

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

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Gulf South Pipeline Company, LP
Harrisville Compressor Station
444A Twin Lakes Road and Dan Keyes Road
Harrisville, Simpson 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:

Permit No.: 2480-00071

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SECTION 1. GENERAL CONDITIONS

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

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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

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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

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the following:

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

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- (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

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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."

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- 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.

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

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- (ii) the source was at the time being properly operated;
 - (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
 - (iv) the permittee submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and
 - (v) the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.
 - (2) In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
 - (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (b) Startups and Shutdowns (as defined by 11 Miss. Admin. Code Pt. 2, R. 1.2.HH. & R. 1.2.CC.)
- (1) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows:
 - (i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above;
 - (ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or
 - (iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit.
 - (2) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof.
 - (3) In the event this startup and shutdown provision conflicts with another

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applicable requirement, the more stringent requirement shall apply.

(c) Maintenance.

- (1) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following:
 - (i) the permittee can identify the need for the maintenance;
 - (ii) the source was at the time being properly operated;
 - (iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
 - (iv) the permittee submitted notice of the maintenance to the DEQ within 5 working days of the time the maintenance began or such other times as allowed by DEQ; and
 - (v) the notice shall contain a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken.
- (2) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof.
- (3) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

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

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SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-001	4,735 Brake Horsepower (BHP) (32.20 MMBTU/hr) Caterpillar Model G3616TALE 4-stroke, lean-burn (4SLB) Natural Gas-Fired, Spark Ignition (SI) Compressor Engine, equipped with a catalytic oxidizer (Ref. No. C-1)
AA-002	4,735 Brake Horsepower (BHP) (32.20 MMBTU/hr) Caterpillar Model G3616TALE 4-stroke, lean-burn (4SLB) Natural Gas-Fired, Spark Ignition (SI) Compressor Engine, equipped with a catalytic oxidizer (Ref. No. C-2)
AA-003	4,735 Brake Horsepower (BHP) (32.20 MMBTU/hr) Caterpillar Model G3616TALE 4-stroke, lean-burn (4SLB) Natural Gas-Fired, Spark Ignition (SI) Compressor Engine, equipped with a catalytic oxidizer (Ref. No. C-3)
AA-004	4,735 Brake Horsepower (BHP) (32.20 MMBTU/hr) Caterpillar Model G3616TALE 4-stroke, lean-burn (4SLB) Natural Gas-Fired, Spark Ignition (SI) Compressor Engine, equipped with a catalytic oxidizer (Ref. No. C-4)
AA-005	1,200 BHP (9.0 MMBTU/hr) Waukesha Model VGF48GL 4-stroke, lean-burn (4SLB) Natural Gas-Fired, Spark Ignition (SI) Emergency Generator Engine (emergency RICE > 500 HP) (Ref. No. EG-1)
AA-006	4,200 gallon natural gas condensate storage tank (Ref. No. T-1)
AA-011	Engine Blowdown Stack #1 From 4 Vents (Ref. No. V-1)
AA-012	Area emission releases (Ref. No. V-2)
AA-017	15,000 BHP (122.70 MMBTU/hr) Solar Model Mars 100T-15000S Natural Gas-Fired Compressor Turbine (Ref. No. C-5)
AA-018	15,000 BHP (122.70 MMBTU/hr) Solar Model Mars 100T-15000S Natural Gas-Fired Compressor Turbine (Ref. No. C-6)
AA-020	Turbine Blowdown Stack #2 From 2 Vents (Ref. No. V-4)
AA-024	839 BHP (6.29 MMBTU/hr) Waukesha Model VGFL36GL 4-stroke, lean-burn (4SLB) Natural Gas-Fired, Spark Ignition (SI) Emergency Generator Engine (emergency RICE > 500 HP) (Ref. No. EG-2)
IA-001	Insignificant tanks (Ref. No. T-2, T-3, T-4, and T-5)
IA-002	Insignificant Vents and Fugitives (Ref. No. L-1, V-5, V-6, and V-7)
IA-003	Insignificant Natural Gas Fired Heaters (Ref. No. H-1, H-2, and H-3)

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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.)

