# STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

# TO OPERATE AIR EMISSIONS EQUIPMENT

# THIS CERTIFIES THAT

Southern Natural Gas Company LLC, Enterprise Compressor Station 100 County Road 332 Enterprise, Mississippi Clarke 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: <u>September 30, 2024</u>

Effective Date: As specified herein.

### MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

Becky Simonson

## AUTHORIZED SIGNATURE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: August 31, 2029

Permit No.: 0440-00048

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### SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(a).)

1.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(b).)

1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(c).)

- 1.4 Prior to its expiration, this permit may be reopened in accordance with the provisions listed below.
  - (a) This permit shall be reopened and revised under any of the following circumstances:
    - (1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.
    - (2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
    - (3) The Permit Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.
    - (4) The Administrator or the Permit Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

- (b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (c) Reopenings shall not be initiated before a notice of such intent is provided to the Title V source by the DEQ at least 30 days in advance of the date that the permit is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

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

1.5 The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(e).)

1.6 This permit does not convey any property rights of any sort, or any exclusive privilege.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)

1.7 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(5).)

- 1.8 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation 11 Miss. Admin. Code Pt. 2, Ch. 6.
  - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as

those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

(b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

(c) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D(2).)

(d) The fee shall be due September 1 of each year. By July 1 of each year, the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the DEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.)

(e) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)

1.9 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(8).)

1.10 Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)

- 1.11 The permittee shall allow the DEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:
  - (a) enter upon the permittee's premises where a Title V source is located or emissionsrelated 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:

- the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I, or 40 CFR 51.166; or
- (2) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, or 40 CFR 51.166;
- (e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or
- (f) any change in ownership of the stationary source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.C(15).)

1.21 Any change in ownership or operational control must be approved by the Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)

1.22 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission.

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

- 1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.
  - (a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.

- (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private airfields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator.
- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.G.)
- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.
  - (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
    - (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:
      - (i) An upset occurred and that the source can identify the cause(s) of the upset;
      - (ii) The source was at the time being properly operated;
      - (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
      - (iv) That within 5 working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;
      - (v) That as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
    - (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.

- (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- (b) Startups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
  - (1) Startups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.
  - (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this regulation, 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B(2)(a) through (e).
  - (3) Where an upset as defined in Rule 1.2 occurs during startup or shutdown, see the upset requirements above.

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

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

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.8.)

# SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-003	2,000 HP Clark TLAD-5 two stroke lean burn (2SLB) SI natural gas-fired non-emergency compressor engine (Ref. No. 001C-008)
AA-004	2,000 HP Clark TLAD-5 2SLB SI natural gas-fired non-emergency compressor engine (Ref. No. 001C-009)
AA-005	2,500 HP Cooper Bessemer GMVH-12C 2SLB SI natural gas-fired non-emergency compressor engine (Ref. No. 001C-010)
AA-006	3,920 HP Cooper Bessemer 8W330-C2 2SLB SI natural gas-fired non-emergency compressor engine (Ref. No. 001C-011)
AA-007	3,920 HP Cooper Bessemer 8W330-C2 2SLB SI natural gas-fired non-emergency compressor engine (Ref. No. 001C-012)
AA-008	3,920 HP Cooper Bessemer 8W330-C2 2SLB SI natural gas-fired non-emergency compressor engine (Ref. No. 001C-013)
AA-009	567 HP Caterpillar G3412 TA four stroke rich burn (4SRB) SI natural gas-fired emergency generator engine (Ref. No. 002G-003)
AA-010	4,730 HP Caterpillar G3616 four stroke lean burn (4SLB) SI natural gas-fired non-emergency compressor engine equipped with an oxidation catalyst (Ref. No. 001C-014)
AA-011	4,730 HP Caterpillar G3616 4SLB SI natural gas-fired non-emergency compressor engine equipped with an oxidation catalyst (Ref. No. 001C-015)
AA-012	340 HP Detroit Diesel S60G 4SRB SI natural gas-fired emergency generator engine (Ref. No. 002G-004)
AA-013	10,350 HP (61.2 MMBTUH) Solar Taurus T-70 natural gas-fired compressor turbine
AA-014	650 HP Kohler 400 REZXB 4SRB SI natural gas-fired emergency generator engine
AA-015	0.25 MMBTUH Fuel Gas Heater
AA-016	0.75 MMBTUH Fuel Gas Heater
AA-000	Plant-wide Equipment and Pipe Fugitive Emissions

## SECTION 3. EMISSION LIMITATIONS & STANDARDS

#### A. Facility-Wide Emission Limitations & Standards

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

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

- 3.A.3 For the entire facility, the permittee shall not cause, permit, or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.
  - (a) The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.
  - (b) When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gasborne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

