

**STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
TITLE V PERMIT**

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Columbia Gulf Transmission Company, Inverness Compressor Station
4161 Four Mile Road
Humphreys County

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

Permit Issued: _____

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

**AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Expires:

Permit No.: 1180-00020

TABLE OF CONTENTS

SECTION 1.	GENERAL CONDITIONS	3
SECTION 2.	EMISSION POINTS & POLLUTION CONTROL DEVICES	13
SECTION 3.	EMISSION LIMITATIONS & STANDARDS	14
SECTION 4.	COMPLIANCE SCHEDULE	25
SECTION 5.	MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS....	26
SECTION 6.	ALTERNATIVE OPERATING SCENARIOS	37
SECTION 7.	TITLE VI REQUIREMENTS	38

APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT

APPENDIX B LIST OF REGULATIONS REFERENCED IN THIS PERMIT

Draft/Proposed

SECTION 1. GENERAL CONDITIONS

- 1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(a).)
- 1.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(b).)
- 1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(c).)
- 1.4 (a) This permit shall be reopened and revised under any of the following circumstances:
- (1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.
 - (2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (3) The Permit Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
 - (4) The Administrator or the Permit Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as

Draft/Proposed

practicable.

- (c) Reopenings shall not be initiated before a notice of such intent is provided to the Title V source by the DEQ at least 30 days in advance of the date that the permit is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.G)

- 1.5 The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(e).)
- 1.6 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)
- 1.7 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(5).)
- 1.8 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation 11 Miss. Admin. Code Pt. 2, Ch. 6.)
 - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating

Draft/Proposed

volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

- (b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D(2).)
 - (c) The fee shall be due September 1 of each year. By July 1 of each year the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the DEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.)
 - (d) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)
- 1.9 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(8).)
- 1.10 Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)
- 1.11 The permittee shall allow the DEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- (a) enter upon the permittee's premises where a Title V source is located or emissions-

Draft/Proposed

related activity is conducted, or where records must be kept under the conditions of this permit;

- (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - (d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(2).)
- 1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(1).)
- 1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)
- 1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)
- 1.15 Nothing in this permit shall alter or affect the following:
- (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
 - (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
 - (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the

Draft/Proposed

Federal Act. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(2).)

- 1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)
- 1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C(2)., R. 6.4.B., and R. 6.2.A(1)(c).)
- 1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:
- (a) the changes are not modifications under any provision of Title I of the Act;
 - (b) the changes do not exceed the emissions allowable under this permit;
 - (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:
 - (1) a brief description of the change(s),
 - (2) the date on which the change will occur,
 - (3) any change in emissions, and
 - (4) any permit term or condition that is no longer applicable as a result of the change;
 - (d) the permit shield shall not apply to any Section 502(b)(10) change. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F(1).)
- 1.19 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in

Draft/Proposed

the absence of an approved schedule, with the appropriate requirements specified in 11 Miss. Admin. Code Pt. 2, Ch. 3., "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)

- 1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations 11 Miss. Admin. Code Pt. 2, Ch. 6., "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:
- (a) routine maintenance, repair, and replacement;
 - (b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
 - (c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
 - (d) use of an alternative fuel or raw material by a stationary source which:
 - (1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; or
 - (2) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;
 - (e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or

Draft/Proposed

(f) any change in ownership of the stationary source."

- 1.21 Any change in ownership or operational control must be approved by the Permit Board. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)
- 1.22 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B(1).)
- 1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.
- (a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.
 - (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.
 - (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.G.)
- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies.
- (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or

Draft/Proposed

improper operation, or operator error.

- (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.
- (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) the permitted facility was at the time being properly operated;
 - (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - (4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)

1.25 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.

- (a) Upsets
 - (1) For an upset defined in 11 Miss. Admin. Code Pt. 2, R. 1.2., 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

Draft/Proposed

contemporaneous operating logs or other relevant evidence the following:

- (i) An upset occurred and that the source can identify the cause(s) of the upset;
 - (ii) The source was at the time being properly operated;
 - (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
 - (iv) That within 5 working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;
 - (v) That as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
- (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
 - (3) This provision is in addition to any upset provision contained in any applicable requirement.
 - (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- (b) Startups and Shutdowns (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.)
- (1) Startups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.
 - (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this regulation, 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or

Draft/Proposed

work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B(2)(a) through (e).

