STATE OF MISSISSIPPI
AIR POLLUTION CONTROL PERMIT

AND PREVENTION OF SIGNIFICANT DETERIORATION (PSD) AUTHORITY

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Cooperative Energy, a Mississippi Electric Cooperative,
R D Morrow Sr Generating Plant
304 Old Okahola Schoolhouse Road
Purvis, Mississippi
Lamar County

Addition of Two Combined-Cycle Combustion Turbines and Heat Recovery Steam Generators (Unit 1 and Unit 2)

has been granted permission to construct air emissions equipment to comply with the emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with 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 and under authority granted by the Environmental Protection Agency under 40 CFR 52.01 and 52.21.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

Krystal Rudolph

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: FEB 2 5 2020

Permit No.: 1440-00021

SECTION 1. GENERAL CONDITIONS

1.1 This permit is for air pollution control purposes only.

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

1.2 Any activities not identified in the application are not authorized by this permit.

(Ref.: Miss. Code Ann. 49-17-29(1)(b))

1.3 The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for operating without a valid permit pursuant to State Law.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)

1.4 It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(6).)

1.5 The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)

1.6 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 the permit, unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(a).)

1.7 The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. 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. 2.2.B(15)(b).)

1.8 The permit does not convey any property rights of any sort, or any exclusive privilege.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)

1.9 The permittee shall furnish to the Department of Environmental Quality (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 permit or, for information claimed to be confidential, the permittee shall furnish such records to the 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. 2.2.B(15)(d).)

1.10 Design and Construction Requirements: The stationary source shall be designed and constructed so as to operate without causing a violation of any Applicable Rules and Regulations, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(1)-(3).)

1.11 The necessary facilities shall be constructed to prevent any wastes or other products or substances to be placed in a location where they are likely to cause pollution of the air or waters of the State without the proper environmental permits.

(Ref.: Miss. Code Ann. 49-17-29(1) and (2))

1.12 Fugitive Dust Emissions from Construction Activities: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(4).)

1.13 General Nuisances: 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.)

1.14 Right of Entry: The permittee shall allow the Mississippi Department of Environmental Quality, Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives, upon presentation of credentials:

A. To enter at reasonable times upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and

B. To have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air contaminants or waste waters, fuel, process material, or other material which affects or may affect emission of air contaminants from any source.

(Ref.: Miss. Code Ann. 49-17-21)

1.15 Permit Modification or Revocation: After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to, the following:

A. Persistent violation of any of the terms or conditions of this permit;

B. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

C. A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

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

1.16 Public Record and Confidential Information: Except for information determined to be confidential under the Mississippi Air and Water Pollution Control Law, all information obtained in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality, Office of Pollution Control.

(Ref.: Miss. Code Ann. 49-17-39)

1.17 Permit Transfer: This permit shall not be transferred except upon approval of the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.16.B.)

1.18 Severability: The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the 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. 2.1.D(7).)

1.19 Permit Expiration: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance, if construction is suspended for eighteen (18) months or more, or if construction is not completed within a reasonable time. The DEQ may extend the 18-month period upon a satisfactory showing that an extension is justified.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(1)., R. 2.5.C(4)., and R. 5.2.)

1.20 Certification of Construction: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(3).)

1.21 Beginning Operation: After certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate, whichever is applicable, is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by 11 Miss. Admin. Code Pt. 2, R. 2.13.G.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(4).)

1.22 Application for a Permit to Operate: The application for issuance or modification of the State Permit to Operate or the Title V Permit, whichever is applicable, is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).)

1.23 Operating Under a Permit to Construct: Upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).)

1.24 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:

(a) An upset occurred and that the source can identify the cause(s) of the upset;

(b) The source was at the time being properly operated;

(c) 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;

(d) That within five (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;

(e) 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 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 11 Miss. Admin. Code Pt. 2, R. 1.2.,occurs during startup or shutdown, see the upset requirements above.

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

1.25 General Duty: All air emission equipment shall be operated as efficiently as possible to minimize emissions of air contaminants.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

1.26 Compliance Testing: Regarding compliance testing:

A. The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.

B. Compliance testing will be performed at the expense of the permittee.

C. Each emission sampling and analysis report shall include but not be limited to the following:

(1) detailed description of testing procedures;

(2) sample calculation(s);

(3) results; and

(4) comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B(3), (4), and (6).)

SECTION 2. EMISSION POINT DESCRIPTION

The permittee is authorized to construct and/or modify and operate, upon certification of construction, air emissions equipment, as described in the following table.

Emission Point	Description
AA-012	4,122 MMBTU/hr Natural-Gas Fired Combustion Turbine #1 equipped with SCR to control NOx emissions, oxidation catalyst to control CO and VOC emissions, and low NOx burners.
AA-013	4,122 MMBTU/hr Natural-Gas Fired Combustion Turbine #2 equipped with SCR to control NOx emissions, oxidation catalyst to control CO and VOC emissions, and low NOx burners.
AA-014	225 MMBTU/hr Natural Gas-Fired Auxiliary Boiler equipped with Low NOx burner.
AA-015	10 MMBTU/hr Natural Gas-Fired Dew Point Heater #1.
AA-016	10 MMBTU/hr Natural Gas-Fired Dew Point Heater #2.
AA-017	2,012 hp (1500kW) Emergency Diesel Generator. New Engine that burns only ultra low sulfur diesel.
AA-018	2,700 gallon Fixed Roof Diesel Storage Tank
AA-019	Circuit Breakers with SF_6
AA-020	10 MMBTU/hr Natural Gas-Fired Dew Point Heater #3.

SECTION 3. EMISSION LIMITATIONS AND STANDARDS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limitation/Standard
AA-012 AA-013 AA-014 AA-015 AA-016 AA-017 AA-020	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Opacity	< 40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2		
AA-012 AA-013 AA-014 AA-015 AA-016 AA-020	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.3	Fuel	Natural Gas Only
AA-012 AA-013 AA-014 AA-015 AA-016 AA-020	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.4	PM (filterable only)	$E = 0.8808*I^{-0.1667}$
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.5	PM/$PM_{10}$$PM_{2.5}$ CO/NOx/VOC SO_2/H_2SO_4/GHG	Operational and contractual testing and tuning
AA-014 AA-015 AA-016 AA-020	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.6	SO_2	4.8 lbs/MMBTU
AA-012 AA-013	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.7	CO	BACT: 2.0 ppm @ 15% O_2 (3-hour average) not to exceed 18.2 lb/hr (excluding startup, shutdown, and tuning) and 1,502 tpy (including startup, shutdown, and tuning)
		3.8	PM/PM_{10}/$PM_{2.5}$	BACT: 36.3 lbs/hr (3-hour average) not to exceed 159.0 tpy
		3.9	VOC	BACT: 1.8 ppm @ 15% O_2 (3-hour average) not to exceed 9.4 lb/hr (excluding startup, shutdown, and tuning) and 135.4 tpy (including startup, shutdown, and tuning)
		3.10	H_2SO_4 mist	BACT: 17.7 lbs/hr (3-hour average) not to exceed 77.7 tpy
		3.11	GHG CO_2(e)	BACT: 850 lbs CO_2/MW-hr gross (12-month rolling average) not to exceed 2,114,111 tpy
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.12	Operating Restriction	BACT: startup, shutdown, and tuning duration and operating parameters

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limitation/Standard
AA-012 AA-013	NSPS Subpart KKKK -- Standards of Performance for Stationary Combustion Turbines that commenced Construction, Modification, or Reconstruction after February 18, 2005 40 CFR 60.4300, 60.4305(a) and (b)	3.13	NOx SO_2	Applicability
	40 CFR 60.4320(a) and Table 1, Subpart KKKK	3.14	NOx	15 ppm @15% O_2 or 0.43 lbs/MWh on a 30 unit operating day average
	40 CFR 60.4330(a)(1) or (2), Subpart KKKK	3.15	SO_2	0.90 lbs/MWh or 0.06 lbs SO_2/MMBTU
	40 CFR 60.4333(a), Subpart KKKK	3.16	NOx/SO_2	Good Air Pollution Control Practices
	NSPS Subpart TTTT – Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units 40 CR 60.5508, 60.5509(a)(1) and (2), and 60.5515	3.17	CO_2	Applicability
	40 CFR 60.5520(a) and (b), and Table 2, Subpart TTTT	3.18	CO_2	1,000 lbs CO_2/MWh(gross) (12 operating month rolling average)
	40 CFR 72.6, Subpart A	3.19	NOx	Acid Rain Applicability
	40 CFR 97, Subpart BBBBB	3.20		Cross-State Air Pollution Rule (CSAPR) Applicability
AA-014	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.21	Hours of Operation	≤ 2,000 hours/year
		3.22		Install an operational non-resettable hour meter
		3.23	CO	BACT: 0.049 lbs/MMBTU not to exceed 11.03 lb/hr and 11.03 tpy
		3.24	$PM/PM_{10}/PM_{2.5}$	BACT: 0.01 lbs/MMBTU not to exceed 1.7 lb/hr and 1.7 tpy
		3.25	VOC	BACT: 0.005 lbs/MMBTU not to exceed 1.13 lb/hr and 1.13 tpy
		3.26	H_2SO_4 mist	BACT: 0.02 tpy

