

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

**TO OPERATE AIR EMISSIONS EQUIPMENT**

**THIS CERTIFIES THAT**

Mississippi Baptist Medical Center  
1225 North State Street  
Jackson, Hinds County, Mississippi

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

**Permit Issued:** \_\_\_\_\_

**Effective Date:** As specified herein.

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**

\_\_\_\_\_  
**AUTHORIZED SIGNATURE  
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Expires:** [Date not to exceed 5 years from issuance]

**Permit No.: 1080-00069**

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**APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT**

**APPENDIX B CUSTOM FUEL MONITORING SCHEDULE PROPOSED FOR STATIONARY GAS TURBINE**

## SECTION 1. GENERAL CONDITIONS

- 1.1 The permittee must comply with all conditions of this permit. Any permit non-compliance 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 three (3) or more years. Such a reopening shall be completed no later than eighteen (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 the 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) Re-openings shall not be initiated before a notice of such intent is provided to the Title V source by the Mississippi Department of Environmental Quality (MDEQ) at least thirty (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 MDEQ within a reasonable time any information the MDEQ 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 MDEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to the MDEQ 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 MDEQ 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 6 – “Air Emissions Operating Permit Regulations for Purposes of Title V of the Federal Clean Air Act”.

- (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 MDEQ 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 MDEQ 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 MDEQ, 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, emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (d) As authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

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

- 1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere.

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

- 1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970.

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

- 1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source.

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

- 1.15 Nothing in this permit shall alter or affect the following:
- (a) The provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
  - (b) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - (c) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
  - (d) The ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act.

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

- 1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan.

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

- 1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V Operating Permit (TVOP). If the permittee submits a timely and complete application, the failure to have a TVOP 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 MDEQ 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 timeframe as provided in other regulations for emergencies] and the notification includes the following:
  - (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 MDEQ 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 2 – “Permit Regulations for the Construction and/or Operation of Air Emissions Equipment” – and may require modification of this permit in accordance with Mississippi Administrative Code, Title 11, Part 2, Chapter 6 – “Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act”.

“Modification” is defined as [a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:



- (a) Routine maintenance, repair, and replacement;
- (b) Use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (c) Use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
- (d) Use of an alternative fuel or raw material by a stationary source which:
  - (1) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, 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 Part 51, 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, silvi-cultural 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 an Emergency Air Pollution Episode Alert imposed by the Executive Director of the MDEQ and must meet the following buffer zones.

- (a) Open burning without a forced-draft air system must not occur within five hundred (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 fifty (50) yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator.

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

1.24 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies:

- (a) Except as otherwise specified herein, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in Part (c) following are met.
- (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
  - (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of the emergency the permittee took all reasonable steps to

minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

- (4) The permittee submitted notice of the emergency to the MDEQ within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

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

1.25 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, start-ups, 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 five (5) working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other non-compliance, and the corrective actions taken and;
    - (v) That as soon as practicable but no later than twenty-four (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) Start-ups and Shutdowns (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
- (1) Start-ups and shutdowns are part of normal source operation. Emission limitations apply during start-ups and shutdowns unless source specific emission limitations or work practice standards for start-ups 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for start-ups and shutdowns. Source specific emission limitations or work practice standards established for start-ups and shutdowns are subject to the requirements prescribed in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 1.10.B.(2)(a) through (e).
  - (3) Where an upset as defined in Rule 1.2 occurs during start-up or shutdown, see the upset requirements above.

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

- 1.26 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Mississippi Administrative Code, Title 11, Part 2, Chapter 1, Rule 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.)

- 1.27 Regarding compliance testing (if applicable):

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

- (b) Compliance testing will be performed at the expense of the permittee.
- (c) Each emission sampling and analysis report shall include (but not be limited to) the following:
  - (1) Detailed description of testing procedures;
  - (2) Sample calculation(s);
  - (3) Results; and
  - (4) Comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

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

## SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-100	Facility-Wide [Mississippi Baptist Medical Center]
AA-001	47.4 MMBTU / Hour Natural Gas-Fired Turbine with Heat Recovery Steam Generator (HRSG) [Construction Date: 1990]
AA-002	39.0 MMBTU / Hour Natural Gas-Fired Flue Gas Heat Recovery Boiler (Duct Burner) [Construction Date: 1990]
AA-003	20,000 Gallon Diesel Storage Tank
AA-004	38.0 MMBTU / Hour Dual Fuel-Fired (Natural Gas / No. 2 Fuel Oil) Back-Up Boiler No. 1 [Construction Date: 1973]
AA-005	38.0 MMBTU / Hour Dual Fuel-Fired (Natural Gas / No. 2 Fuel Oil) Back-Up Boiler No. 2 [Construction Date: 1973]
AA-006	Cooling Tower No. 1
AA-007	Cooling Tower No. 2
AA-008	1,881 HP (13.01 MMBTU / hour) No. 2 Fuel Oil-Fired Compression Ignition Emergency Generator Engine No. 1 [Manufacture Date: February 2006]
AA-009	1,881 HP (13.01 MMBTU / hour) No. 2 Fuel Oil-Fired Compression Ignition Emergency Generator Engine No. 2 [Manufacture Date: December 2006]
AA-010	5,000 Gallon Diesel Storage Tank

