

STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Columbia Gulf Transmission LLC, Holcomb Compressor Station
Old Mississippi 7
Holcomb, Mississippi
Grenada County

Initial Application for Construction

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.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD



AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: MAY 08 2017

Permit No.: 0960-00040

SECTION 1

A. GENERAL CONDITIONS

1. This permit is for air pollution control purposes only. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)
2. Any activities not identified in the application are not authorized by this permit. (Ref.: Miss. Code Ann. 49-17-29 1.b)
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).)
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).)
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).)
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).)
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).)
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).)
9. The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the 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).)

10. Design and Construction Requirements: The stationary source shall be designed and constructed so as to operate without causing a violation of an 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.)
11. Solids Removal: The necessary facilities shall be constructed so that solids removed in the course of control of air emissions may be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits. (Ref.: Miss. Code Ann. 49-17-29)
12. Diversion and Bypass of Air Pollution Controls: The air pollution control facilities shall be constructed such that diversion from or bypass of collection and control facilities is not needed except as provided for in 11 Miss. Admin. Code Pt. 2, R. 1.10., "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants." (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)
13. 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).)
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 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) At reasonable times 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 emissions. (Ref.: Miss. Code Ann. 49-17-21)
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:
 - 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.)

16. Public Record and Confidential Information: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared 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)
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)
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).)
19. Permit Expiration: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance or if construction is suspended for eighteen (18) months or more. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(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).)
21. Beginning Operation: Except as prohibited in Section 1, Condition 24 of this permit, 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).)
22. Application for a Permit to Operate: Except as otherwise specified in Section 1, Condition 24 of this permit, 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).)

23. Operating Under a Permit to Construct: Except as otherwise specified in Section 1, Condition 24 of this permit, 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).)
24. Application Requirements for a Permit to Operate for Moderate Modifications: For moderate modifications that require contemporaneous enforceable emissions reductions from more than one emission point in order to “net” out of PSD/NSR, the applicable Title V Permit to Operate or State Permit to Operate must be modified prior to beginning operation of the modified facilities. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7).)
25. General Duty: All air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
26. Deviation Reporting: Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) working days of the time the deviation began. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
27. 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).)

B. GENERAL NOTIFICATION REQUIREMENTS

1. 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).)
2. 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).)
3. 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).)
4. 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).)

SECTION 2
EMISSION POINT DESCRIPTION

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

Emission Point (Ref. No.)	Description
AA-001 (T01)	15,845 hp Natural Gas-fired Turbine (135.48 MMBtu/hr)
AA-002 (T02)	15,845 hp Natural Gas-fired Turbine (135.48 MMBtu/hr)
AA-003 (G1)	880 hp Natural Gas-fired Emergency Generator 4-Stroke, Lean Burn (Emergency Spark Ignition (SI) internal combustion engine (ICE) > 500 HP with displacement < 10 Liters/cylinder and manufactured after January 1, 2009)
AA-004 (H1)	1.10 MMBTU/hr natural gas fired process heater
AA-005 (SH1)	Forty (40) 0.072 MMBTU/hr natural gas fired catalytic heaters
AA-006 (A01)	2,056 gallon Condensate Tank
AA-007	Fugitive Piping Components including, but not limited to valves, connectors, pressure relief devices, open-ended lines, flanges, instruments, and meters.
AA-008 (A02)	1,260 gallon Waste Water Tank

SECTION 3 EMISSION LIMITATIONS AND STANDARDS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard	
AA-001 and AA-002	11 Miss. Admin. Code Pt. 2, Ch.1, R. 1.3D(1)(b)	3.1	PM (filterable)	Emissions shall not exceed $E = (0.8808) I^{-0.1667}$	
	Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.2	Opacity	$\leq 40 \%$	
	40 CFR 60, Subpart KKKK § 60.4305(a), § 60.4305(b)	3.3	NO _x SO ₂	General Applicability	
	40 CFR 60, Subpart KKKK § 60.4330(a)(2)	3.4	SO ₂	≤ 0.060 lb SO ₂ /MMBtu heat input (26 ng SO ₂ /J).	
	40 CFR 60, Subpart KKKK §60.4320(a) and Table 1 to Subpart KKKK	3.5	NO _x	$\geq 75 \%$ load	25 ppmvd at 15 % O ₂ or 150 ng/J of useful output
		3.6		$< 75\%$ load; $< 0^{\circ}\text{F}$	150 ppm @ 15% O ₂ or 1,100 ng/J of useful output
	40 CFR 60, Subpart KKKK § 60.4333(a)	3.7	NO _x SO ₂	Control Practices	
	11 Miss. Admin. Code Pt.2, R. 2.2.B(10)	3.8	CO	Normal Operation ($\geq 50 \%$ load)	7.43 lb/hr
				Low Load ($< 50 \%$);	653.41 lb/hr
				Low Ambient Temp. ($< 0^{\circ}\text{F}$)	31.41 lb/hr
				Startup & Shutdown	272.70 lb/event
		3.9		78.83 tpy	

