor the total sulfur content of the fuel being fired in the turbine. The sulfur content of the fuel must be determined using total sulfur methods described in 40 CFR 60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228 or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see (40 CFR 60.17) which measure the major sulfur compounds, may be used.

The permittee may be exempted from monitoring the total sulfur content of the fuel if the permittee can demonstrate the fuel does not exceed potential sulfur emissions of 26 ng SO_2/J (0.060 lb SO_2/MMBTU). The permittee may demonstrate this by providing the fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for the purchased natural gas is 20 grains of sulfur or less per 100 standard cubic feet.

(Ref.: 40 CFR 60.4360 and 60.4365(a), Subpart KKKK)

5.B.16 For Emission Point AA-009, the permittee shall install a non-resettable hour meter on the engine (if not already installed). The permittee shall keep records of the hours of operation of the engine that are recorded through the hour meter. The records shall indicate 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 60.4209(a) and 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	PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004 and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.C.1	NO_x CO Opacity	Semiannual reporting
		5.C.2		
		5.C.3	Startup and Shutdown	Semiannual reporting of startup/shutdown duration and percent deviations
AA-003	PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004	5.C.4	Heat Input	Semiannual reporting
AA-004 AA-006	PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004 40 CFR 63.6640(b), 63.6650(f), and Footnote 2 to Table 2d, Subpart ZZZZ 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.5	Hours of Operation	Semiannual reporting
AA-008 AA-009	Title V Operating Permit issued June 26, 2015, and modified June 5, 2017 (PSD Avoidance) and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.C.6	Hours of Operation NO_x $PM/PM_{10}/PM_{2.5}$	Semiannual reporting
AA-008	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.C.7	Startups and Shutdowns	Semiannual reporting
	40 CFR 60.4375(a), 60.4380(b), and 60.4395, Subpart KKKK	5.C.8	NO_x	Excess emissions/monitor downtime reports
AA-009	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.C.9	Hours of operation	Semiannual reporting

5.C.1 For Emission Points AA-001 and AA-002, the permittee shall submit semiannual reports in accordance with Condition 5.A.4 which contain a summary of the NO_x and CO emissions in tons/year based on a 365-day rolling total. This report should also include the results from any visible observations or VEEs completed during the reporting period.

(Ref.: PSD Construction Permit issued January 7, 2000, and modified November 7, 2001,

and May 13, 2004, and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

5.C.2 For Emission Points AA-001 and AA-002, the permittee shall submit semiannual NO_x and CO excess emissions and monitoring system reports which identify any excess emissions (for both lbs/hr and ppm) and monitor downtime that occurred during the reporting period. The semiannual report shall be submitted in accordance with Condition 5.A.4.

(Ref.: PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004)

5.C.3 For Emission Points AA-001 and AA-002, the permittee shall submit a semiannual report in accordance with Condition 5.A.4 that contains any startup and shutdown duration time deviations that occurred during the reporting period. If no deviations occurred, the semiannual report should state that no such deviations occurred during the reporting period.

(Ref.: PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004)

5.C.4 For Emission Point AA-003, the permittee shall submit semiannual reports showing the total heat input in MMBTU on a monthly and rolling 12-month total basis.

(Ref.: PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004)

5.C.5 For Emission Points AA-004 and AA-006, the permittee shall submit semiannual reports in accordance with Condition 5.A.4 summarizing the hours of operation of 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.

This report shall also include all deviations from any emission or operating limitation of Subpart ZZZZ. Such deviations shall include any failure to perform the work practice on the required schedule. In the event a work practice is delayed because the engine is operating during an emergency or if performing the work practice on the required work schedule posed an unacceptable risk under federal, state, or local law, the permittee shall include in the report the reason for the delay.

(Ref.: PSD Construction Permit issued January 7, 2000, and modified November 7, 2001, and May 13, 2004 and 40 CFR 63.6640(b), 63.6650(f), and Footnote 2 to Table 2d, Subpart ZZZZ and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

5.C.6 For Emission Points AA-008 and AA-009, the permittee shall submit a semiannual report in accordance with Condition 5.A.4 that summarizes the hours of operation for each unit and the corresponding emissions of NO_x and $PM/PM_{10}/PM_{2.5}$ in tons/year for the reporting

period on a monthly and rolling 12-month basis.

