STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Entergy Mississippi LLC
Choctaw County Generating Station
2446 Highway 407
French Camp, Mississippi
Choctaw County

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

Permit Issued: February 25, 2025

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

Becky Simonson

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: January 31, 2030 **Permit No.: 0400-00018**

15595 PER20230002

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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	2,126 MMBtu/hr natural gas-fired combustion turbine (CT) with supplemental duct burners with a maximum heat input capacity of 510 MMBtu/hr. The turbine is equipped with Selective Catalytic Reduction (SCR) for controlling NO_x emissions (CT reconstructed in 2017).
AA-002	2,126 MMBtu/hr natural gas-fired CT with supplemental duct burners with a maximum heat input capacity of 510 MMBtu/hr. The turbine is equipped with SCR for controlling NO_x emissions.
AA-003	2,126 MMBtu/hr natural gas-fired CT with supplemental duct burners with a maximum heat input capacity of 510 MMBtu/hr. The turbine is equipped with SCR for controlling NO_x emissions.
AA-004	32.66 MMBtu/hr natural gas-fired Clever Brooks auxiliary boiler equipped with dry low-NO_x burners.
AA-005	2.31 MMBtu/hr (300 HP/224 KW) diesel-fired emergency compression ignition fire water pump engine (John Deere Power Tech 8.1 Model 6081, Model Year – 2002)
AA-006	0.49 MMBtu/hr (64.1 HP/49 KW) natural gas/LPG-fired emergency, spark ignition engine used to provide backup power (Kohler Model KG2204T, Model Year 2021)

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. Facility-Wide Emission Limitations & Standards

3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).

(a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.

(b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

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

3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Condition 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets.

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

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

(a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.

(b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gasborne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

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

B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001 AA-002 AA-003 AA-004	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.B.1	PM (filterable)	$E = 0.8808 * I^{-0.1667}$
AA-005 AA-006	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.2	PM (filterable)	0.6 lbs/MMBtu
AA-001 AA-002 AA-003	11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued May 31, 2017, and 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008	3.B.3	Fuel Restriction	Natural gas only
		3.B.4	Operating Restriction	Lowest Sustainable Load (LSL) equal to 45%
		3.B.5	Operating Restriction	SCR must operate at all loads above the LSL
		3.B.6	Startup/ Shutdown/ Runbacks/ Tuning	Cold startup ≤ 6 hours Warm startup ≤ 4 hours Tuning event ≤ 6 hours Runback ≤ 60 minutes to return above LSL Shutdown ≤ 3 hours
AA-001	11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued May 31, 2017 [PSD Avoidance Limit (VOC)] [PSD BACT Limits (PM, PM_{10}, $PM_{2.5}$, NO_x, CO, Opacity)]	3.B.7	PM/PM_{10} (filterable)	≤ 0.008 lbs/MMBtu not to exceed 20.59 lbs/hr both determined on a 3-hour average basis not to exceed 90.18 TPY
			$PM_{2.5}$ (filterable + condensable)	≤ 20.59 lbs/hr determined on a 3-hour average basis not to exceed 90.18 TPY
			SO_2	≤ 1.38 lbs/hr not to exceed 6.04 TPY
			NO_x	≤ 3 ppmv at 15% O_2 and ≤ 23.45 lbs/hr both determined on a rolling 3-hour average basis not to exceed 102.72 TPY
			CO	≤ 10 ppm at 15% O_2 and ≤ 44.82 lbs/hr both determined on a rolling 3-hour average basis not to exceed 220.9 TPY
			VOC	≤ 3.5 ppm at 15% O_2 and ≤ 8.97 lbs/hr both determined on a rolling 3-hour average basis not to exceed 39.29 TPY
			Opacity	≤ 10%

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-002 AA-003	11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008 [PSD BACT Limits]	3.B.8	PM/ PM_{10} (filterable)	≤ 20.59 lbs/hr determined on a 3-hour average basis not to exceed 90.18 TPY
			SO_2	≤ 1.38 lbs/hr not to exceed 6.04 TPY
			NO_x	≤ 3.5 ppmv at 15% O_2 and ≤ 27.36 lbs/hr both determined on a rolling 3-hour average basis not to exceed 119.83 TPY
			CO	≤ 18.36 ppm at 15% O_2 and ≤ 82.29 lbs/hr both determined on a rolling 3-hour average basis not to exceed 360.43 TPY
			VOC	≤ 3.64 ppm at 15% O_2 and ≤ 9.33 lbs/hr both determined on a rolling 3-hour average basis not to exceed 40.86 TPY
			Opacity	≤ 10%
AA-001	40 CFR 60, Subpart KKKK Standards of Performance for Stationary Combustion Turbines 40 CFR 60.4300, 60.4305, 60.4315, 60.4333(a), Subpart KKKK	3.B.9	SO_2 NO_x	Applicability
	40 CFR 60.4320(a) and Table 1, Subpart KKKK	3.B.10	NO_x	≤ 15 ppm @ 15% O_2 or ≤ 0.43 lbs/MWh determined on a 30-day rolling average basis
	40 CFR 60.4330(a)(2), Subpart KKKK	3.B.11	SO_2	≤ 0.060 lbs SO_2/MMBtu heat input (≤ 26 ng SO_2/J)
AA-001	40 CFR 60, Subpart TTTT Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units 40 CFR 60.5508, 60.5509, 60.5515, 60.5525(b), and Table 3, Subpart TTTT	3.B.12	CO_2	Applicability
	40 CFR 60.5520(a), 60.5525, and Table 2, Subpart TTTT	3.B.13		≤ 1,000 lbs CO_2/MWh of gross energy output determined on a 12-operating month rolling average basis

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-002 AA-003	40 CFR 60, Subpart GG Standards of Performance for Stationary Gas Turbines 40 CFR 60.330, Subpart GG	3.B.14	SO_2 NO_x	Applicability
	40 CFR 60.332(a)(1) and (b), Subpart GG	3.B.15	NO_x	STD = 0.0075*(14.4/Y) + F
	40 CFR 60.333(b), Subpart GG	3.B.16	SO_2	Fuel must contain less than 0.8% sulfur by weight
AA-001 AA-002 AA-003	40 CFR 60, Subpart Da Standards of Performance for Electric Utility Steam Generating Units 40 CFR 60.40Da(e)(1) and (2), Subpart Da	3.B.17	PM SO_2 NO_x Opacity	Applicability
	40 CFR 60.42Da(b)(2) and (f)(1), Subpart Da	3.B.18	PM Opacity	PM and Opacity limit exemption
	40 CFR 60.43Da(b)(2) and 60.48Da(a), Subpart Da	3.B.19	SO_2	≤ 0.20 lbs/MMBtu heat input
	40 CFR 60.44Da(d)(1) and 60.48Da(a), Subpart Da	3.B.20	NO_x	≤ 1.6 lbs/MWh
AA-001 AA-002 AA-003	40 CFR 63, Subpart YYYY NESHAP for Stationary Combustion Turbines 40 CFR 63.6080, 63.6085, and 63.6090(a)(1) and (3) and (b)(4), Subpart YYYY	3.B.21	HAP (formaldehyde)	Applicability
AA-001	40 CFR 63.6100, 63.6105(c) and Table 1, Subpart YYYY and EPA Approved CMS Monitoring Plan in Appendix D	3.B.22		≤ 91 ppbvd @15% oxygen
	40 CFR 63.6100 and Table 2, Subpart YYYY and EPA Approved CMS Monitoring Plan in Appendix D	3.B.23		Gross power output ≥ 82 MW (4-hour average)
AA-001 AA-002 AA-003	40 CFR 72-78 Acid Rain Program Provisions 40 CFR 72.6, Subpart A	3.B.24	NO_x SO_2	Applicability

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001 AA-002 AA-003	40 CFR 97, Subpart EEEEE Cross State Air Pollution Rule (CSAPR) NO_x Ozone Season Group 2 Trading Program 40 CFR 97.804, Subpart EEEEE	3.B.25	NO_x	Applicability
AA-004	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.B.26	SO_2	4.8 lbs/MMBtu
	11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008	3.B.3	Fuel Restriction	Natural gas only
		3.B.27	Operating Restriction	Operate ≤ 4,000 hours per year determined on a rolling 12-month total basis
	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.28	PM SO_2	Applicability
	40 CFR 63, Subpart DDDDD NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters 40 CFR 63.7480, 63.7485, 63.7490(a)(1) and (d), 63.7499(l), 63.7500(a)(1), (e), and (f), and 63.7505(a), Subpart DDDDD	3.B.29	HAP	Applicability
AA-004	40 CFR 63.7500(a)(3), Subpart DDDDD	3.B.30	HAP	Operating requirement
AA-005	11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008	3.B.31	Fuel Restriction	Fuel must contain less than 0.8% sulfur by weight
AA-005 AA-006	40 CFR 63, Subpart ZZZZ NESHAP for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6580, 63.6585(a) and (b), 63.6590(a)(1)(ii), (a)(2)(ii), and (c)(6), and 63.6605, Subpart ZZZZ	3.B.32	HAP	Applicability
AA-005	40 CFR 63.6640(f)(1) through (3), Subpart ZZZZ	3.B.33		Operating requirements