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-003	11 Miss. Admin. Code Pt. 2, Ch.1, R. 1.3D(1)(a)	3.10	PM	0.6 lbs/MMBTU
	40 CFR 63, Subpart ZZZZ §63.6590(c)	3.11	HAPs	Applicability
	40 CFR 60, Subpart JJJJ §60.4230(a)(4)(iv)	3.12	NO _x CO VOCs	Applicability
	40 CFR 60, Subpart JJJJ §60.4243(d))	3.13	Operating Time	Limit readiness and maintenance checks to 100 hours per year, including 50 hours per year of non-emergency use.
	40 CFR 60, Subpart JJJJ §60.4233(e), §60.4234, and Table 1 to Subpart JJJJ	3.14	NO _x	2.0 g/HP-hr or 160.0 ppmvd at 15% O ₂
			CO	4.0 g/HP-hr or 540.0 ppmvd at 15% O ₂
			VOCs	1.0 g/HP-hr or 86.0 ppmvd at 15% O ₂
	Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.2	Opacity	≤ 40 %
AA-004 and AA-005	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.10	PM	0.6 lbs/MMBTU
	11 Miss. Admin. Code Pt. 2 R.1.4 A(1)	3.15	SO ₂	4.8 lbs/MMBTU
	Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.2	Opacity	≤ 40 %
AA-007	40 CFR 60, Subpart OOOOa §60.5365a(j)	3.16	GHG/VOC	Applicability
	40 CFR 60, Subpart OOOOa §60.5397a	3.17		Reduce VOC and GHG fugitive emissions

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

$$E = (0.8808) I^{-0.1667}$$

where E is the emission rate in pounds per MMBtu/hr heat input and I is the heat input in MMBtu/hr.

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

- 3.2. 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.)

- 3.3. Emission Points AA-001 and AA-002 are subject to the New Source Standards of Performance for Stationary Combustion Turbines, 40 CFR 60, Subpart KKKK. The combustion turbines qualify as stationary combustion turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced modification after February 18, 2005. Stationary combustion turbines regulated under this subpart are exempt from the requirements of Subpart GG.

(Ref.: 40 CFR 60, Subpart KKKK; §60.4305(a), §60.4305(b))

- 3.4. For Emission Points AA-001 and AA-002, the permittee must not burn any fuel which contains total potential sulfur emissions in excess of 0.060 lb SO₂/MMBtu heat input (26 ng SO₂/J) The permittee can demonstrate the sulfur emissions shall not exceed 26 ng SO₂/J (0.06 lb SO₂/mmBtu) heat input by complying with 40 CFR. (See Condition 5.2)

(Ref.: 40 CFR 60, Subpart KKKK; §60.4330(a)(2), §60.4365)

- 3.5. For Emission Points AA-001 and AA-002, the NO_x emissions shall not exceed 25 ppm at 15 percent O₂ or 150 ng/J of useful output (1.2 lb/MWh).

(Ref.: 40 CFR 60, Subpart KKKK; §60.4320(a) and Table 1 to Subpart KKKK)

- 3.6. For Emission Points AA-001 and AA-002, when the emission units are operating at less than 75 percent of peak load or at temperatures less than 0 degree Fahrenheit, the NO_x emissions shall not exceed 150 ppm at 15 percent O₂ or 1,100 ng/J of useful output (8.7 lb/MWh).