(Ref.: TVOP issued June 26, 2015, and modified June 5, 2017 (PSD Avoidance))

5.C.7 For Emission Point AA-008, the permittee shall submit a semiannual report in accordance with Condition 5.A.4 that summarizes the number of startups and shutdowns which occurred during the previous six-month period.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.C.8 For Emission Point AA-008, the permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emissions must be reported for all periods of unit operation, including startup, shutdown, and malfunction. Periods of excess emissions and monitor downtime that must be reported are defined as follows:

(a) An excess emission is any unit operating period in which the 4-hour or 30-day rolling average NO_x emission rate exceeds the applicable emission limit in Section 3.B of this permit. For the purposes of Subpart KKKK, a "4-hour rolling average NO_x emission rate" is the arithmetic average of the average NO_x emission rate in ppm or ng/J (lb/MWh) measured by the CEMS for a given hour and the three unit operating hour average NO_x emission rates immediately preceding that unit operating hour. Calculate the rolling average if a valid NOx emission rate is obtained for at least 3 of the 4 hours. For the purposes of Subpart KKKK, a "30-day rolling average NO_x emission rate" is the arithmetic average of all hourly NO_x emission data in ppm or ng/J (lb/MWh) measured by the CEMS for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30-day average is calculated each unit operating day as the average of all hourly NO_x emission rates for the preceding 30 unit operating days if a valid NO_x emission rate is obtained for at least 75 percent of all operating hours.

(b) A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NO_x concentration, CO_2, or CO concentration, fuel flow rate, or megawatts.

(c) For operating periods during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard.

All reports required under Subpart KKKK must be postmarked by the 30th day following the end of each 6-month period. This information may be submitted in the report required in Condition 5.A.4; however, that report will need to be submitted by the 30th day following the end of the reporting period.

(Ref.: 40 CFR 60.4375(a), 60.4380(b), and 60.4395, Subpart KKKK)

5.C.9 For Emission Point AA-009, the permittee shall submit semiannual reports in accordance with Condition 5.A.4 summarizing the hours of operation of the 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)(a)(2).)

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 C 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 REQUIREMENTS

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, and AA-008					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR part 75, subpart B (for SO2 monitoring) and 40 CFR part 75, subpart H (for NOX monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
SO_2		X			
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) Designated representative requirements - The permittee shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.813 through 97.818.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

(1) The permittee, and the designated representative, of each CSAPR NO_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) Effect 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) Effect on units in Indian country. Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regards to any source or unit, in Indian country within the borders of the state.

APPENDIX A

List of Abbreviations Used In this Permit

11 Miss. Admin. Code Pt. 2, Ch. 1.	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
11 Miss. Admin. Code Pt. 2, Ch. 2.	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
11 Miss. Admin. Code Pt. 2, Ch. 3.	Regulations for the Prevention of Air Pollution Emergency Episodes
11 Miss. Admin. Code Pt. 2, Ch. 4.	Ambient Air Quality Standards
11 Miss. Admin. Code Pt. 2, Ch. 5.	Regulations for the Prevention of Significant Deterioration of Air Quality
11 Miss. Admin. Code Pt. 2, Ch. 6.	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
11 Miss. Admin. Code Pt. 2, Ch. 7.	Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act
BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
lbs/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards for Hazardous Air Pollutants, 40 CFR 61 or National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR 63
NMVOC	Non-Methane Volatile Organic Compounds
NO_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

List of Regulations Referenced In this Permit

11 Miss. Admin. Code, Part 2, Ch. 1. – Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants (Amended November 10, 2016)

11 Miss. Admin. Code, Part 2, Ch. 2. – Permit Regulations for the Construction and/or Operation of Air Emissions Equipment (Amended July 28, 2005)

11 Miss. Admin. Code, Part 2, Ch. 6. – Air Emission Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act (Amended June 28, 2012)

