

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

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Columbia Gulf Transmission Company, Corinth Compressor Station
3659 County Road 100
Corinth, Alcorn County, Mississippi

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: SEP 02 2016

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD



AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: AUG 31 2021

Permit No.: 0060-00028

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SECTION 1. GENERAL CONDITIONS

- 1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(a).)
- 1.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(b).)
- 1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(c).)
- 1.4 (a) This permit shall be reopened and revised under any of the following circumstances:
 - (1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.
 - (2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (3) The Permit Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
 - (4) The Administrator or the Permit Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (c) Reopenings shall not be initiated before a notice of such intent is provided to the Title V source by the DEQ at least 30 days in advance of the date that the permit is to be

reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

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

- 1.5 The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(e).)
- 1.6 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)
- 1.7 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(5).)
- 1.8 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation 11 Miss. Admin. Code Pt. 2, Ch. 6.)
 - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)
 - (b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted

allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).) 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-related activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

- (d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(2).)
- 1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(1).)
- 1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)
- 1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)
- 1.15 Nothing in this permit shall alter or affect the following:
 - (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
 - (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
 - (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(2).)
- 1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)
- 1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional

information identified as being needed to process the application. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C(2), R. 6.4.B., and R. 6.2.A(1)(c).)

- 1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:
- (a) the changes are not modifications under any provision of Title I of the Act;
 - (b) the changes do not exceed the emissions allowable under this permit;
 - (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:
 - (1) a brief description of the change(s),
 - (2) the date on which the change will occur,
 - (3) any change in emissions, and
 - (4) any permit term or condition that is no longer applicable as a result of the change;
 - (d) the permit shield shall not apply to any Section 502(b)(10) change. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F(1).)
- 1.19 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in accordance with the permittee's previously approved Emissions Reduction Schedule or, in the absence of an approved schedule, with the appropriate requirements specified in 11 Miss. Admin. Code Pt. 2, Ch. 3., "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared. (Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)
- 1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations 11 Miss. Admin. Code Pt. 2, Ch. 6., "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

- (a) routine maintenance, repair, and replacement;
 - (b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
 - (c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
 - (d) use of an alternative fuel or raw material by a stationary source which:
 - (1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; 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
 - (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 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, shutdowns and maintenance.
- (a) Upsets (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.KK.)
 - (1) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (i) an upset occurred and that the permittee can identify the cause(s) of the upset;
 - (ii) the source was at the time being properly operated;
 - (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
 - (iv) the permittee submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and
 - (v) the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.
 - (2) In any enforcement proceeding, the permittee 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.
 - (b) Startups and Shutdowns (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.HH. & R. 1.2.CC.)
 - (1) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows:

- (i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above;
 - (ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or
 - (iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit.
 - (2) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof.
 - (3) In the event this startup and shutdown provision conflicts with another applicable requirement, the more stringent requirement shall apply.
- (c) Maintenance.
- (1) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following:
 - (i) the permittee can identify the need for the maintenance;
 - (ii) the source was at the time being properly operated;
 - (iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
 - (iv) the permittee submitted notice of the maintenance to the DEQ within 5 working days of the time the maintenance began or such other times as allowed by DEQ; and
 - (v) the notice shall contain a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken.

- (2) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof.
- (3) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