- (3) Where an upset as defined in Rule 1.2 occurs during startup or shutdown, see the upset requirements above.

- 1.26 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Regulation 11 Miss Admin. Code Pt. 2, R. 1.8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

Draft/Proposed

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-001	4,800 brake horsepower (bhp) (39.4 MMBTU/hr) Cooper-Beesemer Model LSV-16SG four stroke lean burn (4SLB) spark ignition (SI) natural gas-fired compressor engine
AA-002	4,800 bhp (39.4 MMBTU/hr) Cooper-Beesemer Model LSV-16SG 4SLB SI natural gas-fired compressor engine
AA-003	4,800 bhp (39.4 MMBTU/hr) Cooper-Beesemer Model LSV-16SG 4SLB SI natural gas-fired compressor engine
AA-004	4,800 bhp (39.4 MMBTU/hr) Cooper-Beesemer Model LSV-16SG 4SLB SI natural gas-fired compressor engine
AA-007	46 bhp (0.6 MMBTU/hr) Ford Model LSG-4231 four stroke rich burn (4SRB) SI natural gas-fired emergency backup power generating engine
AA-008	750 bhp (9.1 MMBTU/hr) Waukesha Model L5790GU 4SRB SI natural gas-fired emergency backup power generating engine
AA-009	46 bhp (0.6 MMBTU/hr) Ford Model LSG-4231 4SRB SI natural gas-fired emergency fire pump engine
AA-011	16,793 bhp (139.2 MMBTU/hr) Solar Mars Model 100-T15005 natural gas-fired centrifugal compressor turbine
AA-012	21,916 bhp (167.3 MMBTU/hr) Solar Titan Model 130-19500S natural gas-fired centrifugal compressor turbine
AA-013	Plant wide Fugitive Emissions

Draft/Proposed

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. Facility-Wide Emission Limitations & Standards

- 3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).
- (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
 - (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.)
- 3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Condition 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.)

Draft/Proposed

B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant / Parameter	Limit/Standard
AA-007 through AA-009	11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(a)	3.B.1	PM	0.6 lbs/MMBTUH
AA-001 through AA-004, AA-011, and AA-012	11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(b)	3.B.2	PM	$E=0.8808 \cdot I^{-0.1667}$
AA-011 and AA-012	40 CFR 63, Subpart YYYY (National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines) 40 CFR 63.6080, Subpart YYYY; 40 CFR 63.6085, Subpart YYYY; 40 CFR 63.6090(a)(1), Subpart YYYY; and 40 CFR 63.6090(b)(4), Subpart YYYY	3.B.3	HAPs	Applicability
AA-011	40 CFR 60, Subpart GG (Standards of Performance for Stationary Gas Turbines) 40 CFR 60.330, Subpart GG	3.B.4	NO _x and SO ₂	Applicability
	40 CFR 60.333(b), Subpart GG	3.B.5	SO ₂	≤ 0.8% sulfur by weight
	40 CFR 60.332(a)(2) and (d), Subpart GG; Air Construction Permit issued May 6, 1997 (PSD avoidance via netting); and Air Title V Permit Issued December 12, 2003 and Modified August 14, 2008 (Revised PSD avoidance via netting)	3.B.6	NO _x	Temperature > 0 °F: Full load 42 ppmvd @15% O ₂ and 21.4 lb/hr
				Temperature > 0 °F: Low load (< 50% load) 70 ppmvd @ 15% O ₂ and 24.8 lb/hr
				Low Temperature (<0 °F): 42 ppmvd @ 15% O ₂ 21.6 lb/hr
				Startup/Shutdown: 9.5 lb/hr
			CO	Temperature > 0 °F: Full load: 15.5 lb/hr