(Ref.: 40 CFR 60, Subpart KKKK; §60.4320(a) and Table 1 to Subpart KKKK)

- 3.7. For Emission Points AA-001 and AA-002, the permittee must 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, Subpart KKKK; §60.4333(a))

- 3.8. For Emission Points AA-001 and AA-002, the permittee shall not exceed the following emission limits:

Operating Mode	Emissions Limit Carbon Monoxide (CO) per turbine
Normal Operation (≥ 50 % load)	7.43 lb/hr
Low Load (< 50 %);	653.41 lb/hr
Low Ambient Temp. (< 0 °F)	31.41 lb/hr
Startup & Shutdown	272.70 lb/event

- 3.9. For Emission Points AA-001 and AA-002, the permittee shall limit Carbon Monoxide (CO) emission for each turbine to no more than 78.83 tons per year on a 12-month rolling total average.

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

- 3.10. For Emission Points AA-003, AA-004, and AA-005, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.

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

- 3.11. Emission Point AA-003 is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Engines, 40 CFR Part 63, Subpart ZZZZ. The engine is a new stationary RICE located at an area source of HAPs and thus shall meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ. No further requirements apply for the engine under Subpart ZZZZ.

(Ref.: 40 CFR 63.6590(c))

- 3.12. Emission Point AA-003 is subject to the New Source Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ.

(Ref.: 40 CFR 60, Subpart JJJJ; §60.4230(a)(4)(iv))

- 3.13. Emission Point AA-003 is an emergency unit and the permittee shall construct and operate the engine according to the requirements in (a) through (d) below:
- (a) There is no limit on the use of the engine during emergency situations.
 - (b) The permittee may operate the engine for any combination of maintenance checks and readiness testing for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (c) counts as part of the 100 hours per calendar year allowed by this paragraph.
 - (i) The engine may be operated for maintenance checks and readiness testing, for a maximum of 100 hours per calendar year provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of the engine for more than 100 hours per calendar year.
 - (c) The engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (b). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - (d) If the emergency engine is not operated according to the requirements in (a) - (c) above, the engine will not be considered an emergency engine under this subpart and will need to meet any applicable requirements for non-emergency engines.

(Ref.: 40 CFR 60, Subpart JJJJ; §60.4243(d))

- 3.14. For Emission Point AA-003, the permittee must comply with the following emission standards:

Emission Standards		
Pollutant	g/HP-hr	ppmvd at 15% O ₂
NO _x	2.0	160.0
CO	4.0	540.0
VOCs	1.0	86.0

These emission standards must be achieved over the entire life of the engine.

(Ref.: 40 CFR 60, Subpart JJJJ; §60.4233(e), §60.4234 and Table 1 to Subpart JJJJ of Part 60)

- 3.15 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).)

- 3.16 For Emission Point AA-007, the permittee is subject to and shall comply with all applicable requirements of 40 CFR 60 Subpart OOOOa, Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced after September 18, 2015. The collection of fugitive emission components at a compressor station, as defined by §60.5430a, is an affected facility under the Subpart.

(Ref.: 40 CFR 60, Subpart OOOOa, §60.5365a(j))

- 3.17 For Emission Point AA-007, the permittee must reduce GHG (in the form of a limitation on emissions of methane) and VOC emissions by complying with the requirements of paragraphs (a) through (j) of §60.5397a. For purposes of Subpart OOOOa, fugitive emissions are defined as: Any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 ppm or greater using Method 21.

(Ref.: 40 CFR 60, Subpart OOOOa, §60.5397a)

SECTION 4
WORK PRACTICES

No Work Practice Standards Apply To This Permit Action.

SECTION 5 MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
AA-001, AA-002	40 CFR 60, Subpart KKKK § 60.4340, §60.8, and 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.1	NOx/CO	Initial and Subsequent Performance Test
	40 CFR 60, Subpart KKKK §60.4365	5.2	SO ₂	Monitor Sulfur Content or a valid purchase contract, tariff sheet, or transportation contract for the fuel
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11))	5.3	NOx/CO	Monitor Operation of the Turbines and calculate monthly emissions
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11))	5.4	NOx/CO	Calculate annual emissions
AA-003	40 CFR 60, Subpart JJJJ § 60.4243(b)	5.5	NO/CO/VOC	Maintenance plan, good air pollution control practices, and initial performance test and subsequent performance tests every 8,700 hrs. or 3 yrs.
	40 CFR 60, Subpart JJJJ §60.4237(a)	5.6		Install non-resettable hour meter
	40 CFR 60, Subpart JJJJ § 60.4245(a)	5.7		Recordkeeping
	40 CFR 60, Subpart JJJJ §60.4245(b)	5.8		Keep records of the hours of operation
AA-007	40 CFR 60, Subpart OOOOa §60.5397a(a)-(g), §60.5410a(j)(1)-(2)	5.9	VOC/GHG	Monitor Fugitive Emissions
	40 CFR 60, Subpart OOOOa §60.5397a(h), §60.5410a(j)(4)	5.10		Repair or Replace Fugitive Emission Sources
	40 CFR 60, Subpart OOOOa §60.5420a(c)(15)	5.11		Maintain records of fugitive monitoring surveys