### 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 or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process that exceeds forty percent (40%) opacity subject to the exceptions provided below:

- (a) Start-up operations may produce emissions that exceed 40% opacity for up to fifteen (15) minutes per start-up in any one (1) hour and not to exceed three (3) start-ups per stack in any twenty-four (24) hour period.
- (b) Emissions resulting from soot blowing operations (i.e. ash removal) shall be permitted provided such emissions do not exceed sixty percent (60%) 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 (1) 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 or allow the discharge into the ambient air from any point source 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 The permittee shall not cause 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 gas-borne 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**

<b>Emission Point(s)</b>	<b>Applicable Requirement</b>	<b>Condition Number(s)</b>	<b>Pollutant/Parameter</b>	<b>Limit/Standard</b>
AA-100	11 Miss. Admin. Code Pt. 2, R. 1.3.D.(1)(b).	3.B.1	PM	$E = 0.8808 \cdot I^{-0.1667}$
	11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the Title V Operating Permit issued <b>[DATE]</b> <b>(PSD Avoidance Limit)</b>	3.B.2	NO <sub>x</sub>	249.0 tpy (Rolling 12-Month Total)
AA-001	40 CFR Part 60, Subpart GG – Standards of Performance for Stationary Gas Turbines 40 CFR 63.330; Subpart GG	3.B.3	SO <sub>2</sub> NO <sub>x</sub>	General Applicability
	40 CFR 60.332(a)(2); Subpart GG	3.B.4	NO <sub>x</sub>	STD = 0.0150 (14.4 / Y) + F
	40 CFR 60.333(b); Subpart GG	3.B.5	SO <sub>2</sub>	0.8% by Weight
AA-002	40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units 40 CFR 60.40c(a); Subpart Dc	3.B.6	SO <sub>2</sub> PM	General Applicability
AA-002 AA-005 AA-006	11 Miss. Admin. Code Pt. 2, R. 1.4.A.(1).	3.B.7	SO <sub>2</sub>	4.8 lb. / MMBTU
AA-004 AA-005	40 CFR Part 63, Subpart JJJJJ – NESHAP for Industrial, Commercial, and Institutional Boilers for Area Sources 40 CFR 63.11193 and 63.11195(e); Subpart JJJJJ	3.B.8	HAPs	General Applicability (Gas-Fired Boiler Exclusion Clause)
AA-008 AA-009	40 CFR Part 63, Subpart ZZZZ NESHAP for Stationary Reciprocating Internal Combustion Engines 40 CFR 63.6590(a)(1)(iii) and (c)(1); Subpart ZZZZ	3.B.9	HAPs	General Applicability
	40 CFR 63.6640(f)(1), (2), and (4); Subpart ZZZZ 40 CFR 60.4211(f)(1) – (3); Subpart IIII	3.B.10	Non-Emergency Operation	100 Hours Per Calendar Year for Maintenance and Readiness Testing 50 Hours Per Calendar Year for Non-Emergency Situations

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-008 AA-009	40 CFR 60.4207(b); Subpart IIII 40 CFR 63.6604(a); Subpart ZZZZ	3.B.11	Fuel Requirement	15 ppm Max. Sulfur Content; and 40 Min. Cetane Index or 35% (by volume) Max. Aromatic Content
AA-009	40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Combustion Engines 40 CFR 60.4200(a)(2)(i); Subpart IIII	3.B.12	NMC + NO <sub>x</sub> CO PM Opacity (Smoke)	General Applicability
AA-009	40 CFR 60.4202(a)(2), 60.4205(b), and 60.4206; Subpart IIII	3.B.13	NMHC + NO <sub>x</sub>	6.4 g / kW-hr
			CO	3.5 g / kW-hr
			PM	0.20 g / kW-hr
AA-009	40 CFR 60.4202(b)(2); Subpart IIII 40 CFR 1039.105; Subpart B	3.B.14	Opacity (Smoke)	20% During Acceleration Mode; 15% During Lugging Mode; and 50% During Peaks in Acceleration or Lugging Mode

3.B.1 For Emission Point AA-100 (Facility-Wide), the maximum permissible emission of ash and/or particulate matter (PM) from any fossil fuel burning installation with a heat input rate equal to or greater than ten (10) million BTU (MMBTU) per hour heat input but less than 10,000 MMBTU per hour shall not exceed an emission rate as determined by the relationship:

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

Where “E” is the emission rate in pounds per MMBTU per hour heat input and “I” is the heat input in MMBTU per hour.