Draft/Proposed

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant / Parameter	Limit/Standard
				Temperature > 0 °F: Low load (< 50% load): 475.1 lb/hr
				Low Temperature (<0 °F): 31.3 lb/hr
				Startup/Shutdown: 190.4 lb/hr
	Air Construction Permit issued November 3, 1998 and Air Title V Permit Issued December 12, 2003	3.B.7	NO _x and CO	209.8 tpy NO _x and 150.0 tpy CO
AA-012	40 CFR 60, Subpart KKKK (Standards of Performance for Stationary Combustion Turbines) 40 CFR 60.4300, Subpart KKKK; 40 CFR 60.4305, Subpart KKKK; and 40 CFR 60.4315, Subpart KKKK	3.B.8	NO _x and SO ₂	Applicability
	40 CFR 60.4330(a)(2), Subpart KKKK	3.B.9	SO ₂	0.060 lb SO ₂ /MMBTU (20 grains S/100scf
	40 CFR 60.4320(a), Subpart KKKK; Table 1 of Subpart KKKK; Air Construction Permit issued November 3, 1998; and Air Title V Permit Issued December 12, 2003	3.B.10	NO _x	Temperature ≥ 0 °F: Full load: 42 ppmvd @15% O ₂ and 26.0 lb/hr
				Temperature ≥ 0 °F: Low load (< 50% load): 70 ppmvd @ 15% O ₂ and 30.2 lb/hr
				Low Temperature (< 0 °F): 42 ppmvd @ 15% O ₂ and 26.3 lb/hr
				Startup/Shutdown: 10.7 lb/hr
			CO	Temperature ≥ 0 °F: Full load: 18.8 lb/hr
				Temperature ≥ 0 °F: Low load (< 50% load): 577.4 lb/hr
				Low Temperature (< 0 °F): 38.1 lb/hr
				Startup/Shutdown: 211.9 lb/hr
	Air Construction Permit issued November 3, 1998 and Air Title V Permit Issued December 12, 2003	3.B.11	NO _x and CO	99.6 tpy NO _x and 143.3 tpy CO

Draft/Proposed

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant / Parameter	Limit/Standard
AA-001 through AA-004 and AA-007 through AA-009	40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) 40 CFR Part 63.6580, Subpart ZZZZ; 40 CFR Part 63.6585(a)-(b), Subpart ZZZZ; 40 CFR Part 63.6590(a)(1)(i)-(ii), Subpart ZZZZ; 40 CFR Part 63.6590(b)(3)(iii), Subpart ZZZZ; and 40 CFR Part 63.6600(c), Subpart ZZZZ	3.B.12	HAPs	Applicability
AA-007 and AA-009	40 CFR 63.6602, Subpart ZZZZ; 40 CFR 63.6625(j), Subpart ZZZZ; and Item 6 and Footnotes 1 and 2 of Table 2c of Subpart ZZZZ	3.B.13	HAP	Scheduled Maintenance Activities
	40 CFR 63.6625(e)(2) and (h), Subpart ZZZZ; 40 CFR 63.6640(a), Subpart ZZZZ; and Item 9 of Table 6 of Subpart ZZZZ	3.B.14	General Operating Condition	Operational Requirements
	40 CFR 63.6605(a)-(b), Subpart ZZZZ	3.B.15	General Operating Condition	Continuous Compliance and Minimizing Emissions
AA-007 through AA-009	40 CFR 63.6625(f), Subpart ZZZZ and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	3.B.16	Operational Restriction	Operational Requirement

3.B.1 For Emission Points AA-007 through AA-009, the permittee shall not have particulate emissions from fossil fuel burning installations of less than 10 MMBTU/hr heat input that exceeds 0.6 lb/MMBTU.

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

3.B.2 For Emission Points AA-001 through AA-004, AA-011, and AA-012, the permittee shall not have particulate emissions from fossil fuel burning installations of greater than 10 MMBTU/hr heat input that exceeds the emission rate as determined by the relationship:

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

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

Draft/Proposed

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

- 3.B.3 For Emission Points AA-011 and AA-012, the permittee is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, 40 CFR 63, Subpart YYYY.

Emission Points AA-011 and AA-012 meet the definition of existing stationary combustion turbines as specified in 40 CFR 63.6090(a)(1). Since Emission Point AA-011 and AA-012 are existing stationary combustion turbines, they do not have to meet the requirements in Subpart YYYY or the General Provisions in Subpart A.

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

- 3.B.4 For Emission Point AA-011, the permittee is subject to the Standards of Performance Standard for Stationary Gas Turbines, 40 CFR 60, Subpart GG, and the General Provisions in Subpart A.

(Ref.: 40 CFR 60.330, Subpart GG)

- 3.B.5 For Emission Point AA-011, the permittee shall not burn any fuel which contains sulfur in excess of 0.80 percent by weight.