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-006	40 CFR 60, Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines 40 CFR 60.4230(a)(4)(iii) and Table 3, Subpart JJJJ	3.B.34	$HC + NO_x$ CO	Applicability
	40 CFR 60.4233(c), 60.4231(c) and 60.4234, Subpart JJJJ and 40 CFR 1054, Appendix A(b)(1)	3.B.35		Emission standards for new engines (see condition)
	40 CFR 60.4243(a), Subpart JJJJ	3.B.36		Certified engine requirements
	40 CFR 60.4243(d)(1) through (3) and (e), Subpart JJJJ	3.B.37		Operating requirements

3.B.1 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall not cause, permit, or allow the emission of ash and/or particulate matter from fossil fuel burning installations of greater than 10 million BTU per hour heat input to exceed an emission rate as determined by the relationship

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

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

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

3.B.2 For Emission Points AA-005 and AA-006, 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.3 For Emission Points AA-001, AA-002, AA-003 and AA-004, the permittee shall not burn any fuel other than pipeline quality natural gas.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued May 31, 2017, and 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008)

3.B.4 For Emission Points AA-001, AA-002, and AA-003, the Lowest Sustainable Load (LSL) for the combustion turbines is equal to 45% of the operating load. The LSL was established via performance testing completed in 2017.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued May 31, 2017, and 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008)

3.B.5 For Emission Points AA-001, AA-002, and AA-003, the permittee shall operate the selective catalytic reduction (SCR) systems at all times the combustion turbine is operating above the established LSL.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued May 31, 2017, and 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008)

3.B.6 For Emission Points AA-001, AA-002, and AA-003, the permittee shall comply with the following requirements during startup, shutdown, run back, and tuning events:

(a) *Startup (AA-002 and AA-003).* A startup event begins at the moment the startup sequence is initiated by the permittee and fuel flow is initiated into the specific CT and ends with the attainment of the CT LSL (i.e., 45%). There are two types of startup:

(1) *Cold Startup.* A startup that occurs when the CT has not been fired in the previous 48 hours. The permittee is limited to an operating period of six (6) hours or less during a cold startup of the CT and heat recovery steam generator (HRSG).

(2) *Warm Startup.* A startup that occurs when the turbine has been fired within the previous 48 hours. The permittee is limited to an operating period of four (4) hours or less during a warm startup of the CT and HRSG.

(b) *Startup (AA-001).* Startup time must not extend longer than the time specified by the manufacturer's standard operating procedure for startups. Startups should be conducted, to the extent possible, in a manner consistent with ensuring that safety and good air pollution control practices for minimizing emissions are followed.

(c) *Runback.* A runback event begins at the moment a process critical alarm causes a CT to drop below the LSL. The permittee has sixty (60) minutes to return to or above the LSL. If the CT does not return to the LSL within this period, the permittee shall initiate shutdown procedures.

(d) *Tuning event.* A tuning event will normally occur because of required seasonal tuning, after a combustor change-out, after a major repair or maintenance to a combustor, or other similar maintenance circumstance. Tuning sessions are completed periodically to optimize combustion or emission reductions from the CT.

Tuning events must be performed in accordance with the manufacturer's recommendations. During the tuning event, all reasonable steps to minimize levels of emissions that exceed the limits of this permit shall be taken. Tuning events shall be limited to six (6) hours or less.

(e) *Shutdown.* A shutdown event begins at the moment the specific CT reduces load to the LSL during a normal shutdown sequence initiated by the permittee and ends with the termination of fuel flow to the specific CT. For periods of shutdown, the permittee shall limit the total time in a shutdown event to three (3) hours or less.

The CTs shall not operate at less than the LSL at any time except during startup, shutdown, run back events, tuning events, or emergencies.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued May 31, 2017, and 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008, and the EPA Approved CMS Monitoring Plan in Appendix D)

3.B.7 Emission Point AA-001 is limited in accordance with the following:

(a) Particulate Matter (PM)/PM less than 10 microns (PM_{10}) (filterable) $\leq$ 0.008 lbs/MMBtu not to exceed 20.59 lbs/hr determined on a 3-hour average basis not to exceed 90.18 tons per year (TPY);

(b) Particulate Matter less than 2.5 microns ($PM_{2.5}$) (filterable + condensable) $\leq$ 20.59 lbs/hr determined on a 3-hour average basis not to exceed 90.18 TPY;

(c) Sulfur Dioxide (SO_2) $\leq$ 1.38 lbs/hr not to exceed 6.04 TPY;

(d) Nitrogen Oxides (NO_x) $\leq$ 3 ppmv at 15% O_2 and $\leq$ 23.45 lbs/hr both determined on a rolling 3-hour average basis not to exceed 102.72 TPY;

(e) Carbon Monoxide (CO) $\leq$ 10 ppmv at 15% O_2 and $\leq$ 44.82 lbs/hr both determined on a rolling 3-hour average basis not to exceed 220.9 TPY;

(f) Volatile Organic Compounds (VOC) $\leq$ 3.5 ppmv at 15% O_2 and $\leq$ 8.97 lbs/hr both determined on a rolling 3-hour average basis not to exceed 39.29 TPY; and

(g) Opacity $\leq$ 10%.

The permittee shall comply with the short-term (lbs/hr and ppm) emission limits at all times except during periods of startup, shutdown, run back, and tuning events. However, emissions generated during these periods shall be calculated and used to demonstrate compliance with the long-term (TPY) emission limits.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued May 31, 2017 [PSD Avoidance Limit (VOC)][PSD BACT Limits(PM, PM_{10}, $PM_{2.5}$, NO_x, CO, Opacity)])

3.B.8 For Emission Points AA-002 and AA-003, the emission limits below are applicable to **each** individual emission point:

(a) PM/PM_{10} (filterable) ≤ 20.59 lbs/hr determined on a 3-hour average basis not to exceed 90.18 tons per year (TPY);

(b) SO_2 ≤ 1.38 lbs/hr not to exceed 6.04 TPY;

(c) NO_x ≤ 3.5 ppmv at 15% O_2 and ≤ 27.36 lbs/hr both determined on a rolling 3-hour average basis not to exceed 119.83 TPY;

(d) CO ≤ 18.36 ppmv at 15% O_2 and ≤ 82.29 lbs/hr both determined on a rolling 3-hour average basis not to exceed 360.43 TPY;

(e) VOC ≤ 3.64 ppmv at 15% O_2 and ≤ 9.33 lbs/hr both determined on a rolling 3-hour average basis not to exceed 40.86 TPY; and

(f) Opacity ≤ 10%.

The permittee shall comply with the short-term (lbs/hr and ppm) emission limits at all times except during periods of startup, shutdown, run back, and tuning events. However, emissions generated during these periods shall be calculated and used to demonstrate compliance with the long-term (TPY) emission limits.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008 [PSD BACT Limits])

3.B.9 Emission Point AA-001 is subject to and shall comply with all applicable requirements of the Standards of Performance for Stationary Combustion Turbines, 40 CFR 60, Subpart KKKK, and the applicable General Provisions found in 40 CFR 60, Subpart A.

(Ref. 40 CFR 60.4300, 60.4305, 60.43315, and 60.4333(a), Subpart KKKK)

3.B.10 For Emission Point AA-001, the permittee shall limit NO_x emissions to equal to or less than 15 ppm at 15 percent oxygen (less than equal to 0.43 lbs/MWh) of useful output to be determined on a 30-day rolling average basis.

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

3.B.11 For Emission Point AA-001, the combustion turbine shall not fire any fuel which contains total potential sulfur emissions in excess of 0.060 lbs SO_2/MMBtu (26 ng SO_2/J) heat input.

(Ref.: 40 CFR 60.4320(a)(2), Subpart KKKK)

3.B.12 Emission Point AA-001 is subject to and shall comply with the applicable requirements of the Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units (EGU), 40 CFR 60, Subpart TTTT and the applicable General Provisions from 40 CFR 60, Subpart A.

The permittee shall operate and maintain the affected EGU, including associated equipment and monitors, in a manner consistent with safety and good air pollution control practices. The MDEQ will determine if you are using consistent operation and maintenance procedures based on information available to the MDEQ that may include but is not limited to, fuel use records, monitoring results, review of operation and maintenance procedures and records, review of reports required by Subpart TTTT, and inspection of the EGU.

(Ref.: 40 CFR 60.5508, 60.5509, 60.5515, 60.5525(b), and Table 3, Subpart TTTT)

3.B.13 For Emission Point AA-001, the permittee shall not discharge from the affected Electric Generating Unit (EGU) any gases that contain CO_2 in excess of 1,000 lbs CO_2/MWh of gross energy output.

(Ref.: 40 CFR 60.5520(a), 60.5525, and Table 2, Subpart TTTT)

3.B.14 Emission Points AA-002 and AA-003 are subject to and shall comply with the applicable requirements of the Standards of Performance for Stationary Gas Turbines, 40 CFR 60, Subpart GG and the applicable General Provisions found in 40 CFR 60, Subpart A.

(Ref.: 40 CFR 60.330, Subpart GG)

3.B.15 For Emission Points AA-002 and AA-003, the permittee shall not cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of

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

Where STD is the allowable ISO corrected (if required as given in 40 CFR 60.335(b)(1)) NO_x emission concentration (percent by volume at 15 percent oxygen and on a dry basis); Y is the manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour; and F is the NO_x emission allowance for fuel-bound nitrogen as defined in 40 CFR 60.332(a)(4).