40 CFR 82, Protection of Stratospheric Ozone

40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines

40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

40 CFR 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines

40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines

40 CFR 72-78, Acid Rain Program General Provisions

40 CFR 97, Subpart EEEEE, Cross State Air Pollution Rule (CSAPR) NO_x Ozone Season Group 2 Trading Program

PHASE II ACID RAIN PERMIT

Issued to: Entergy Mississippi, LLC - Hinds County Plant
Operated by: Entergy Mississippi, LLC - Hinds County Plant
ORIS Code: 55218
Effective: March 31, 2020 to February 28, 2025

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	December 17, 1999
(2)	Final Permit issued	February 8, 2000
(3)	Draft Permit for public and EPA comment	March 26, 2004
(4)	Final Permit issued	June 11, 2004
(5)	Draft Permit for public and EPA comment	April 14, 2009
(6)	Final Permit issued	June 10, 2009
(7)	Permit transferred	December 10, 2009
(8)	Draft Permit for public and EPA comment	May 8, 2015
(9)	Final Permit issued	June 26, 2015
(10)	Modified TVOP for public and EPA comment	April 27, 2017
(11)	Final modified TVOP issued	June 5, 2017

Present Action:

(1)	Draft Title V and Phase II Acid Rain Permits for public and EPA comment	February 12, 2020
(2)	Final Permit issued	March 31, 2020

Signature

MAR 3 1 2020
Date

Krystal Rudolph, P.E.
Chief, Environmental Permits Division
Mississippi Department of Environmental Quality
P.O. Box 2261
Jackson, MS 39225-2261
Telephone (601) 961-5171
Fax (601) 961-5742

12051 PER20190001

PHASE II ACID RAIN PERMIT

Issued to: Entergy Mississippi, LLC - Hinds County Plant
Operated by: Entergy Mississippi, LLC - Hinds County Plant
ORIS Code: 55218
Effective: March 31, 2020 to February 28, 2025

ACID RAIN PERMIT CONTENTS:

1) Statement of Basis.

2) SO_2 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) SO_2 ALLOWANCE ALLOCATIONS AND NO_X REQUIREMENTS FOR EACH AFFECTED UNIT:

		2020	2021	2022	2023	2024
AA-001 AA-002 AA-008	**SO_2 allowances, under Table 2 of 40 CFR Part 73.**	NA	NA	NA	NA	NA
	NO_X limit	NA				

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 SO_2 allowances.

4) PHASE II PERMIT APPLICATION:

Attached

PHASE II ACID RAIN PERMIT

Issued to: Entergy Mississippi, LLC - Hinds County Plant
Operated by: Entergy Mississippi, LLC - Hinds County Plant
ORIS Code: 55218
Effective: March 31, 2020 to February 28, 2025

ACID RAIN PERMIT CONTENTS:

1) Statement of Basis.

2) SO_2 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) SO_2 ALLOWANCE ALLOCATIONS AND NO_X REQUIREMENTS FOR EACH AFFECTED UNIT:

		2020	2021	2022	2023	2024
AA-001 AA-002 AA-008	**SO_2 allowances, under Table 2 of 40 CFR Part 73.**	NA	NA	NA	NA	NA
	NO_X limit	NA				

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 SO_2 allowances.

4) PHASE II PERMIT APPLICATION:

Attached

STATE OF MISSISSIPPI
PHIL BRYANT
GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
GARY C. RIKARD, EXECUTIVE DIRECTOR

March 21, 2019

Hisham Sidani
Vice President
Entergy Mississippi Inc, Hinds County Plant
10055 Grogans Mill Road, Parkwood II
The Woodlands, TX 77380-1059

Dear Sidani:

Re: Entergy Mississippi Inc, Hinds County Plant
Monitoring Conditions
Air Ref. No. 1080-00230
Hinds County

We received your letter dated January 3, 2019, and have review the request for approval on Permit Conditions 5.B.14(a), (c), and (c), and Condition 5.B.15(c). Based on the information received, the agency concurs with Entergy Mississippi's assessment and the permittee shall maintain compliance through the means described in your letter.