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

- 3.B.6 For Emission Point AA-011, the maximum hourly rate shall not exceed the following limits:

Operating Mode	Emissions		
	NOx (ppmvd @ 15% O ₂)	NOx (lb/hr)	CO (lb/hr)
Full-Load $\geq 0^{\circ}\text{F}$	42	21.4	15.5
Low-Load (<50% Load)	70	24.8	475.1
Low-Temperature ($\leq 0^{\circ}\text{F}$)	42	21.6	31.3
Startup/Shutdown	N/A	9.5	190.4

* Startup/Shutdown cycle totals 19 minutes (9 minutes for startup period and 10 minutes for shutdown)

(Ref.: 40 CFR 60.332(a)(2) and (d), Subpart GG; Air Construction Permit issued May 6, 1997 (PSD avoidance via netting); and Air Title V Permit Issued December 12, 2003 and Modified August 14, 2008 (Revised PSD avoidance via netting))

- 3.B.7 For Emission Point AA-011, the permittee shall limit nitrogen oxides (NOx) emissions to

Draft/Proposed

209.8 tons per year (tpy) and carbon monoxide (CO) emissions to 150.0 tpy, as calculated on a rolling, consecutive 12-month basis.

(Ref.: Air Construction Permit issued May 6, 1997 (PSD avoidance via netting); and Air Title V Permit Issued December 12, 2003 and Modified August 14, 2008 (Revised PSD avoidance via netting))

- 3.B.8 For Emission Point AA-012, the permittee is subject to the Standards of Performance Standard for Stationary Combustion Turbines, 40 CFR 60, Subpart KKKK, and the General Provisions in Subpart A.

(Ref.: 40 CFR 60.4300, Subpart KKKK)

- 3.B.9 For Emission Point AA-012, the permittee shall not burn any fuel which contains total potential sulfur emissions in excess of 0.060 lb SO₂ /MMBTU (20 grains S/100scf).

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

- 3.B.10 For Emission Point AA-012, the maximum hourly rate shall not exceed the following limits:

Operating Mode	Emissions		
	NO _x (ppmvd @ 15% O ₂)	NO _x (lb/hr)	CO (lb/hr)
Full-Load $\geq 0^{\circ}\text{F}$	42	26.0	18.8
Low-Load (<50% Load)	70	30.2	577.4
Low-Temperature ($\leq 0^{\circ}\text{F}$)	42	26.3	38.1
Startup/Shutdown	N/A	10.7	211.9

* Startup/Shutdown cycle totals 19 minutes (9 minutes for startup period and 10 minutes for shutdown)

(Ref.: 40 CFR 60.4320(a), Subpart KKKK; Table 1 of Subpart KKKK; Air Construction Permit issued November 3, 1998; and Air Title V Permit Issued December 12, 2003)

- 3.B.11 For Emission Point AA-012, the permittee shall limit nitrogen oxides (NO_x) emissions to 99.6 tons per year (tpy) and carbon monoxide (CO) emissions to 143.3 tpy, as calculated on a rolling, consecutive 12-month basis.

(Ref.: Air Construction Permit issued November 3, 1998 and Air Title V Permit Issued December 12, 2003)

- 3.B.12 For Emission Points AA-001 through AA-004 and AA-007 through AA-009, the permittee is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary

Draft/Proposed

Reciprocating Internal Combustion Engines (RICE), 40 CFR 63, Subpart ZZZZ.

Emission Points AA-001 through AA-004 are existing four stroke lean burn (4SLB) spark ignition (SI) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, and as such, are exempt from the requirements of 40 CFR 63, Subpart ZZZZ and the General Provisions in Subpart A.

Emission Points AA-007 and AA-009 are existing four stroke rich burn (4SRB) SI emergency stationary RICE with a site rating of less than 500 brake HP located at a major source of HAP emissions, and as such, are subject to the operational requirements of 40 CFR 63, Subpart ZZZZ and the applicable General Provisions in Subpart A.

Emission Point AA-008 is an existing 4SRB SI emergency stationary RICE with a site rating of greater than 500 brake HP located at a major source of HAP emissions, and as such, is only subject to the emergency operational requirements of 40 CFR 63, Subpart ZZZZ.