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

3.B.2 For Emission Point AA-100 (Facility-Wide), the permittee shall limit the total emission of nitrogen oxides (NO<sub>x</sub>) to no more than 249.0 tons per year (tpy) based on a rolling 12-month total.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.15.C., as established in the Title V Operating Permit issued [DATE] – PSD Avoidance Limit)

3.B.3 For Emission Point AA-001, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 60, Subpart GG – Standards of

Performance for Stationary Gas Turbines and 40 CFR Part 60, Subpart A – General Provisions.

(Ref.: 40 CFR 60.330; Subpart GG)

- 3.B.4 For Emission Point AA-001, the permittee shall not discharge into the atmosphere any gases that contains NO<sub>x</sub> in excess of the concentration determined by the following relationship:

$$STD = 0.00150 \left( \frac{14.4}{Y} \right) + F$$

Where:

STD = the allowable ISO corrected NO<sub>x</sub> emission concentration (percent by volume at 15 percent oxygen and on a dry basis).

Y = the manufacturer's rated heat rate at the manufacturer's rated peak load [in kilojoules (kJ) per watt-hour], or the actual measured heat rate based on a lower heating value of fuel as measured at actual peak load.

The value of "Y" shall not exceed 14.4 kJ per watt-hour.

F = the NO<sub>x</sub> emission allowance for fuel-bound nitrogen. The use of "F" is optional, and the permittee may choose to apply the NO<sub>x</sub> allowance for fuel-bound nitrogen.

If the permittee elects to apply a NO<sub>x</sub> emission allowance for fuel-bound nitrogen, the permittee may determine an appropriate F-value in accordance with the following table or may accept an F-value of zero.

Fuel-Bound Nitrogen (Percent by Weight)	F (NO <sub>x</sub> Percent by Volume)
$N \leq 15$	0
$0.015 \leq N \leq 0.1$	$0.04 \cdot (N)$
$0.1 \leq N \leq 0.25$	$0.004 + 0.0067 \cdot (N - 0.1)$
$N > 0.25$	0.005

"N" = the nitrogen content of the fuel (in weight percent).(Ref.: 40 CFR 60.332(a)(2) – (4) and (c); Subpart GG)

- 3.B.5 For Emission Point AA-001, the permittee shall not combust any fuel that contains a total sulfur in excess of 0.8 percent by weight (or 8,000 ppm<sub>w</sub>).

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

- 3.B.6 For Emission Point AA-002, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units and 40 CFR Part 60, Subpart A – General Provisions.

For the purpose of this permit, a steam generating unit that only utilizes natural gas as a fuel is exempt from all emission standards promulgated by Subpart Dc.

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

- 3.B.7 For Emission Points AA-002, AA-005, and AA-006, 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 MMBTU heat input.

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

- 3.B.8 For Emission Point AA-004 and AA-005, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 63, Subpart JJJJJJ – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial, Commercial, and Institutional Boilers for Area Sources and 40 CFR Part 63, Subpart A – General Provisions (as required in Table 8 of Subpart JJJJJJ).

Emission Points AA-004 and AA-005 are permitted to burn natural gas and No. 2 fuel oil; however, the sources are considered “gas-fired boilers” and are not subject to the requirements of the subpart pursuant to 40 CFR 63.11195(e), Subpart JJJJJJ.

For the purpose of this permit, a “*gas-fired boiler*” includes any boiler that burns a gaseous fuel not combined with any solid fuels or a burns liquid fuel only during periods of gas curtailment, gas supply interruption, start-ups, or periodic testing of a liquid fuel. The periodic testing of liquid fuel shall not exceed a combined total of forty-eight (48) hours during any calendar year.

(Ref.: 40 CFR 63.11193 and 63.11195(e); Subpart JJJJJJ)

- 3.B.9 For Emission Points AA-008 and AA-009, the permittee is subject to and shall comply with the applicable requirements found in 40 CFR Part 63, Subpart ZZZZ –NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE) and 40 CFR Part 63, Subpart A – General Provisions (as required in Table 8 of Subpart ZZZZ). For the purpose of this permit, stationary RICE is classified as “new” if construction or reconstruction commenced on / after June 12, 2006.