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

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-001	Cooper-Bessemer LSV-16SG 4400 bhp (39.4 MMBTU/hr) 4SLB Natural Gas-Fired Compressor Engine (Ref. E01)
AA-002	Cooper-Bessemer LSV-16SG 4400 bhp (39.4 MMBTU/hr) 4SLB Natural Gas-Fired Compressor Engine (Ref. E02)
AA-003	Cooper-Bessemer LSV-16SG 4400 bhp (39.4 MMBTU/hr) 4SLB Natural Gas-Fired Compressor Engine (Ref. E03)
AA-004	Cooper-Bessemer LSV-16SG 4400 bhp (39.4 MMBTU/hr) 4SLB Natural Gas-Fired Compressor Engine (Ref. E04)
AA-005	Pratt-Whitney GG4A-2 16,000 bhp (309.6 MMBTU/hr) Natural Gas-Fired Turbine Compressor Engine (Ref. E05)
AA-011	Ford LSG-4231-5005-F 46.2 bhp (0.5 MMBTU/hr) 4SRB Natural Gas-Fired Fire Pump Engine (emergency RICE < 500hp) (Ref. P1)
AA-012	Kohler 20RZ 38 bhp (0.4 MMBTU/hr) 4SRB Natural Gas-Fired Generator Engine (emergency RICE < 500hp) (Ref. G5)
AA-013	Solar Titan 130-T19502S 21,022 bhp nominal rating @ 0°F (162.6 MMBTU/hr) Natural Gas-Fired Turbine Compressor Engine (Ref. E07)
AA-014	Waukesha VGF24GL 585 bhp (4.9 MMBTU/hr) 4SLB Natural gas-Fired Generator Engine (Ref. G6)
AA-015	Three (3) 125 BTU/hr Natural Gas-Fired Tank Heaters

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 Paragraph 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.)

B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-001 through AA-005, & AA-013	11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(b)	3.B.1	PM	$E = 0.8808 * I^{-0.1667}$
AA-011, AA-012, AA-014, & AA-015	11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(a)	3.B.2	PM	0.6 lb/MMBTU
AA-005, AA-013, & AA-015	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1)	3.B.3	SO ₂	4.8 lbs/MMBTU
AA-013	40 CFR 60, Subpart KKKK 40 CFR 60.4305(a)	3.B.4	NO _x SO ₂	Applicability
AA-013	NSPS Subpart KKKK 40 CFR 60.4320(a), 40 CFR 60.4330(a)(2) and Table 1 to Subpart KKKK	3.B.5	NO _x SO ₂	42 ppm @ 15% O ₂ 0.06 lb/ SO ₂ /MMBtu
AA-013	NSPS Subpart KKKK 40 CFR 60.4333(a)	3.B.6	General Operating Condition	Minimizing Emissions
AA-013	Title V Permit Modification October 29, 2008 Title V Permit Issued December 12, 2003 and Modified December 17, 2004 Construction Permit issued December 22, 1998	3.B.7 3.B.8	NO _x	Full- Load > 0°F: 25.3 lb/hr Low-Load (<50% load): 29.3 lb/hr Low-Temperature (< 0°F): 25.9 lb/hr Startup/Shutdown: 10.7 lb/hr 98.5 tons per 12-month rolling basis
			CO	Full- Load >0°F: 18.3 lb/hr Low-Load (<50% load): 561.1 lb/hr Low-Temperature (<0 °F): 37.6 lb/hr Startup/Shutdown: 211.9 lb/hr 142.3 tons per 12-month rolling basis
AA-014	Construction Permit issued December 22, 1998	3.B.9	Operational Restriction	500 hours per year of operation
AA-001 through AA-004, AA-011, AA-012, & AA-014	40 CFR 63, Subpart ZZZZ	3.B.10	HAPs	Applicability
AA-011 & AA-012	40 CFR 63.6640(f) & 40 CFR 63.6675	3.B.11	Operations	Operate only in emergency operation, maintenance and testing, and in non-emergency situations for < 50 hours per year.
AA-011 & AA-012	40 CFR 63.6602 and Item 6 to Table 2c to Subpart ZZZZ	3.B.12	Operations	Change oil and filter and inspect all hoses and belts every 500 hours; and Inspect spark plugs every 1,000 hours, and replace

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
				as necessary; or utilize optional oil analysis program.
AA-011 & AA-012	40 CFR 63.6625(e)(2), (f) and (h), 63.6640(a), and Tables 2c and 6 of Subpart ZZZZ	3.B.13	Operations	Operate according to the manufacturer's emission-related written instructions or develop and follow a maintenance plan consistent with good air pollution practice for minimizing emissions; The engines must have a non-resettable hour meter if one is not already installed; & Minimize the engine's time spent at idle during startup and minimize the engine's startup time.
AA-011 & AA-012	40 CFR 63.6605	3.B.14	Compliance	Maintain compliance with the applicable requirements of Subpart ZZZZ at all times.
AA-005 & AA-013	40 CFR 63, Subpart YYYY	3.B.15	HAPs	Applicability
AA-015	NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63, Subpart DDDDD 63.7485, 63.7490, 63.7499(l) 63.7500(a)(3)	3.B.16	HAPs	General Applicability
		3.B.17	General Operating Condition	Minimizing Emissions