(Ref.: 40 CFR Part 63.6580, 40 CFR Part 63.6585(a)-(b), 40 CFR Part 63.6590(a)(1)(i)-(ii), and 40 CFR Part 63.6590(b)(3)(iii), Subpart ZZZZ)

3.B.13 For Emission Points AA-007 and AA-009, the permittee shall comply with the following requirements:

- (a) Change oil and filter every 500 hours of operation or annually, whichever comes first, or perform an oil analysis at the same frequency in order to extend the oil change requirement. If the permittee chooses to use oil analysis in an effort to extend the oil/filter change requirement, the results of the analysis must verify the oil still meets the limits contained in (1)–(3) below. If any of these limits are exceeded, the oil must be changed within two business days of receiving the results of the analysis. If the engine is not in operation when the results are received, the oil must be changed within two business days or before commencing operation, whichever is later. The oil analysis program must be included in the engine’s maintenance plan required by Condition 3.B.15;
 - (1) Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new;
 - (2) Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or
 - (3) Percent water content (by volume) is greater than 0.5.

Draft/Proposed

- (b) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
- (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

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

(Ref.: 40 CFR 63.6602, 40 CFR 63.6625(j), and Item 6 of Table 2c of Subpart ZZZZ)

3.B.14 For Emission Points AA-007 and AA-009, the permittee shall comply with the following requirements:

- (a) Operate and maintain the engine according to the manufacturer's emission-related written instructions or develop and follow a maintenance plan which provides to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution practice for minimizing emissions.
- (b) Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

(Ref.: 40 CFR 63.6625(e)(2) and (h), 40 CFR 63.6640(a), and Item 9 of Table 6 of Subpart ZZZZ)

3.B.15 For Emission Points AA-007 and AA-009, the permittee shall, at all times, be in compliance with the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, and operate and maintain the engines, including associated monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

Draft/Proposed

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

- 3.B.16 For Emission Points AA-007 through AA-009, the permittee must install and operate a non-resettable hour meter on each emergency engine.

(Ref: 40 CFR 63.6625(f), Subpart ZZZZ and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2))

Draft/Proposed

C. Insignificant and Trivial Activity Emission Limitations & Standards

Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.C.1	PM	0.6 lbs/MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	SO ₂	4.8 lbs/MMBTU

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

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

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

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

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

Draft/Proposed

D. Work Practice Standards

None.

Draft/Proposed

SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, by January 31 for the preceding calendar year. Each compliance certification shall include the following:
- (a) the identification of each term or condition of the permit that is the basis of the certification
 - (b) the compliance status
 - (c) whether compliance was continuous or intermittent
 - (d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period
 - (e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(5)(a), (c), & (d).)

Draft/Proposed

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

A. General Monitoring, Recordkeeping and Reporting Requirements

- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.
- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
- (a) the date, place as defined in the permit, and time of sampling or measurements
 - (b) the date(s) analyses were performed
 - (c) the company or entity that performed the analyses
 - (d) the analytical techniques or methods used
 - (e) the results of such analyses and
 - (f) the operating conditions existing at the time of sampling or measurement. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(1).)
- 5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(2).)
- 5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with 11 Miss. Admin. Code Pt. 2, R. 6.2.E. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)
- 5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall

Draft/Proposed

be made within five (5) days of the time the deviation began. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(2).)

- 5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the DEQ and the EPA.
- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.

Draft/Proposed

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-007 and AA-009	40 CFR 63.6655(a), (d), and (e), Subpart ZZZZ and 40 CFR 63.6625(j), Subpart ZZZZ	5.B.1	Records	General recordkeeping
AA-007 through AA-009	40 CFR 63.6640(f), Subpart ZZZZ and 40 CFR 63.6675, Subpart ZZZZ	5.B.2	Hours	General recordkeeping
	40 CFR 63.6655(f), Subpart ZZZZ and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.3	Operations	General recordkeeping
AA-011 and AA-012	40 CFR 60.4365, Subpart KKKK	5.B.4	Fuel Sulfur Content	Fuel monitoring
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.5	Operations	General recordkeeping
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.6	CO and NOx	General recordkeeping
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.7	CO and NOx	Monitoring and recordkeeping
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.8	CO and NOx	Monitoring and recordkeeping
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.9	CO and NOx	Portable analyzer or performance stack testing
AA-012	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2) and 40 CFR 60.4245(b), Subpart KKKK	5.B.10	NOx	Performance stack testing

Draft/Proposed

5.B.1 For Emission Points AA-007 and AA-009, the permittee shall keep the following records:

- (a) A copy of each notification and report submitted to comply with Subpart ZZZZ;
- (b) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment);
- (c) Records of maintenance conducted on the engines in order to demonstrate the engines are being operated and maintained according to the manufacturer's emission related operation and maintenance instructions or the permittee's own maintenance plan as required by Condition 3.B.15;
- (d) Records of all required maintenance performed. If using an oil analysis program as described in Condition 3.B.14, records of the results for each required parameter of the oil analysis.