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

#### B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-003 through AA-008, AA-010, AA-011, AA-013, and AA-014	11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(b)	3.B.1	РМ	E=0.8808*I <sup>-0.1667</sup>
AA-009, AA-012, AA-015, and AA-016	11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(a)	3.B.2	РМ	0.6 lbs/MMBTU
AA-003 through AA-012 and AA-014	<ul> <li>40 CFR 63, Subpart ZZZZ</li> <li>(National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE))</li> <li>40 CFR 63.6580, Subpart ZZZZ;</li> <li>40 CFR 63.6590(a)-(b), Subpart ZZZZ;</li> <li>40 CFR 63.6590(a)(1)(i)-(ii), Subpart ZZZZ;</li> <li>40 CFR 63.6590(a)(2)(i), Subpart ZZZZ;</li> <li>40 CFR 63.6590(b)(1)(i), Subpart ZZZZ;</li> <li>40 CFR 63.6590(b)(1)(i), Subpart ZZZZ;</li> <li>40 CFR 63.6590(b)(3)(i)-(iii), Subpart ZZZZ;</li> </ul>	3.B.3	НАР	Applicability
AA-003	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Air Construction Permit issued November 7, 1978	3.B.4	NOx Operating hours	59.2 lb/hr and 248.6 tpy 8,424 hours/yr
	11 Miss. Admin. Code Pt. 2, R.		NOx	37.4 lb/hr and 163.9 tpy
AA-004	2.2.B(10)., as established in the Air Construction Permit issued August 3, 1981	3.B.5	СО	10.5 lb/hr and 46.2 tpy
AA-005	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Air Construction Permit issued August 28, 1984	3.B.6	NOx	12.7 lb/hr and 55.6 tpy
AA-006, AA-007,	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Air		NOx	24.0 lb/hr and 105.0 tpy per emission source
and AA-008	Construction Permit issued May 14, 1996	3.B.7	СО	15.0 lb/hr and 65.0 tpy per emission source
AA-009, AA-012, and AA-014	40 CFR 63.6625(f), Subpart ZZZZ and 11 Miss. Admin. Code Pt. 2, R. <u>2.2.B(10)</u> , as established in the Title V Operating Permit issued December 6, 2018	3.B.8	Operational Restriction	Operational Requirements

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-009, AA-012, and AA-014	40 CFR 63.6640(f) and 63.6675, Subpart ZZZZ, and 40 CFR 60.4243(d)(1)-(3), and 60.4248, Subpart JJJJ	3.B.9	Operational Restriction	Emergency Operational Requirements
			СО	3.65 lb/hr and 16.0 tpy per emission source
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the	3.B.10	NOx	7.3 lb/hr and 31.97 tpy per emission source
	Air Title V Permit modified January 18, 2002 and Air		VOC	4.43 lb/hr and 19.41 tpy per emission source
AA-010	Construction Permit issued August 26, 2003	3.B.11	Fuel Restriction	Natural Gas Only
and AA-011		3.B.12	Control Device Requirement	Must be operated at all times
	40 CFR Part 64 – Compliance Assurance Monitoring (CAM) 40 CFR 64.2(a), CAM	3.B.13	СО	CAM Applicability
	40 CFR 63.6600(b), Subpart ZZZZ and Item 2 of Table 2a of 40 CFR 63, Subpart ZZZZ	3.B.14	CO or Formaldehyde	Reduce CO emissions by $\ge 93\%$ or limit formaldehyde to 14 ppmvd at 15% O <sub>2</sub>
AA-011	40 CFR 63.6600(b), Subpart ZZZZ and Item 1 of Table 2b of 40 CFR 63, Subpart ZZZZ	3.B.15	General Operating Condition	Catalyst pressure drop $\leq 2$ inches H <sub>2</sub> O and catalyst inlet temp. $\geq 450$ °F and $\leq 1350$ °F
	40 CFR 63.6605(a), Subpart ZZZZ	3.B.16	General Operating Condition	Continuous Compliance
	40 CFR 63.6605(b), Subpart ZZZZ	3.B.17	General Operating Condition	Minimizing Emissions
	<ul> <li>40 CFR 60, Subpart GG</li> <li>(Standards of Performance for Stationary Gas Turbines)</li> <li>40 CFR 60.330, Subpart GG</li> </ul>	3.B.18	SO2 and NOx	Applicability
	40 CFR 60.333(b), Subpart GG	3.B.19	Fuel Sulfur Content	$\leq$ 0.8 percent by weight
AA-013	40 CFR 60.332(a)(2), Subpart GG	3.B.20	NOx	STD = 0.0150((14.4)/Y) + F
	40 CFR 60.334(h)(3), Subpart GG	3.B.21	Fuel Restrictions	Natural Gas Only, with sulfur content $\leq 20$ grains/100 scf
	11 Miss. Admin. Code Pt. 2, R.	3.B.22	СО	11.89 lb/hr and 45.14 tpy
	2.2.B(10)., as established in the Air Construction Permit issued April 1, 2013		NOx	9.77 lb/hr and 37.05 tpy
			VOC	3.10 lb/hr and 11.75 tpy

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-014	40 CFR 60, Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines) 40 CFR 60.4230(a)(4)(iv), Subpart JJJJ	3.B.23	NOx, CO, and VOC	Applicability
	40 CFR 60.4233(e), Subpart JJJJ; 40 CFR 60.4234, Subpart JJJJ; and Table 1 to 40 CFR Part 60, Subpart JJJJ	3.B.24	NOx, CO, and VOC	2.0 g/bhp-hr NO <sub>x</sub> or 160 ppmvd @ 15% O <sub>2</sub> 4.0 g/bhp-hr CO or 540 ppmvd @ 15% O <sub>2</sub> 1.0 g/bhp-hr VOC or 86 ppmvd @ 15% O <sub>2</sub>
	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.B.25	SO <sub>2</sub>	4.8 lbs/MMBTU
AA-015 and AA-016	40 CFR 63, Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for	3.B.26	HAPs	General Applicability
	Industrial, Commercial, and Institutional Boilers and Process Heaters) 40 CFR 63.7485,63.7490, 63.7499(1), and 63.7500(a)(3), Subpart DDDDD	3.B.27	General Operating Condition	Minimizing Emissions

3.B.1 For Emission Points AA-003 through AA-008, AA-010, AA-011, AA-013, and AA-014, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input shall not exceed an emission rate as determined by the relationship

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

Where E is the emission rate in pounds per 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-009 and AA-012, AA-015, and AA-016, the maximum permissible emission of ash and/or particulate matter from a fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.