The permittee shall be considered in compliance with the Subpart GG emission limit provided the permittee demonstrates compliance with the NO_x emission concentration limits (ppmv at 15% O_2) contained in Condition 3.B.8.

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

3.B.16 For Emission Points AA-002 and AA-003, the permittee shall not burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight.

(Ref.: 40 CFR 333(b), Subpart GG)

3.B.17 The duct burners associated with the heat recovery steam generators on Emission Points AA-001, AA-002, and AA-003, are subject to the Standards of Performance for Electric Utility Steam Generating Units, 40 CFR 60, Subpart Da and the applicable requirements of the General Provisions in 40 CFR 60, Subpart A. Only the emissions generated from the combustion of fuel in the steam generating unit (i.e., duct burners) are subject to the requirements of Subpart Da

(Ref.: 40 CFR 60.40Da(e)(1) and (2), Subpart Da)

3.B.18 The duct burners associated with the heat recovery steam generators on Emission Points AA-001, AA-002, and AA-003 are exempt from the PM and Opacity emission limits found in 40 CFR 60.42Da since they combust natural gas, have potential SO_2 emission rates equal to or less than 0.060 lbs/MMBtu, and they do not use a post-combustion technology to reduce emissions of SO_2 or PM.

(Ref.: 40 CFR 60.42Da(b)(2) and (f)(1), Subpart Da)

3.B.19 The duct burners associated with the heat recovery steam generators on Emission Points AA-001, AA-002, and AA-003 shall not discharge any gases that contain SO2 in excess of 0.20 lbs/MMBtu heat input. This limit applies at all times except during periods of startup, shutdown, or malfunction.

(Ref.: 40 CFR 60.43Da(b)(2) and 60.48Da(a), Subpart Da)

3.B.20 The duct burners associated with the heat recovery steam generators on Emission Points AA-001, AA-002, and AA-003 shall not discharge any gases that contain NO_x (expressed as NO_2) in excess of 1.6 lbs/MWh gross energy output. Compliance with the limit is determined on a 30-boiler operating day rolling average basis. This limit applies at all times except during periods of startup, shutdown, or malfunction.

(Ref.: 40 CFR 60.44Da(d)(1) and 60.48Da(a), Subpart Da)

3.B.21 Emission Points AA-001, AA-002, and AA-003 are subject to and shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines, 40 CFR 63, Subpart YYYY and the applicable requirements of the General Provisions, 40 CFR 63, Subpart A.

For purposes of this subpart, the combustion turbines associated with Emission Points AA-002 and AA-003 are considered existing stationary combustion turbines that are not required to meet the requirements of Subpart YYYY or Subpart A. The combustion turbine

associated with Emission Point AA-001 was reconstructed in 2017; therefore, it is now considered an affected source that is subject to the applicable requirements of Subpart YYYY.

(Ref.: 40 CFR 63.6080, 63.6085, and 63.6090(a)(1) and (3) and (b)(4), Subpart YYYY)

3.B.22 For Emission Point AA-001, the permittee shall limit the concentration of formaldehyde to less than 91 ppbvd or less at 15 percent oxygen, except during turbine startup. For purposes of this subpart, startup is defined as the first firing of fuel in the stationary combustion turbine and ends in accordance with the manufacturer's standard operating procedure for startups or no longer than 3 (three) hours, whichever is less.

The permittee shall operate and maintain the affected source and 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 the applicable standard have been achieved. Determination of whether the permittee is operating in compliance with operation and maintenance requirements 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 63.6100, 63.6105(c), and Tables 1 and 2, Subpart YYYY)

3.B.23 For Emission Point AA-001, the permittee shall operate the combustion turbine at a gross power output of 82 MW in the lean premix mode during normal operation which is in accordance with the EPA approved Continuous Monitoring System (CMS) plan found in Appendix D of this permit.

(Ref.: 40 CFR 63.6100 and Table 2, Subpart YYYY)

3.B.24 Emission Points AA-001, AA-002, and AA-003 are subject to the Acid Rain Program Regulations as specified in 40 CFR 72-78. The permittee shall comply with all applicable requirements of said standards as included in Section 8.0 of this permit and as specified in the Acid Rain Permit in Appendix C.

(Ref.: 40 CFR 72.6, Subpart A)

3.B.25 Emission Points AA-001, AA-002, and AA-003 are 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)

3.B.26 For Emission Point AA-004, the permittee shall not discharge sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.

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

3.B.27 Emission Point AA-004 is limited to 4,000 hours per year of operation determined on a 12-month rolling total.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008)

3.B.28 Emission Point AA-004 is subject to and shall comply with the applicable requirements of the Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Dc and the General Provisions, 40 CFR 60, Subpart A. Since the boiler is fired with natural gas, there are no applicable emission or operating limits in Subpart Dc.

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

3.B.29 Emission Point AA-004 is subject to and shall comply with the applicable requirements of the NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD and the General Provisions, 40 CFR 63, Subpart A identified in Table 10 of Subpart DDDDD.

For purposes of this subpart, the boiler is considered an existing boiler in the "units designed to burn gas 1 fuels subcategory" and per 40 CFR 63.7500(e), the boiler is not subject to the emission and operating limits contained in Tables 2 and 4 of Subpart DDDDD. The permittee shall be in compliance with all applicable standards of Subpart DDDDD at all times the affected unit is operating, except during periods of startup and shutdown during which the permittee shall comply with the work practice standards contained in Section 3.D of this permit.

(Ref.: 40 CFR 63.7480, 63.7485, 63.7490(a)(1) and (d), 63.7499(l), 63.7500(a)(1), (e), and (f), and 63.7505(a), Subpart DDDDD)

3.B.30 For Emission Point AA-004, the permittee shall operate and maintain the affected source, including any associated air pollution control or monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and an inspection of the affected source.

(Ref.: 40 CFR 63.7500(a)(3), Subpart DDDDD)

3.B.31 For Emission Point AA-005, the permittee shall not burn any fuel which contains sulfur in excess of 0.8 percent by weight.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008)

3.B.32 Emission Points AA-005 and AA-006 are subject to and shall comply with the applicable requirements of the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63, Subpart ZZZZ and the applicable General Provisions, 40 CFR 63, Subpart A identified in Table 8 of Subpart ZZZZ.

For purposes of this subpart, Emission Point AA-005 is considered an existing, emergency compression ignition stationary RICE with a site rating less than 500 HP with a displacement of less than 30 liters/cylinder, that is located at a major source of HAP emissions. As such, the engine is subject to the applicable requirements for emergency engines under Subpart ZZZZ.

Emission Point AA-006 is considered a new, emergency spark ignition stationary RICE with a site rating of less than 500 HP located at a major source of HAP emissions. Per 40 CFR 63.6590(c)(6), the engine shall meet the requirements of Subpart ZZZZ by meeting the applicable requirements of the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ.

At all times, the permittee shall be in compliance with the applicable requirements of Subpart ZZZZ and shall operate and maintain the engines 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 inspections of the source.

(Ref.: 40 CFR 63.6580, 63.6585(a) and (b), 63.6590(a)(1)(ii), (a)(2)(ii), and (c)(6), and 63.6605, Subpart ZZZZ)

3.B.33 Emission Point AA-005 shall be considered an emergency stationary RICE under 40 CFR 63, Subpart ZZZZ 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 according to the requirements in (a)-(c) below, the engine will not be considered an emergency engine under Subpart ZZZZ and must 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 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 permittee maintains records indicating the federal, state, or local standards require maintenance testing of an 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). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(Ref.: 40 CFR 63.6640(f)(1), (2), and (3), Subpart ZZZZ)

3.B.34 Emission Point AA-006 is subject to and shall comply with all applicable requirements of the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (ICE), 40 CFR 60, Subpart JJJJ and the General Provisions, 40 CFR 60, Subpart A as specified in Table 3 of Subpart JJJJ.

(Ref.: 40 CFR 60.4230(a)(4)(iii) and Table 3, Subpart JJJJ)

3.B.35 For Emission Point AA-006, the permittee shall operate and maintain the engine such that it achieves the emission standards listed below for the life of the engine:

(a) $HC+NO_x \leq 13.4$ g/kW-hr

(b) $CO \leq 519$ g/kW-hr

(Ref.: 40 CFR 60.4233(c), 60.4231(c), and 60.4234, Subpart JJJJ and 40 CFR 1054, Appendix A(b)(1))

3.B.36 For Emission Point AA-006, the permittee shall comply with the applicable emission standards by purchasing, installing, operating, and maintaining an engine that is certified to meet the applicable emission standards. The permittee shall operate and maintain the engine in accordance with the manufacturer's emission-related written instructions and shall only change the emission-related settings that are permitted by the manufacturer.

(Ref.: 40 CFR 60.4243(a), Subpart JJJJ)

3.B.37 Emission Point AA-006 shall be considered an emergency stationary ICE under 40 CFR 60, Subpart JJJJ 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 JJJJ 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 the insurance company associated with the 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 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 60.4243(d)(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.

The permittee may operate the engine using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the permittee is required to conduct a performance test to demonstrate compliance with the applicable emission standards.

(Ref.: 40 CFR 60.4243(d)(1), (2), and (3) and (e), Subpart JJJJ

C. Insignificant and Trivial Activity Emission Limitations & Standards

There are no other requirements applicable to the insignificant activities listed in the source's Title V permit application.

