# STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

# TO OPERATE AIR EMISSIONS EQUIPMENT

## THIS CERTIFIES THAT

Trunkline Gas Company, Shaw Compressor Station
1069 Sand Pit Road
Shaw, Mississippi
Bolivar 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: XXXXX

**Effective Date: As specified herein.** 

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: [Date not to exceed 5 yrs from issuance] Permit No.: 0240-00081

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## APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT

#### SECTION 1. GENERAL CONDITIONS

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

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

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

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

judgments are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

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

- (a) enter upon the permittee's premises where a Title V source is located or 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).)
- Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(1).)
- 1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)
- 1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)
- 1.15 Nothing in this permit shall alter or affect the following:
  - (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
  - (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
  - (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.

- (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(2).)
- 1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)
- 1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C(2)., R. 6.4.B., and R. 6.2.A(1)(c).)
- 1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:
  - (a) the changes are not modifications under any provision of Title I of the Act;
  - (b) the changes do not exceed the emissions allowable under this permit;
  - (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:
    - (1) a brief description of the change(s),
    - (2) the date on which the change will occur,
    - (3) any change in emissions, and
    - (4) any permit term or condition that is no longer applicable as a result of the change;
  - (d) the permit shield shall not apply to any Section 502(b)(10) change. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F(1).)
- 1.19 Should the Executive Director of the Mississippi Department of Environmental Quality declare an Air Pollution Emergency Episode, the permittee will be required to operate in

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

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

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

improper operation, or operator error.

- (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.
- (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
  - (1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - (2) the permitted facility was at the time being properly operated;
  - (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
  - (4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)
- 1.25 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.
  - (a) Upsets
    - (1) For an upset defined in 11 Miss. Admin. Code Pt. 2, R. 1.2., the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:
      - (i) An upset occurred and that the source can identify the cause(s) of

the upset;

- (ii) The source was at the time being properly operated;
- (iii) During the upset the source took all reasonable steps to minimize levels of emissions that exceeded the emission standard or other requirement of an applicable rule, regulation, or permit;
- (iv) That within 5 working days of the time the upset began, the source submitted a written report to the Department describing the upset, the steps taken to mitigate excess emissions or any other noncompliance, and the corrective actions taken and;
- (v) That as soon as practicable but no later than 24 hours of becoming aware of an upset that caused an immediate adverse impact to human health or the environment beyond the source boundary or caused a general nuisance to the public, the source provided notification to the Department.
- (2) In any enforcement proceeding by the Commission, the source seeking to establish the occurrence of an upset has the burden of proof.
- (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (4) These upset provisions apply only to enforcement actions by the Commission and are not intended to prohibit EPA or third party enforcement actions.
- (b) Startups and Shutdowns (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.)
  - (1) Startups and shutdowns are part of normal source operation. Emission limitations apply during startups and shutdowns unless source specific emission limitations or work practice standards for startups and shutdowns are defined by an applicable rule, regulation, or permit.
  - (2) Where the source is unable to comply with existing emission limitations established under the State Implementation Plan (SIP) and defined in this regulation, 11 Mississippi Administrative Code, Part 2, Chapter 1, the Department will consider establishing source specific emission limitations or work practice standards for startups and shutdowns. Source specific emission limitations or work practice standards established for startups and shutdowns are subject to the requirements prescribed in 11 Miss. Admin. Code Pt. 2, R. 1.10.B(2)(a) through (e).
  - (3) Where an upset as defined in Rule 1.2 occurs during startup or shutdown, see the upset requirements above.
- 1.26 Where an upset as defined in Rule 1.2 occurs during startup or shutdown, see the upset requirements above. 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