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B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-001 AA-002 AA-003 AA-004	11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(b)	3.B.1	PM	$E = 0.8808 * I^{-0.1667}$
	40 CFR 63, Subpart ZZZZ	3.B.2	HAPs	Applicability
	40 CFR 60, Subpart JJJJ 40 CFR 60.4230(a)(4)(i)	3.B.3	NOx CO VOC	Applicability
	Construction Permit issued November 6, 2007, 40 CFR 60.4233(e), and Table 1 to Subpart JJJJ (Emission limits apply to each unit individually)	3.B.4	NOx	2.0 grams per brake horsepower-hour or 160 ppmvd @ 15% O ₂ , not to exceed 7.31 lb/hr and 32.01 tpy
		3.B.5	CO	4.0 grams per brake horsepower-hour or 540 ppmvd @ 15% O ₂ , not to exceed 1.57 lb/hr and 6.86 tpy
		3.B.6	VOC	1.0 grams per brake horsepower-hour or 86 ppmvd @ 15% O ₂ , not to exceed 1.84 lb/hr and 8.07 tpy
	NSPS JJJJ 40 CFR 60.4234	3.B.7	NOx CO VOC	Continuous Emissions Compliance
	Construction Permit issued November 6, 2007	3.B.8	Operational Restriction	The catalytic oxidizer must be used when operating the compressor engine.
	Construction Permit issued November 6, 2007	3.B.9	Operational Restriction	Pipeline Quality Natural Gas only
	40 CFR 63.6605	3.B.10	HAP	Continuous Compliance
	40 CFR 63.6600(b) and Item 2 of Table 2a to Subpart ZZZZ	3.B.11		Reduce CO emissions by 93% or more or limit concentration of formaldehyde to 14 ppmvd or less at 15 percent O ₂ .
	40 CFR 63.6600(b) and Item 1.a. of Table 2b to Subpart ZZZZ	3.B.12		Pressure drop across the catalyst
	40 CFR 63.6600(b) and Item 1.b. of Table 2b to Subpart ZZZZ	3.B.13		Catalyst inlet temperature
	40 CFR 63.6625(b))	3.B.14		Continuous parameter monitoring system (CPMS)
	40 CFR 63.6625(h)	3.B.15		Startup requirements
	40 CFR 63.6640(a))	3.B.16		General operating requirements
AA-005 AA-024	40 CFR 63, Subpart ZZZZ	3.B.2	HAP	Applicability
	11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(a)	3.B.17	PM	0.6 lb/MMBTU
	40 CFR 63.6640(f) and 40 CFR 63.6675	3.B.18	Operational Restriction	Operating requirements
AA-011	11 Miss. Admin. Code Pt. 2, R. 1.4.B(2)	3.B.19	H ₂ S	1 grain per 100 standard cubic feet

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Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-017 AA-018	11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(b)	3.B.1	PM	$E = 0.8808 * I^{-0.1667}$
	40 CFR 60, Subpart KKKK 40 CFR 60.4305(a)	3.B.20	NO _x SO ₂	Applicability
	NSPS Subpart KKKK 40 CFR 60.4320(a), 40 CFR 60.4330(a)(2) and Table 1 to Subpart KKKK	3.B.21	NO _x SO ₂	25 ppm @15% O ₂ 0.06 lb/ SO ₂ /MMBtu

- 3.B.1 For Emission Points AA-001, AA-002, AA-003, AA-004, AA-017, and AA-018, 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 Emission Points AA-001 through AA-004, AA-005, and AA-024 are subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63, Subpart ZZZZ.

For applicability under Subpart ZZZZ, Emission Points AA-001 through AA-004 are considered new, spark ignition, 4-stroke lean-burn, non-emergency engines with a site rating greater than 500 HP that are located at a major source of HAPs.

Emission Points AA-005 and AA-024 are considered new, spark ignition, 4-stroke lean-burn emergency engines with a site rating greater than 500 HP that are located at a major source of HAPs. Per 63.6590(b)(1)(i), these engines do not have to meet the requirements of Subpart ZZZZ or Subpart A.

(Ref.: 40 CFR 63.6580, 63.6585(a) and (b), 63.6590(a)(2)(i), and 63.6590(b)(1)(i))

- 3.B.3 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee is subject to the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ. (Ref: 40 CFR 60.4230(a)(4)(i))
- 3.B.4 For Emission Points AA-001, AA-002, AA-003, and AA-004, Nitrogen Oxide (NO_x) emissions from each emission point are limited to 2.0 grams per horsepower-hour (g/hp-hr) or 160 ppmvd @ 15% O₂, and shall not exceed 7.31 pounds per hour (lb/hr), and 32.01 tons per year (tpy). (Ref: 40 CFR 60.4233(e), Table 1 of Subpart JJJJ, and

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- 3.B.5 For Emission Points AA-001, AA-002, AA-003, and AA-004, Carbon Monoxide (CO) emissions from each emission point are limited to 4.0 g/hp-hr or 540 ppmvd @ 15% O₂, and shall not exceed 1.57 lb/hr, and 6.86 tpy.