For new compression-ignition RICE (Emission Point AA-009, the permittee shall comply with the applicable requirements in Subpart ZZZZ by complying with 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition (CI) Combustion Engines. No further requirements apply for such engines under Subpart ZZZZ.

(Ref.: 40 CFR 63.6590(a)(1)(iii) and (c)(1); Subpart ZZZZ)

3.B.10 For Emission Points AA-008 and AA-009, any operation of the engine for any reason other than emergency operation, maintenance and testing, and operation in non-emergency situations for fifty (50) hours per year is prohibited. If an engine is not operated in accordance with paragraphs (a) through (c) of this condition, the engine will not be considered an emergency engine under the referenced regulation and shall meet all requirements for a corresponding non-emergency engine.

- (a) There is no limit on the use of the engine during an emergency situation.
- (b) The permittee may operate an engine for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company accompanied with the engine. Maintenance checks and readiness testing of an engine is limited to a maximum of one hundred (100) hours per calendar year. The permittee may petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing. However, a petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of the engine beyond 100 hours per calendar year.
- (c) The permittee may operate an engine 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 calendar 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.

(Ref.: 40 CFR 63.6640(f)(1), (2), and (4); Subpart ZZZZ)  
(40 CFR 60.4211(f)(1) – (3); Subpart IIII)

3.B.11 For Emission Points AA-008 and AA-009, the permittee shall only combust diesel fuel within each engine that meet the following requirements (on a per-gallon basis):

- (a) A maximum sulfur content of fifteen (15) parts per million (ppm); and
- (b) A minimum cetane index of forty (40) or a maximum aromatic content of thirty-five (35) volume percent.

(Ref.: 40 CFR 60.4207(b); Subpart IIII and 40 CFR 63.6604(a); Subpart ZZZZ)

3.B.12 For Emission Point AA-009, the permittee is subject to and shall comply with all applicable requirements found in 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR Part 60, Subpart A – General Provisions (as required by Table 8 of Subpart IIII).

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

3.B.13 For Emission Point AA-009, the permittee shall comply with the following emission standards:

- (a) Nitrogen Oxides + Non-methane Hydrocarbons (NO<sub>x</sub> + NMHC): 6.4 grams per kilowatt-hour (g / kW-hr);
- (b) Carbon Monoxide (CO): 3.5 grams per kilowatt-hour (g / kW-hr); and
- (c) Particulate Matter (PM): 0.20 grams per kilowatt-hour (g / kW-hr).

The permittee shall operate and maintain the engine in such a manner to achieve the referenced emission standards over the entire life of the engine.

(Ref.: 40 CFR 60.4202(a)(2), 60.4205(b), and 60.4206; Subpart IIII)

3.B.14 For Emission Point AA-009, the permittee shall not discharge into the atmosphere any smoke exhaust that exceeds the following opacity standards:

- (a) Twenty Percent (20%) during the acceleration mode;
- (b) Fifteen Percent (15%) during the lugging mode; and
- (c) Fifty Percent (50%) during the peaks in either the acceleration or lugging modes.

The permittee shall operate and maintain the engine in such a manner to achieve the referenced emission standards over the entire life of the engine.

(Ref: 40 CFR 60.4202(b)(2); Subpart IIII and 40 CFR 1039.105; Subpart B)

C. INSIGNIFICANT AND TRIVIAL ACTIVITY EMISSION LIMITATIONS & STANDARDS

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

- 3.C.1 The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than ten (10) MMBTU per hour heat input shall not exceed 0.6 pounds per MMBTU 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 MMBTU 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	Pollutant / Parameter	Limit / Standard
AA-008	40 CFR 63.6603(a), 63.6625(i), and Table 2d (Item 4); Subpart ZZZZ	3.D.1	HAPs	Perform Required Maintenance
	40 CFR 63.6605(b); Subpart ZZZZ	3.D.2		General Duty Clause
	40 CFR 63.6625(e)(2); Subpart ZZZZ	3.D.3		Operate in Accordance with Manufacturer's Instructions or a Site-Specific Maintenance Plan
	40 CFR 63.6625 (h); Subpart ZZZZ	3.D.4		Minimize Idling During Start-Up ≤ 30 Minutes for a Start-Up Period
AA-009	40 CFR 60.4211(a); Subpart IIII	3.D.5	NMHC + NO <sub>x</sub> CO PM Opacity (Smoke)	Perform Compliance Practices

3.D.1 For Emission Point AA-008 and AA-009, except during periods of start-up, the permittee shall meet the following maintenance requirements:

- (a) Change the oil and filter every five hundred (500) hours of operation or annually (whichever comes first).