(Ref.: 40 CFR 63.6655(a), (d), and (e) and 40 CFR 63.6625(j), Subpart ZZZZ)

5.B.2 For Emission Points AA-007 through AA-009, the permittee shall operate the emergency engine according to the requirements below:

- (a) There is no limit on the use of the engine during emergency situations.
- (b) The engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the 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 emergency RICE beyond 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.
- (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. 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

Draft/Proposed

another entity.

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 a non-emergency engine.

(Ref.: 40 CFR 63.6640(f) and 40 CFR 63.6675, Subpart ZZZZ)

- 5.B.3 For Emission Points AA-007 through AA-009, the permittee shall keep records of the hours of operation of the engines recorded using the non-resettable hour meters. These records must indicate how many hours are spent in emergency operation, including what classified the operation as an emergency, and how many hours are spent in non-emergency operation. For Emission Points AA-007 and AA-009, these records should also include any time spent operating for the purposes identified in Condition 5.B.2(a), (b), and (c), and should contain an explanation of the emergency situation, date, and start and end time of engine operation for this purpose.

(Ref.: 40 CFR 63.6655(f), Subpart ZZZZ and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2))

- 5.B.4 For Emission Points AA-011 and AA-012, the permittee shall monitor and keep records of the total sulfur content of the gaseous fuel combusted in the turbine. The permittee shall not be required to monitor the total sulfur content of the gaseous fuel combusted in the turbine if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR Part 60.331(u). The permittee shall use the following source of information to make the required demonstration:

- (a) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
- (b) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 0.060 lb SO₂/MMBtu) heat input or 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR, Part 75 is required.

(Ref.: 40 CFR 60.334(h)(3), Subpart GG and 40 CFR 60.4365, Subpart KKKK)

- 5.B.5 For Emission Points AA-011 and AA-012, the permittee shall maintain the following records to demonstrate compliance with the annual emission rates:

- (a) Monthly operating hours at Full- Load >0 °F operating mode (DLN),

Draft/Proposed

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

These monthly records will be used to calculate monthly emissions (ME) for NO_x and CO (Px) using the following equation:

$$\text{ME Px} = (\text{DLN Px} * \text{DLN hrs}) + (\text{non-DLN Px} * \text{non-DLN hrs}) + (\text{LT Px} * \text{LT hrs}) + (\text{SS Px} * \text{SS hrs})$$

where DLN Px, non-DLN Px, LT Px, and SS Px are the unit allowable emission rates (lb/hr) for pollutant X during normal Full Load (DLN), Low-Load (non-DLN), Low-Temperature (LT), and Startup/Shutdown (SS).

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

- 5.B.6 For Emission Points AA-011 and AA-012, the permittee shall monitor and record the monthly and consecutive twelve month rolling total of carbon monoxide (CO) and nitrogen oxides (NO_x) emissions. Such records shall be kept for five years and made available upon request by DEQ personnel.

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

- 5.B.7 For Emission Points AA-011 and AA-012, the permittee shall utilize a thermocouple to continuously monitor the combustion zone temperature to document normal turbine operation. Each thermocouple shall be set to alarm if the combustion zone temperature exceeds the design level by >10 °F for 10 seconds and an automatic shutdown of the turbine if the combustion zone temperature exceeds design level by >20 °F for 20 seconds. Records of the continuous monitoring of combustion zone temperature shall be maintained. Additionally, the permittee shall record the date and time of any automatic turbine shutdowns due to combustion zone temperature over-temperature conditions.

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

- 5.B.8 For Emission Points AA-011 and AA-012, the design combustion zone temperature is set at 1,360 °F for Emission Point AA-011 and 1,400°F for Emission Point AA-012. Each unit's thermocouple shall be checked for proper calibration, annually, and calibration records maintained.

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

Draft/Proposed

- 5.B.9 For Emission Points AA-011 and AA-012, the permittee shall demonstrate compliance with the CO and NOx pound per hour emission limitations by portable analyzer testing, annually. Portable analyzer testing is not required for Emission Point AA-012 during the year that performance stack testing is conducted in accordance with Condition 5.B.10.