3.B.1 For Emission Points AA-001 through AA-005, and AA-013, the maximum permissible emission of ash and/or particulate matter shall not exceed an emission rate as determined by the relationship

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

where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of Btu per hour. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(b))

- 3.B.2 For Emission Points AA-011, AA-012, AA-014 and AA-015 the maximum permissible emission of ash and/or particulate matter shall not exceed 0.6 pounds per million BTU per hour heat input. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(a))
- 3.B.3 For Emission Points AA-005, AA-013 and AA-015, 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.B.4 Emission Point AA-013 is subject to the New Source Standards of Performance for Stationary Combustion Turbines, 40 CFR 60, Subpart KKKK. This combustion turbine qualifies as a stationary combustion turbine 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. (Ref.: 40 CFR 60.4305(a))
- 3.B.5 For Emission Point AA-013, the permittee shall not exceed a Nitrogen Oxides (NO_x) emission rate of 42 ppmvd at 15% O₂ and shall not burn any fuel which contains total potential sulfur emissions in excess of 0.060 lb SO₂/MMBtu (20 grains S/100 scf). (Ref.: 40 CFR 60.4320(a), 40 CFR 60.4330(a)(2) and Table 1 to Subpart KKKK)
- 3.B.6 For Emission Point AA-013, 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 60.4333(a))
- 3.B.7 For Emission Point AA-013, the maximum hourly rate shall not exceed the following limits:

Operating Mode	Emissions	
	NO _x (lb/hr)	CO (lb/hr)
Full-Load $\geq 0^{\circ}\text{F}$	25.3	18.3
Low-Load (<50% Load)	29.3	561.1
Low-Temperature ($\leq 0^{\circ}\text{F}$)	25.9	37.6
Startup/Shutdown	10.7	211.9

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

(Ref.: Title V Permit issued December 12, 2003, and modified December 17, 2004, and October 29, 2008)

- 3.B.8 For Emission Point AA-013, the annual emission rate of Nitrogen Oxides (NO_x) shall not exceed 98.5 tons per year, and the annual emission rate of Carbon Monoxide (CO) shall not exceed 142.3 tons per year. (Ref.: Title V Permit issued December 12, 2003, and modified December 17, 2004, and October 29, 2008)
- 3.B.9 For Emission Point AA-014, the permittee is limited to 500 hours per year of operation. (Ref.: Construction Permit issued December 22, 1998)
- 3.B.10 Emission Points AA-001 through AA-004, AA-011, AA-012, and AA-014 are subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Engines, 40 CFR Part 63, Subpart ZZZZ.

Emission Points AA-001 through AA-004 and AA-014 are existing spark ignition 4-stroke lean- burn engines with a site rating greater than 500 HP and are located at a major source of HAPs. As such, these engines do not have any applicable requirements under Subpart ZZZZ or Subpart A, the General Provisions.

Emission Points AA-011 and AA-012 are existing spark ignition emergency engines with a site rating less than 500 HP located at a major source of HAPs.

(Ref.: 40 CFR 63.6580, 63.6585(a) and (b), 63.6590(a)(1)(i) and (ii), and 63.6590(b)(3)(ii))

- 3.B.11 For Emission Points AA-011 and AA-012, the permittee shall operate the emergency engines according to the requirements below:
 - (a) There is no limit on the use of the engines during emergency situations.
 - (b) The engines may operate for any combination of the purposes specified in paragraphs (1) - (3) below 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.
 - (1) The engines may be operated 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 Administrator 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.

- (2) The engines may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- (3) The engines may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (c) The engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response 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 engines are not operated according to the requirements in (a) - (c) above, the engines 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 63.6640(f) and 63.6675)

3.B.12 For Emission Points AA-011 and AA-012, 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.13;
 - (1) Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from the Total Acid Number when new.
 - (2) Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new.