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# SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description	
AA-001	24.54 MMBtu/hr; 2,667 HP natural gas fired 4-stroke lean burn reciprocating internal combustion engine (Facility Ref. No. 5501)	
AA-002	24.54 MMBtu/hr; 2,667 HP natural gas fired 4-stroke lean burn reciprocating internal combustion engine (Facility Ref. No. 5502)	
AA-003	24.54 MMBtu/hr; 2,667 HP natural gas fired 4-stroke lean burn reciprocating internal combustion engine (Facility Ref. No. 5503)	
AA-004	22.42 MMBtu/hr; 3,000 HP natural gas fired 4-stroke lean burn reciprocating internal combustion engine (Facility Ref. No. 5504)	
AA-005	22.42 MMBtu/hr; 3,000 HP natural gas fired 4-stroke lean burn reciprocating internal combustion engine (Facility Ref. No. 5505)	
AA-006	22.42 MMBtu/hr; 3,000 HP natural gas fired 4-stroke lean burn reciprocating internal combustion engine (Facility Ref. No. 5506)	
AA-011	95.50 MMBtu/hr; 11,100 HP natural gas fired combustion turbine	
AA-015	3,000 gallon pipeline condensate storage tank (Ref. No. Tank No. 6)	
AA-016	1,000 gallon gasoline storage tank (Ref. No. Tank No. 15)	
AA-017	4.09 MMBtu/hr (530 HP) natural gas fired 4-stroke lean burn emergency reciprocating internal combustion engine (Facility Ref. No. 5547)	
AA-018	1.5MMBtu/hr natural gas fired water jacket heater	
AA-019	1.5 MMBtu/hr natural gas fired water jacket heater	
AA-023	Tank truck loading operation	
AA-024	0.31 MMBtu/hr (40 HP) propane fired 4-stroke rich burn emergency reciprocating internal combustion engine (Facility Ref. No. 5548)	
AA-025	3,150 gallon pipeline condensate 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, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).
  - (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
  - (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.)
- 3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Paragraph 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.)

# B. <u>Emission Point Specific Emission Limitations & Standards</u>

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001 through AA-006, AA-011, AA-017 through AA-019, and AA-024	11 Miss. Admin. Code Pt. 2, R. 1.3.A. 11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.A.1 3.A.2	Opacity	40% Opacity
AA-001 through AA-006, and AA-011	11 Miss. Admin. Code Pt. 2 R.1.3. D(1)(b).	3.B.1	PM (filterable only)	E=0.8808*F <sup>0.1667</sup>
AA-017 through AA-019, and AA-024	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.2	PM (filterable only)	0.6 lbs/MMBTU
AA-018 AA-019	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.B.3	$SO_2$	4.8 lbs/MMBTU
AA-011	40 CFR 63, Subpart YYYY (§63.6085 and 63.6090(a) and (b)(4))	3.B.4	НАР	Applicability
AA-001 through AA-006, AA-017, and AA-024	40 CFR 63, Subpart ZZZZ (§63.6585 and 63.6590(a)(1-2))	3.B.5	НАР	Applicability
AA-001 through AA-006, and AA-017	40 CFR 63, Subpart ZZZZ (§63.6590(b)(3)(i-ii)) 40 CFR 63, Subpart ZZZZ (§63.6590(b)(1)(i))	3.B.6		Exemption from the requirements of Subparts A and ZZZZ

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Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-024	40 CFR 63, Subpart ZZZZ (§63.6590(c)(6)) 40 CFR 60, Subpart JJJJ (§60.4230(a)(4)(iv) and 60.4236(c))	3.B.7	НАР	Emission point demonstrates compliance to NESHAP Subpart ZZZZ by complying with the applicable requirements of NSPS Subpart JJJJ.  This engine is not subject to Subpart JJJJ.
AA-018 AA-019	40 CFR 63, Subpart DDDDD (§63.7485, 63.7490(a)(1) and (d), 63.7499(l), and 63.7500(a)(1))	3.B.8	НАР	Applicability
	40 CFR 63, Subpart DDDDD (§63.7500(a)(3))	3.B.9	General Operating Requirement	Remain in compliance with work practice standards at all times during operation

3.B.1 For Emission Points AA-001 through AA-006 and AA-011, the maximum permissible emission of ash and/or particulate matter shall not exceed an emission rate as determined by the relationship