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

3.B.3 For Emission Points AA-003 through AA-012 and AA-014, the permittee is subject to and shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ.

Emission Points AA-003 through AA-008 are existing non-emergency spark ignition two stroke lean burn (2SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions and as such are not required to meet the requirements of 40 CFR Part 63, Subpart ZZZZ or the General Provisions in Subpart A.

Emission Point AA-009 is an existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions. As such, the emergency engine is only required to meet the emergency operational requirements of 40 CFR Part 63, Subpart ZZZZ that are listed in Condition 3.B.9.

Emission Point AA-010 is an existing non-emergency spark ignition four stroke lean burn (4SLB) stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions and as such is not required to meet the requirements of 40 CFR Part 63, Subpart ZZZZ or the General Provisions in Subpart A.

Emission Point AA-011 is a new non-emergency SI 4SLB stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions and as such is required to meet the requirements of 40 CFR Part 63, Subpart ZZZZ and the General Provisions in Subpart A.

Emission Point AA-012 is an existing emergency stationary RICE with a site rating of less than 500 brake HP located at a major source of HAP emissions and as such is required to meet the operational requirements of 40 CFR Part 63, Subpart ZZZZ and the General Provisions in Subpart A.

Emission Point AA-014 is a new emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR Part 63.6640(f)(2)(ii) and (iii) and as such is not required to meet the requirements of 40 CFR Part 63, Subpart ZZZZ or the General Provisions in Subpart A, except for the initial notification requirements, which have been met.

(Ref.: 40 CFR 63.6580, 40 CFR 63.6585(a)-(b), 40 CFR 63.6590(a)(1)(i)-(ii), 40 CFR 63.6590(a)(2)(i), 40 CFR 63.6590(b)(1)(i), and 40 CFR 63.6590(b)(3)(i)-(iii), Subpart ZZZZ)

3.B.4 For Emission Point AA-003, Nitrogen Oxide (NOx) emissions are limited to 59.2 pounds per hour (lb/hr) and 248.6 tons per year (tpy) and operating hours are limited to 8,424 hours

per year (hrs/yr).

(Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Air Construction Permit issued August 3, 1981)

3.B.5 For Emission Point AA-004, NOx emissions are limited to 37.4 lb/hr and 163.9 tpy and Carbon Monoxide (CO) emissions are limited to 10.5 lb/hr and 46.2 tpy.

(<u>Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).</u>, as established in the Air Construction Permit issued August 3, 1981)

3.B.6 For Emission Point AA-005, NOx emissions are limited to 12.7 lb/hr and 55.6 tpy.

(Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Air Construction Permit issued August 28, 1984)

3.B.7 For Emission Points AA-006, AA-007, and AA-008, NOx emissions are limited to 24.0 lb/hr and 105.0 tpy from each emission source and CO emissions are limited to 15.0 lb/hr and 65.0 tpy from each emission source.

(Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Air Construction Permit issued May 14, 1996)

3.B.8 For Emission Points AA-009, AA-012, and AA-014, the permittee must install and operate a non-resettable hour meter on each emergency engine.

(Ref: 40 CFR 63.6625(f) and 11 Miss. Admin. Code Pt. 2, R. <u>2.2.B(10)</u>., as established in the Title V Operating Permit issued December 6, 2018))

- 3.B.9 For Emission Points AA-009, AA-012, and AA-014, the permittee shall operate each 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 DEQ 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 another entity.

If the emergency engines are not operated according to the requirements in (a) - (c) above, then Emission Point AA-014 will not be considered an emergency engine under 40 CFR Part 60, subpart JJJJ and must meet all requirements for non-emergency engines, and Emission Points AA-009 and AA-012 will not be considered emergency engines under 40 CFR Part 63, subpart ZZZZ and must meet all requirements for non-emergency engines

(<u>Ref.: 40 CFR 63.6640(f) and 40 CFR 63.6675</u>, Subpart ZZZZ and 40 CFR 60.4243(d)(1)-(3) and 40 CFR 60.4248, Subpart JJJJ)

3.B.10 For Emission Points AA-010 and AA-011, NOx emissions are limited to 7.3 lb/hr and 31.97 tpy for each emission point, CO emissions are limited to 3.65 lb/hr and 16.0 tpy for each emission point, and Volatile Organic Compound (VOC) emissions are limited to 4.43 lb/hr and 19.41 tpy ffor each emission point. These limits were established to remain below PSD significant emission rates.

(Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Air Construction Permit issued August 26, 2003, and Air Title V Permit modified January 18, 2002)

3.B.11 For Emission Points AA-010 and AA-011, the permittee shall combust pipeline quality natural gas only.

(Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Air Construction Permit issued August 26, 2003, and Air Title V Permit modified January 18, 2002)

3.B.12 For Emission Points AA-010 and AA-011, the permittee shall operate each source with emissions routed to each source's respective air pollution control device at all times during operations.

(<u>Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).</u>, as established in the Air Construction Permit issued August 26, 2003, and Air Title V Permit modified January 18, 2002)

3.B.13 For Emission Points AA-010 and AA-011, the permittee is subject to and shall comply with all applicable requirements of 40 CFR Part 64 – Compliance Assurance Monitoring (CAM).