The permittee also has the option of utilizing an oil analysis program in order to extend the noted oil change requirement in accordance with the following provisions:

- (1) The oil analysis shall be performed at the same frequency specified for changing the oil as outlined in paragraph (a) of this condition;
- (2) The analysis program shall (at a minimum) analyze the Total Base Number, viscosity, and percent water content. The condemning limits for each noted parameter are as follows:
  - (i) Total Base Number is less than thirty percent (30%) of the Total Base Number of the oil when new;
  - (ii) Viscosity of the oil has changed by more than twenty percent (20%) from the viscosity of the oil when new; and
  - (iii) Percent water content (by volume) is greater than 0.5.

If none of the condemning limits are exceeded, the permittee is not required to change the oil. However, if any of the limits are exceeded, the permittee shall change the oil within two (2) business days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the permittee shall change the oil within two (2) business days or before commencing operation (whichever is later).

The permittee shall keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. Additionally, the analysis program shall be part of the maintenance plan for the engine.

If the engine is operating during an emergency situation and it is not possible to perform the oil change on the required schedule or if performing the oil change on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the oil change can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The oil change should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. The permittee shall report any failure to perform the oil change on the schedule required and the Federal, State, or local law under which the risk was deemed unacceptable.

- (b) Inspect the air cleaner every one thousand (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.

(Ref.: 40 CFR 63.6603(a), and 63.6625(i), and Table 2d (Item 4); Subpart ZZZZ)

- 3.D.2 For Emission Point AA-008, the permittee shall operate and maintain each engine (including associated air pollution control equipment and monitor equipment) in a manner consistent with safety and good air pollution control practices for minimizing emissions at all times.

The general duty to minimize emissions does not require the permittee to make you to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ, which may include (but is not limited to) monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of an engine.

(Ref.: 40 CFR 63.6605(b); Subpart ZZZZ)

- 3.D.3 For Emission Point AA-008, the permittee shall comply with one of the following work practice options:

- (a) Operate and maintain the engine and the after-treatment control device (if any) according to the manufacturer's emission-related written instructions; or
- (b) Develop a site-specific maintenance plan, which shall provide to the extent practicable for the maintenance and operation of an engine in a manner consistent with good air pollution control practice for minimizing emissions.

(Ref.: 40 CFR 63.6625(e)(2); Subpart ZZZZ)

- 3.D.4 For Emission Point AA-008, the permittee shall minimize the time spent at idle during engine start-up and minimize the start-up time to a period needed for appropriate and safe loading of an engine, not to exceed thirty (30) minutes, after which time the non-startup emission limitations apply.

(Ref.: 40 CFR 63.6625(h); Subpart ZZZZ)

- 3.D.5 For Emission Point AA-009, the permittee shall demonstrate compliance with the emission standards outlined in Conditions 3.B.8 and 3.B.9 by performing the following work practices:

- (a) Operate and maintain each engine and control device (if any) according to the manufacturer's emission-related written instructions;
- (b) Change only those emission-related settings that are permitted by the manufacturer; and
- (c) Meet the requirements of 40 CFR Part 1068 (as applicable).

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

## **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 of each year 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. GENERAL MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS**

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

(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. Supporting 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 of each year 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 Mississippi Administrative Code, Title 11, Part 2, Chapter 6, Rule 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 30, July 31, October 31, and January 31), and any required annual reports shall be submitted by January 31 following each calendar year.

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

(Ref.: 40 CFR 60.19(c), 61.10(g), and 63.10(a)(5); Subpart A)

- 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. The 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 MDEQ 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, the monitoring, testing, recordkeeping, and reporting requirements of Section 5 herein supersede the requirements of any preceding permit to construct and/or operate upon permit issuance.