D. Work Practice Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-004	40 CFR 63.7500(a)(1), 63.7515(d), 63.7540(a)(10) and (13), and Table 3, Subpart DDDDD	3.D.1	HAP	Tune-up frequency
	40 CFR 63.7540(a)(10)(i)-(vi), Subpart DDDDD	3.D.2		Tune-up requirements
AA-005	40 CFR 63.6602 and Table 2c, Subpart ZZZZ	3.D.3	HAP	Maintenance requirements
	40 CFR 63.6625(e)(2) and (h) and 63.6640(a), Subpart ZZZZ	3.D.4		Operating requirements

3.D.1 For Emission Point AA-004, the permittee shall conduct an annual tune-up on the boiler in accordance with Condition 3.D.2. Each subsequent tune-up must be completed no more than 13 months after the previous tune-up. If the boiler is not operating on the required date for a tune-up, the permittee shall conduct the required tune-up within 30 calendar days of startup.

(Ref.: 40 CFR 63.7500(a)(1), 63.7515(d), and 63.7540(a)(10) and (13), and Table 3, Subpart DDDDD)

3.D.2 For Emission Point AA-004, each tune-up shall consist of the following:

(a) As applicable, inspect the burner, and clean or replace any components of the burner, as necessary (the burner inspection may be completed any time prior to the tune-up or can be delayed until the next scheduled unit shutdown).

(b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.

(c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (inspection may be delayed until the next scheduled unit shutdown).

(d) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject.

(e) Measure the concentrations from the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.

(f) Maintain on-site and submit, if requested by MDEQ, a report containing the information in (1) and (2) below:

(1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler.

(2) A description of any corrective actions taken as part of the tune-up.

(Ref.: 40 CFR 63.7540(a)(10)(i)-(vi), Subpart DDDDD)

3.D.3 For Emission Point AA-005, 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 when necessary.

(c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first and replace as necessary.

If the engine is operating during an emergency and it is not possible to shut down the engine in order to perform the maintenance practice according to the schedule listed in (a)-(c) above, or if performing the maintenance 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 maintenance 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 63.6602 and Table 2c, Subpart ZZZZ)

3.D.4 For Emission Point AA-005, the permittee shall operate and maintain the engine according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practices for minimizing emissions. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

(Ref. 40 CFR 63.6625(e)(2) 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. If the permit was reissued or modified during the course of the preceding calendar year, the compliance certification shall address each version of the permit. Each compliance certification shall include the following:

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

(b) the compliance status;

(c) whether compliance was continuous or intermittent;

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

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

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

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

A. General Monitoring, Recordkeeping and Reporting Requirements

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

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

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

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

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

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

(d) the analytical techniques or methods used;

(e) the results of such analyses; and

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

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

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

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

5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with 11 Miss. Admin. Code Pt. 2, R. 6.2.E. For applicable periodic reporting requirements in 40 CFR Parts 60, 61, and 63, the permittee shall comply with the deadlines in this condition for reporting conducted on a semiannual basis. Additionally, any required quarterly reports shall be submitted by the end of the month following each calendar quarter (i.e., April 30th, July

31st, October 31st, and January 31st), and any required annual reports shall be submitted by January 31st following each calendar year.

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

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

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

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

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

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

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

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

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

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-001 AA-002 AA-003	11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued May 31, 2017, 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008, and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(1).	5.B.1	PM, $PM_{2.5}$, PM_{10}	Performance testing
		5.B.2	NO_x CO	Monitor emissions using CEMS
		5.B.3	SO_2	Fuel monitoring
		5.B.4	VOC	Performance testing
		5.B.5	Opacity	Annual VEE
		5.B.3	Fuel	Monitor and maintain fuel quality and usage records
		5.B.6	Operating restrictions	Monitor and keep records for operating levels and control device operations
		5.B.7	Startup/ Shutdown/ Runbacks/ Tuning	Monitor and maintain records for these operating periods
AA-001	40 CFR 60.4335(b)(1)-(3), 60.4340(b)(1), 60.4345, 60.4350, and 60.4380(b), Subpart KKKK	5.B.8	NO_x	Monitor emissions using CEMS
	40 CFR 60.4400 and 60.4405, Subpart KKKK	5.B.9		Annual performance testing
	40 CFR 60.4360, 60.4365, 60.4415(a)(1), Subpart KKKK	5.B.10	SO_2	Fuel sulfur content
AA-001	40 CFR 60.5525(a)(1), Subpart TTTT	5.B.11	CO_2	Fuel records
AA-002 AA-003	40 CFR 60.334(h), Subpart GG	5.B.3	SO_2 Fuel	Monitor and maintain fuel quality and usage records
	40 CFR 60.334(c), Subpart GG	5.B.2	NO_x	Monitor emissions using CEMS
AA-001 AA-002 AA-003	40 CFR 60.48Da(d), (i), and (k), Subpart Da	5.B.12	SO_2 NO_x	Calculate emissions
AA-001	40 CFR 63.6115, 63.6120, and Table 3, Subpart YYYY and EPA Approved CMS Monitoring Plan in Appendix D	5.B.13	HAP (formaldehyde)	Annual compliance testing
	40 CFR 63.6125(e), 63.6135, 63.6140(a), and Table 5 Subpart YYYY and EPA Approved CMS Monitoring Plan in Appendix D	5.B.14		Monitoring and continuous compliance requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-001	40 CFR 63.6155(a)(1), (2), (5), (6), and (7), (c), and (d), and 63.6160 Subpart YYYY and EPA Approved CMS Monitoring Plan in Appendix D	5.B.15	HAP (formaldehyde)	Recordkeeping requirements
AA-001 AA-002 AA-003	40 CFR 75.57(a), Subpart F	5.B.16	NO_x SO_2	General recordkeeping requirement
AA-004	11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008, and 40 CFR 60.48c(g)(2), Subpart Dc	5.B.17	Fuel	Monitor and maintain fuel quality and usage records
		5.B.18	Operating hours	Monitor and maintain records documenting hours of operation
AA-004	40 CFR 63.7555(a)(1) and (2) and 63.7560, Subpart DDDDD	5.B.19	HAP	General recordkeeping requirements
AA-005	11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008	5.B.20	Fuel	Monitor and maintain fuel quality and usage records
AA-005	40 CFR 63.6625(f) and 63.6655(f)(1), Subpart ZZZZ	5.B.21	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.22		General recordkeeping
AA-006	40 CFR 60.4237(c) and 63.4245(b), Subpart JJJJ	5.B.23	$HC + NO_x$ CO	Install non-resettable hour meter and record hours of operation
	40 CFR 60.4245(a)(1)-(3), Subpart JJJJ	5.B.24		General recordkeeping

5.B.1 For Emission Points AA-001, AA-002, and AA-003, the permittee shall demonstrate compliance with filterable PM/PM_{10} emission limitations by stack testing in accordance with EPA Reference Methods 1-5 or an EPA approved equivalent. For Emission Point AA-001, the permittee shall demonstrate compliance with $PM_{2.5}$ (filterable + condensable) by stack testing using EPA Reference Method 202 in conjunction with Methods 1-5 or an EPA approved equivalent. The permittee shall determine the frequency of the stack testing based on the previous stack testing results. If a stack test shows that the emissions are at or below 65 percent of the emission limits in Conditions 3.B.7 and 3.B.8, then the permittee shall stack test once every five years (not to exceed 61 months from the previous test). If a stack test shows emissions exceeding 65 percent of the emission limit, the permittee shall perform the stack test biennially (not to exceed 25 months from the previous test). The stack testing shall be performed on a biennial basis until two consecutive stack tests show

emissions below 65 percent of the emission limit at which time the stack testing may return to the once every 5 years testing frequency.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued May 31, 2017, 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008, and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(1).)

5.B.2 For Emission Points AA-001, AA-002, and AA-003, the permittee shall demonstrate compliance with the CO and NO_x emission limitations using a continuous emission monitoring system (CEMS). Demonstrating compliance with the emission limits using CEMS data in lieu of EPA Reference Methods is an acceptable practice provided 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 the use of reference method data collected during the Relative Accuracy Test Audits (RATA) required under 40 CFR 75. The permittee shall use Part 75 CEMS data substitution provisions for CEMS when determining compliance with CO and NO_x limitations.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued May 31, 2017, 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008, and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(1).)

5.B.3 For Emission Points AA-001, AA-002, and AA-003, the permittee shall monitor the quantity and quality of the fuel being fired in each turbine. Per 40 CFR 60.334(h)(3), the permittee is not required to monitor the total sulfur content of the gaseous fuel combusted if the fuel meets the definition of natural gas in 40 CFR 60.331(u). The permittee shall use one of the following sources of information to demonstrate compliance:

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

(b) Representative fuel sampling data which shows that the sulfur content of the gaseous fuel does not exceed 20.0 grains/100 scf. At a minimum, the amount of fuel sampling data specified in Sections 2.3.1.4 or 2.3.2.4 of Appendix D of Part 75 is required.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued May 31, 2017, 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008, and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(1).)