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limitation/Standard
AA-014	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.27	GHG CO_2 (e)	BACT: 26,347 tpy
	40 CFR 60, Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generation Units 40 CFR 60.40b(a), Subpart Db	3.28	SO_2 PM NOx	Applicability
	40 CFR 60.42b(k)(2), Subpart Db	3.29	SO_2	Exemption
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.30		Shall burn only fuels that have an SO_2 emission rate of 0.32 lb/MMBTU heat input or less
	40 CFR 60.44b(a)(4)(i), Subpart Db	3.31	NOx	0.20 lbs/MMBTU
AA-015 AA-016 AA-020	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.32	Operation Restriction	Only operate 2 heaters at a time
		3.33		Install, operate, and maintain an operational non-resettable hour meter
		3.34	CO	BACT: 0.08 lbs/MMBTU not to exceed 0.8 lb/hr and 3.6 tpy
		3.35	$PM/PM_{10}/PM_{2.5}$	BACT: 0.01 lbs/MMBTU not to exceed 0.07 lb/hr and 0.31 tpy
		3.36	VOC	BACT: 0.005 lbs/MMBTU not to exceed 0.05 lb/hr and 0.22 tpy
		3.37	H_2SO_4 mist	BACT: 0.004 tpy
		3.38	GHG CO_2 (e)	BACT: 5,129 tpy
	40 CFR 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generation Units 40 CFR 60.40c(a), Subpart Dc	3.39	SO_2 PM	Applicability
AA-017	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.40	CO	BACT: 2.6 g/hp-hr not to exceed 11.6 lb/hr

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limitation/Standard
AA-017	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.41	$PM/PM_{10}/PM_{2.5}$	BACT: 0.15 g/hp-hr not to exceed 0.7 lb/hr
		3.42	VOC	BACT: 0.07 tpy
		3.43	H_2SO_4 mist	BACT: 1.9×10^{-4} tpy
		3.44	GHG CO_2 (e)	BACT: 123 tpy
	40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants from Reciprocating Internal Combustion Engines 40 CFR 63.6585, 63.6590(a)(2)(i), and 63.6590(c)(1)	3.45	HAP	Applicability as an area source of HAPs
	40 CFR 60, Subpart IIII – New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines 40 CFR 60.4200(a)(2)(i)	3.46	NMHC/CO/ NO_x/PM	Applicability
	40 CFR 60.4205(b), Subpart IIII	3.47		Comply with 40 CFR 60.4202 for same model year and maximum engine power
	40 CFR 60.4202(a)(2), Subpart IIII and 40 CFR 89.112	3.48		NMHC + NOx – 6.4 g/kw-hr (4.77 g/hp-hr) CO – 3.5 g/kw-hr (2.6 g/hp-hr) PM – 0.2 g/kw-hr (0.15g/hp-hr)
	40 CFR 60.4207(b), Subpart IIII and 40 CFR 80.510(b)	3.49	Fuel	Max sulfur content of 15 ppm Minimum cetane index of 40 or a maximum aromatic content of 35 volume percent
	40 CFR 60.4209(a), Subpart IIII	3.50	Hours of Operation	Install a non-resettable hour meter
	40 CFR 60.4211(c), Subpart IIII	3.51		Purchase an engine certified to emission standards in 40 CFR 60.4205(b) (Condition 3.47)
AA-018	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.52	VOC	BACT: Fixed Roof Tank

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limitation/Standard
AA-019	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.53	GHG CO_2 (e)	BACT: 156.6 tpy

3.1 For Emission Points AA-012, AA-013, AA-014, AA-015, AA-016, AA-017, and AA-020, 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.)

3.2 For Emission Points AA-012, AA-013, AA-014, AA-015, AA-016, AA-017, and AA-020, 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 3.1. This shall not apply to vision obscuration caused by uncombined water droplets.

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

3.3 For Emission Points AA-012, AA-013, AA-014, AA-015, AA-016, and AA-020, the permittee shall only burn natural gas.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

3.4 For Emission Points AA-012, AA-013, AA-014, AA-015, AA-016, and AA-020, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations shall not 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).)

3.5 For Emission Points AA-012, AA-013 AA-014, AA-015, AA-016, and AA-020, the permittee is allowed to conduct operational and contractual testing and tuning on the emission points to ensure the safe, efficient and reliable operation of the emission points. This shakedown period begins with initial startup and ends with initial performance testing or 180 days after startup, whichever comes sooner. The requirements in Section 3 of this permit shall apply at all times.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

3.6 For Emission Points AA-014, AA-015, AA-016, and AA-020, the maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input.

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

3.7 For Emission Points AA-012 and AA-013, the permittee shall not discharge or cause the discharge of Carbon Monoxide (CO) in excess of 2.0 ppm corrected to 15 percent Oxygen (O_2), 18.2 lb/hr (excluding startup, shutdown, and tuning), and 1,502 tpy (including startup, shutdown and tuning) determined by a 3-hour average using EPA Test Method 10, 40 CFR 60, Appendix A. The emission limits apply to each combustion turbine.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.8 For Emission Points AA-012 and AA-013, the permittee shall not discharge or cause the discharge of Particulate Matter ($PM/PM_{10}/PM_{2.5}$) in excess of 36.3 lbs/hr and 159 tpy determined by three (3) hour average using EPA Test Methods 201 and 202, 40 CFR 51, Appendix M. The emission limits apply to each combustion turbine.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.9 For Emission Points AA-012 and AA-013, the permittee shall not discharge or cause the discharge of Volatile Organic Compounds (VOC) in excess of 1.8 ppm corrected to 15 percent Oxygen (O_2), 9.4 lb/hr (excluding startup, shutdown, and tuning), and 135.4 tpy (including startup, shutdown, and tuning) determined by a 3-hour average using EPA Test Method 25, 40 CFR 60, Appendix A. The emission limits apply to each combustion turbine

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.10 For Emission Points AA-012 and AA-013, the permittee shall not discharge or cause the discharge of Sulfuric Acid Mist (H_2SO_4) in excess of 17.7 lbs/hr not to exceed 77.7 tpy determined by a 3-hour average using EPA Test Method 8, 40 CFR 60, Appendix A. The emission limits apply to each combustion turbine

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.11 For Emission Points AA-012 and AA-013, on or after the date of initial startup, the permittee shall not discharge or cause the discharge of Greenhouse Gas (GHG) emissions (CO_2(e)) in excess of 850 lbs of CO_2/gross Mega Watt (MW)-hour on a 12-month rolling

average not to exceed 2,114,111 tpy. The emission limits apply to each combustion turbine.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.12 For Emission Points AA-012 and AA-013, the permittee shall comply with the short-term limits listed in Conditions 3.6 through 3.11 at all times except during tunings, startups and shutdowns. Emissions during tuning, startups and shutdowns shall be included when determining compliance with the tons/year limitations.

The combustion turbines shall not be operated below 25% load (determined by the manufacturer) except during upsets, startups, and shutdowns.

The MECL (minimum emission compliance load) is defined as 35% load and is dependent on ambient conditions (such as temperature, humidity, and other factors).

Startup is defined as beginning when fuel is fired in the unit and ends when the unit reaches the MECL (35% load), not to exceed 240 minutes in duration.

Shutdown is defined as beginning when the unit drops below 25% load and ending when fuel is no longer fired, not to exceed 60 minutes in duration.

Tuning events are required to ensure the safe, reliable steady-state operation of the combustion turbine and to minimize NOx and CO emissions. Tuning events involve adjustments to the fuel distribution ratio and other parameters within the turbine combustion control system due to changes in the combustion environment of the turbine including, but not limited to, the following: ambient conditions, fuel composition changes, combustor hardware degradation, and combustor hardware replacement. Tuning events shall 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 sixteen (16) hours or less per event.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.13 For Emission Points AA-012 and AA-013, the permittee is subject to and shall comply with all applicable provisions of Standards of Performance for Stationary Combustion Turbines (40 CFR 60, Subpart KKKK) and the General Provisions (40 CFR 60, Subpart A).