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

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

- 3.B.2 For Emission Point AA-017 through AA-019 and AA-024, 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.B.3 For Emission Points AA-018 and AA-019, the maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. (Ref: 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).)
- 3.B.4 Emission Point AA-011 is a stationary, natural gas fueled combustion turbine located at a major source of Hazardous Air Pollutants (HAPs) which was constructed before January 14, 2003. As such, this unit is an existing affected source and is subject to and shall comply with all applicable requirements of 40 CFR Part 63, Subpart YYYY National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines; however, due to the fact that this turbine is an existing affected source, the permittee does not have to meet the requirements of Subpart YYYY or Subpart A. (Ref.: 40 CFR 63.6085 and 63.6090(a) and (b)(4))
- 3.B.5 Emission Points AA-001 through AA-006 are stationary Reciprocating Internal Combustion Engines (RICE) with a site rating of more than 500 brake horsepower (HP) which are located at a major source of Hazardous Air Pollutants (HAPs) and were constructed before December 19, 2002. As such, these RICE are existing affected sources and are subject to and shall comply with all applicable requirements of 40 CFR Part 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Emission Point AA-017 is a stationary emergency RICE with a site rating of more than 500 HP which is located at a major source of HAPs and was constructed before December 19, 2002. As such, this RICE is an existing affected source and is subject to and shall comply with all applicable requirements of Subpart ZZZZ.

Emission Point AA-024 is a stationary emergency RICE with a site rating of less than 500 HP which is located at a major source of HAPs and was constructed after June 12, 2006. As such, this RICE is a new affected source and is subject to and shall comply with all applicable requirements of Subpart ZZZZ. (Ref.: 40 CFR 63.6585 and 63.6590(a)(1-2))

- 3.B.6 Emission Points AA-001 through AA-006 and AA-017 are existing spark ignition 4-stroke, lean burn (4SLB) stationary RICE with a site rating of more than 500 HP located at a major source of HAPs. As such, these emission points do not have to meet the requirements of Subparts A and ZZZZ. (Ref.: 40 CFR 63.6590(b)(3)(i-ii))
- 3.B.7 Emission Point AA-024 is a new 4-stroke, rich-burn (4SRB) emergency stationary RICE with a site rating of less than 500 HP located at a major source of HAPs. As such, this engine shall demonstrate compliance with Subpart ZZZZ by meeting all applicable requirements of 40 CFR Part 60, Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. However, the permittee commenced construction of Emission Point AA-024 after June 12, 2006, and the engine was manufactured before January 1, 2009 and was installed before January 1, 2011. Therefore, this engine is not subject to the requirements of 40 CFR Part 60, Subpart JJJJ. (Ref.: 40 CFR 63.6590(c)(6), 60.4230(a)(4)(iv), and 60.4236(c))
- 3.B.8 Emission Points AA-018 and AA-019 are existing boilers or process heaters in the "units designed to burn gas 1 fuel" subcategory, as listed in §63.7499(l) and defined in §63.7575, and are located at a major source of HAPs. As such, these units are subject to and shall comply with all applicable requirements of 40 CFR Part 63, Subpart DDDDD National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. These units do not have any applicable emission standards and only have to comply with the work practice standard in Condition 3.D.1. (Ref.: 40 CFR 63.7485, 63.7490(a)(1) and (d), 63.7499(l), and 63.7500(a)(1))
- 3.B.9 For Emission Points AA-018 and AA-019, the permittee shall at all times operate and maintain the boilers and process heaters, including any monitoring equipment, in a manner consistent with safe and good air pollution control practices for minimizing emissions. (Ref.: 40 CFR 63.7500(a)(3))

C.	Insignificant and Tr	rivial Activity Emission	Limitations & Standards

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

- 3.C.1 The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).)
- 3.C.2 The maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).)