5.B.4 For Emission Points AA-001, AA-002, and AA-003, the permittee shall demonstrate compliance with the VOC emission limits by performance testing in accordance with EPA Reference Method 25 or an approved equivalent. The permittee shall determine the

frequency of the performance testing based on the previous test results. If the results from a performance test indicate emissions are below 65 percent of the applicable emission limits in Conditions 3.B.7 and 3.B.8, then the permittee shall complete the required test once every 5 years (not to exceed 61 months from the previous test). If the results from a performance test indicate emissions exceed 65 percent of the emission limits, the permittee shall complete the required tests biennially (not to exceed 25 months from the previous test). The performance test shall continue to be performed on a biennial basis until the results from two consecutive performance tests indicate emissions are below 65 percent of the emission limits. Once this criteria has been met, the permittee may return to the once every 5 years testing frequency.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008, and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(1).)

5.B.5 For Emission Points AA-001, AA-002, and AA-003, the permittee shall demonstrate compliance with the opacity limits on an annual basis (not to exceed 13 months from the previous visual observation) by having a facility trained observer perform a visual observation of each emission point. The permittee shall keep records of the results from these observations. If any visible emissions are detected during an observation, a certified observer shall perform a Visible Emissions Evaluation (VEE) in accordance with EPA Reference Method 9 for a minimum of six (6) consecutive minutes (24 observations at 15 second intervals) and maintain records of the results.

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

5.B.6 For Emission Points AA-001, AA-002, and AA-003, the permittee shall keep records of the turbine operating loads and corresponding records which demonstrate the SCR on each turbine was in operation at all times the combustion turbines were operating in excess of the LSL established in Condition 3.B.4.

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

5.B.7 For Emission Points AA-001, AA-002, and AA-003, the permittee shall maintain records of the occurrence and duration of all startup, shutdown, runback, or tuning events for each turbine. Such records shall include the date and time for each event and confirmation that good air pollution control practices were followed during the period.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued May 31, 2017, 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008, and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(1).)

5.B.8 For Emission Point AA-001, the permittee shall continuously monitor emissions in accordance with the following:

(a) Install, certify, maintain, and operate a continuous emission monitoring system (CEMS) consisting of a NO_x monitor and diluent gas (O_2 or CO_2) monitor, to determine the hourly NO_x emission rate in parts per million (ppm) or lbs/MMBtu.

(b) Install, calibrate, maintain, and operate a fuel flow meter to continuously measure the heat input to the affected unit.

(c) Install, calibrate, maintain, and operate a watt meter to continuously measure the gross electrical output of the unit in megawatt-hours.

The CEMS, fuel flow meter, and watt meter shall be installed, certified, calibrated, and maintained in accordance with the applicable requirements contained in 40 CFR 60.4345(a) through (e). Excess emissions shall be determined in accordance with the applicable requirements of 40 CFR 60.4350(a) through (g) and 60.4380(b).

(Ref.: 40 CFR 60.4335(b)(1)-(3), 60.4340(b)(1), 60.4345, 60.4350, and 60.4380(b), Subpart KKKK)

5.B.9 For Emission Point AA-001, the permittee shall perform annual NO_x performance tests in accordance with the procedures in 40 CFR 60.4405 on an annual basis not to exceed more than 14 calendar months following the previous performance test.

(Ref.: 40 CFR 60.4400 and 60.4405, Subpart KKKK)

5.B.10 For Emission Point AA-001, the permittee shall demonstrate compliance with the sulfur content of the fuel in accordance with one of the following demonstration methods:

(a) Fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, which specifies the fuel has potential sulfur emissions of less than less than 0.060 lbs SO_2/MMBtu heat input; or

(b) Representative fuel sampling data which shows that the sulfur content of the fuel does not exceed 0.060 lbs SO_2/MMBtu heat input. At a minimum, the amount of fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 of Appendix D in 40 CFR 75 is required.

(Ref.: 40 CFR 60.4360, 60.4365, and 60.4415(a)(1), Subpart KKKK)

5.B.11 For Emission Point AA-001, the combustion turbine is only permitted to burn natural gas. Since the fuel will result in a consistent emission rate of 160 lbs CO_2/MMBtu or less, the permittee is not subject to any additional monitoring or reporting requirements under Subpart TTTT. The permittee is only required to maintain fuel purchase records for the permitted fuels.

5.B.12 For Emission Points AA-001, AA-002, and AA-003, the permittee shall demonstrate compliance with the SO_2 and NO_x emission limits from Subpart Da using one of the sources of information in Condition 5.B.3 (SO_2), the CEMS required in Condition 5.B.2

(NO_x), or the procedures identified in 40 CFR 60.48Da(d) and (k).

(Ref.: 40 CFR 60.48Da(d), (i), and (k), Subpart Da)

5.B.13 For Emission Point AA-001, the permittee shall demonstrate compliance with the formaldehyde emission standard in Condition 3.B.22 by conducting an annual stack test (not to exceed 13 months from the previous test) in combined cycle mode per the procedures contained in 40 CFR 63.6120 at high load, which is defined as 100 percent plus or minus 10 percent. During each compliance test, the permittee shall comply with the following:

(a) Continuously monitor and record the gross power output and lean premix indication ("NORMOPHHR" status in StackVision). The values shall be recorded at least once every 15 minutes during the formaldehyde emission standard compliance demonstration testing, and continuously thereafter, to successfully demonstrate compliance with the formaldehyde emission standard. An hourly averaged gross power output shall be determined by using all readings taken at least once every 15 minutes during a normal-operation hour.

(b) Each compliance demonstration testing event shall consist of four (4) separate test runs. Each test run must last at least one (1) hour. The four-hour average gross power output shall be determined by computing the four-hour average using all hourly averaged readings taken during the testing event.

(Ref.: 40 CFR 63.6115, 63.6120, and Table 3, Subpart YYYY and EPA Approved CMS Monitoring Plan in Appendix D)

5.B.14 For Emission Point AA-001, the permittee shall continuously monitor and record the four-hour average gross power output to determine compliance with the formaldehyde emission standard in Condition 3.B.22 and to determine compliance with the gross power output requirement contained in Condition 3.B.23. The four-hour rolling average gross power output shall be determined by computing the four-hour average using all hourly averaged readings for the current hour and the preceding three hours of operation. The permittee shall verify the gross power output meter's accuracy once annually according to the manufacturer's recommended procedures and maintain records of the annual verifications for inspection purposes. The lean premix indication must also be continuously monitored and recorded at least once every 15 minutes.

Data collected during periods of startup (e.g., before achieving a gross power output of 82 MW), shutdown, or malfunction may not be included in the four-hour average for the formaldehyde emission compliance demonstration testing and four-hour rolling averages used to indicate compliance with the formaldehyde emission standard.

(Ref.: 40 CFR 53.6125(e), Subpart YYYY and EPA Approved CMS Monitoring Plan in Appendix D)

5.B.15 For Emission Point AA-001, the permittee shall keep records of the following:

(a) A copy of each notification and report submitted to comply with Subpart YYYY, including all documentation supporting any Initial Notification or Notification of Compliance Status;

(b) Records of all performance tests and performance evaluations;

(c) Records of all maintenance on the air pollution control equipment as required in 40 CFR 63.10(b)(2)(ii);

(d) Records which contain the date, time, and duration of each startup period, recording the periods when the affected source was subject to the standard applicable to startup;

(e) Records which contain the date, time, cause, and duration of a deviation. For each deviation, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions. These records should also identify any actions taken to minimize emissions during the deviation and any corrective actions taken to return the affected unit to normal operation;

(f) Records of all required monitoring data used to show continuous compliance with the gross power output and lean premix requirements; and

(g) An electronic or hard copy of any records submitted electronically via EPA's CEDRI.

(Ref.: 40 CFR 63.6155(a)(1), (2), (5), (6), and (7), (c), and (d), and 63.6160 Subpart YYYY and EPA Approved CMS Monitoring Plan in Appendix D)

5.B.16 For Emission Points AA-001, AA-002, and AA-003, the permittee shall comply with the following requirements for continuous monitoring systems:

(a) Install, calibrate, maintain, and operate continuous monitoring systems for NO_x, as specified in 40 CFR 60.334, Appendix B and 40 CFR 75. The monitoring systems must comply with all applicable requirements specified in 40 CFR 60.334, 40 CFR 60.13, Appendix B of 40 CFR 60, and 40 CFR 75.

(b) Install, calibrate, maintain, and operate continuous monitoring systems for CO as specified in 40 CFR 60, Appendix B, and Appendix F.

(c) Install, calibrate, maintain, and operate a fuel flow monitor for the purpose of determining the hourly SO_2 mass emission rate and heat input in accordance with Appendix D of 40 CFR 75, in lieu of a continuous SO_2 emission monitor.

(d) The Cylinder Gas Audits/Relative Accuracy Test Audits (CGA/RATA) shall be conducted according to Appendices B and F of 40 CFR 60. However, the frequency of the audit shall be as specified in 40 CFR 75, Appendix B, Section 2.2. The RATA

required under 40 CFR 60, Appendix F, shall be at the frequency specified in 40 CFR 75, Appendix B, Section 2.3.1 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 calendar quarter. For the diluent monitor(s), 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.: 40 CFR 75.57(a))

5.B.17 For Emission Point AA-004, the permittee shall record and maintain records of the amount of natural gas combusted each day or may elect to record and maintain records of the amount of natural gas combusted during each calendar month.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008, and 40 CFR 60.48c(g)(2), Subpart Dc)

5.B.18 For Emission Point AA-004, the permittee shall monitor and record the hours of operation of the boiler on a daily basis and maintain a 12-month rolling total.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008)

5.B.19 For Emission Point AA-004, the permittee shall keep records of the following:

(a) Each notification and report submitted to comply with Subpart DDDDD, including all information supporting the Notification of Compliance Status or semiannual compliance report.