(Ref.: 40 CFR 64.2(a), Compliance Assurance Monitoring)

3.B.14 For Emission Point AA-011, the permittee shall reduce CO emissions by 93 percent or more or limit the concentration of formaldehyde in the stationary RICE exhaust to 14 ppmvd or less at 15 percent O<sub>2</sub>, with the engine operated at 100% load plus or minus 10%.

#### (Ref.: 40 CFR 63.6600(b) and Item 2 of Table 2a of 40 CFR Part 63, Subpart ZZZZ)

3.B.15 For Emission Point AA-011, the permittee shall maintain the catalyst so that the pressure drop across the catalyst does not change by more than two inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test. In addition, the permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.

(Ref.: 40 CFR 63.6600(b) and Item 1 of Table 2b of 40 CFR Part 63, Subpart ZZZZ)

3.B.16 For Emission Point AA-011, the permittee shall be in compliance with the emission limitations and operating limitations cited in Conditions 3.B.14 and 3.B.15 at all times.

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

3.B.17 For Emission Point AA-011, the permittee shall at all times, operate and maintain the engine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safe and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to be made to reduce emissions if levels required by 40 CFR Part 63, Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the DEQ 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 engine.

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

3.B.18 Emission Point AA-013 is subject to and shall comply with all applicable requirements of the New Source Standards of Performance for Stationary Combustion Turbines, 40 CFR Part 60, Subpart GG.

#### (Ref.: 40 CFR 60.330), Subpart GG)

3.B.19 For Emission Point AA-013, the permittee shall not burn any fuel which contains sulfur in excess of 0.8 percent by weight.

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

3.B.20 For Emission Point AA-013, the permittee shall not cause to be discharged into the atmosphere any gases which contain nitrogen oxides in excess of:

$$STD = 0.0150[(14.4)/Y] + F$$

where: STD = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent oxygen and on a dry basis)

Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.

Fuel-bound nitrogen (percent by weight)	F (NO <sub>x</sub> percent by volume)
$N \le 0.015$	0
$0.015 < N \le 0.1$	0.04(N)
$0.1 < N \leq 0.25$	0.004 + 0.0067(N-0.1)
N > 0.25	0.005

 $F = NO_x$  emission allowance for fuel bound nitrogen as defined by the following table:

where: N = the nitrogen content of the fuel (percent by weight)

(Ref.: 40 CFR 60.332(a)(2), Subpart GG)

- 3.B.21 For Emission Point AA-013, the permittee shall combust only natural gas that complies with the definition of natural gas in 40 CFR 60.331(u). The permittee may elect not 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), regardless of whether an existing custom schedule approved by the Environmental Protection Agency (EPA) for subpart GG requires such monitoring. 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 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 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 part 75 is required.

(Ref: 40 CFR 60.334(h)(3), Subpart GG)

3.B.22 For Emission Point AA-013, NOx emissions are limited to 9.77 lb/hr and 37.05 tpy, CO emissions are limited to 11.89 lb/hr and 45.14 tpy, and VOC emissions are limited to 3.10 lb/hr and 11.75 tpy.

#### (Ref: Air Construction Permit issued April 1, 2013)

3.B.23 Emission Point AA-014 is subject to and shall comply with all applicable requirements of the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart JJJJ.

#### (Ref: 40 CFR 60.4230(a)(4)(iv), Subpart JJJJ)

3.B.24 For Emission Point AA-014, Nitrogen Oxide (NOx) emissions are limited to 2.0 grams per horsepower-hour (g/bhp-hr) or 160 ppmvd @ 15% O2, Carbon Monoxide (CO) emissions are limited to 4.0 g/bhp-hr or 540 ppmvd @ 15% O2, and Volatile Organic Compound (VOC) emissions are limited to 1.0 g/bhp-hr or 86 ppmvd @ 15% O2. The engine shall be operated and maintained such that the engine achieves these emission standards over the entire life of the engine.

#### (Ref: 40 CFR 60.4233(e), 40 CFR 60.4234, and Table 1 of 40 CFR 60, Subpart JJJJ)

3.B.25 For Emission Points AA-015 and AA-016, the permittee shall not discharge sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer in excess of 4.8 pounds (measured as sulfur dioxide (SO2) per million BTU heat input.

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

3.B.26 Emission Points AA-015 and AA-016 are subject to and shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR Part 63 Subpart DDDDD. Emission Points AA-015 and AA-016 are existing process heaters in the "units designed to burn gas 1 fuel" subcategory as listed in 40 CFR Part 63.7499(1) and defined in 40 CFR Part 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.

# (<u>Ref: 40 CFR 63.7485, 40 CFR 63.7490(a)(1) and (d), 40 CFR 63.7499(1), and 40 CFR 63.7500(a)(1), Subpart DDDDD</u>)

3.B.27 For Emission Points AA-015 and AA-016, the permittee shall operate and maintain each process heater, 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), Subpart DDDDD)

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

#### C. Insignificant and Trivial Activity Emission Limitations & Standards

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).)