Sincerely,

Ryan Ozment
Air I
Environmental Permits Division

12051 PER20160001

OFFICE OF POLLUTION CONTROL
POST OFFICE BOX 2261 • JACKSON, MISSISSIPPI 39225-2261 • TEL: (601) 961-5171 • FAX: (601) 354-6612 • www.deq.state.ms.us
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12051 PER20190001

Entergy.

Power Generation
10055 Grogan's Mill Road
The Woodlands, TX 77380
Tel 281-297-3418
Fax 281-297-3071

Charles E. Hall, VP
Power Plant Operations - Mississippi

January 3, 2019

Mr. Jeffrey Bland, P.E.
Air 1 Branch Chief - EPD
Mississippi Department of Environmental Quality
P.O. Box 2261
Jackson, Mississippi 39225-2261

Re: Entergy Mississippi, LLC Hinds County Plant
Air Facility No. 1080-00230; AI No. 12051
Jackson, Mississippi

Dear Mr. Bland:

The Entergy Mississippi, LLC Hinds County Plant is requesting Mississippi Department of Environmental Quality (MDEQ) approval on the following permit conditions:

- Permit Condition 5.B.14 (a) – Procedure 1 in Appendix F to Part 60 is not required.
- Permit Condition 5.B.14 (c) – Fuel flowmeters that meet the installation, certification, and quality assurance requirements of Appendix D to 40 CFR Part 75 are acceptable for use under this subpart.
- Permit Condition 5.B.14 (e) – For the CEMS and fuel flow meters, the permittee may satisfy the requirements of this paragraph by implementing the QA program and plan described in Section 1 of Appendix B to 40 CFR Part 75.
- Permit Condition 5.B.1 (c) – That only quality assured data from the CEMS shall be used to identify excess emissions under Subpart KKKK. Periods where the missing data substitution procedures in Subpart D of Part 75 are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under 60.7 (c).

Should you have any questions regarding this request for approval please contact Mr. Timothy R. Stone at (601) 969-2316.

Based on information and belief formed after reasonable inquiry, the statements contained herein are true, accurate, and complete.

Sincerely,

Charles E. Hall

Charles E. Hall
V.P. Power Plant Operations - Mississippi

12051 PER20190001

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-025

Acid Rain Permit Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31

This submission is: ☐ New ☑ Revised

STEP 1

Identify the source by plant name, State, and ORIS code.

Plant Name: Entergy Mississippi Inc., Hinds County Plant | State: MS | ORIS Code: 55218

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a." For new units, enter the requested information in columns "c" and "d."

a	b	c	d
Unit ID#	Unit Will Hold Allowances in Accordance with 40 CFR 72.9(c)(1)	New Units Commence Operation Date	New Units Monitor Certification Deadline
AA-001	Yes	N/A	N/A
AA-002	Yes	N/A	N/A
AA-008	Yes	9/8/2019	3/8/2020
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		

DUPLICATE

RECEIVED
NOV 4 2019
MDEQ

Plant Name (from Step 1) Entergy Mississsippi Inc., Hinds County Plant

STEP 3

Read the standard requirements

Permit Requirements

(1) The designated representative of each affected source and each affected unit at the source shall:

(i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;

(2) The owners and operators of each affected source and each affected unit at the source shall:

(i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and

(ii) Have an Acid Rain Permit.

Monitoring Requirements

(1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.

(2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

(3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

(1) The owners and operators of each source and each affected unit at the source shall:

(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and

(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.

(3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or

(ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

STEP 3, Cont'd.

Nitrogen Oxides Requirements The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

(1) The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
(2) The owners and operators of an affected unit that has excess emissions in any calendar year shall:
(i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting
authority:
(i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
(iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
(2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.

Plant Name (from Step 1)	Entergy Mississippi Inc., Hinds County Plant

Step 3, Cont'd.

Liability, Cont'd.

(5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
(6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided,* that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Certification

Read the certification statement, sign, and date

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Hisham Sidani	
Signature	Hisham Sidani	Date 10/25/2019