- 5.1. For Emission Points AA-001 and AA-002, the permittee shall demonstrate compliance with the short term nitrogen oxides limits by conducting an initial performance test in accordance with 40 CFR 60.4400(a) and annually thereafter. The permittee shall submit a test report of the results of the initial performance test within 180 days of startup, but no later than 60 days of attaining maximum production rate. Annually means no more than

14 months following the previous performance test. If the NO_x lb/hr and ppm emission results from the performance test is less than or equal to 75% of the NO_x emission limits for the turbine, the permittee may reduce the frequency of subsequent performance test to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75% of the NO_x emission limit for the turbine, the permittee must resume annual performance tests.

The permittee shall demonstrate compliance with the short term CO limits for normal operation by conducting an initial performance test in accordance with EPA Reference Method 10, 40 CFR 60, Appendix A, or alternatively approved methodology and annually thereafter. Annually means no more than 14 months following the previous performance test. If the CO emission results from the performance test is less than or equal to 75% of the CO lb/hr and ppm emission limits, the permittee may reduce the frequency of subsequent performance test to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75% of the CO emission limit for the turbine, you must resume annual performance tests.

The NO_x and CO tests shall be performed simultaneously.

(Ref: 40 CFR 60 Subpart KKKK, §60.4340, §60.4400(a) and (b), §60.8, & 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11))

- 5.2. For Emission Points AA-001 and AA-002, the permittee shall not be required to monitor the total sulfur content of the natural gas combusted in the turbine provided the permittee can demonstrate it does not exceed the potential sulfur emission limit contained in Section 3. The permittee shall use one of the following sources of information to make the required demonstration:
- (a) The gas quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract for the fuel, specifying that the maximum total sulfur content of the natural gas is 20.0 grains of sulfur or less per 100 standard cubic feet; or
 - (b) Representative fuel sampling data which show that the sulfur content of the natural gas being fired does not exceed 26 ng SO₂/J (0.06 lb SO₂/mmBtu) heat input. At a minimum, the amount of fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75 is required.

(Ref: 40 CFR 60 Subpart KKKK, §60.4365)

- 5.3. For Emission Points AA-001 and AA-002, to demonstrate compliance with the NO_x and CO annual emission limits, the permittee shall maintain the following records:
- (a) Monthly operating hours at Normal Operation >0 °F operating mode (NL hrs),

- (b) Monthly operating hours at Low-Load (<50% load) operating mode (LL hrs),
- (c) Monthly operating hours at Low-Temperature (<0 °F) operating mode (LT hrs),
- (d) Monthly number and duration of startup & shutdown events (SS events).

These monthly records will be used to calculate monthly emissions (ME_x) for CO and NO_x using the following equations:

$$NO_x \text{ (lb/month)} = (7.32 * NL \text{ hrs}) + (16.10 * LL \text{ hrs}) + (21.68 * LT \text{ hrs}) + (3.10 * SS \text{ events})$$

$$CO \text{ (lb/month)} = (7.43 * NL \text{ hrs}) + (653.41 * LL \text{ hrs}) + (31.41 * LT \text{ hrs}) + (272.70 * SS \text{ events})$$

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

- 5.4. For Emission Points AA-001 and AA-002, the permittee shall determine the annual emission rate for NO_x and CO for the preceding 12-months by summing up the monthly emission rate at the end of each month and adding it to the previous 11-month period. (Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11))
- 5.5. For Emission Point AA-003, the permittee must demonstrate compliance with the applicable emission standards listed in Section 3 by purchasing a non-certified engine and demonstrating compliance with the applicable emission standards according to the requirements specified in §60.4244, as applicable. The permittee must 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 and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

(Ref.: 40 CFR 60 Subpart JJJJ, §60.4243(b))

- 5.6. For Emission Point AA-003, if the engine does not meet the standards applicable to non-emergency engines, the permittee must install a non-resettable hour meter.