If the engine meets the CO requirements of Subpart ZZZZ found in Condition 3.B.11 the permittee does not have to comply with the CO emission limits identified in this condition. (Ref: 40 CFR 60.4233(e), Footnote b to Table 1 of Subpart JJJJ, and Construction Permit issued November 6, 2007)

- 3.B.6 For Emission Points AA-001, AA-002, AA-003, and AA-004, Volatile Organic Compound (VOC) emissions shall be limited to 1.0 g/hp-hr or 86 ppmvd @ 15% O₂, and shall not exceed 1.84 lb/hr, and 8.07 tpy. (Ref: 40 CFR 60.4233(e), Table 1 of Subpart JJJJ, and Construction Permit issued November 6, 2007)

- 3.B.7 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee must operate and maintain each engine such that they achieve the emission standards found in Conditions 3.B.4 through 3.B.6 over the entire life of the engine. (Ref: 40 CFR 60.4234)

- 3.B.8 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee shall only operate the compressor engine with the catalytic oxidizer in place and operational. In the event of a failure of the catalytic oxidizer, the permittee shall cease operations until such time as repairs are made and the proper efficiency of the catalytic oxidizer is restored. The permittee shall keep a log of all maintenance activities on site. (Ref: Construction Permit issued November 6, 2007)

- 3.B.9 For Emission Points AA-001, AA-002, AA-003, and AA-004, the permittee is restricted to using only natural gas as a fuel. (Ref: Construction Permit issued November 6, 2007)

- 3.B.10 For Emission Points AA-001 through AA-004, the permittee shall, at all times, be in compliance with the applicable requirements of Subpart ZZZZ. The permittee shall operate and maintain the engines, including associated monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by Subpart ZZZZ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (Ref.: 40 CFR 63.6605(a) and (b))

- 3.B.11 For Emission Points AA-001 through AA-004, the permittee shall reduce CO emissions

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by 93 percent or more or limit the concentration of formaldehyde in each engine's exhaust to 14 ppmvd or less at 15 percent O₂. (Ref.: 40 CFR 63.6600(b) and Table 2a of Subpart ZZZZ))

- 3.B.12 For Emission Points AA-001 through AA-004, the permittee shall maintain each catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test. (Ref.: 40 CFR 63.6600(b) and Table 2b of Subpart ZZZZ)
- 3.B.13 For Emission Points AA-001 through AA-004, the permittee shall maintain the temperature of each engine's exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. (Ref.: 40 CFR 63.6600(b) and Table 2b of Subpart ZZZZ)
- 3.B.14 For Emission Points AA-001 through AA-004, the permittee shall install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the following requirements:
- (a) The permittee must prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in paragraphs (1) through (5) below. The permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in paragraphs (a) through (e) in the facility's site-specific monitoring plan.
 - (1) The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
 - (2) Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;
 - (3) Equipment performance evaluations, system accuracy audits, or other audit procedures;
 - (4) Ongoing operation and maintenance procedures in accordance with provisions in §63.8(c)(1)(ii) and (c)(3); and
 - (5) Ongoing reporting and recordkeeping procedures in accordance with provisions in §63.10(c), (e)(1), and (e)(2)(i).
 - (b) The permittee must install, operate, and maintain each CPMS in continuous

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operation according to the procedures in the site-specific monitoring plan.

- (c) The CPMS must collect data at least once every 15 minutes
- (d) For a CPMS for measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger.
- (e) The permittee must conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually.
- (f) The permittee must conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan.

(Ref: 40 CFR 63.6625(b) and 63.8(f)(4))

- 3.B.15 For Emission Points AA-001 through AA-004, the permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup found in Condition 3.B.11 apply. (Ref: 40 CFR 63.6625(h))
- 3.B.16 For Emission Points AA-001 through AA-004, the permittee shall demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Table 2b to Subpart ZZZZ that apply according to methods specified in Table 6 to Subpart ZZZZ. (Ref: 40 CFR 63.6640(a))
- 3.B.17 For Emission Points AA-005 and AA-024, the maximum permissible emission of ash and/or particulate matter shall not exceed 0.6 pounds per million BTU per hour heat input. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(a))
- 3.B.18 For Emission Points AA-005 and AA-024, the permittee shall operate the emergency engines according to the requirements below:
 - (a) There is no limit on the use of the engines during emergency situations.
 - (b) The engines may be operated for maintenance checks and readiness testing for a maximum of 100 hours per calendar year provided the maintenance checks and readiness testing are recommended by federal, state, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the MDEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a

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petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of the emergency engines beyond 100 hours per calendar year.