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

**B. SPECIFIC MONITORING AND RECORDKEEPING REQUIREMENTS**

<b>Emission Point(s)</b>	<b>Applicable Requirement</b>	<b>Condition Number</b>	<b>Pollutant / Parameter Monitored</b>	<b>Monitoring / Recordkeeping Requirement</b>
AA-100	11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(a)(2).	5.B.1	NO <sub>x</sub>	Calculate Emissions (Monthly and Rolling 12-Month Total)
AA-001	40 CFR 60.334(h)(4); Subpart GG	5.B.2	SO <sub>2</sub> NO <sub>x</sub>	Fuel Nitrogen and Sulfur Content Monitoring Requirements
		5.B.3	SO <sub>2</sub>	Additional Monitoring for Fuel Sulfur Content (As Applicable)
	40 CFR 60.334(h)(3); Subpart GG	5.B.4		Sulfur Content Monitoring Exclusion
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.B.5	NO <sub>x</sub>	Conduct Routine Performance Testing
AA-002	40 CFR 60.48c(g); Subpart Dc	5.B.6	SO <sub>2</sub> PM	Monitor Fuel Usage Daily
AA-004 AA-005	11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(a)(2).	5.B.7	SO <sub>2</sub>	Maintain Fuel Type and Fuel Usage Monthly (Each Boiler) Maintain Fuel Supplier Certification on Sulfur Content (Fuel Oil)
AA-008 AA-009	40 CFR 63.6655(f)(2); Subpart ZZZZ 40 CFR 60.4214(b); Subpart IIII 11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(a)(2).	5.B.8	Emergency Engine Status	Monitor Hours of Operation Monthly (Emergency and Non-Emergency)
AA-008	40 CFR 63.6625(f); Subpart ZZZZ	5.B.9	Hours of Operation	Install a Non-Resettable Hour Meter
	40 CFR 63.6655(a)(2), (5), (d), and (e); Subpart ZZZZ	5.B.10	HAPs	Maintain Maintenance-Related Documentation
AA-009	40 CFR 60.4214(a)(2); Subpart IIII	5.B.11	NMHC + NO <sub>x</sub>	Recordkeeping Requirements
	40 CFR 60.4211(g)(2); Subpart IIII	5.B.12	CO PM	Perform Compliance Demonstration (As Applicable)

5.B.1 For Emission Point AA-100 (Facility-Wide), the permittee shall calculate and record the total emission of NO<sub>x</sub> from all applicable sources in tons on both a monthly and a rolling 12-month total basis.

Unless otherwise specified herein, the permittee shall include all reference data used to validate calculated emissions (e.g. operational data, applicable emission factors,



manufacturer's specifications, engineering judgement determinations, stack test results, etc.).

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

5.B.2 For Emission Point AA-001, the permittee shall monitor the sulfur content and nitrogen content of natural gas combusted in accordance with the frequency specified in the following EPA-approved custom fuel monitoring schedule (and found in detail in Appendix B of this permit):

- (a) The monitoring of the fuel nitrogen content **is not** required while pipeline-grade natural gas is combusted.
- (b) Unless otherwise specified herein, the permittee shall analyze the fuel sulfur content of the natural gas combusted on a semi-annual basis.
- (c) For any fuel sulfur content analysis, the permittee shall use one (1) of the methods specified in 40 CFR 60.335(b)(10), Subpart GG.
- (d) Should any required fuel sulfur content analysis indicate non-compliance with the corresponding limit specified in Condition 3.B.5, the permittee shall begin complying with the fuel monitoring schedule found in Condition 5.B.2.
- (e) If there is a change in fuel supply, the permittee shall begin complying with the fuel monitoring schedule outlined in Condition 5.B.3. For the purpose of this permit, a substantial change in fuel quality shall be considered a change in fuel supply.

(Ref.: 40 CFR 60.334(h)(4); Subpart GG)

5.B.3 For Emission Point AA-001, the permittee shall implement the following fuel sulfur content monitoring schedule immediately following either the discovery of non-compliance with the limit specified in Condition 3.B.5 or a change in fuel supply as specified in Condition 5.B.2(e):

- (a) Should the permittee be required to monitor the fuel sulfur content of natural gas under this condition, such monitoring [in accordance with Condition 5.B.2(c)] shall be conducted on a bi-monthly basis.
- (b) If compliance with the sulfur content limit specified in Condition 3.B.5 is maintained for six (6) months of monitoring in accordance with paragraph (a) of this condition (and the permittee does not perform a fuel supply change), the fuel monitoring frequency may be reduced to once per calendar quarter.
- (c) If compliance with the fuel sulfur content limit specified in Condition 3.B.5 is maintained for six (6) quarters of monitoring in accordance with paragraph (b) of this condition (and the permittee does not perform a fuel supply change), the permittee may resume the monitoring frequency outlined Condition 5.B.2(b).