(b) Records which contain the concentrations of CO in the effluent stream in parts per million by volume, oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up, and a description of any corrective actions taken as part of the tune-up.

These records shall be in a form suitable and readily available for review for a period of five (5) years following the date of each occurrence, measurement, maintenance corrective action, report, or record. These records must be kept onsite, or must be accessible from

onsite, for at least two (2) years after the date of each, and then they may be kept off-site for the remaining three (3) years.

(Ref.: 40 CFR 63.7555(a)(1) and (2) and 63.7560, Subpart DDDDD)

5.B.20 For Emission Point AA-005, the permittee shall keep records on site that contain the sulfur content of each shipment of diesel fuel received and stored in the fuel tank.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008)

5.B.21 For Emission Point AA-005, the permittee shall install a non-resettable hour meter on the engine, if one is not already installed. The permittee shall keep records of the hours of operation of the engine that are recorded through the hour meter. 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)(1), Subpart ZZZZ)

5.B.22 For Emission Point AA-005, 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 the engine or hour meter;

(c) Records of any 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; and

(d) Records of the maintenance conducted on the engine in order to demonstrate the engine was operated and maintained in accordance with 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); 63.6655(e)(2); and 63.6660; Subpart ZZZZ)

5.B.23 For Emission Point AA-006, the permittee shall install a non-resettable hour meter and keep records of the hours of operation recorded through the hour meter. These records shall also document the reason the engine was operating and identify whether the operation was in emergency or non-emergency service.

(Ref.: 40 CFR 60.4237(c) and 63.4245(b), Subpart JJJJ)

5.B.24 For Emission Point AA-006, the permittee shall keep the following records:

(a) A copy of all notifications and supporting information submitted to comply with Subpart JJJJ;

(b) Records of all maintenance conducted on the engine; and

(c) Documentation from the manufacturer that the engine is certified to meet the emission standards.

(Ref.: 40 CFR 60.4245(a)(1)-(3), Subpart JJJJ)

C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Reporting Requirement
AA-001 AA-002 AA-003	11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008, and 40 CFR 60.51Da	5.C.1	PM PM_{10} $PM_{2.5}$ VOC	Performance test submittal requirements
		5.C.2	NO_x CO SO_2	Semiannual emissions report
AA-001 AA-002 AA-003	40 CFR 72-78	5.C.3	SO_2 NO_x CO	Acid Rain Program
AA-001 AA-002 AA-003	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.C.4	Opacity	Semiannual report
		5.C.5	Operating Limits	
AA-001	40 CFR 60.4375(a) and 60.4395, Subpart KKKK	5.C.6	NO_x SO_2	Semiannual excess emission/ monitor downtime reports
AA-001 AA-002 AA-003	40 CFR 63.334(j), Subpart GG	5.C.7	SO_2 NO_x	Semiannual excess emissions and monitor downtime report
AA-001	40 CFR 63.6140(b), 63.6150(a), (b)(5), (g), and Table 6 of Subpart YYYY	5.C.8	HAP (formaldehyde)	Semiannual report
	40 CFR 63.6150(f), Subpart YYYY	5.C.9		Submit performance test reports through CEDRI
AA-004	11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008	5.C.10	Hours of operation	Semiannual report
AA-004	40 CFR 63.7550(a), (b)(5), (c)(1) and (5)(i)-(iii), (xiv), and (xvii), and Table 9, Subpart DDDDD	5.C.11	HAP	Annual compliance report

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Reporting Requirement
AA-005	40 CFR 63.6640(b), 63.6650(f), and Footnote 1 to Table 2c, Subpart ZZZZ and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.12	HAP	Annual report of hours of operation each calendar year and reason for operation
AA-006	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.13	HAP (Hours of Operation)	Semiannual report

5.C.1 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable. For subsequent tests, the submittal of the test protocol requirement may be waived provided the protocol will not change and a request confirming such is made to the MDEQ. The permittee shall notify the MDEQ in writing at least ten (10) days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness any test(s).

The permittee shall submit the corresponding test reports within sixty (60) days of completion of the stack tests.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008, and 40 CFR 60.51Da)

5.C.2 For Emission Points AA-001, AA-002., and AA-003, the permittee shall submit a summary of NO_x and CO emissions in tons/year (each consecutive 365-day rolling total during the reporting period) using the data recorded by the CEMS for each unit. This information shall also include the average NO_x emission rate in lbs/MMBtu for each 30 successive boiler operating days that occur during the reporting period. The summary shall be submitted in accordance with the semiannual report required in Condition 5.A.4 of this permit.

In addition to the information noted above, the permittee may submit all applicable information from 40 CFR 60.51Da(b) and (i) in an electronic quarterly report in lieu of submitting the written report. The quarterly reports shall be submitted no later than thirty (30) days after the end of the calendar quarter and it shall be accompanied by a certification statement from the permittee indicating whether compliance with the applicable emission standards and minimum data requirements of Subpart Da were achieved during the reporting period.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008, and 40 CFR 60.51Da)

5.C.3 For Emission Points AA-001, AA-002, and AA-003, the permittee shall comply with the reporting requirements specified in the Acid Rain Program regulations.

(Ref.: 40 CFR 72-78)

5.C.4 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit a semiannual report in accordance with Condition 5.A.4 that contains a summary of the results from any VEEs completed during the reporting period.

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

5.C.5 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit a semiannual report in accordance with Condition 5.A.4 that contains a summary of operational data for each combustion turbine that identifies the date, duration, and type of event for each startup, shutdown, runback, or tuning event that occurred during the reporting period. This report shall also include the amount of time each combustion turbine was operating above the LSL while the SCR unit was not operational.

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

5.C.6 For Emission Point AA-001, the permittee shall submit semi-annual excess emissions and monitor downtime reports in accordance with Condition 5.A.4 containing the information in 40 CFR 60.7(c). Excess emissions must be reported for all periods of unit operation, including startup, shutdown, and malfunction.

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

5.C.7 For Emission Points AA-001, AA-002, and AA-003, the permittee shall submit a semiannual report in accordance with Condition 5.A.4 that contains information concerning any excess emission or monitor downtime events for the NO_x CEMS that occurred during the reporting period. For purposes of this report, the information shall be in accordance with 40 CFR 60.7(c) and excess emissions and monitor downtime is defined in 40 CFR 60.334(j)(1)(iii)(A) through (C).

(Ref.: 40 CFR 63.334(j), Subpart GG)

5.C.8 For Emission Point AA-001, the permittee shall submit a semiannual report in accordance with Condition 5.A.4 which contains the following information:

(a) Company name and address;

(b) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;

(c) Date of report and beginning and ending dates of the reporting period;

(d) Report the following information for each deviation that occurred during the reporting period:

(1) The number of deviations with start date, time, duration, cause, and any corrective actions taken for each;

(2) For each deviation, include a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, and a description of the method used to estimate the emissions;

(3) Information concerning the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks), as applicable, and the corrective action(s) taken; and

(4) Report the total operating time for the affected source during the reporting period.

(e) The semiannual reports shall also be submitted to the EPA via CEDRI which can be accessed via the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov). The electronic report template in CEDRI should be used for this report and it should be submitted within the same time frame as the semiannual report submitted in accordance with Condition 5.A.4.

(Ref.: 40 CFR 63.6140(b), 63.6150(a), (b)(5), (g), and Table 6 of Subpart YYYY)

5.C.9 For Emission Point AA-001, the permittee shall report the results of each required performance test within sixty (60) days after the date a performance test is completed to the EPA in accordance with the following procedures:

(a) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT), submit the results of the performance test to the EPA via the CEDRI in a file format generated through the use of the EPA's ERT. Alternatively, you may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.

(b) For data collected using test methods not supported by the EPA's ERT, the results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

(c) If some of the information to be included is considered confidential business information (CBI), the file must be submitted in accordance with 40 CFR 63.6150(f)(3).

(Ref.: 40 CFR 63.6150(f), Subpart YYYY)

5.C.10 For Emission Points AA-004, the permittee shall submit a semiannual report in accordance

with Condition 5.A.4 that contains a summary of the operating hours during the reporting period on a monthly and 12-month rolling total for the reporting period.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 5 and 40 CFR 52.21(j), as established in the PSD Permit to Construct issued June 13, 2001, and modified November 23, 2004, and June 17, 2008)

5.C.11 For Emission Point AA-004, the permittee shall submit an annual compliance report in accordance with Condition 4.2 containing the following information:

(a) Company and facility name and address;

(b) Process unit information, emission limitations, and operating parameter limitations;

(c) Date of report and beginning and end dates of the reporting period;

(d) The date of the most recent tune-up and the date of the most recent burner inspection if it was not done on the date of the tune-up; and

(e) A statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(Ref.: 40 CFR 63.7550(a), (b)(5), (c)(1) and (5)(i)-(iii), (xiv), and (xvii), and Table 9, Subpart DDDDD)

5.C.12 For Emission Point AA-005, 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.