(Ref.: 40 CFR 60 Subpart JJJJ, §60.4237(a))

- 5.7. For Emission Point AA-003, the permittee must keep records of the following information:
 - (a) All notifications submitted to comply with this subpart and all documentation supporting any notification.

- (b) Maintenance conducted on the engine.
- (c) If the combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

(Ref.: 40 CFR Subpart JJJJ, §60.4245(a))

- 5.8. For Emission Point AA-003, if the engine does not meet the standards applicable to non-emergency engines, the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.

(Ref.: 40 CFR 60 Subpart JJJJ, §60.4245(b))

- 5.9. For Emission Point AA-007, the permittee must monitor all fugitive emission components, as defined in §60.5430a, in accordance with the following
- (a) The permittee must develop an emissions monitoring plan that covers the collection of fugitive emissions components. The plan must incorporate the applicable elements as specified in §60.5397a(c) and (d).
 - (b) Each monitoring survey shall observe each fugitive emissions component, as defined in §60.5430a, for fugitive emissions.
 - (c) The permittee must conduct an initial monitoring survey within 60 days of the startup of the new compressor station for each new collection of fugitive emissions components.
 - (d) A monitoring survey of fugitive emissions components must be conducted at least quarterly after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 days apart. Fugitive emission components designated as difficult-to-monitor or unsafe-to-monitor must comply with the specifications of §60.5397a(g)(3) and §60.5397a(g)(4).

(Ref.: 40 CFR 60 Subpart OOOOa, §60.5397a(a)-(g) and §60.5410a(j)(1)-(2))

- 5.10. For Emission Point AA-007, each identified source of fugitive emissions shall be repaired or replaced in accordance with the following:
- (a) Each identified source of fugitive emissions shall be repaired or replaced as soon as practicable, but no later than 30 calendar days after detection of the fugitive emissions.
 - (b) If the repair or replacement is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe

to repair during operation of the unit, the repair or replacement must be completed during the next compressor station shutdown, well shutdown, well shut-in, after an unscheduled, planned or emergency vent blowdown or within 2 years, whichever is earlier.

- (c) Each repaired or replaced fugitive emission component must be resurveyed as soon as practicable, but no later than 30 days after being repaired, to ensure that there are no fugitive emissions.

(Ref.: 40 CFR 60 Subpart OOOOa, §60.5397a(h) and §60.5410a(j)(4))

- 5.11. For Emission Point AA-007, the permittee must maintain the records identified as specified in §60.7(f) and in 40 CFR 60.5420a(c)(15). All records required by this subpart must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by this subpart that are submitted electronically via the EPA's CDX may be maintained in electronic format. The records include the fugitive emissions monitoring plan and the records of each monitoring survey.

(Ref.: 40 CFR 60 Subpart OOOOa, §60.5420a(c)(15))

SECTION 6
REPORTING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
AA-001, AA-002	Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	6.1	Report annual NOx and CO emissions
	Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11) and 40 CFR 60 Subpart KKKK, §60.4375(b)	6.2	Submit performance test within 60 days after test
AA-003	40 CFR 60, Subpart JJJJ §60.4245(c) & (d)	6.3	Initial Notification; submit performance test within 60 days after test (if subject to performance test)
AA-007	40 CFR 60, Subpart OOOOa §60.5397a(j)	6.4	Submit Annual Reports

- 6.1. For Emission Points AA-001 and AA-002, the permittee shall submit a semi-annual summary report of the 12-month rolling total annual emission rate for NOx and CO.

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

- 6.2. For AA-001 and AA-002, the permittee must submit a written report of the results of each subsequent performance test before the close of business on the 60th day following the completion of the performance test.

For all required testing, the permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to the DEQ. Also, the permittee shall notify the DEQ in writing at least ten (10) days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness the test.

(Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11) and 40 CFR 60 Subpart KKKK, §60.4375(b))

- 6.3. For Emission Point AA-003, if the engine has not been certified by an engine manufacturer to meet the emission standards in §60.4231, the permittee must submit an initial notification as required in §60.7(a)(1). The notification must include the information in §60.4245(c)(1)-(5). For all required testing, the permittee shall submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed.

(Ref.: 40 CFR 60 Subpart JJJJ, §60.4245(c) & (d))

- 6.4. For Emission Point AA-007, annual reports shall be submitted that include the information specified in §60.5420a(b)(7). Multiple collection of fugitive emissions components station may be included in a single annual report.

(Ref.: 40 CFR 60 Subpart OOOOa, §60.5397a(j))