#### D. Work Practice Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-018 AA-019	40 CFR 63, Subpart DDDDD (§63.7500(e), 63.7515(d), 63.7540(a)(10)(i)-(vi), (12), and (13), and Table 3 of Subpart DDDDD)	3.D.1	НАР	Five Year Tune-up

- 3.D.1 For Emission Points AA-018 and AA-019, the permittee shall complete a tune-up on each process and heater every five years beginning from the date of the initial tune-up. Each subsequent tune-up shall be completed no more than 61 months after the previous one. If a unit is not operating on the required date of the tune-up, the tune-up must be conducted within 30 calendar days of startup. The tune-up on each process heater must be completed in accordance with (a) through (f) below:
  - (a) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown not to exceed 72 months from the previous burner 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 (the permittee may delay the inspection until the next scheduled unit shutdown).
- (d) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>X</sub> 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, a report containing the following information listed in (i) through (iii):
  - (i) 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 each unit.
  - (ii) A description of any corrective actions taken as a part of the tune-up of the unit.
  - (iii) The type and amount of fuel used over the 12 months prior to the tune-up of the unit, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

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

#### SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, by January 31 for the preceding calendar year. Each compliance certification shall include the following:
  - (a) the identification of each term or condition of the permit that is the basis of the certification;
  - (b) the compliance status;
  - (c) whether compliance was continuous or intermittent;
  - (d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
  - (e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(5)(a), (c), & (d).)
- 4.3 The permittee shall submit progress reports consistent with an applicable schedule of compliance and 11 Miss. Admin. Code Pt. 2, R. 6.2.C(8). semiannually, or at such other frequency as is specified in an applicable requirement or by the Permit Board. Such progress reports shall contain the following:
  - (a) dates for achieving the activities, milestone(s), or compliance required in the schedule of compliance, and dates when such activities, milestone(s) or compliance were achieved; and
  - (b) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

# SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

- A. General Monitoring, Recordkeeping and Reporting Requirements
- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.
- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
  - (a) the date, place as defined in the permit, and time of sampling or measurements;
  - (b) the date(s) analyses were performed;
  - (c) the company or entity that performed the analyses;
  - (d) the analytical techniques or methods used;
  - (e) the results of such analyses; and
  - (f) the operating conditions existing at the time of sampling or measurement.

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

- 5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(2).)
- 5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with 11 Miss. Admin. Code Pt. 2, R. 6.2.E. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)
- 5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) days of the time the deviation began. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(2).)
- 5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the DEQ and the EPA.

- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.
- B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Monitoring/Recordkeeping Requirement
Entire Facility	Title V Permit Issued June 25, 2012 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b).	5.B.1	Fuel Usage	Maintain records of the type and quantity of fuel used on a monthly basis
AA-018 AA-019	40 CFR 63, Subpart DDDDD (§63.7540(a)(12))	5.B.2	НАР	Continuous Compliance
	40 CFR 63, Subpart DDDDD (§63.7545(f))	5.B.3		Natural Gas Curtailment
	40 CFR 63, Subpart DDDDD (§63.7555(a)(1) and (h), 63.7560, and 63.10(b)(2))	5.B.4		Recordkeeping

- 5.B.1 For the entire facility, the permittee shall monitor and maintain records of each type and the respective quantity of fuel used on a monthly basis. The permittee shall keep these records on-site in accordance with Condition 5.A.3 and shall make these records available upon request. (Ref.: Title V Permit Issued June 25, 2012 and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b).)
- 5.B.2 For Emission Points AA-018 and AA-019, the permittee shall demonstrate continuous compliance with the applicable work practice standards by conducting a tune-up in accordance with Condition 3.D.1. (Ref.: 40 CFR 63.7540(a)(12))
- 5.B.3 For Emission Points AA-018 and AA-019, if the permittee burns an alternative fuel during a period of natural gas curtailment or supply interruption, then the permittee must submit a notification to the MDEQ of the alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption as defined by §63.7575. The notification must include (a) through (e) below:
  - (a) Company name and address.
  - (b) Identification of the affected units.
  - (c) Reason the permittee is unable to use natural gas, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.
  - (d) Type of alternative fuel that the permittee attends to use.
  - (e) Dates that the alternative fuel use is expected to begin and end.