(Ref.: 40 CFR 60.334(h)(4); Subpart GG)

5.B.4 For Emission Point AA-001, the permittee may elect not to monitor the fuel sulfur content in accordance with Condition 5.1(b) **if** the permittee maintains one (1) of the following sources of documentation on the natural gas combusted:

- (a) The gas quality characteristics in a current and valid purchase contract, tariff sheet or transportation contract for the natural gas that specifies the maximum total sulfur content of the fuel to no more than twenty (20.0) grains per one hundred (100) standard cubic feet; or
- (b) Representative fuel sampling data that indicates the sulfur content of the natural gas to be no more than 20.0 grains per 100 standard cubic feet. At a minimum, the amount of fuel sampling data required is specified in either Section 2.3.1.4 or 2.3.2.4 of Appendix D found in 40 CFR Part 75.

(Ref.: 40 CFR 60.334(h)(3); Subpart GG)

5.B.5 For Emission Point AA-001, the permittee shall demonstrate compliance with the NO<sub>x</sub> limitation specified in Conditions 3.B.4 by conducting routine performance testing biennially [and no later than twenty-four (24) months after the previously completed test] and in accordance with the following requirements:

- (a) Each test shall be conducted in accordance with an applicable EPA Test Method found in Appendix A of 40 CFR Part 60, Appendix M of 40 CFR Part 51, Appendix A of 40 CFR Part 63, or an alternative test method approved by the EPA prior to the testing event.
- (b) The permittee shall conduct a minimum of three (3) separate test runs for a performance test that each last for at least one (1) hour.
- (c) The permittee shall conduct a performance stack test at representative load conditions. For the purpose of this permit, “representative load conditions” is defined as the operation of the unit under heat input rates that will be typical in the future.

The MDEQ may require the permittee to conduct subsequent performance stack test if the heat input rate of the unit increases by more than ten percent (10%) of the average rate established during the previously completed test.

- (d) The permittee shall monitor and record the usage of fuel combusted during each test run.
- (e) The permittee shall continuously monitor the moisture content and the oxygen content in the exhaust gas during each test run.

In the event that a test is required and the unit is shut down, the permittee shall conduct testing in accordance with this condition no later than ninety (90) days after resuming operation.

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

- 5.B.6 For Emission Point AA-002, the permittee shall monitor and record the amount of natural gas combusted each day.

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

- 5.B.7 For Emission Points AA-004 and AA-005, the permittee shall maintain documentation that details the type and quantity of each fuel combusted on a monthly basis.

For any fuel oil combusted, the permittee shall also maintain documentation from a fuel supplier that certifies the sulfur content (by percent weight).

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

- 5.B.8 For Emission Points AA-008 and AA-009, the permittee shall monitor and record (via a non-resettable hour meter) the hours of operation for each engine about emergency and non-emergency service on a monthly basis. Additionally, the permittee shall detail what classified each occurrence as either an emergency or a non-emergency.

(Ref.: 40 CFR 63.6655(f)(2); Subpart ZZZZ and 40 CFR 60.4214(b); Subpart IIII)

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

- 5.B.9 For Emission Points AA-008, the permittee shall install a non-resettable hour meter on each engine if one is not already installed.

(Ref.: 40 CFR 63.6625(f); Subpart ZZZZ)

- 5.B.10 For Emission Points AA-008, the permittee shall maintain the following documentation:

- (a) Records that detail each occurrence and duration of a malfunction of an engine in addition to the action(s) taken during these periods of malfunction to minimize emissions, including corrective actions to restore the affected source to its usual manner of operation;
- (b) Records on all maintenance conducted in accordance with the requirements outlined in Condition 3.D.1; and
- (c) A copy of either the manufacturer's emission-related written instructions for an engine or the site-specific maintenance plan developed for an engine as outlined in Condition 3.D.3(b).

(Ref.: 40 CFR 63.6655(a)(2) and (5), (d), and (e), Subpart ZZZZ)

5.B.11 For Emission Point AA-009, the permittee shall maintain documentation that details the following information:

- (a) All notifications submitted to comply with Subpart IIII;
- (b) Any maintenance conducted on an engine; and
- (c) Documentation from the manufacturer that indicate an engine is certified to meet the emission standards specified in Conditions 3.B.13.

(Ref.: 40 CFR 60.4214(a)(2); Subpart IIII)

5.B.12 For Emission Point AA-009, if the permittee does not operate and maintain the engine according to the manufacturer's emission-related written instructions or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance through the following actions:

- (a) Keep a maintenance plan, records of conducted maintenance, and (to the extent practicable) maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions; and
- (b) Conduct an initial performance test to demonstrate compliance with the emission standards outlined in Condition 3.B.13 within one (1) year of start-up, within one (1) year after the engine is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within one (1) year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer.