- (3) Percent water content (by volume) is greater than 0.5.
- (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, 63.6625(j), and Table 2c of Subpart ZZZZ)

3.B.13 For Emission Points AA-011 and AA-012, the permittee shall comply with the following requirements:

- (a) Operate and maintain the engines 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) The engines must have a non-resettable hour meter if one is not already installed.
- (c) 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), (f) and (h), 63.6640(a), and Tables 2c and 6 of Subpart ZZZZ)

3.B.14 For Emission Points AA-011 and AA-012, the permittee shall, at all times, be in compliance with the applicable requirements of 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. (Ref.: 40 CFR 63.6605)

- 3.B.15 Emission Points AA-005 and AA-013 are subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, 40 CFR 63, Subpart YYYYY. These combustion turbines are existing stationary combustion turbines and as such are not required to meet any requirements of Subpart YYYYY nor Subpart A, the General Provisions. (Ref.: 40 CFR 63.6080, and 63.6090(a)(1) and (b)(4))
- 3.B.16 All process heaters identified in Emission Point AA-015 are subject to the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD.

These process heaters are existing process heaters in the “units designed to burn gas 1 fuel” subcategory as listed in 40 CFR 63.7499(l) and defined in 40 CFR 63.7575. These units do not have any applicable emission standards and only have to comply with the work practice standard in Condition 3.D.1. (Ref: 40 CFR 63.7485, 63.7490(a)(1) and (d), 63.7499(l), and 63.7500(a)(1))

- 3.B.17 The permittee shall operate and maintain each process heater listed in Emission Point AA-015, including any monitoring equipment, in a manner consistent with safe and good air pollution control practices for minimizing emissions. (Ref.: 40 CFR 63.7500(a)(3))

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.

D. Work Practice Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-015	40 CFR 63.7500(e), 63.7515(d), 63.7540(a)(10)(i)-(vi), (12), and (13) and Table 3 of Subpart DDDDD	3.D.1	Tune Up	Subsequent Tune-ups

3.D.1 For Emission Point AA-015, the permittee shall complete a tune-up on each process heater every five years beginning from the date of the initial tune-up. Each subsequent tune-up shall be completed no more than 61 months after the previous one. If a unit is not operating on the required date of the tune-up, the tune-up must be conducted within 30 calendar days of startup. The tune-up on each process heater must be completed in accordance with (a) through (f) below:

- (a) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;
- (b) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (c) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;
- (d) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;
- (e) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis

before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

- (f) Maintain on-site and submit, if requested by MDEQ, an annual report containing the following information listed in (1) through (3) of this section:
 - (1) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
 - (2) A description of any corrective actions taken as a part of the tune-up of the process heaters; and
 - (3) The type and amount of fuel used over the 12 months prior to the tune-up of the process heaters, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

(Ref.: 40 CFR 63.7500(e), 63.7515(d), 63.7540(a)(10)(i)-(vi),(12), and(13), and Table 3 of Subpart DDDDD)

SECTION 4. COMPLIANCE SCHEDULE

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

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

A. General Monitoring, Recordkeeping and Reporting Requirements

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

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-011 & AA-012	40 CFR 63.6655(a), (d), and (e) and 63.6625(j)	5.B.1	Records	Keep records of Subpart ZZZZ Compliance Reports; Records malfunctions; & Records of all maintenance.
	40 CFR 63.6655(f)	5.B.2	Hours	Keep records of the hours of operation of the engines & 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.
	40 CFR 63.6660 and 63.10(b)(1)	5.B.3	Operations	Keep records of all operating requirements for five years.
AA-013	40 CFR 60.4340, 60.4375, 60.4400(a)&(b), and 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.B.4	NO _x CO	Conduct annual performance tests for NO _x and CO emissions
AA-013	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.B.5	NO _x CO T5 combustion zone temperature	Shall conduct emissions testing for NO _x and CO and monitor the T5 combustion zone temperature
AA-013	40 CFR 60.4365	5.B.6	Fuel Sulfur Content	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. Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 0.060 lb SO ₂ /MMBtu heat input. At a minimum, the amount of fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75 is required.
AA-013	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.B.7	NO _x CO	Maintain monthly operating hours at specified load conditions and monthly number and