(Ref.: 40 CFR 63.7545(f))

5.B.4 For Emission Points AA-018 and AA-019, the permittee must keep all records readily

available for review. The permittee shall keep a copy each notification and report submitted to comply with Subpart DDDD, including all documentation supporting the Notification of Compliance Status or compliance report. The permittee shall keep records of the total hours per calendar year that an alternative fuel is burned in accordance with 5.B.3 and the total hours per calendar year that the boilers operated during those times. 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. (Ref.: 40 CFR 63.7555(a)(1) and (h), 63.7560, and 63.10(b)(2))

#### C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/ Parameter Monitored	Reporting Requirement
AA-019 through AA-023	40 CFR 63, Subpart DDDDD (§63.7550(a) and (b); 63.7550(c)(1); 63.7550(c)(5)(i-iii), (xiv), and (xvii); and Table 9 of Subpart DDDDD)	5.C.1	НАР	Submit a 5-year compliance report

- 5.C.1 For Emission Points AA-018 and AA-019, 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-up required in Condition 3.D.1 has been completed. This information must be submitted for each unit:
  - (a) Company and Facility name and address
  - (b) Process unit information
  - (c) Date of report and beginning and ending dates of reporting period.
  - (d) The date of the most recent tune-up for Emission Points AA-018 and AA-019. Include the date of the most recent burner inspection, if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.
  - (e) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report

(Ref.: 40 CFR 63.7550(a), (b), and (c)(5)(i)-(iii),(xiv), and (xvii) and Table 9 of Subpart DDDDD))

## SECTION 6. ALTERNATIVE OPERATING SCENARIOS

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 <a href="http://ecfr.gpoaccess.gov">http://ecfr.gpoaccess.gov</a> under Title 40, or DEQ shall provide a copy upon request from the permittee.

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



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

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

#### APPENDIX A

#### **List of Abbreviations Used In this Permit**

11 Miss. Admin. Code Pt. 2, Ch. 1. Air Emission Regulations for the Prevention, Abatement, and Control

of Air Contaminants

11 Miss. Admin. Code Pt. 2, Ch. 2. Permit Regulations for the Construction and/or Operation of Air

**Emissions Equipment** 

11 Miss. Admin. Code Pt. 2, Ch. 3. Regulations for the Prevention of Air Pollution Emergency Episodes

11 Miss. Admin. Code Pt. 2, Ch. 4. Ambient Air Quality Standards

11 Miss. Admin. Code Pt. 2, Ch. 5. Regulations for the Prevention of Significant Deterioration of Air

Quality

11 Miss. Admin. Code Pt. 2, Ch. 6. Air Emissions Operating Permit Regulations for the Purposes of Title

V of the Federal Clean Air Act

11 Miss. Admin. Code Pt. 2, Ch. 7. Acid Rain Program Permit Regulations for Purposes of Title IV of the

Federal Clean Air Act

BACT Best Available Control Technology CEM Continuous Emission Monitor

CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

CO Carbon Monoxide

COM Continuous Opacity Monitor

COMS Continuous Opacity Monitoring System

DEQ Mississippi Department of Environmental Quality EPA United States Environmental Protection Agency

gr/dscf Grains Per Dry Standard Cubic Foot

HP Horsepower

HAP Hazardous Air Pollutant

lbs/hr Pounds per Hour

M or K Thousand

MACT Maximum Achievable Control Technology

MM Million

MMBTUH Million British Thermal Units per Hour

NA Not Applicable

NAAQS National Ambient Air Quality Standards

NESHAP National Emissions Standards For Hazardous Air Pollutants, 40 CFR 61

or

National Emission Standards For Hazardous Air Pollutants for Source Categories, 40 CFR 63

NMVOC Non-Methane Volatile Organic Compounds

NO<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