(Ref.: 40 CFR 60.4211(g)(2), Subpart IIII)

C. SPECIFIC REPORTING REQUIREMENTS

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant / Parameter Monitored	Reporting Requirement
AA-100	11 Miss. Admin. Code Pt. 2, R. 6.3.A.(3)(c)(1).	5.C.1	NO <sub>x</sub> Fuel Usage Fuel Sulfur Content Hours of Operation	Submit a Semi-Annual Monitoring Report
AA-001	11 Miss. Admin. Code, Pt. 2, R. 2.2.B.(11).	5.C.2	SO <sub>2</sub> NO <sub>x</sub>	Notify the MDEQ on Start-Up of Turbine
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11) and 2.6.B.(5).	5.C.3	NO <sub>x</sub>	Submit Performance Test Protocol Submit 10-Day Notification of Performance Testing Event
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11).	5.C.4		Submit Performance Test Results

5.C.1 For Emission Point AA-100 (Facility-Wide), the permittee shall submit a semi-annual monitoring report in accordance with Condition 5.A.4 that details the following information:

- (a) The total emission of NO<sub>x</sub> from all applicable sources in tons both on a monthly and a rolling 12-month total basis (as well as any corresponding data used to calculate emissions).
- (b) The results from each fuel sulfur content analysis required by either Condition 5.B.2(b) or 5.B.3. If the permittee elects to utilize the fuel sulfur content exclusion outlined in Condition 5.B.4, the permittee shall instead submit the corresponding documentation.
- (b) For Emission Points AA-004 and AA-005, the report shall include the following information:
  - (1) The total quantity of each fuel combusted on a monthly basis; and
  - (2) For any fuel oil combusted, the corresponding fuel supplier certification that details the sulfur content.
- (c) For Emission Points AA-008 and AA-009, the hour of operation for each emergency engine (including a summary on how many hours are spent for emergency operation, what classified the operation as an emergency situation, how many hours are spent for non-emergency operation, and the circumstances for non-

emergency operation).

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

- 5.C.2 For Emission Point AA-001, the permittee shall notify the MDEQ on the start-up of the turbine no later than fifteen (15) days after the actual event.

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

- 5.C.3 For Emission Point AA-001, the permittee shall submit a written performance test protocol for testing required by Conditions 5.B.5 that details the procedures and test methods to be implemented during the actual testing event no later than thirty (30) days prior to the intended testing date.

The permittee shall notify the MDEQ in writing at least ten (10) days prior to the intended testing date so that a representative from the MDEQ may be afforded the opportunity to observe the stack testing.

If deemed necessary by the MDEQ, a conference may be required prior to the intended testing date to discuss the proposed test methods and procedures outlined in the performance testing protocol.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11) and 2.6.B.(5).)

- 5.C.4 For Emission Point AA-001, the permittee shall submit the results for any conducted performance test required by Condition 5.B.5 to the MDEQ no later than sixty (60) days after completing the actual test. At a minimum, the permittee shall include the information specified in Condition 1.27(c) and the following site-specific information (as applicable):

- (a) The hourly fuel combustion rate during a performance test;
- (b) The hourly heat input rate of the turbine; and
- (c) The moisture content and the oxygen content data.

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

## **SECTION 6. ALTERNATIVE OPERATING SCENARIOS**

6.1 None permitted.

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## SECTION 7. TITLE VI REQUIREMENTS

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

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

11 Miss. Admin. Code Pt. 2, Ch. 1.	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
11 Miss. Admin. Code Pt. 2, Ch. 2.	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
11 Miss. Admin. Code Pt. 2, Ch. 3.	Regulations for the Prevention of Air Pollution Emergency Episodes
11 Miss. Admin. Code Pt. 2, Ch. 4.	Ambient Air Quality Standards
11 Miss. Admin. Code Pt. 2, Ch. 5.	Regulations for the Prevention of Significant Deterioration of Air Quality
11 Miss. Admin. Code Pt. 2, Ch. 6.	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act
11 Miss. Admin. Code Pt. 2, Ch. 7.	Acid Rain Program Permit Regulations for Purposes of Title IV of the Federal Clean Air Act
BACT	Best Available Control Technology
CEM	Continuous Emission Monitor
CEMS	Continuous Emission Monitoring System
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COM	Continuous Opacity Monitor
COMS	Continuous Opacity Monitoring System
DEQ	Mississippi Department of Environmental Quality
EPA	United States Environmental Protection Agency
gr/dscf	Grains Per Dry Standard Cubic Foot
HP	Horsepower
HAP	Hazardous Air Pollutant
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
NM VOC	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 <sub>10</sub>	Particulate Matter less than 10 µm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound

## **APPENDIX B**

### **Custom Fuel Monitoring Schedule Proposed for Stationary Gas Turbine**