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

3.14 For Emission Points AA-012 and AA-013, NOx emissions shall not exceed 15 ppm @ 15% O_2 or 0.43 lbs/MW-hr of useful output, on a 30 unit operating day rolling average.

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

3.15 For Emission Points AA-012 and AA-013, the permittee shall comply with either A or B:

A. Shall not cause to be discharged into the atmosphere any gases with contain SO_2 in excess of 0.90 lbs/MWh gross output; or

B. Shall not burn any fuel which contains total potential sulfur emissions in excess of 0.06 lbs SO_2/MMBTU heat input.

(Ref.: 40 CFR 60.4330(a)(1) or (2), Subpart KKKK)

3.16 For Emission Points AA-012 and AA-013, the permittee shall operate and maintain the stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

(Ref.: 40 CFR 60.4333(a), Subpart KKKK)

3.17 For Emission Points AA-012 and AA-013, the permittee is subject to and shall comply with all applicable requirements of the Standards of Performance for Greenhouse Gas Emissions from Electric Generating Units (40 CFR 60, Subpart TTTT) and the General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.5508, 60.5509(a)(1) and (2), and 60.5515, Subpart TTTT)

3.18 For Emission Points AA-012 and AA-013, a newly constructed or reconstructed stationary combustion turbine that supplies more than its design efficiency or 50 percent, whichever is less, times its potential electric output as net-electric sales on both a 12-operating month and a 3-year rolling average basis and combust more than 90% natural gas on a heat input basis on a 12-operating month rolling average basis shall not exceed 1,000 lbs CO_2/MWh of gross energy output. The permittee shall comply with this limit by complying with the BACT limit in Condition 3.11.

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

3.19 Emission Points AA-012, and AA-013, the permittee is subject to and shall comply with all applicable requirements of the Acid Rain Program as specified in 40 CFR Parts 72-78.

(Ref.: 40 CFR 72.6, Subpart A)

3.20 For Emission Points AA-012 and AA-013, the permittee is subject to and shall comply with the applicable requirements of the Cross-State Air Pollution Rule (CSAPR) as set forth in 40 CFR 97, Subpart BBBBB –NO_x Ozone Season Trading Program.

(Ref.: 40 CFR 97, Subpart BBBBB)

3.21 For Emission Point AA-014, the annual hours of operation for the auxiliary boiler shall not exceed 2,000 hours per 12-month rolling total.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

3.22 For Emission Point AA-014, the permittee shall install and maintain a non-resettable hour meter.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

3.23 For Emission Point AA-014, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Carbon Monoxide (CO) in excess of 0.049 lbs/MMBTU, 11.03 lb/hr and 11.03 tpy.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.24 For Emission Point AA-014, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Particulate Matter ($PM/PM_{10}/PM_{2.5}$) in excess of 0.01 lbs/MMBTU, 1.7 lb/hr, and 1.7 tpy.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.25 For Emission Point AA-014, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Volatile Organic Compounds (VOC) in excess of 0.005 lbs/MMBTU, 1.13 lb/hr, and 1.13 tpy.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.26 For Emission Point AA-014, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Sulfuric Acid Mist (H_2SO_4) in excess of 0.02 tpy.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.27 For Emission Point AA-014, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Greenhouse Gas (GHG) emissions ($CO_2(e)$) in excess of 26,347 tpy.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.28 For Emission Point AA-014, the permittee is subject to and shall comply with all applicable requirements of Standards of Performance for Industrial –Commercial-Institutional Steam Generation Units (40 CFR 60, Subpart Db) and the General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.40b(a), Subpart Db)

3.29 For Emission Point AA-014, units firing only very low sulfur oil, gaseous fuel, a mixture of these fuels, or a mixture of these fuels with any other fuels with a potential SO_2 emission rate of 0.32 lbs/MMBtu heat input or less are exempt from the SO_2 emissions limit in 40 CFR 60.42b(k)(1).

(Ref.: 40 CFR 60.42b(k)(2), Subpart Db)

3.30 For Emission Point AA-014, the permittee shall only burn fuels with a potential SO_2 emission rate of 0.32 lbs/MMBTU heat input or less.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). NSPS Subpart Db SO_2 Avoidance Limit)

3.31 For Emission Point AA-014, the permittee shall not cause to be discharged into the atmosphere any gases that contain NOx (expressed as NO_2) in excess of 0.20 lbs/MMBTU.

(Ref.: 40 CFR 60.44b(a)(4)(i), Subpart Db)

3.32 For Emission Points AA-015, AA-016, and AA-020, the permittee shall only operate two (2) heaters at a time.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

3.33 For Emission Points AA-015, AA-016, and AA-020, the permittee shall install, operate, and maintain a non-resettable hour meter.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

3.34 For Emission Points AA-015, AA-016, and AA-020, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Carbon Monoxide (CO) in excess of 0.08 lbs/MMBTU, 0.8 lb/hr, and 3.6 tpy determined by operating and maintaining in accordance with the manufacturer's recommendations. The emission limits apply to each heater.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.35 For Emission Points AA-015, AA-016, and AA-020, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Particulate Matter ($PM/PM_{10}/PM_{2.5}$) in excess of 0.01 lbs/MMBTU, 0.07 lb/hr, and 0.31 tpy determined by operating and maintaining in accordance with the manufacturer's recommendations. The emission limits apply to each heater.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.36 For Emission Points AA-015, AA-016, and AA-020, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Volatile Organic Compounds (VOC) in excess of 0.005 lbs/MMBTU, 0.05 lb/hr, and 0.22 tpy determined by operating and maintaining in accordance with the manufacturer's recommendations. The emission limits apply to each heater.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.37 For Emission Points AA-015, AA-016, and AA-020, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Sulfuric Acid Mist (H_2SO_4) in excess of 0.004 tpy determined by operating and maintaining in accordance with the manufacturer's recommendations. The emission limits apply to each heater.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.38 For Emission Points AA-015, AA-016, and AA-020, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Greenhouse Gas (GHG) emissions (CO_2(e)) in excess of 5,129 tpy for each heater.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.39 For Emission Points AA-015, AA-016, and AA-020, the permittee is subject to and shall comply with all applicable requirements of 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).

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

3.40 For Emission Point AA-017, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Carbon Monoxide (CO) in excess of 2.6 g/hp-hr, 11.6 lb/hr.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.41 For Emission Point AA-017, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Particulate Matter ($PM/PM_{10}/PM_{2.5}$) in excess of 0.15 g/hp-hr , 0.7 lb/hr.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.42 For Emission Point AA-017, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Volatile Organic Compounds (VOC) in excess of 0.07 tpy.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.43 For Emission Point AA-017, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Sulfuric Acid Mist (H_2SO_4) in excess of $1.9x10^{-4}$ tpy.

(Ref. : 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.44 For Emission Point AA-017, at all times, including equipment startup and shutdown, the permittee shall not discharge or cause the discharge of Greenhouse Gas (GHG) emissions ($CO_2(e)$) in excess of 123 tpy.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.45 For Emission Point AA-017, the permittee is subject to and shall comply with all applicable requirements of National Emission Standards for Hazardous Air Pollutants from Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ) and the General Provisions (40 CFR 63, Subpart A).

Emission Point AA-017 is a new stationary emergency RICE with a site rating of more than 500 brake hp located at an area source of HAP and constructed after December 19, 2002. The engine will meet all the requirements of 40 CFR 63, Subpart ZZZZ by meeting all the applicable requirements of 40 CFR 60, Subpart IIII.

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

3.46 For Emission Point AA-017, the permittee is subject to and shall comply with all applicable requirements of the New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines (40 CFR 60, Subpart IIII) and the General Provisions (40 CFR 60, Subpart A).

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

3.47 For Emission Point AA-017, the permittee shall comply with the emission standards for new non-road CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power.

(Ref.: 40 CFR 60.4205(b), Subpart IIII)

3.48 For Emission Point AA-017, the permittee shall not exceed the following emission limits:

A. NMHC + NOx – 6.4 g/kw-hr (4.77 g/hp-hr)

B. CO – 3.5 g/kw-hr (2.6 g/hp-hr)

C. PM – 0.20 g/kw-hr (0.15 g/hp-hr)

(Ref.: 40 CFR 60.4202(a)(2), Subpart IIII and 40 CFR 89.112)

3.49 For Emission Point AA-017, the permittee shall only use diesel fuel that meets the requirements for non-road diesel fuel below.