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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1). and 40 CFR 63.6640(b), 63.6650(f), and Footnote 1 to Table 2c, Subpart ZZZZ)

5.C.13 For Emission Point AA-006, 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)(c)(1).)

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 under Title 40, or DEQ shall provide a copy upon request from the permittee.

7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A – Production and Consumption Controls.

7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B – Servicing of Motor Vehicle Air Conditioners.

7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E – The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:

(a) All containers in which a class I or class II substance is stored or transported;

(b) All products containing a class I substance; and

(c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.

7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F – Recycling and Emissions Reduction:

(a) Servicing, maintaining, or repairing appliances containing class I, class II or non-exempt substitute refrigerants;

(b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or

(c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, as well as persons selling, offering for sale, and/or purchasing class I, class II, or non-exempt substitute refrigerants.

7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G – Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.

7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H – Halon Emissions Reduction:

(a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;

(b) Any person disposing of halons;

(c) Manufacturers of halon blends; or

(d) Organizations that employ technicians who service halon-containing equipment.

SECTION 8. ACID RAIN REQUIREMENTS

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-003					
Parameter	CEMS requirements pursuant to 40 CFR part 75, subpart B (for SO_2 monitoring) and 40 CFR part 75, subpart H (for NO_x monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR part 75, appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR part 75, appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR part 75, subpart E
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.

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

BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
lb/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards for Hazardous Air Pollutants, 40 CFR 61, or National Emission Standards for Hazardous Air Pollutants for Source Categories, 40 CFR 63
NMVOC	Non-Methane Volatile Organic Compounds
NO_x	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10 μm in diameter
$PM_{2.5}$	Particulate Matter less than 2.5 μm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOHAP	Volatile Organic Hazardous Air Pollutant
VOC	Volatile Organic Compound

APPENDIX B

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. 5. - Regulations for the Prevention of Significant Deterioration of Air Quality (Amended April 28, 2016)

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 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units

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 JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

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

40 CFR 60, Subpart TTTT, Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units

40 CFR 63, Subpart YYYY, NESHAP for Stationary Combustion Turbines

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

40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

40 CFR 72-78, Acid Rain Program General Provisions

40 CFR 82, Protection of Stratospheric Ozone

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

APPENDIX C

Phase II Acid Rain Permit

PHASE II ACID RAIN PERMIT

Issued to: Entergy Mississippi LLC, Choctaw County Generating Station
Operated by: Entergy Mississippi LLC
ORIS Code: 55706
Effective: *February 25, 2025 to January 31, 2030*

Summary of Previous Actions:

(1)	Draft permit for public and EPA comment	November 9, 2001
(2)	Final permit issued	April 9, 2002
(3)	Renewal of Title V and Acid Rain Permit	November 23, 2004
(4)	Renewal of Title V and Acid Rain Permit	June 10, 2010
(5)	Renewal of Title V and Acid Rain Permit	October 13, 2018

Present Action:

(1)	Draft TV and Phase II Acid Rain Permits for public and EPA comment	November 27, 2024
(2)	Permit finalized and issued	February 25, 2025

Becky Simonson
Signature

January 25, 2025
Date

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

PHASE II ACID RAIN PERMIT

Issued to: Entergy Mississippi LLC, Choctaw County Generating Station
Operated by: Entergy Mississippi LLC, Choctaw County Generating Station
ORIS Code: 55706
Effective: *February 25, 2025 to January 31, 2030*

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.

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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:

		2024	**2025**	**2026**	**2027**	**2028**
AA-001 AA-002 AA-003	**SO_2 allowances, under Table 2 of 40 CFR 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 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

APPENDIX D

EPA APPROVED CONTINUOUS MONITORING SYSTEM PLAN

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4 ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

June 12, 2023

Mr. Jeff Turlington
Sr. Environmental Analyst
Entergy Services, LLC 2107
Research Forest Drive
The Woodlands, Texas 77382 Dear

Mr. Turlington:

This is in response to your letter dated October 5, 2022, requesting a revision to your approved continuous monitoring system (CMS) plan, issued by the U.S. Environmental Protection Agency (EPA) on August 30, 2022, for Title 40, Code of Federal Regulation (C.F.R.), Part 63, Subpart YYYY - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines, as it applies to one combustion turbine operated at Entergy Services, LLC (Entergy), Choctaw County Generating Plant, in French Camp, Mississippi. In the letter, you requested to use a gross power output of 82 megawatts (MW) as the low-load operating limit and remove specific conditions (iii) and (x) from "The EPA's Determination for Entergy's CMS Plan Petition" in the approved CMS plan issued by the EPA on August 30, 2022, which requires Entergy to conduct the formaldehyde emission standard compliance demonstration testing at low load operation and calculate the four-hour rolling average gross power output to establish the operation limit at the low load operation. The revision request was based on the results from the initial formaldehyde emission standard compliance demonstration testing that occurred on August 10, 2022, and August 11, 2022. The EPA requested additional information from you on February 15, 2023, April 11, 2023, and May 3, 2023, and received information on February 15, 2023, April 11, 2023, and May 5, 2023.

Based on our review of all available information, your proposed revision is acceptable, subject to specific requirements. Details regarding the CMS plan and the basis for our determination are provided in the remainder of this letter.

Description of Combustion Turbine Unit Emission Point AA-001

Emission Point AA-001 includes a combustion turbine generator (CTG1) and a heat recovery steam generator (HRSG) and may operate with supplemental duct burners when in combined cycle mode. CTG1 is a lean premix gas-fired General Electric (GE) Model 7FB combustion turbine which is equipped with a Dry Low NOx (DLN) combustion system and has a maximum power output limit of 208

MW. Based on the information provided by Entergy, the unit is only operated in combined cycle mode. Because the turbine was reconstructed in 2017 (after January 14, 2003), it is categorized as a new affected source under Subpart YYYY. The unit is not equipped with an oxidation catalyst to control emissions of formaldehyde.

Description of Entergy's CMS Petition and Revision Petition

Entergy proposes to use the combustion turbine gross power output measured in MW as the operating parameter to demonstrate compliance with the formaldehyde emission standard. The four-hour rolling average of the gross power output will be calculated, monitored, and recorded. Additionally, Entergy proposes to monitor the turbine system's lean premix mode which is indicated as "NORMOPHR" status in StackVision (per previous communication with the EPA). The lean-premix mode of operation ensures good combustion practices are being achieved during operation of the turbine.

Entergy proposes to conduct the initial and subsequent annual formaldehyde emission standard compliance demonstration testing by performing four one-hour test runs at the high load condition (defined as 100 percent plus or minus 10 percent of the achievable operating load range) and the low load condition (expected to be about 50 to 60 percent of the achievable operating load range). Entergy will continuously monitor turbine power output and lean premix mode indication during the testing events. Results from the testing events will be used to establish the operating limits to indicate compliance with the formaldehyde emission standard during non-testing periods.

After the initial formaldehyde emission standard compliance demonstration testing, Entergy proposes to continuously monitor and record the lean premix mode indication and four-hour rolling average of turbine power output to ensure compliance with the formaldehyde emission standard. Entergy will use a Schweitzer Engineering Laboratories (SEL) meter (model SEL-735) to monitor the turbine power output. Entergy has identified the relevant operation and maintenance procedures for the power output meter, which describes the recommended operation and maintenance procedures, and the meter's verification procedures. SEL, the manufacturer of the power output meter, verified that the instrument is factory-calibrated and does not require yearly calibration, only periodic accuracy verification. On-site meter verification, using a test block and portable test station, reduces meter downtime and technician meter verification time to approximately less than 20 minutes.

On August 10, 2022, and August 11, 2022, Entergy conducted the initial formaldehyde emission standard compliance demonstration testing at the exhaust stack of Emission Point AA-001. Three 80- minute test runs were conducted at the low load and high load conditions, respectively. Per communication with Entergy, the company will continue to conduct four 1-hour test runs at high load conditions in future testing events. Based on the initial testing results for the low load condition, Entergy requested to remove specific conditions (iii) and (x) from "The EPA's Determination for Entergy's CMS Plan Petition" in the approved CMS plan issued by EPA on August 30, 2022, which requires Entergy to conduct the formaldehyde emission standard compliance demonstration testing at low load and calculate the four-hour rolling average gross power output to establish the operation limit at the low load. Entergy also requested to use a gross power output of 82 MW as the low load operating limit and suggested that any operation above 82 MW will provide a reasonable assurance of compliance with the formaldehyde emission standard. Entergy stated that the unit rarely operates at low load other than during startup and shutdown. The operating time at mid to high load (138 MW to 208 MW) for the unit was 96 percent for year 2020, 88 percent for year 2021, and 91 percent for year 2022 from January to September.

EPA's Review of Subpart YYYY Standards and CMS Petition Requirements

Under 40 C.F.R. § 63.6085, owners and operators are subject to Subpart YYYY if they own or operate a stationary combustion turbine located at a major source of hazardous air pollutant (HAP) emissions. Under 40 C.F.R. § 63.6090(a)(2), a stationary combustion turbine is a new source if construction commenced after January 14, 2003. Under 40 C.F.R. § 63.6095(a)(3), new lean premix gas-fired stationary combustion turbines which started operation on or before March 9, 2022, must comply with the emissions limitations and operating limitations in Subpart YYYY no later than March 9, 2022.
Under 40 C.F.R. § 63.6100, each new lean premix gas-fired stationary combustion turbine must comply with the emission limitations and operating limitations in Table 1 and Table 2 of Subpart YYYY, respectively. Regarding the emissions standard, Table 1 of Subpart YYYY limits the concentration of formaldehyde to 91 parts-per-billion by volume, dry basis (ppbvd), or less, at 15-percent oxygen (O_2) for new lean premix gas-fired stationary combustion turbines, except during the period of turbine startup excluded by the rule (*e.g.*, first hour of startup for single cycle operation and first three hours of startup for combined cycle operation). Table 2 of Subpart YYYY requires owners/operators to maintain the turbines within operating limitations approved by the EPA Administrator to continuously demonstrate compliance with the emission limit during non-testing periods.