- (c) The engines may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (b). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- (d) If the emergency engines are not operated according to the requirements in (a) - (c) above, the engines will not be considered an emergency engine under this subpart and will need to meet any applicable requirements for non-emergency engines.

(Ref.: 40 CFR 63.6640(f) and 40 CFR 63.6675)

- 3.B.19 For Emission Point AA-011, the maximum permissible emission of hydrogen sulfide shall not exceed one (1) grain per 100 standard cubic feet of the gas stream. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.B(2))
- 3.B.20 Emissions Points AA-017 and AA-018 are subject to the Standards of Performance for Stationary Combustion Turbines, 40 CFR 60, Subpart KKKK. Each combustion turbine qualifies as a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced modification after February 18, 2005. (Ref.: 40 CFR 60.4305(a))
- 3.B.21 For Emission Points AA-017 and AA-018, the permittee shall not exceed a Nitrogen Oxides (NO_x) emission rate of 25 ppmvd at 15% O₂ and shall not burn any fuel which contains total potential sulfur emissions in excess of 0.060 lb SO₂/MMBtu (20 grains S/100 scf). (Ref.: 40 CFR 60.4320(a), 40 CFR 60.4330(a)(2) and Table 1 of Subpart KKKK)

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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).)

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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.

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Code Pt. 2, R. 6.3.A(3)(c)(2).)

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

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

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-001 through AA-005 AA-017 AA-018 AA-024	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.B.1	Fuel Content	Keep records of fuel quality.
AA-001 through AA-004	40 CFR 60.4243(b)(2)(ii))	5.B.2	NO _x CO VOC	Keep a maintenance plan and records of conducted maintenance
	40 CFR 60.4243(b)(2)(ii); Construction Permit Issued November 6, 2007; and 40 CFR 60.4244(a)-(g))	5.B.3	NO _x CO VOC	Conduct performance stack tests, triennially, or every 8,760 hours of operations, whichever comes first.
		5.B.4		
	40 CFR 63.6655(a)	5.B.5	HAP	Keep records.
	40 CFR 63.6655(b)	5.B.6		CPMS records
	40 CFR 63.6655(d)	5.B.7		Continuous compliance records
	40 CFR 63.6660	5.B.8		Records retention
	40 CFR 63.6665	5.B.9		General Provisions
	40 CFR 63.6615 and Item 1 and Footnote 1 to Table 3 to Subpart ZZZZ	5.B.10	CO	CO performance tests
	40 CFR 63.6620(a)-(e) and Item 1 to Table 4 of Subpart ZZZZ	5.B.11		
	40 CFR 63.6635	5.B.12	CO Formaldehyde	Monitor operations

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Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-001 through AA-004	40 CFR 60.4245(a)(1)-(4))	5.B.13	NO _x CO VOC	Keep records.
AA-005 AA-024	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.B.14	Operations	Records of monthly hours of operation
AA-017 AA-018	40 CFR 60.4360 & 40 CFR 60.4365(a); Construction Permit issued November 6, 2007; and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2)	5.B.15	Fuel Content	Fuel Records
	40 CFR 60.4340(a)	5.B.16	NO _x	Conduct performance stack tests

- 5.B.1 For Emission Points AA-001 through AA-005, AA-017, AA-018, and AA-024, the permittee shall keep records to assure the natural gas being combusted is pipeline grade (sweet) natural gas. The permittee shall make these records available upon request by DEQ personnel and maintain this data in accordance with Permit Condition 5.A.3. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11))
- 5.B.2 For Emission Points AA-001 through AA-004, the permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. (Ref: 40 CFR 60.4243(b)(2)(ii))
- 5.B.3 For Emission Points AA-001 through AA-004, the permittee must conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first to demonstrate compliance with the NO_x, CO, and VOC emissions limitations in Conditions 3.B.4 through 3.B.6. (Ref: 40 CFR 60.4243(b)(2)(ii))
- 5.B.4 For Emission Points AA-001 through AA-004, each NO_x, CO, and VOC performance test must be conducted according to the following requirements:
- (a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 of Subpart JJJJ.
 - (b) The permittee may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If the engine is non-operational, it does not need to startup solely to conduct a performance test; however, the performance test must immediately be conducted upon startup of the

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engine.