A. A maximum sulfur content of 15 ppm

B. A minimum cetane index of 40 or a maximum aromatic content of 35 volume percent

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

3.50 For Emission Point AA-017, the permittee shall install a non-resettable hour meter prior to startup of the engine.

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

3.51 For Emission Point AA-017, the permittee shall comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) (Condition 3.47), for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's emission-related specifications.

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

3.52 For Emission Point AA-018, the permittee shall install a fixed roof that is mounted to the storage tank in a stationary manner, and maintain all openings in a closed position at all times when not in use.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

3.53 For Emission Point AA-019, CO_2(e) emissions shall not exceed 156.6 tpy. To meet this limit, the permittee shall install state-of-the-art enclosed pressure SF_6 breakers with a guaranteed loss rate of 0.5 percent by weight or less per year and install a density monitor alarm system. The permittee shall install and maintain a leak detection system on the circuit breakers that signals an alarm in the control room in the event that any circuit breaker loses pressure. Any detected leaks must be repaired immediately.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10). BACT Limit)

SECTION 4. WORK PRACTICES

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Work Practice
AA-014	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	4.1	CO NOx	Biennial Tune-Ups
		4.2		Boiler Maintenance
AA-015 AA-016 AA-020	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	4.3	CO NOx	Maintenance and Tune-Ups every 5 years according to manufacturer's recommendations

4.1 For Emission Point AA-014, the permittee shall perform biennial tune-ups and shall comply with the following. Each tune-up shall be performed every 2 years not to exceed 25 months between each tune up.

A. Inspect the burner, and clean or replace any components of the burner as necessary (permittee may delay the burner inspection until the next scheduled unit shutdown, but must inspect each burner at least once every 36 months);

B. Inspect the flame pattern, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications;

C. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly;

D. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specification and with any NOx requirement to which the unit is subject;

E. Measure the concentrations in 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; and

F. In lieu of performing the biennial tune-up in accordance with A through E of this condition, the permittee can submit an alternative tune-up procedure based on the manufacturer's recommendation for approval by MDEQ at least sixty (60) days prior to the required biennial tune-up.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

4.2 For Emission Point AA-014, the permittee shall perform all manufacturer's recommended maintenance on the Auxiliary Boiler.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

4.3 For Emission Points AA-015, AA-016, and AA-020, the permittee shall perform tune-ups every five (5) years not to exceed 61 months from the previous tune-up in accordance with Condition 4.1 and follow the manufacturer's maintenance procedures.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

SECTION 5. MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Monitoring/Recordkeeping Requirement
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.1	Recordkeeping	Maintain records for a minimum of 5 years.
AA-012 AA-013 AA-014 AA-015 AA-016 AA-017 AA-018 AA-019 AA-020	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.2	$PM/PM_{10}PM_{2.5}$ CO/NOx/VOC SO_2/H_2SO_4/GHG	Good Air Pollution Control Practices
		5.3	GHG	Global Warming Potential
AA-012 AA-013	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.4	$PM/PM_{10}PM_{2.5}$ CO/NOx/VOC SO_2/H_2SO_4/GHG	Develop and implement an operation and maintenance plan
		5.5	CO	Stack Testing within 180 days of startup and biennially using EPA Test Method 10, 40 CFR 60, Appendix A
			$PM/PM_{10}/PM_{2.5}$	Stack Testing within 180 days of startup and biennially using EPA Test Methods 201 and 202, 40 CFR 51, Appendix M
			VOC	Stack Testing within 180 days of startup and biennially using EPA Test Method 25, 40 CFR 60, Appendix A
			H_2SO_4 Mist	Stack Testing within 180 days of startup and biennially using EPA Test Method 8 40 CFR 60, Appendix A
		5.6	GHG $CO_2(e)$	Continuous Monitoring for CO_2
				Hourly Determination of CO_2 Mass Emissions
		5.7		Hourly Determination of actual Heat Input
		5.8		Hourly Recordkeeping
		5.9		Compliance for GHG BACT will be demonstrated by following 40 CFR 60, Subpart TTTT
		5.10	Operating Restrictions	Monitor hours of operation

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Monitoring/Recordkeeping Requirement
AA-012 AA-013	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.11	GHG $CO_2(e)$	GHG Emissions Calculations
		5.12	PM/$PM_{10}$$PM_{2.5}$ CO/NOx/VOC SO_2/H_2SO_4/GHG	Recordkeeping
		5.13		Excess Emissions and Monitor Downtime
	40 CFR 60.4333, 60.4335, 60.4345, 60.4350, 60.4355, 60.4360, 60.4365, and 60.4370, Subpart KKKK	5.14	NOx	Monitoring and Recordkeeping
	40 CFR 60.5525, Subpart TTTT	5.15	CO_2	General Requirements
	40 CFR 60.5535, Subpart TTTT	5.16		Excess Emissions
	40 CFR 60.5540, Subpart TTTT	5.17		
	40 CFR 60.5560, Subpart TTTT	5.18		Recordkeeping
	40 CFR 60.5565, Subpart TTTT	5.19		
AA-014	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.20	Hours of Operation	Maintain log of hours of operation of the Auxiliary Boiler
		5.5	CO	Stack Testing within 180 days of startup and biennially using EPA Test Method 10, 40 CFR 60, Appendix A
			PM/PM_{10}/$PM_{2.5}$	Stack Testing within 180 days of startup and biennially using EPA Test Methods 1 - 5, 40 CFR 60, Appendix A
			VOC	Stack Testing within 180 days of startup and biennially using EPA Test Method 25, 40 CFR 60, Appendix A
		5.21	H_2SO_4 Mist	Demonstrate compliance via mass balance emission calculations
		5.22	GHG $CO_2(e)$	GHG Compliance
	40 CFR 60.45b(j), 40 CFR 60.47b(f), and 60.49b(r), Subpart Db	5.23	SO_2	Fuel Monitoring
	40 CFR 60.46b(a), Subpart Db	5.24	NOx	Emission standards apply at all times, even during periods of startup, shutdown, or malfunction

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Monitoring/Recordkeeping Requirement
AA-014	40 CFR 60.46b(c), Subpart Db	5.25	NOx	Compliance shall be determined through performance testing as required by 40 CFR 60.46b(f). Initial performance test shall be performed no later than 180 days after initial startup and biennially to demonstrate compliance with the NOx permit limit.
	40 CFR 60.46b(g), Subpart Db	5.26		
	40 CFR 60.46b(e)(1) and (4), Subpart Db	5.27		Performance Test Requirements
	40 CFR 60.49b(d)(2), Subpart Db	5.28	Fuel	Maintain records of amounts of fuel combusted each calendar month
	40 CFR 60.49b(o), Subpart Db	5.29	SO_2 NOx	Maintain records for 2 years
AA-015 AA-016 AA-020	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.30	CO $PM/PM_{10}/PM_{2.5}$ VOC H_2SO_4 Mist	Determine compliance using vendor emissions data, work practice standards, and manufacturer's recommendations in Section 4
		5.31	Operation Restriction	Maintain log of which heaters are operating and which one is shut down
		5.32		Hours of Operation Recordkeeping
		5.33	GHG	Calculate and record $CO_2(e)$ emissions on a 12-month rolling average
	40 CFR 60.48c(g)(2), Subpart Dc	5.34	Fuel	Record the amount of fuel combusted during each calendar month.
AA-017	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.35	VOC	Determine compliance using emission calculations
		5.36	H_2SO_4 Mist	Determine compliance using mass balance emissions calculations
		5.33	GHG $CO_2(e)$	Calculate and record $CO_2(e)$ emissions on a 12-month rolling average
	40 CFR 60.4206, Subpart IIII	5.37	Compliance	Comply for Life of the Engine
	40 CFR 60.4211(a), Subpart IIII	5.38		Operate and Maintain according to manufacturer's written instructions
	40 CFR 60.4211(c), Subpart IIII	5.39		
	40 CFR 60.4211(g)(3), Subpart IIII and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.40		

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Monitoring/Recordkeeping Requirement
AA-017	40 CFR 60.4214(b), Subpart IIII	5.41	Compliance	Recordkeeping
AA-018	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.42	VOC	Monthly Inspections
		5.43		Throughput Records
AA-019	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.44	SF_6	Equip with low pressure alarms
		5.45		Monitoring Requirements

5.1 The permittee shall retain all required records, monitoring data, supporting information and reports for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings or other data for continuous monitoring instrumentation, all records of the short term and long term emissions, all records or reports pertaining to adjustments and/or maintenance performed in any emission-related system or device at the facility, all records relating to performance tests and monitoring of any auxiliary combustion equipment and copies of all reports required by this permit. Copies of such records shall be submitted to DEQ as required by Applicable Rules and Regulations or this permit upon request. These records shall be maintained on site and made available to MDEQ personnel upon request.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9.)