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
				duration of startup & shutdown cycles
AA-013	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.B.8	NOx CO	Maintain the monthly and consecutive 12-month emission rate for NOx and CO
AA-014	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.B.9	Operations	Shall monitor and record monthly the hours of operation
AA-015	40 CFR 63.7540(a)(12)	5.B.10	HAP	Continuous Compliance
	40 CFR 63.7555(a)(1), 63.7560, and 63.10(b)(2)	5.B.11	HAP	Recordkeeping

5.B.1 For Emission Points AA-011 and AA-012, the permittee shall keep the following records:

- (a) A copy of each 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.13;
- (d) Records of all required maintenance performed. If using an oil analysis program as described in Condition 3.B.12, records of the results for each required parameter of the oil analysis.

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

- 5.B.2 For Emission Points AA-011 and AA-012, the permittee shall keep records of the hours of operation of the engines recorded using the non-resettable hour meters required in Condition 3.B.13. 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. Records should also include any time spent operating for the purposes identified in Condition 3.B.11(b)(1), (b)(2), (b)(3), 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))
- 5.B.3 The permittee shall keep records required in Conditions 3.B.11, 3.B.12, and 3.B.13 in a form suitable and readily available for expeditious review. These records shall be kept in hard copy or electronic form for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.6660 and 63.10(b)(1))
- 5.B.4 For Emission Point AA-013, the permittee shall demonstrate compliance with the CO emission limitations by stack testing, annually, in accordance with EPA Reference Method 10, 40 CFR 60, Appendix A, or alternatively approved methodology. If the CO emission results from the performance test is less than or equal to 75% of the CO 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 CO emission limit for the turbine, you must resume annual performance tests.

For compliance with the NO_x limits, the permittee must perform annual performance tests in accordance with 40 CFR 60.4400 to demonstrate continuous compliance. If the NO_x emission results from the performance test is less than or equal to 75% of the NO_x 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 NO_x emission limit for the turbine, you must resume annual performance tests.

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. (Ref:

40 CFR 60.4340, 60.5375, 60.4400(a) and (b) & 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11))

5.B.5 The table below is the monitoring plan for Emission point AA-013:

Requirements	Specific Monitoring Provisions
General Monitoring Approach	Emissions testing for NOx and CO combined with monitoring of T5 combustion zone temperature to document normal turbine operation.
Testing & Monitoring Methods	Referenced method testing annually to document compliance with NOx and CO limits and to record T5 values during testing (actual T5 to be within 75°F of design level). Annual emission testing for NOx and CO using portable emissions analyzer; record T5 temperature during testing. Continuous monitoring of T5 combustion zone temperature reported by turbine control panel.
Indicator Range	Audible alarm if T5 exceeds design level by >10°F for 10 seconds. Automatic shutdown if T5 exceeds design level by > 20°F for 20 seconds.
Data Collection Agency	Continuous monitoring of T5 temperature; record date and time of any automatic turbine shutdowns due to T5 over-temperature conditions.
Averaging Period	None.
Recordkeeping	Records of testing, QA/QC, and over-temperature shutdowns to be retained for 5 years.
Reporting	Submit reference method and portable analyzer test results to MDEQ within 60 days after testing. Documentation of over-temperature shutdowns to be included in semi-annual monitoring report.
QA/QC	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. Thermocouples will be checked for proper calibration annually.

“T5” – thermocouples which measures the inlet temperature into the power turbine. Since it is not possible to measure the combustor temperature directly due to the extremely high temperatures, measuring T5 and using a complex mathematical algorithm to obtain the combustor temperature is industry standard. As combustor zone temperature (measured by T5) is a critical parameter to maintaining low emissions and meeting its low emissions guarantees, the design T5 temperature is set at 1,360°F for the Mars turbine and 1,400°F for the Titan turbine. All of the full-load testing occurred at T5 values within 50°F of the design temperature.