#### D. Work Practice Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-015 and AA-016	40 CFR 63.7500(e), 63.7515(d), 63.7540(a)(10)(i)-(vi), (12) and (13), and Table 3 of 40 CFR Part 63, Subpart DDDDD	3.D.1	Tune Up	Tune-ups
AA-012	40 CFR 63.6602, 63.6625(j), and Item 6 and Footnotes 1 and 2 of Table 2C of 40 CFR Part 63, Subpart ZZZZ	3.D.2	НАР	Scheduled Maintenance Activities

- 3.D.1 For Emission Points AA-015 and AA-016, the permittee shall complete a tune-up on the 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 the 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 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 NOx requirement to which the unit is subject;
  - (e) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis

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

- (f) 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 heater; and

# (Ref.: 40 CFR Part 63.7500(e), 63.7515(d), 63.7540(a)(10)(i)-(vi),(12), and(13), and Table 3 of 40 CFR Part 63, Subpart DDDDD)

- 3.D.2 For Emission Point 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.
    - (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 the 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 Item 6 and Footnotes 1 and 2 of Table 2c of 40 CFR 63, Subpart ZZZZ)

### SECTION 4. COMPLIANCE SCHEDULE

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

## SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

#### A. <u>General Monitoring, Recordkeeping and Reporting Requirements</u>

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

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

- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
  - (a) the date, place as defined in the permit, and time of sampling or measurements;
  - (b) the date(s) analyses were performed;
  - (c) the company or entity that performed the analyses;
  - (d) the analytical techniques or methods used;
  - (e) the results of such analyses; and
  - (f) the operating conditions existing at the time of sampling or measurement.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-003	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.1	Operating Hours	Monitor and record daily operating hours
AA-003 through AA-008	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.2	NO <sub>X</sub>	Biennial performance tests
AA-004 and AA-006 through AA-008	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.3	СО	Biennial performance tests
AA-003 through AA-014	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.4	Fuel	Monitor and record monthly the type and quantity of natural gas combusted.

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring/Recordkeeping Requireme
AA-009, AA-012, and AA-014	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2) and 40 CFR 63.6625(d), Subpart ZZZZ	5.B.5	Hours	Monitor and record operations
-	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.6	NOx	Semiannual portable analyzer tests
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.7	Inspections	Weekly inspections
	40 CFR 64 (Compliance Assurance Monitoring)	5.B.8	CO and Formaldehyde	CAM Requirements – See Appendix F
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2); 40 CFR 63.6640(a); and Item 1 of Table 6 of 40 CFR Part 63, Subpart ZZZZ	5.B.9	Temperature	Monitor and record catalyst inl temperature.
AA-010 and AA-011	40 CFR 64.3(a) and (b), 64.6(c), CAM	5.B.10	CAM Requirements	Monitor and record catalyst inl temperature using a thermocouple at monitor and record the pressure dro across the oxidation catalyst and reco the monthly pressure drop at 90 to 1 percent load.
	40 CFR 64.7(b) and (c), CAM	5.B.11	Operational Requirements	Operational Requirements
	40 CFR 64.7(d), CAM	5.B.12	Operational Requirements	Operational Requirements
	40 CFR 64.8, CAM	5.B.13	Operational Requirements	Develop and implement a Quali Improvement Plan (QIP), if necessary
	40 CFR 64.9(b), CAM	5.B.14	Recordkeeping Requirements	Recordkeeping Requirements
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.15	СО	Annual performance tests
AA-010	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.16	СО	Perform performance test upon replacement of the catalyst.
	40 CFR 63.6615, 63.6620, 63.6640,; and Tables 3, 4, and 6 of 40 CFR Part 63, Subpart ZZZZ	5.B.17	CO & O <sub>2</sub>	Semiannual portable analyzer tests
AA-011	40 CFR 63.6640 and Table 6 of 40 CFR 63, Subpart ZZZZ	5.B.18	Temperature	Monitor and record catalyst in temperature.
	40 CFR 63.6640 and Table 6 of 40 CFR 63, Subpart ZZZZ	5.B.19	Pressure Drop	Monitor and record catalyst pressure dr
	40 CFR 63.6640(b), Subpart ZZZZ	5.B.20	CO and Pressure Drop	Perform performance test upon replacement of the catalyst.
AA-013	40 CFR 60.334(h)(3), Subpart GG	5.B.21	Fuel Sulfur Content	Monitor and record fuel sulfur content
AA-014	40 CFR 60.4243(a)(1) and (b)(1), Subpart JJJJ	5.B.22	NO <sub>x</sub> , CO, and VOC	Purchase a certified engine

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Monitoring/Recordkeeping Requirement
	40 CFR 60.4245(a)(1)-(4) and (b), Subpart JJJJ	5.B.23	NO <sub>x</sub> , CO, and VOC	Keep records
AA-015	40 CFR 63.7540(a)(12), Subpart DDDDD	5.B.24	HAP	Continuous Compliance
and AA-016	40 CFR 63.7555(a)(1), 63.7560, Subpart DDDDD; and 40 CFR 63.10(b)(2), Subpart A	5.B.25	НАР	Recordkeeping

5.B.1 For Emission Point AA-003, the permittee shall keep records of the hours of operation of the engine on a monthly and 12-month consecutive rolling total basis.

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

5.B.2 For Emission Points AA-003 through AA-008, the permittee shall conduct biennial (not to exceed 25 months from the previous one) performance tests in accordance with EPA Reference Method 7 or 7E or an EPA approved equivalent, to demonstrate compliance with the permitted emission limitations for NO<sub>x</sub>. For the purpose of compliance demonstration, the permittee shall operate the sources at their maximum capacity.

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

5.B.3 For Emission Points AA-004, AA-006, AA-007, and AA-008, the permittee shall conduct biennial (not to exceed 25 months from the previous one) performance tests in accordance with EPA Reference Method 10, or an approved EPA equivalent, to demonstrate compliance with the permitted emission limitations for CO.

For the purpose of compliance demonstration, the permittee shall operate the sources at their maximum capacity.