5.2 For Emission Points AA-012, AA-013, AA-014, AA-015, AA-016, AA-017, AA-018, AA-019, and AA-020, at all times, including periods of startup, shutdown, shakedown, tuning and malfunction, the permittee shall, to the extent practicable, maintain and operate the facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to MDEQ, which may include, but is not limited to, monitoring results, opacity observation, review of operating maintenance procedures and inspection of the facility.

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

5.3 For Emission Points AA-012, AA-013, AA-014, AA-015, AA-016, AA-017, AA-018, AA-019, and AA-020, for the purposes of showing compliance with any GHG emission limit in this permit, the Global Warming Potential (GWP) factors listed in 40 CFR 98,

Subpart A, Table A-1 as of the issuance date of this permit shall be used. The current GWP factors are listed below:

GHG Pollutant	GWP Factor
CO_2	1
CH_4	25
N_2O	298
SF_6	22,800

(Ref.: 40 CFR 98, Subpart A, Table A-1)

5.4 For Emission Points AA-012 and AA-013, as soon as practicable following initial startup of the combustion turbines but prior to commencement of commercial operation, and thereafter, the permittee shall develop and implement an operation and maintenance plan. At a minimum, the plan shall identify measures for assessing the performance of the turbines, the acceptable range of the performance measures for achieving the design electrical output, the methods for monitoring the performance measures, and the routine procedures for maintaining the turbines in good operating condition.

The permittee shall maintain a copy of the current operation and maintenance plan for the facility, and shall keep a copy of all prior versions of the plan for a minimum of five years. The permittee shall also keep records of the monitoring data for each of the facility performance measures and all maintenance activities; the permittee shall maintain such records for a minimum of 5 years following the date they are created.

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

5.5 For Emission Points AA-012, AA-013, and AA-014, the permittee shall demonstrate initial compliance with the CO, PM, VOC and H_2SO_4 mist emission limits, set forth in Section 3 of this permit by stack testing in accordance with the applicable EPA Test Methods listed below within 180 days after startup.

Carbon Monoxide (CO)	EPA Test Method 10
Particulate Matter ($PM/PM_{10}/PM_{2.5}$)	EPA Test Methods 201 and 202
Volatile Organic Compounds (VOC)	EPA Test Method 25
Sulfuric Acid Mist (H_2SO_4)	EPA Test Method 8

All test methods shall be the current versions, which are in effect upon permit issuance. The stack testing shall be performed when the emission units are operating as close to their maximum capacity as operating conditions allow.

For Emission Point AA-014, in lieu of stack testing for H_2SO_4 mist the permittee shall determine the emission rate by performing a mass balance calculation.

For Emission Points AA-012 through AA-013, in lieu of stack testing the permittee can demonstrate compliance with the NOx and CO emission limitations using a Continuous Emission Monitoring System (CEMS). Demonstrating compliance with the ppm, lb/hr,

and tons/year 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 test data collected during Relative Accuracy Test Audits (RATA) required per 40 CFR 75.

To demonstrate continuous compliance, subsequent stack testing shall be conducted within 25 months of the previous stack test. If a stack test shows that the emissions are at or below 75 percent of the emission limits in Section 3, then the permittee shall stack test once every 5 years not to exceed 60 months from previous stack test. If a stack test shows emissions exceeding 75 percent of the emission limit, the permittee shall perform the stack test biennially beginning on the next odd year. The stack testing shall be performed on a biennial basis until two consecutive stack tests show emissions below 75 percent of the emission limit at which time the stack testing may return to the once per five (5) year testing frequency.

The permittee shall submit a stack test protocol at least thirty (30) days prior to the scheduled test date to ensure that all test methods and procedures are acceptable to the DEQ. If the initial stack test protocol is acceptable, subsequent test protocols may be waived if these protocols contain no significant changes. Also, the DEQ must be notified at least ten (10) days prior to the scheduled test date so that an observer may be schedules to witness the test(s).

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

5.6 For Emission Points AA-012 and AA-013, for demonstrating initial compliance with the GHG emission limit in Condition 3.11, the permittee shall install, certify, and operate and maintain monitoring systems for quantifying CO_2 (GHG) emissions from each turbine in accordance with the applicable requirements of 40 CFR 75. Consistent with 40 CFR 75.4(b), all applicable certification tests shall be completed within 180 days after the date the unit comments commercial operation.

Following the initial certification, the CO_2 continuous monitoring system shall be quality assured in accordance with the applicable requirements of 40 CFR 75.

The CO_2 continuous monitoring shall be capable of producing hourly determination of CO_2 mass emissions in tons per hour (tons/hr).

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

5.7 For Emission Points AA-012 and AA-013, the permittee shall measure and record, for each turbine, the actual heat input (MMBtu) on an hourly basis in accordance with 40 CFR 75.

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

5.8 For Emission Points AA-012 and AA-013, the permittee shall measure/calculate and record, for each turbine, the following on an hourly basis:

A. Gross energy output rate (MW)

B. CO_2 mass emission rate (tons CO_2/hr)

C. Heat input rate (MMBtu/hr)

D. Unit operating time, as described in to CFR 75.57(b)(2)

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

5.9 For Emission Points AA-012 and AA-013, the permittee shall demonstrate compliance with the BACT limits for GHG by performing the calculations, monitoring and recordkeeping for GHG emissions in accordance with 40 CFR 60, Subpart TTTT (Conditions 5.15, 5.16 and 5.18). The permittee shall be in compliance with the BACT limits for GHG at all times.

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

5.10 For Emission Points AA-012 and AA-013, the permittee shall record the hours of operation on a daily basis. These records shall include a record of all startups, shutdowns or tuning of the combustion turbines, and SCR systems. The records maintained for each startup, shutdown, or tuning event shall contain the date, start time, end time, duration, a description of any deviations from manufacturer's or permittee's written instructions or permit limits that contribute to excess emissions, and a confirmation that good air pollution control practices were followed during the event.

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

5.11 For Emission Points AA-012 and AA-013, for demonstration compliance with the limits in 3.11, the permittee shall use the procedures set forth in 40 CFR 75 and 98 to determine resulting GHG emissions as CO_2(e) based on the combination of CO_2 emissions (from continuous monitoring system) and calculated CO_2(e) of other GHG pollutants. Permittee shall keep adequate records of these GHG emission calculations.

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

5.12 For Emission Points AA-012 and AA-013, the permittee shall maintain records that include the following: the occurrence and duration of any startup, shutdown, tuning, shakedown, or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and corresponding emission measurements.

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

5.13 For Emission Points AA-012 and AA-013, the permittee shall maintain records of all excess emissions. Excess emissions shall be defined as any period in which the emissions exceed the maximum emission limits set forth in this permit. A period of monitor down-time shall be any unit operating hour in which sufficient data was not obtained by the CEMS to validate the hour according to 40 CFR 75. Excess emissions

indicated by the CEMS system, source testing, or compliance monitoring shall be considered violation of the applicable emission limit.

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

5.14 For Emission Points AA-012 and AA-013, the permittee shall comply with all applicable monitoring and recordkeeping as described in 40 CFR 60, Subpart KKKK.

(Ref.: 40 CFR 60.4333, 60.4335, 60.4345, 60.4350, 60.4355 60.4360, 60.4365, and 60.4370, Subpart KKKK)

5.15 For Emission Points AA-012 and AA-013, compliance with the applicable CO_2 emission standard in Condition 3.18 shall be determined on a 12-operating-month rolling average basis.

A. The permittee shall be in compliance with the emission standards in 40 CFR 60, Subpart TTTT that apply to the EGU at all times. However, the permittee shall determine compliance with the emission standards only at the end of the applicable operating month, as provided in 40 CFR 60.5525(a)(1).

B. At all times, the permittee shall operate and maintain each affected EGU, including associated equipment and monitors, in a manner consistent with safety and good air pollution control practice. 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, and inspection of the EGU.

C. Within 30 days after the end of the initial compliance period (*i.e.*, no more than 30 days after the first 12-operating-month compliance period), the permittee shall make an initial compliance determination for your affected EGU(s) with respect to the applicable emissions standard in Condition 3.18, in accordance with the requirements in 40 CFR 60, Subpart TTTT. The first operating month included in the initial 12-operating-month compliance period shall be determined by following the procedures in 40 CFR 60.5525(c).