The permittee has the option to conduct a performance stack test for NOx and CO in lieu of conducting the portable analyzer testing. If performance stack testing is chosen, the permittee shall demonstrate compliance with the CO pound per hour emission limitations by stack testing in accordance with EPA Reference Method 10, 40 CFR 60, Appendix A, or alternatively approved methodology. For Emission Point AA-011, the permittee shall demonstrate compliance with the NOx pound per hour emission limitations by stack testing in accordance with EPA Reference Method 7E, 40 CFR 60, Appendix A, or alternatively approved methodology. For Emission Point AA-012, the permittee shall demonstrate compliance with the NOx pound per hour emission limitations by performance stack testing in accordance with 40 CFR 60.4400 to demonstrate continuous compliance.

Continuous monitoring and recording of each turbine's combustion zone temperature shall be conducted during each test. If the portable emissions analyzer results exceed the NOx or CO standards, maintenance shall be performed on the engine to correct the problem and the portable analyzer testing repeated.

The permittee must submit a written report of the results of each portable analyzer test before the close of business on the 60th day following the completion of the portable analyzer 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. After the first successful submittal of an initial written test protocol, the permittee may request that the resubmittal of testing protocol be waived for subsequent testing by certifying in writing at least thirty (30) days prior to subsequent testing that all conditions for testing remain unchanged such that the original protocol can and will be followed.

Reference method and portable emissions analyzer testing to be conducted in accordance with test protocol detailing QA/QC to be used during testing and subject to approval by MDEQ.

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

Draft/Proposed

- 5.B.10 For Emission Point AA-012, the permittee shall demonstrate compliance with the NOx pound per hour emission limitations by performance stack testing, annually, in accordance with 40 CFR 60.4400 to demonstrate continuous compliance. If the NOx emission results from the performance stack test is less than or equal to 75% of the NOx emission limit 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 NOx emission limit for the turbine, the permittee must resume annual performance tests.

The NOx performance tests must be done at load conditions within plus or minus 25 percent of 100 percent of peak load. The permittee may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. The permittee must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.

The permittee must submit a written report of the results of each 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. After the first successful submittal of an initial written test protocol, the permittee may request that the resubmittal of testing protocol be waived for subsequent testing by certifying in writing at least thirty (30) days prior to subsequent testing that all conditions for testing remain unchanged such that the original protocol can and will be followed.

Reference method testing to be conducted in accordance with test protocol detailing QA/QC to be used during testing and subject to approval by MDEQ.

(Ref: 40 CFR 60.4340, 40 CFR 60.5375, 40 CFR 60.4400(a) and (b), Subpart KKKK and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2))

Draft/Proposed

C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Reporting Requirement
AA-001 through AA-004, AA-007 through AA-009, AA-011, and AA-012	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.C.1	Fuel	Submit semiannual reports of fuel sulfur content monitoring records
AA-007 and AA-009	40 CFR 63.6640(b), Subpart ZZZZ	5.C.2	Work Practices	Submit semiannual reports of deviations
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.C.3	Maintenance	Submit semiannual reports of maintenance
AA-007 through AA-009	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.C.4	Hours	Submit semiannual reports of operations
AA-011 and AA-012	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.C.5	Hours	Submit semiannual reports of operations
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.C.6	NO _x and CO	Submit semiannual reports of emissions
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.C.7	Shutdowns	Submit semiannual reports of shutdowns
	40 CFR 60.4375(b), Subpart KKKK and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.C.8	NO _x and CO	Submit performance stack test reports and portable analyzer results

Draft/Proposed

- 5.C.1 For Emission Points AA-001 through AA-004, AA-007 through AA-009, AA-011, and AA-012, the permittee shall submit a copy of the Gas Quality Section of the current valid purchase contract, tariff sheet or transportation contract for natural gas combusted in the compressors, turbines and emergency generators in accordance with Condition 5.A.4.

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

- 5.C.2 For Emission Points AA-007 and AA-009, the permittee shall report each instance in which the work practices listed in Permit Condition 3.B.13 were not met. Such instances are deviations and should be reported within five (5) business days in accordance with Condition 5.A.5.

(Ref.: 40 CFR 63.6640(b), Subpart ZZZZ)

- 5.C.3 For Emission Points AA-007 and AA-009, the permittee shall submit semiannual reports showing the records of conducted maintenance in accordance with Condition 5.A.4.