Under 40 C.F.R. § 63.6105(a), after September 8, 2020, owners/operators must comply with the applicable emission limitations, operating limitations, and other requirements of Subpart YYYY. Under 40 C.F.R. § 63.6105(c), after September 8, 2020, owners/operators must always operate and maintain any affected source in a manner consistent with safety and good air pollution control practices for minimizing emissions.

Under 40 C.F.R. § 63.6110(a), owners/operators must conduct the initial performance tests, or other initial compliance demonstrations in Table 4 to Subpart YYYY that apply, within 180 calendar days after the compliance date specified (*e.g.*, by September 8, 2022) for affected source stationary combustion turbines according to the provisions in 40 C.F.R. § 63.7(a)(2), unless a historical test may be accepted according to the provisions of 40 C.F.R. § 63.6110(b). Under 40 C.F.R. § 63.6115, subsequent performance tests must be performed on an annual basis as specified in Table 3 to Subpart YYYY.

Under 40 C.F.R. § 63.6125(b), for a stationary combustion turbine not using an oxidation catalyst to comply with the formaldehyde emission limit, owners/operators must continuously monitor any parameters specified in a petition approved by the Administrator to comply with the operating limitations in Table 2 to Subpart YYYY, as specified in Table 5 to Subpart YYYY.

Under 40 C.F.R. § 63.6120(f), for a stationary combustion turbine not equipped with an oxidation catalyst, owners/operators may petition the Administrator for approval of operating limitations to demonstrate compliance with the formaldehyde emission limitation during non-testing periods. In these cases, the petition must include:

(1) Identification of the specific parameters you propose to use as additional operating limitations;
(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters and how limitations on these parameters will serve to limit HAP emissions;
(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and

instruments; and

(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.

Under 40 C.F.R. § 63.6125(e), after September 8, 2020, for owners/operators using a CMS to indicate compliance with the formaldehyde emissions standard during non-testing periods, a CMS quality control program must be developed and implemented which includes written procedures for the CMS according to 40 C.F.R. § 63.8(d)(1-2). Additionally, a program of corrective action should be included in the plan required under 40 C.F.R. § 63.8(d)(2).

Under 40 C.F.R. § 63.6135(a), except for monitor malfunctions, associated repairs, and required applicable quality assurance or quality control activities, owners/operators must always conduct all parametric monitoring when the stationary combustion turbine is operating.

Under 40 C.F.R. § 63.6120(e), when a CMS petition is required to be submitted to the Administrator, owners/operators must not conduct the initial performance test until after the petition is approved or disapproved by the Administrator.

The EPA's Determination for Entergy's CMS Plan Revision Petition

In the approval letter dated August 30, 2022, specific conditions (iii) and (x) required Entergy to conduct the formaldehyde emission standard compliance demonstration testing at low load and calculate the four-hour rolling average of gross power output to establish the operation limit at low load condition. This was necessary to ensure that the operation of the combustion turbine could meet the formaldehyde emission limit while operating at the low load, given the fact that the EPA lacked sufficient testing results evidence for the operation of the GE Model 7FB combustion turbine at the low load.

The EPA has reviewed the results from the initial formaldehyde emission standard compliance demonstration testing submitted by Entergy. During the three runs at high load, gross power output ranged from 171 to 174 MW with an average of 173 MW, which is considered 100 percent load relative to temperature and humidity. During the three runs at low load, power output ranged from 81 to 84 MW with an average load of 83 MW, which is considered 48 percent load relative to temperature and humidity. The average formaldehyde concentration from each run ranged from 35.24 to 36.95 ppbvd for the runs at the low load condition, and 34.58 to 35.23 ppbvd for the runs at the high load condition. Formaldehyde concentrations were corrected to 15-percent O_2, dry basis. The lean premix indication ("NORMOPHR" status in StackVision) was indicated during all testing runs.

The results from the initial formaldehyde emission standard compliance demonstration testing at the exhaust of Emission Point AA-001 indicate that when the combustion turbine operates in the lean premix mode, the formaldehyde concentration varies little when the power output is above 82 MW. The average formaldehyde concentrations were below 50 percent of the standard during the testing runs at both low load and high load conditions. Based on supporting and available information, including other testing reports we have received for GE Model 7FB turbines, Entergy's request to use a gross power output of 82 MW as the operating limit at low load condition and test only at the high load condition for subsequent annual compliance demonstration testing is acceptable.

Based on all available information, the following CMS plan is acceptable to the EPA:

i.) To demonstrate compliance with the formaldehyde emission standard, Entergy must conduct annual compliance demonstration testing in combined cycle mode using procedures of 40

C.F.R. § 63.6120 at high load, defined as 100 percent plus or minus 10 percent.

ii.) Gross power output and lean premix indication ("NORMOPHR" status in StackVision) must be continuously monitored and recorded at least once every 15 minutes during the formaldehyde emission standard compliance demonstration testing, and continuously thereafter, to successfully demonstrate compliance with the formaldehyde emission standard promulgated in 40 C.F.R. § 63.6100 and Table 1 to Subpart YYYY. An hourly averaged gross power output shall be determined by using all readings taken at least once every 15 minutes during a normal-operation hour.

iii.) For the formaldehyde emission standard compliance demonstration testing event, four separate test runs for each testing event must be conducted. Each test run must last at least 1 hour. The four-hour average gross power output shall be determined by computing the four-hour average using all hourly averaged readings taken during the testing event.

iv.) Following the formaldehyde emission compliance demonstration testing, the four-hour rolling average gross power output must be continuously monitored and recorded to serve as an indication of compliance status with the formaldehyde emission standard. The four-hour rolling average gross power output shall be determined by computing the four-hour average using all hourly averaged readings for the current hour and preceding three hours of operation.

v.) During normal operation, the turbine must be operated at or above a gross power output of 82 MW in the lean premix mode to ensure compliance with this approval. The lean premix indication must be continuously monitored and recorded at least once every 15 minutes.

vi.) Data collected during periods of startup (*e.g.*, before achieving a gross power output of 82 MW), shutdown, or malfunction may not be included in the four-hour average for the formaldehyde emission compliance demonstration testing and four-hour rolling averages used to indicate compliance with the formaldehyde emission standard. Startup time must not extend longer than the time specified by the manufacturer's standard operating procedure for startups. Startups must be conducted, to the extent possible, in a manner consistent with ensuring that safety and good air pollution control practices for minimizing emissions are followed.

vii.) Entergy must verify the gross power output meter's accuracy once annually according to the manufacturer's recommended procedures and maintain records of the annual verifications for inspection purposes.

The EPA's approval of the Entergy's CMS plan is based on information provided in Entergy's CMS plan submission and research conducted by the EPA. Should Entergy change the operating conditions of the turbine to an operation which is different than the operating conditions represented in this approval such that formaldehyde emissions increase because of the change, Entergy must submit a revised CMS plan petition to address the change(s).

Nothing in this CMS plan approval excludes the EPA from reopening this CMS plan approval to adjust its conditions, if needed, for enhancement of emission standard compliance assurance. If Entergy discovers an additional parameter (or additional parameters), which indicates additional parametric monitoring operating limits are necessary to assure compliance with the formaldehyde emission standard, Entergy must submit a revised CMS plan petition to the EPA to revise the CMS plan and incorporate the additional operating limit(s) based on the discovery. Finally, if Entergy recognizes an opportunity to revise the CMS plan based on other CMS plan approvals issued by the EPA, or new information obtained by Entergy which may reduce the burden of tasks necessary for compliance assurance but still effectively assure compliance with the formaldehyde emission standard, Entergy may file a petition to the EPA referencing that information to revise this CMS plan.

Please note that our approval does not alter Entergy's obligations to meet all other applicable NESHAP, including, but not limited to, the following NESHAP general provisions:

- The requirement to maintain and operate affected facilities and associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions, per 40 C.F.R. § 63.6, and

- The prohibition against concealing emissions which would otherwise constitute a violation of an applicable standard, including the use of gaseous diluents to achieve compliance with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere, per 40 C.F.R. § 63.4.

This CMS petition approval was coordinated with the EPA's Office of Enforcement and Compliance Assurance and Office of Air Quality Planning and Standards. If you have any questions about this CMS petition conditional approval, please contact Henian Zhang at (404) 562-8123, or by email at zhang.henian@epa.gov.

Sincerely,

ANTHONY TONEY Digitally signed by ANTHONY TONEY Date: 2023.06.12 15:25:13 -04'00

Caroline Y. Freeman
Director
Air and Radiation Division

cc: Robert Scinta, EPA ECA
Morgan Everitt, EPA OECA
Melanie King, OAQPS Melissa
Fortenberry, MDEQ