(Ref.: 40 CFR 60.5525, Subpart TTTT)

5.16 For Emission Points AA-012 and AA-013, the permittee shall comply with the following:

A. Prepare a monitoring plan to quantify the hourly CO_2 mass emission rate (tons/h), in accordance with the applicable provisions in 40 CFR 75.53(g) and (h). The electronic portion of the monitoring plan must be submitted using the ECMPS Client Tool and must be in place prior to reporting emissions data and/or the results of monitoring system certification tests under this subpart. The monitoring plan must be updated as necessary. Monitoring plan submittals must be made by the person authorized under 40 CFR 72.20, 72.22, and 72.26.

B. Determine the hourly CO_2 mass emissions in kilograms (kg) from your affected EGU(s) according to 40 CFR 60.5535(b)(1) through (5), or, if applicable, as provided in paragraph (c).

C. If the affected EGU exclusively combusts liquid fuel and/or gaseous fuel, as an alternative to complying with paragraph (b), the permittee may determine the hourly CO_2 mass emissions according to 40 CFR 60.5535(c)(1) through (4).

D. Consistent with 40 CFR 60.5520 (Condition 3.18), the permittee shall determine the basis of the emissions standard that applies to your affected source in accordance with 40 CFR 60.4435(d)(1).

(Ref.: 40 CFR 60.5535, Subpart TTTT)

5.17 For Emission Points AA-012 and AA-013, the permittee shall comply with the following:

A. For the initial and each subsequent 12-operating-month rolling average compliance period, to demonstrate compliance with Condition 3.18, the permittee shall follow the procedures in paragraphs 40 CFR 60.5540(a)(1) through (7) to calculate the CO_2 mass emissions rate for your affected EGU(s) in units of the applicable emissions standard (*i.e.*, either kg/MWh or lb/MMBtu). The permittee shall use the hourly CO_2 mass emissions calculated under Condition 5.16(b) or (c), as applicable, and either the generating load data from Condition 5.16(d)) for output-based calculations. The CO_2 mass emissions rate for Emission Points AA-012 and AA-013 must be determined according to the procedures specified in 40 CFR 60.5540(a) (1) through (7) and must be less than or equal to the applicable CO_2 emission standard in Condition 3.18.

B. In accordance with 40 CFR 60.5520 (Condition 3.18), to demonstrate compliance with the applicable CO_2 emission standard, for the initial and each subsequent 12-operating-month compliance period, the CO_2 mass emissions rate for your affected EGU must be determined according to the procedures specified in 40 CFR 60.5540(a)(1) through (7) and must be less than or equal to the applicable CO_2 emissions standard in Condition 3.18, or the emissions standard calculated in accordance with 40 CFR 60.5525(a)(2) (Condition 5.15).

(Ref.: 40 CFR 60.5540, Subpart TTTT)

5.18 For Emission Points AA-012 and AA-013, the permittee shall comply with the following recordkeeping requirements:

A. Maintain records of the information you used to demonstrate compliance with 40 CFR 60, Subpart TTTT as specified in 40 CFR 60.7(b) and (f).

B. For affected EGUs subject to the Acid Rain Program, the permittee shall follow the applicable recordkeeping requirements and maintain records as required under 40 CFR 75, Subpart F.

C. Keep records of the calculations you performed to determine the hourly and total CO_2 mass emissions (tons) for each operating month (for all affected EGUs); and each compliance period, including, each 12-operating-month compliance period.

D. Keep records of the applicable data recorded and calculations performed that you used to determine your affected EGU's gross or net energy output for each operating month.

E. Keep records of the calculations you performed to determine the percentage of valid CO_2 mass emission rates in each compliance period.

F. Keep records of the calculations you performed to assess compliance with each applicable CO_2 mass emissions standard in Condition 3.18.

G. Keep records of the calculations you performed to determine any site-specific carbon-based F-factors you used in the emissions calculations (if applicable).

(Ref.: 40 CFR 60.5560, Subpart TTTT)

5.19 For Emission Points AA-012 and AA-013, the permittee shall comply with the following:

A. Records must be in a form suitable and readily available for expeditious review.

B. Maintain each record for 3 years after the date of conclusion of each compliance period.

C. Maintain each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 60.7. Records that are accessible from a central location by a computer or other means that instantly provide access at the site meet this requirement. The permittee may maintain the records off site for the remaining year(s) as required by this subpart.

(Ref.: 40 CFR 60.5565, Subpart TTTT)

5.20 For Emission Point AA-014, the permittee shall maintain a log of the hours of operation of the auxiliary boiler.

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

5.21 For Emission Point AA-014, the permittee shall demonstrate compliance with the H_2SO_4 BACT Limit by performing a mass balance calculation.

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

5.22 For Emission Point AA-014, the permittee shall use the data recorded from the fuel receipts and non-resettable hour meter as well as the appropriate emission factors from 40 CFR 98, Subpart C, Table C-2 and the GWP factors in Condition 5.3 to calculate and record CO_2(e) emissions.

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

5.23 For Emission Point AA-014, the permittee shall comply with the following:

A. Obtain and maintain the fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas as defined in 40 CFR 60.41b and the applicable sulfur limit.

B. Develop and submit a site-specific fuel analysis plan to the MDEQ for review and approval no later than 60 days before the date you intend to demonstrate compliance. Each fuel analysis plan shall include at a minimum, an initial requirement of weekly testing and each analysis report shall contain, at a minimum, the information in 40 CFR 60.49b(r)(2).

(Ref.: 40 CFR 60.45b(j), 60.47b(f), and 60.49b(r), Subpart Db)

5.24 For Emission Point AA-014, the NOx emission standards in Condition 3.31 shall apply at all times even during periods of startup, shutdown, or malfunction.

(Ref.: 40 CFR 60.46b(a), Subpart Db)

5.25 For Emission Point AA-014, compliance with the NOx emissions standards in Condition 3.31 shall be determined through performance testing in accordance with 40 CFR 60.46b(f) (Condition 5.27).

(Ref.: 40 CFR 60.46b(c), Subpart Db)

5.26 For Emission Point AA-014, the permittee shall demonstrate the maximum heat input capacity of the steam generating unit by operating the facility at maximum capacity for 24 hours. The permittee shall determine the maximum heat input capacity using the heat loss method or the heat input method described in sections 5 and 7.3 of the ASME *Power Test Codes* 4.1 (incorporated by reference, see 40 CFR 60.17).

This demonstration of maximum heat input capacity shall be made during the initial performance test for affected facilities that meet the criteria of 40 CFR 60.44b(j). It shall be made within 60 days after achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial start-up of each facility, for affected facilities meeting the criteria of 40 CFR 60.44b(k). Subsequent performance tests shall be conducted biennially. If this demonstration indicates that the maximum heat input capacity of the affected facility is less than the information stated by the manufacturer of the affected facility, the maximum heat input capacity determined during this demonstration shall be used to determine the capacity utilization rate for the affected facility. Otherwise, the maximum heat input capacity provided by the manufacturer is used.

(Ref.: 40 CFR 60.46b(g), Subpart Db and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.27 For Emission Point AA-014, to determine compliance with the emission limits for NO_x required under 40 CFR 60.44b (Condition 3.31), the permittee shall conduct the

performance test as required under 40 CFR 60.8 using the continuous system for monitoring NO_x under 40 CFR 60.48(b).

A. For the initial compliance test, NO_x from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO_x emission standards under 40 CFR 60.44b (Condition 3.31). The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

B. Following the date on which the initial performance test is completed or is required to be completed under 40 CFR 60.8, whichever date comes first, the permittee shall determine compliance with the NO_x standards in 40 CFR 60.44b (Condition 3.31) once every 5 years (not to exceed 61 months after previous performance test) through the use of a 30-day performance test. During periods when performance tests are not requested, NO_x emissions data collected pursuant to 40 CFR 60.48b(g)(1) or 40 CFR 60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the NO_x emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_x emission data for the preceding 30 steam generating unit operating days.

(Ref.: 40 CFR 60.46b(e)(1) and (4), Subpart Db)

5.28 For Emission Point AA-014, the permittee shall record and maintain records of the amount of fuel combusted during each calendar month.

(Ref.: 40 CFR 60.49b(d)(2), Subpart Db)

5.29 For Emission Point AA-014, the permittee shall maintain all records for a period of 2 years following the date of such record.

(Ref.: 40 CFR 60.49b(o), Subpart Db)

5.30 For Emission Points AA-015, AA-016, and AA-020, the permittee shall determine compliance with the BACT Limits using vender emissions data, work practice standards, and manufacture's recommendations outlined in Section 4.

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

5.31 For Emission Points AA-015, AA-016, and AA-020, the permittee shall maintain a log of which heaters are operating and which heater is shutdown.