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

5.B.6 For Emission Point AA-013, 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 Condition 3.B.5. 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.
- (b) Representative fuel sampling data which show that the sulfur content of the natural gas being fired does not exceed the sulfur limit in Condition 3.B.5. 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 60.4365)

5.B.7 For Emission Point AA-013 to demonstrate compliance with the annual emission rates, the permittee shall maintain the following records:

- (a) Monthly operating hours at Full- Load $>0^{\circ}\text{F}$ operating mode (DLN),
- (b) Monthly operating hours at Low-Load ($<50\%$ load) operating mode (non-DLN),
- (c) Monthly operating hours at Low-Temperature ($<0^{\circ}\text{F}$) 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. 2.2.B.(11))

- 5.B.8 For Emission Point AA-013, the permittee shall determine the annual emission rate for NOx 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.B.9 For Emission Point AA-014, the permittee shall monitor and record monthly the hours of operation. The total hours of operation for each consecutive 12-month period shall also be recorded. These records shall be kept on site for a period of five (5) years. (Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11))
- 5.B.10 For Emission Point AA-015, the permittee shall demonstrate continuous compliance with the applicable work practice standards by conducting a tune-up on each process heater in accordance with Condition 3.D.1. (Ref.: 40 CFR 63.7540(a)(12))
- 5.B.11 For Emission Point AA-015, the permittee shall keep a copy each notification and report submitted to comply with Subpart DDDDD, including all documentation supporting the Notification of Compliance Status or a semiannual compliance report. These records shall be retained for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record. The permittee is required to keep the records on site for a period of 2 years after the event and then they may be kept offsite for the remaining three years. All records must be readily available for review. (Ref.: 40 CFR 63.7555(a)(1), 63.7560, and 63.10(b)(2))

C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Reporting Requirement
AA-013	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.C.1	Fuel Sulfur Content	Submit report of fuel sulfur content monitoring records
AA-013	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.C.2	NOx CO	Submit report of monthly & 12-month annual emission rate for NOx and CO
AA-014	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.C.3	Hours	Submit report of monthly & 12-month hours of operation
AA-015	40 CFR 63.7550(a),(b), and(c)(5)(i)-(iii),(xiv), and (xvii) and Table 9 of Subpart DDDDD	5.C.4	HAP	Submit Compliance Report
AA-011 and AA-012	40 CFR 63.6640(b) and Footnote 1 to Table 2c)	5.C.5	Work Practices	Submit Compliance Report

- 5.C.1 For Emission Point AA-013, the permittee shall submit the monitoring records identified in Condition 5.B.6 in accordance with condition 5.A.4. (Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11))
- 5.C.2 For Emission Point AA-013, the permittee shall submit the annual emission rate for NOx and CO for the preceding 12-months in accordance with Condition 5.A.4. (Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11))
- 5.C.3 For Emission Point AA-014, the permittee shall submit the monthly hours of operation and total hours of operation for the previous consecutive 12-month period in accordance with Condition 5.A.4. (Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11))
- 5.C.4 For Emission Point AA-015, the permittee shall submit the information listed in (a) through (e) in accordance with the next required report per Condition 5.A.4 once the tune-ups required in Condition 3.D.1 have been completed. This information must be submitted for each process heater:
- (a) Company and Facility name and address
 - (b) Process unit information
 - (c) Date of report and beginning and ending dates of reporting period
 - (d) The date of the most recent tune-up for each process heater in Emission Point AA-015. Include the date of the most recent burner inspection, if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled shutdown.
 - (e) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- (Ref.: 40 CFR 63.7550(a), (b), and (c)(5)(i)-(iii),(xiv), and (xvii) and Table 9 of Subpart DDDDD))
- 5.C.5 For Emission Points AA-011 and AA-012, the permittee shall report each instance in which the work practices listed in 3.B.12 were not met. Such instances are deviations and should be reported within five (5) business days in accordance with Condition 5.A.5. If the management practices were not performed on the required schedule because it posed an unacceptable risk under Federal, State, or local law at the time of the required scheduled maintenance, the report must include the Federal, State, or local law under which the risk was deemed unacceptable. (Ref.: 40 CFR 63.6640(b) and Footnote 1 to Table 2c)

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 None permitted.

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at <http://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

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 63, Subpart A – General Provisions

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

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

40 CFR 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters

40 CFR 60, Subpart A – General Provisions

40 CFR 60, Subpart KKKK – New Source Performance Standards for Stationary Combustion Turbines