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

5.B.4 For Emission Points AA-003 through AA-014, the permittee shall monitor and maintain records of the type and quantity of fuel combusted on a monthly and 12-month consecutive rolling total basis.

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

5.B.5 For Emission Points AA-009, AA-012, and AA-014, the permittee shall monitor and record the hours of operation of the engine using the non-resettable hour meter. 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.

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

5.B.6 For Emission Points AA-010 and AA-011, the permittee the permittee shall conduct semiannual (not to exceed 7 months from the previous test) performance test monitoring on each engine to demonstrate compliance with NO<sub>x</sub> limitations. The monitoring shall be done using an approved portable analyzer for NO<sub>x</sub> in accordance with ASTM D6522-00, or as an option the permittee may use EPA Reference Methods 7 and 10 or other approved equivalents. The NO<sub>x</sub> testing shall be performed while the engine is operating at peak load conditions.

The permittee shall submit a test protocol at least thirty (30) days prior to the scheduled test date to ensure that all test methods and procedures are acceptable to the DEQ. The DEQ must be notified at least ten (10) days prior to the scheduled test date so that an observer may be scheduled to witness the test(s). After the first successful submittal of a written test protocol for the portable analyzers, 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.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2))

5.B.7 For Emission Points AA-010 and AA-011, the permittee shall perform weekly visual inspections of the air pollution control equipment for leaks, ruptures, cracks, etc. Maintenance shall be performed as necessary to maintain proper operation of the pollution control equipment. Records of weekly inspections and any maintenance work shall be kept in log form and must be made available for review upon request during any inspection visit by the Office of Pollution Control personnel.

The permittee shall maintain on hand at all times sufficient equipment as is necessary to repair and/or overhaul the pollution control equipment. In the event of a failure of the pollution control equipment, the permittee shall cease operations until such time as repairs are made and the proper efficiency of the pollution control equipment is restored.

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

5.B.8 For Emission Points AA-010 and AA-011, the permittee shall comply with the Compliance Assurance Monitoring (CAM) requirements as specified in 40 CFR Part 64. The CAM Plans are provided in Appendix B.

(Ref.: 40 CFR 64, CAM)

5.B.9 For Emission Points AA-010 and AA-011, the permittee shall continuously monitor and keep records of the catalyst bed temperature.

(<u>Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2), 40 CFR Part 63.6640(a), and Item 1</u> of Table 6 of 40 CFR 63, Subpart ZZZZ)

5.B.10 For Emission Points AA-010 and AA-011, the permittee shall continuously monitor the oxidation catalyst inlet temperature using a thermocouple in accordance with the CAM Plan found in Appendix C of the permit. In addition, the permittee shall monitor the pressure drop across the oxidation catalyst and record the monthly pressure drop at 90 to 110 percent load.

(Ref.: 40 CFR 64.3(a) and (b), 64.6(c), Compliance Assurance Monitoring)

- 5.B.11 For Emission Points AA-010 and AA-011, the permittee shall comply with the following requirements for the monitoring required by the approved CAM Plan:
  - (a) Proper maintenance. At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
  - (b) Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used, including in data averaging and calculations or in fulfilling a minimum data availability requirement, as applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(Ref.: 40 CFR 64.7(b) and (c), CAM)

5.B.12 For Emission Points AA-010 and AA-011, upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator

range, designated condition, or below the applicable emission limitation or standard, as applicable.

Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(Ref.: 40 CFR 64.7(d), Compliance Assurance Monitoring)

5.B.13 For Emission Points AA-010 and AA-011, based on the results of a determination made under Condition 5.B.12, the DEQ may require the permittee to develop and implement a Quality Improvement Plan (QIP) containing the elements specified in 40 CFR 64.8(b). The QIP shall be developed and implemented within 180 days of written notification from DEQ that a QIP is required. The DEQ may require the permittee make reasonable changes to the QIP if the QIP fails to address the cause of the control device performance problem or fails to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Implementation of a QIP shall not excuse the permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that applies.

(Ref.: 40 CFR 64.8, Compliance Assurance Monitoring)

5.B.14 For Emission Points AA-010 and AA-011, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to Condition 5.B.13 and any activities undertaken to implement a QIP, data used to document the adequacy of monitoring, and monitoring maintenance or corrective actions, as applicable. As applicable, records of monitoring data and monitoring performance data should include date and time, the company or entity that performed the analysis, analytical techniques or methods used, results and operating conditions at the time of the sampling or measurement. These records may be maintained in hard copy form or electronically, provided they are available for expeditious inspection and review.

(Ref.: 40 CFR 64.9(b), Compliance Assurance Monitoring)

5.B.15 For Emission Point AA-010, the permittee shall conduct annual (not to exceed 13 months from the previous one) performance tests using a portable analyzer for CO and O<sub>2</sub> in accordance with ASTM D6522-00, or as an option the permittee may use EPA Reference Methods 3A and 10 or another EPA approved equivalent, to demonstrate compliance with the permitted emission limitations for CO.

For the purpose of compliance demonstration, the permittee shall operate the source at its maximum capacity.

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

5.B.16 For Emission Point AA-010, within 180 days of replacement of the catalyst, the permittee must conduct a new performance test in accordance with Condition 5.B.15.

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

5.B.17 For Emission Point AA-011, the permittee shall conduct semiannual (not to exceed 7 months from the previous one) performance tests using a portable analyzer for CO and O<sub>2</sub> in accordance with ASTM D6522-00, or as an option the permittee may use EPA Reference Methods 3A and 10 or another approved equivalent, to demonstrate compliance with the CO reduction requirement.