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

5.32 For Emission Points AA-015, AA-016, and AA-020, the permittee shall monitor the hours of operation on the non-resettable hour meter to be recorded monthly and on a 12-month rolling total.

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

5.33 For Emission Points AA-015, AA-016, AA-017, and AA-020, the permittee shall use the annual heat input and data from 40 CFR 98, Table C-1 to calculate and record $CO_2(e)$ emissions on a a12-month rolling average using the Global Warming Potential factors in Condition 5.3.

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

5.34 For Emission Points AA-015, AA-016, and AA-020, the permittee shall record and maintain records of the amount of fuel combusted during each calendar month.

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

5.35 For emission Point AA-017, the permittee shall determine compliance with the VOC BACT Limit by calculating emissions on a tons per year basis.

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

5.36 For Emission Point AA-017, the permittee shall determine compliance with the H_2SO_4 mist BACT Limit by performing a mass balance emissions calculation.

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

5.37 For Emission Point AA-017, the permittee shall operate and maintain the stationary compression ignition internal combustion engine (CI ICE) so that it meets the emission standards in Condition 3.48 and the BACT limits (Conditions 3.40 through 3.44) for the entire life of the engine.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).) and 40 CFR 60.4206, Subpart IIII)

5.38 For Emission Point AA-017, the permittee shall comply with the following:

A. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

B. Change only those emission-related settings that are permitted by the manufacturer; and

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

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

5.39 For Emission Point AA-017, the engine shall be installed and configured according to the manufacturer's emission-related specifications.

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

5.40 For Emission Point AA-017, if you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows: the permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air

pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

(Ref.: 40 CFR 60.4211(g)(3), Subpart IIII and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.41 For Emission Point AA-017, the permittee shall keep records of the hours of operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The records shall indicate how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation.

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

5.42 For Emission Point AA-018, the permittee shall perform monthly inspections and record if a leak is detected and the corrective action taken to minimize the release of VOC.

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

5.43 For Emission Point AA-018, the permittee shall maintain throughput records.

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

5.44 For Emission Point AA-019, the circuit breakers shall be equipped with low pressure alarms. In addition, the permittee shall implement a maintenance program that maintains the integrity of the breakers and minimizes SF_6 emissions.

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

5.45 For Emission Point AA-019, the permittee shall comply with the following:

A. Continuously monitor and record circuit breakers pressure;

B. Perform inspections every even month, not to exceed 75 days from the previous inspection, of the circuit breakers in accordance with the manufacturer’s specifications. Records of inspections shall be kept in accordance with Condition 5.1.

C. Provide periodic maintenance to the circuit breakers and its components

D. Repair any leaks and replace equipment as needed.

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

SECTION 6. REPORTING REQUIREMENTS

6.1 General Reporting Requirements:

A. 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. 2.2.B(11).)

B. Beginning upon issuance of this permit and lasting until issuance or modification of the applicable operating permit, 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. 2.1.C. Where no monitoring data is required to be reported and/or there are no deviations to report, the report shall contain the appropriate negative declaration. For any air emissions equipment not yet constructed and/or operating the report shall so note and include an estimated date of commencement of construction and/or startup, whichever is applicable.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9.)

C. Any document required by this permit to be submitted to the DEQ shall contain a certification signed by a responsible official stating 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. 2.2.B(11).)

D. Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(2).)

E. The permittee must notify DEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(3).)

F. Upon the completion of construction or installation of an approved stationary source or modification, and prior to commencing operation, the applicant shall notify the Permit Board that construction or installation was performed in accordance with the approved plans and specifications on file with the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(1) and (3).)

G. The Permit Board shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the Permit Board determines the changes are substantial, it may require the submission of a new application to construct with "as built" plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an "as built" application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(2).)

Specific Reporting Requirements:

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
AA-012 AA-013 AA-014 AA-015 AA-016 AA-017 AA-020	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.2	Submit a stack test report within 60 days of conducting the stack test
AA-012 AA-013	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.3	Semi-annual reporting
		6.4	Submit records of startup, shutdown, and tuning events
		6.5	Submit monitoring plan in accordance with 40 CFR 75.62
		6.6	Notification in 40 CFR 75.61
		6.7	Excess Emissions
	40 CFR 60.4375(b), Subpart KKKK	6.8	Subpart KKKK Reporting
	40 CFR 60.5550(a), Subpart TTTT	6.9	Submit notifications specified in 40 CFR 60.7(a)(1) and (3), and 60.19 and Table 3
	40 CFR 60.5550(b), Subpart TTTT	6.10	Submit notifications specified in 40 CFR 75.61
	40 CFR 60.5555(a), Subpart TTTT	6.11	Reporting Requirements
	40 CFR 60.5555(b), Subpart TTTT	6.12	Electronic Reports
	40 CFR 60.5555(c), Subpart TTTT	6.13	Reporting under Acid Rain Program
	40 CFR 60.5555(d), Subpart TTTT	6.14	
AA-014	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.15	Submit reports of the hours of operation
	40 CFR 60.49b(a), Subpart Db	6.16	Report of initial startup

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
AA-014	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.17	Reports of fuel usage
	40 CFR 60.49b(b), Subpart Db	6.18	Submit performance test data
	40 CFR 60.49b(r)(1) Subpart Db	6.19	Reports of very low sulfur fuels
	40 CFR 60.49b(r)(2), Subpart Db	6.20	Submit site-specific fuel analysis plan
	40 CFR 60.49b(r)(2), Subpart Db	6.21	Submit fuel analysis report.
	40 CFR 60.49b(w), Subpart Db	6.22	Reports due every 6 months postmarked by the July 30th and January 30th.
AA-015 AA-016 AA-020	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.23	Submit reports of which boilers are operating and which one is shutdown
		6.17	Reports of fuel usage
AA-018	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.24	Submit reports of the monthly inspections and the throughput records
AA-019	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.25	Submit reports of the density alarm monitoring

6.2 For Emission Points AA-012, AA-013, AA-014, AA-015, AA-016, AA-017, and AA-020, the permittee shall submit a report of any stack test results within sixty (60) days of conducting the respective stack test.

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

6.3 For Emission Points AA-012, AA-013, AA-014, AA-015, AA-016, AA-017, and AA-020, the permittee shall submit a summary of the 12-month rolling totals for emissions during the semi-annual reporting period. For Emission Point AA-012 and AA-013 the report shall also indicate whether there were any periods where the CEMS indicated emissions were in excess of the concentration or lb/hr (3-hour rolling average) emission limits. The information above shall be submitted in the semi-annual report required in Condition 6.1.B.

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

6.4 For Emission Points AA-012 and AA-013, the permittee shall submit a report which contains the hours of operation for each unit during the reporting period for each operating mode. At a minimum, this report shall include the number of startups and shutdowns, duration of each, and the time the combustion units were in operation until such time the control equipment began to operate. The information shall be submitted in accordance with Condition 6.1.B.

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

6.5 For Emission Points AA-012 and AA-013, in accordance with 40 CFR 75.62, an initial monitoring plan shall be submitted identifying the methodology for which CO_2 mass emissions will be continuously monitored. The initial monitoring plan shall be submitted no later than 21 days prior to the initial certification tests.

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

6.6 For Emission Points AA-012 and AA-013, the permittee shall provide notification as specified in 40 CFR 75.61 for any event related to the continuous measurement of CO_2.

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

6.7 For Emission Points AA-012 and AA-013, the permittee shall submit a semi annual report of all excess emissions in accordance with Condition 6.1.B, except when: more frequent reporting is specifically required by an applicable subpart; or the administration, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source.

A. Time intervals, data and magnitude of excess emissions, the nature and cause (if known), corrective actions taken and preventive measure adopted;

B. Applicable time and date of each period during which the CEMS was inoperative (monitor down-time), except for zero and span checks, and the nature of CEMS repairs or adjustments;

C. A statement in the report of a negative declaration; that is, a statement when no excess emissions occurred or when the CEMs has not been inoperative, repaired, or adjusted.

D. Any failure to conduct any required source testing, monitoring, or other compliance activities; and

E. Any violation of limitations on operation, including but not limited to restriction on hours operation.

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

6.8 For Emission Points AA-012 and AA-013, the permittee shall comply with all applicable reporting requirements of 40 CFR 60, Subpart KKKK.

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

6.9 For Emission Points AA-012 and AA-013, the permittee shall submit the notifications specified in 40 CFR 60.7(a)(1) and (3) and 60.19, as applicable to the affected EGU(s) (see table 3 of Subpart TTTT).