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

- 5.C.4 For Emission Points AA-007 through AA-009, the permittee shall submit semiannual reports in accordance with Condition 5.A.4 showing the records of the operation of the engines in emergency and non-emergency service that are recorded through the non-resettable hour meters. This report must contain at a minimum the records required by Condition 5.B.3 .

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

- 5.C.5 For Emission Points AA-011 and AA-012, the permittee shall submit semiannual reports showing the operating hours during each load condition described in Condition 5.B.5 and the number of and duration of each startup and shutdown cycle. The reports shall be submitted in accordance with Condition 5.A.4.

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

- 5.C.6 For Emission Points AA-011 and AA-012, the permittee shall submit semiannual reports showing the monthly and twelve (12) month consecutive rolling total emissions of CO and NOx. The reports shall be submitted in accordance with Condition 5.A.4.

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

- 5.C.7 For Emission Points AA-011 and AA-012, the permittee shall include in the semiannual

Draft/Proposed

report documentation of all over-temperature shutdowns during the reporting period and the corrective action taken. These reports shall be submitted in accordance with Condition 5.A.4.

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

- 5.C.8 For Emission Points AA-011 and AA-012, the permittee shall submit performance stack test reports of all required performance stack testing within sixty (60) days of the date the performance stack testing is performed and shall submit results of all required portable analyzer monitoring within sixty (60) days of the date the portable analyzer monitoring is performed.

(Ref.: 40 CFR 60.4375(b), Subpart KKKK and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2))

Draft/Proposed

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 None permitted.

Draft/Proposed

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at <http://ecfr.gpoaccess.gov> under Title 40, or DEQ shall provide a copy upon request from the permittee.

- 7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A – Production and Consumption Controls.
- 7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B – Servicing of Motor Vehicle Air Conditioners.
- 7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E – The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:
 - (a) All containers in which a class I or class II substance is stored or transported
 - (b) All products containing a class I substance and
 - (c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.
- 7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F – Recycling and Emissions Reduction:
 - (a) Servicing, maintaining, or repairing appliances
 - (b) Disposing of appliances, including small appliances and motor vehicle air conditioners or
 - (c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery

equipment, approved recycling and recovery equipment testing organizations, persons selling class I or class II refrigerants or offering class I or class II refrigerants for sale, and persons purchasing class I or class II refrigerants.

- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G – Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.
- 7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H – Halon Emissions Reduction:
- (a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training
 - (b) Any person disposing of halons
 - (c) Manufacturers of halon blends or
 - (d) Organizations that employ technicians who service halon-containing equipment.

APPENDIX A

List of Abbreviations Used In this Permit

11 Miss. Admin. Code Pt. 2, Ch. 1.	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
11 Miss. Admin. Code Pt. 2, Ch. 2.	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
11 Miss. Admin. Code Pt. 2, Ch. 3.	Regulations for the Prevention of Air Pollution Emergency Episodes
11 Miss. Admin. Code Pt. 2, Ch. 4.	Ambient Air Quality Standards
11 Miss. Admin. Code Pt. 2, Ch. 5.	Regulations for the Prevention of Significant Deterioration of Air Quality
11 Miss. Admin. Code Pt. 2, Ch. 6.	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
11 Miss. Admin. Code Pt. 2, Ch. 7.	Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act
BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
lbs/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards For Hazardous Air Pollutants, 40 CFR 61
	or
	National Emission Standards For Hazardous Air Pollutants for Source Categories, 40 CFR 63
NMVOC	Non-Methane Volatile Organic Compounds
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
PM ₁₀	Particulate Matter less than 10 µm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
	VOC
	Volatile Organic Compound

Draft/Proposed

APPENDIX B

LIST OF REGULATIONS REFERENCED IN PERMIT

The full text of the regulations referenced in this permit may be found on-line at <http://www.deq.state.us.us> and <http://ecfr.gpoaccess.gov>, or the Mississippi Department of Environmental Quality (MDEQ) will provide a copy upon request. A list of regulations referenced in this permit is shown below:

11 Miss. Admin. Code Pt. 2, Ch. 1, Mississippi Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants (Amended December 14, 2011)

11 Miss. Admin. Code Pt. 2, Ch. 6, Mississippi Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Air Emissions Operating Permit Regulations for the Purpose of Title V of the Federal Clean Air Act (Amended December 14, 2011)

40 CFR Part 82 - Title VI of the Clean Air Act (Stratospheric Ozone Protection)

40 CFR Part 60, Subpart A – General Provisions

40 CFR Part 63, Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

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

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