For the purpose of compliance demonstration, the permittee shall operate the source at its maximum capacity.

When compliance is demonstrated for two consecutive tests, the testing frequency may be reduced to annually (not to exceed 13 months from the previous test). If the results of any annual performance test indicate non-compliance with the CO emission limitation, or the permittee deviates from any operating limitations, the permittee must resume semiannual testing.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2) and 40 CFR 63.6615, 63.6620, 63.6640 and Tables 3, 4, and 6, Subpart ZZZZ)

- 5.B.18 For Emission Point AA-011, the permittee shall install, operate, and maintain the continuous parameter monitoring systems (CPMS) used to monitor the catalyst inlet temperature in accordance with the following:
  - (a) The permittee shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in (1) through (5) below:
    - (1) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
    - (2) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;
    - (3) Equipment performance evaluations, system accuracy audits, or other audit procedures;
    - (4) Ongoing operation and maintenance procedures in accordance with provisions in 63.8(c)(1)(ii) and (c)(3); and

- (5) Ongoing reporting and recordkeeping procedures in accordance with provisions in 63.10(c), (e)(1) and (e)(2)(i).
- (b) The permittee shall install, operate, and maintain each CPMS in continuous operation according to the procedures in your site-specific monitoring plan.
- (c) The CPMS must collect data at least once every 15 minutes.
- (d) The temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
- (e) The permittee must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually.

#### (Ref.: 40 CFR 63.6625(b), Subpart ZZZZ)

- 5.B.19 For Emission Point AA-011, the permittee shall demonstrate continuous compliance with the CO percent reduction requirement referenced in Condition 3.B.14 for the engine in accordance with the following:
  - (a) Collect the catalyst inlet temperature data, reduce the data to 4-hour rolling averages, and maintain the 4-hour rolling averages within the operating limits for the catalyst inlet temperature.
  - (b) Measure the pressure drop across each catalyst once per month and demonstrate that the pressure drop across the catalyst is within the operating limitation established during the previous performance test.

The permittee shall monitor continuously at all times the engine is operating except for periods of monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities. Any data obtained during one of these periods shall not be used in any average or calculation used to demonstrate compliance.

# (<u>Ref.: 40 CFR 63.6635, 63.6640(a)</u>, and Table 6 of Item 10 of 40 CFR Part 63, Subpart <u>ZZZZ</u>)

5.B.20 For Emission Point AA-011, upon a change to the catalyst, the permittee must reestablish the value for the pressure differential operating parameter that was measured during the initial performance test. When the pressure differential value is reestablished, the permittee must also conduct a performance test to demonstrate that the permittee is meeting the emission limitation in Condition 3.B.14.

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

- 5.B.21 For Emission Point AA-013, 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 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.

#### (<u>Ref.: 40 CFR 60.334(h)(3)</u>, <u>Subpart GG</u>)

5.B.22 For Emission Point AA-014, the permittee shall comply with the emission standards specified in Condition 3.B.24 by purchasing an engine certified according to procedures specified in 40 CFR Part 60, Subpart JJJJ, for the same model year and demonstrating compliance by operating and maintaining the certified engine and control device according to the manufacturer's emission-related written instructions. Records of conducted maintenance must be kept to demonstrate compliance, but no performance testing is required. The applicable requirements as specified in 40 CFR part 1068, subparts A through D, must also be met. If engine settings are adjusted according to and consistent with the manufacturer's instructions, the engine will not be considered out of compliance.

#### (Ref.: 40 CFR 60.4243(a)(1) and 60.4243(b)(1), Subpart JJJJ)

- 5.B.23 For Emission Point AA-014, the permittee shall keep records of the following information:
  - (a) All notifications submitted to comply with Subpart JJJJ and all documentation supporting any notification;
  - (b) Maintenance conducted on the engine;
  - (c) Documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable; and
  - (d) Documentation that the engine meets the emission standards.
  - (e) If the emergency engine does not meet the standards applicable to non-emergency engines, the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how

many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

(Ref: 40 CFR 60.4245(a)(1)-(4) and (b), Subpart JJJJ)

5.B.24 For Emission Points AA-015 and AA-016, the permittee shall demonstrate continuous compliance with the applicable work practice standards by conducting a tune-up on the process heater in accordance with Condition 3.D.1.

#### (Ref.: 40 CFR 63.7540(a)(12), Subpart DDDDD)

5.B.25 For Emission Points AA-015 and AA-016, 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, Subpart DDDDD and 63.10(b)(2), Subpart A)

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Reporting Requirement
AA-003 through AA-014	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.C.1	Fuel	Submit reports of fuel usage
AA-003 through AA-008, AA-010, AA-011, and AA-014	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.C.2	Test Results	Submit stack test protocols, notifications, and reports
AA-003, AA-009, AA-012, and AA-014	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.C.3	Hours	Submit reports of operating hours
AA-010 and AA-011	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.C.4	Hours	Submit reports of CAM Plan excursions
AA-011	40 CFR 63.6650, and Table 7 of 40 CFR Part 63, Subpart ZZZZ	5.C.5	Deviations	Submit reports of excursions
AA-015 and AA-016	40 CFR 63.7550(a),(b), and (c)(5)(i)- (iii),(xiv), and (xvii), and Table 9 of 40 CFR Part 63, Subpart DDDDD	5.C.6	НАР	Submit compliance reports

### C. Specific Reporting Requirements

5.C.1 For Emission Points AA-003 through AA-014, the permittee shall submit fuel usage reports summarizing the type of fuel and the quantity of fuel used 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-003 through AA-008, AA-010, AA-011, and AA-014, The permittee shall submit a test protocol at least thirty (30) days prior to the scheduled test date to ensure that all test methods and procedures are acceptable to the DEQ. The DEQ must be notified at least ten (10) days prior to the scheduled test date so that an observer may be scheduled to witness the test(s).