(Ref.: 40 CFR 60.5550(a), Subpart TTTT)

6.10 For Emission Points AA-012 and AA-013, the permittee shall submit notifications specified in 40 CFR 75.61, as applicable, to the affected EGUs.

(Ref.: 40 CFR 60.5550(b), Subpart TTTT)

6.11 For Emission Points AA-012 and AA-013, the permittee shall and submit reports according to 40 CFR 60.5555(a) through (d) (Conditions 6.11 through 6.14), as applicable.

A. For affected EGUs that are required by 40 CFR 60.5525 (Condition 5.15) to conduct initial and on-going compliance determinations on a 12-operating-month rolling average basis, the permittee shall submit electronic quarterly reports as follows. After accumulating the first 12-operating months for the affected EGU, the permittee shall submit a report for the calendar quarter that includes the twelfth operating month no later than 30 days after the end of that quarter. Thereafter, you must submit a report for each subsequent calendar quarter, no later than 30 days after the end of the quarter.

B. Each quarterly report shall include the following information, as applicable:

(1) Each rolling average CO_2 mass emissions rate for which the last (twelfth) operating month in a 12-operating-month compliance period falls within the calendar quarter. The permittee shall calculate each average CO_2 mass emissions rate for the compliance period according to the procedures in 40 CFR 60.5540 (Condition 5.17). The permittee shall report the dates (month and year) of the first and twelfth operating months in each compliance period for which you performed a CO_2 mass emissions rate calculation. If there are no compliance periods that end in the quarter, the permittee must include a statement to that effect;

(2) If one or more compliance periods end in the quarter, the permittee shall identify each operating month in the calendar quarter where your EGU violated the applicable CO_2 emission standard;

(3) If one or more compliance periods end in the quarter and there are no violations for the affected EGU, the permittee shall include a statement indicating this in the report;

(4) The percentage of valid operating hours in each 12-operating-month compliance period described in (1) above (*i.e.*, the total number of valid operating hours (as defined in 40 CFR 60.5540(a)(1) (Condition 5.17)) in that period divided by the total number of operating hours in that period, multiplied by 100 percent);

(5) Consistent with 40 CFR 60.5520 (Condition 3.18), the CO_2 emissions standard with which the affected EGU must comply; and

(6) Consistent with 40 CFR 60.5520 (Condition 3.18), an indication whether or not the hourly gross or net energy output ($P_{gross/net}$) values used in the compliance determinations are based solely upon gross electrical load.

C. In the final quarterly report of each calendar year, the permittee shall include the following:

(1) Consistent with 40 CFR 60.5520 (Condition 3.18), gross energy output or net energy output sold to an electric grid, as applicable to the units of your emission standard, over the four quarters of the calendar year; and

(2) The potential electric output of the EGU.

(Ref.: 40 CFR 60.5555(a), Subpart TTTT)

6.12 For Emission Points AA-012 and AA-013, the permittee shall submit all electronic reports required under Condition 6.11 using the Emissions Collection and Monitoring Plan System (ECMPS) Client Tool provided by the Clean Air Markets Division in the Office of Atmospheric Programs of EPA.

(Ref.: 40 CFR 60.5555(b), Subpart TTTT)

6.13 For Emission Points AA-012 and AA-013, the permittee shall comply with the following:

A. For affected EGUs under 40 CFR 60 Subpart TTTT that are also subject to the Acid Rain Program, the permittee shall meet all applicable reporting requirements and submit reports as required under 40 CFR 75, Subpart G.

B. The permittee shall comply with the following:

(1) For all newly-constructed affected EGUs under 40 CFR 60 Subpart TTTT that are also subject to the Acid Rain Program, the permittee shall begin submitting the quarterly electronic emissions reports described in paragraph (A) in accordance with 40 CFR 75.64(a), *i.e.*, beginning with data recorded on and after the earlier of:

(a) The date of provisional certification, as defined in 40 CFR 75.19(a)(3); or

(b) 180 days after the date on which the EGU commences commercial operation (as defined in 40 CFR 72.2).

(2) For reconstructed or modified units, reporting of emissions data shall begin at the date on which the EGU becomes an affected unit under this subpart, provided that the ECMPS Client Tool is able to receive and process net energy output data on that date. Otherwise, emissions data reporting shall be on a gross energy output basis until the date that the Client Tool is first able to receive and process net energy output data.

C. If any required monitoring system has not been provisionally certified by the applicable date on which emissions data reporting is required to begin under paragraph B, the maximum (or in some cases, minimum) potential value for the parameter measured by the monitoring system shall be reported until the required certification testing is successfully completed, in accordance with 40 CFR 75.4(j) of this chapter, 40 CFR 75.40(b) of this chapter, or section 2.4 of appendix D to part 75 of this chapter (as applicable). Operating hours in which CO_2 mass emission rates are calculated using maximum potential values are not “valid

operating hours" (as defined in 40 CFR 60.5540(a)(1) (Condition 5.17), and shall not be used in the compliance determinations under 40 CFR 60.5540 (Condition 5.17).

(Ref.: 40 CFR 60.5555(c), Subpart TTTT)

6.14 For Emission Points AA-012 and AA-013, the reports required under Conditions 6.10 and 6.13.A shall be submitted by:

A. The person appointed as the Designated Representative (DR) under 40 CFR 72.20; or

B. The person appointed as the Alternate Designated Representative (ADR) under 40 CFR 72.22; or

C. A person (or persons) authorized by the DR or ADR under 40 CFR 72.26 to make the required submissions.

(Ref.: 40 CFR 60.5555(d), Subpart TTTT)

6.15 For Emission Point AA-014, the permittee shall submit semiannual reports of the hours of operation in accordance with Condition 6.1.B.

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

6.16 For Emission Point AA-014, the permittee shall submit notification of the date of initial startup, as provided by 40 CFR 60.7. This notification shall include:

A. The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility;

B. If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels;

C. The annual capacity factor at which the permittee anticipates operating the facility based on all fuels fired and based on each individual fuel fired.

(Ref.: 40 CFR 60.49(a), Subpart Db)

6.17 For Emission Points AA-014, AA-015, AA-016, and AA-020, the permittee shall submit semi-annual reports of the fuel usage monitoring required by Condition 5.28 and 5.34 in accordance with Condition 6.1.B.

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

6.18 For Emission Point AA-014, the permittee shall submit the performance test data from the initial performance test and subsequent tests within sixty (60) days of conducting the performance test.

(Ref.: 40 CFR 60.49b(b), Subpart Db)

6.19 For Emission Point AA-014, the permittee shall submit reports in accordance with Condition 6.22 certifying that only natural gas was combusted in the affected facility during the reporting period.

(Ref.: 40 CFR 60.49b(r)(1), Subpart Db)

6.20 For Emission Point AA-014, if the permittee elects to demonstrate compliance based on a fuel analysis plan, the permittee shall submit the site-specific fuel analysis plan as described in Condition 5.23 to the MDEQ for review and approval no later than 60 days before the date intended to demonstrate compliance.

(Ref.: 40 CFR 6.49b(r)(2), Subpart Db)

6.21 For Emission Point AA-014, if the permittee elects to demonstrate compliance based on a fuel analysis plan as described in Condition 5.23, the permittee shall submit a fuel analysis report in accordance with Condition 6.20, which contains, at a minimum, the following information:

A. The potential sulfur emissions rate of the representative fuel mixture in ng/J heat input;

B. The method used to determine the potential sulfur emissions rate of each constituent of the mixture. For distillate oil and natural gas, a fuel receipt or tariff sheet is acceptable;

C. The ratio of different fuels in the mixture; and

D. The permittee may petition the MDEQ to approve monthly or quarterly sampling in place of weekly sampling.

(Ref.: 40 CFR 60.49b(r)(2), Subpart Db and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

6.22 For Emission Point AA-014, the reporting period for the reports required under 40 CFR 60, Subpart Db is each 6 month period. All reports shall be submitted to the MDEQ and shall be postmarked by the 30th day following the end of the reporting period (i.e., July 30th and January 30th).

(Ref.: 40 CFR 60.49b(w), Subpart Db)

6.23 For Emission Points AA-015, AA-016, and AA-020, the permittee shall submit semiannual reports of which heaters were operating and which heater was shutdown in accordance with Condition 6.1.B

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

6.24 For Emission Point AA-018, the permittee shall submit semiannual reports of the monthly inspections and the throughput records in accordance with Condition 6.1.B.

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

6.25 For Emission Point AA-019, the permittee shall submit semiannual reports of the density alarm monitoring required by Condition 5.45 including any corrective actions taken on the density alarm monitoring system in accordance with Condition 6.1.B

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