The permittee shall submit written reports of all required performance stack testing results within sixty (60) days of the date the performance stack test is performed and all portable analyzer results within thirty (30) days of the date the portable analyzer test is performed.

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

- 5.C.3 For Emission Points AA-009, AA-012, and AA-014, the permittee shall submit the records
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of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter 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-010 and AA-011, the permittee shall submit reports in accordance with Condition 5.A.4 of the following information, as applicable:
  - (a) Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
  - (b) Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
  - (c) A description of the actions taken to implement a QIP during the reporting period as specified in Condition 5.B.5. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

(Ref.: 40 CFR 64.9(a), Compliance Assurance Monitoring)

5.C.5 For Emission Points AA-010 and AA-011, if the permittee identifies a failure to achieve compliance with the emission limitation or standard for which the approved CAM monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or monitoring additional parameters.

(Ref.: 40 CFR 64.7(e), Compliance Assurance Monitoring)

- 5.C.6 For Emission Point AA-011, the permittee shall submit semiannual compliance reports in accordance with Condition 5.A.4 that contains the following information:
  - (a) The Compliance report shall contain:
    - (1) Company name and address.

- (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
- (3) Date of report and beginning and ending dates of the reporting period.
- (4) If a malfunction occurred during the reporting period, the compliance report shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report shall also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.
- (b) If there are no deviations from any applicable emission limitations or operating limitations, submit a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), submit a statement that there were no periods during which the CPMS was out-of-control during the reporting period.
- (c) For each deviation from an emission or operating limitation that occurs where you are not using a CPMS to comply with the emission or operating limitations in this subpart, the Compliance report shall contain the following information:
  - (1) The total operating time of the engine at which the deviation occurred during the reporting period.
  - (2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- (d) For each deviation from an emission or operating limitation occurring for an engine where a CPMS is used to comply with the emission and operating limitations in Subpart ZZZZ, the permittee shall include the information in Condition 5.C.5(a) and the following information:
  - (1) The date and time that each malfunction started and stopped.
  - (2) The date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks.
  - (3) The date, time, and duration that each CPMS was out-of-control, including the information in 40 CFR 63.8(c)(8).
  - (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.

- (5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
- (6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
- (7) A summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the engine at which the CPMS downtime occurred during that reporting period.
- (8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the engine.
- (9) A brief description of the engine.
- (10) A brief description of the CPMS.
- (11) The date of the latest CPMS certification or audit.
- (12) A description of any changes in CPMS, processes, or controls since the last reporting period.
- (e) All deviations as defined in 40 CFR 63, Subpart ZZZZ shall be reported in accordance with Condition 5.A.4. If the permittee submits a Compliance report pursuant to Table 7 of 40 CFR 63, Subpart ZZZZ, along with, or as part of, the semiannual monitoring report required by Condition 5.A.4, and the Compliance report includes all required information concerning deviations from any emission or operating limitation in Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the Permittee may have to report deviations from permit requirements to DEQ.

(Ref.:40 CFR 63.6650(a), (b)(5),(8), and (9), (c)(1) through (6), (d), (e)(1) through (12),(f) and Table 7 of Subpart ZZZZ))

- 5.C.7 For Emission Points AA-015 and AA-016, 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. 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 40 CFR 63, Subpart DDDDD))

## 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 <u>http://www.ecfr.gov/</u> 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.
- The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E
   The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:
  - (a) All containers in which a class I or class II substance is stored or transported;
  - (b) All products containing a class I substance; and
  - (c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.
- 7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F Recycling and Emissions Reduction:
  - (a) Servicing, maintaining, or repairing appliances containing class I, class II or nonexempt substitute refrigerants;
  - (b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or
  - (c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, as well

as persons selling, offering for sale, and/or purchasing class I, class II, or non-exempt substitute refrigerants.

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

# **APPENDIX A**

## List of Abbreviations Used In this Permit

BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
НАР	Hazardous Air Pollutant
lb/hr	Pounds per Hour
M or K	Thousand
MACT	Maximum Achievable Control Technology
MM	Million
MMBTUH	Million British Thermal Units per Hour
NA	Not Applicable
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emissions Standards for Hazardous Air Pollutants, 40
	CFR 61, or National Emission Standards for Hazardous Air
	Pollutants for Source Categories, 40 CFR 63
NMVOC	Non-Methane Volatile Organic Compounds
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards, 40 CFR 60
O&M	Operation and Maintenance
PM	Particulate Matter
$PM_{10}$	Particulate Matter less than 10 µm in diameter
PM <sub>2.5</sub>	Particulate Matter less than $2.5 \mu m$ in diameter
ppm	Parts per Million
<b>P</b> SD	Prevention of Significant Deterioration
SIP	State Implementation Plan
$SO_2$	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOHAP	Volatile Organic Hazardous Air Pollutant
VOC	Volatile Organic Compound

# **APPENDIX B**

### LIST OF REGULATIONS REFERENCED IN 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 60, Subpart GG – New Source Standards of Performance for Stationary Gas Turbines

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

# **APPENDIX C**

## **COMPLIANCE ASSURANCE MONITORING PLAN**