- (c) Three separate test runs must be conducted for each performance test, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.
- (d) To determine compliance with the NO_x mass per unit output emission limitation, convert the concentration of NO_x in the engine exhaust using Equation 1 of 40 CFR 60.4244.
- (e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of 40 CFR 60.4244.
- (f) When calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of 40 CFR 60.4244.
- (g) If the permittee chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of 40 CFR 60.4244. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of 40 CFR 60.4244.

(Ref: 40 CFR 60.4244(a)-(g))

5.B.5 For Emission Points AA-001 through AA-004, the permittee must keep the following records:

- (a) A copy of each notification and report that was submitted to comply with Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in §63.10(b)(2)(xiv).
- (b) Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
- (c) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

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- (d) Records of all required maintenance performed on the air pollution control and monitoring equipment.
- (e) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(Ref: 40 CFR 63.6655(a))

5.B.6 For Emission Points AA-001 through AA-004, the permittee must keep the following records for each CPMS:

- (a) Records described in §63.10(b)(2)(vi) through (xi).
- (b) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
- (c) Requests for alternatives to the relative accuracy test for the CPMS as required in §63.8(f)(6)(i), if applicable.

(Ref: 40 CFR 63.6655(b))

5.B.7 For Emission Points AA-001 through AA-004, the permittee must demonstrate continuous compliance with each applicable emission or operating limitation by complying with the following:

- (a) Conducting all required performance test(s) for CO to demonstrate the required percent reduction is being achieved;
- (b) Collecting the catalyst inlet temperature data as required;
- (c) Reduce the data to 4-hour rolling averages;
- (d) Maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and,
- (e) Measure the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

(Ref: 40 CFR 63.6655(d) and Table 6 of Subpart ZZZZ)

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- 5.B.8 For Emission Points AA-001 through AA-004, records must be kept in a form suitable and readily available for expeditious review according to §63.10(b)(1). The permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be kept readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). (Ref: 40 CFR 63.6660)
- 5.B.9 For Emission Points AA-001 through AA-004, the permittee is subject to the applicable General Provisions in Table 8 of Subpart ZZZZ (Ref: 40 CFR 63.6665)
- 5.B.10 For Emission Points AA-001 through AA-004, the permittee shall conduct annual performance tests for Carbon Monoxide (CO) emissions. If the results of any annual performance test indicates the stationary RICE is not in compliance with the CO or formaldehyde emission limitation, or there is a deviation from the operating limitations, the permittee shall resume semiannual performance tests. (Ref.: 40 CFR 63.6615 and Item 1 and Footnote 1 to Table 3 to Subpart ZZZZ)
- 5.B.11 For Emission Points AA-001 through AA-004, each Carbon Monoxide performance test must be conducted according to the following requirements.
- (a) If the engine is non-operational , the permittee does not need to start up the engine solely to conduct the performance test. The performance test can be conducted when the engine is started up again. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load.
 - (b) The permittee must conduct three separate test runs for each required performance test, as specified in §63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified.
 - (c) The permittee must select the sampling port location and the number/location of traverse points at the inlet and outlet of the control device. For CO and O₂ measurement, ducts ≤6 inches in diameter may be sampled at a single point located at the duct centroid and ducts >6 and ≤12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is >12 inches in diameter *and* the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A-1, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A-4.
 - (d) The permittee must measure the O₂ at the inlet and outlet of the control device

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using Method 3 or 3A or 3B of 40 CFR part 60, appendix A-2, or ASTM Method D6522-00 (Reapproved 2005)ac (heated probe not necessary). Measurements to determine O₂ must be made at the same time as the measurements for CO concentration.

- (e) The permittee must measure the CO at the inlet and the outlet of the control device using ASTM D6522-00 (Reapproved 2005) (heated probe not necessary) or Method 10 of 40 CFR part 60, appendix A-4. The CO concentration must be at 15 percent O₂, dry basis.
- (f) The permittee must use Equation 1 of 40 CFR 63.6620(e) to determine compliance with the percent reduction requirement.
- (g) The permittee must normalize the CO, THC, or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in (1) through (3) below:
 - (1) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and as described in Equation 2 of 40 CFR 63.6620(e)(2)(i).
 - (2) Calculate the CO₂ correction factor for correcting measurement data to 15 percent O₂ as described in Equation 3 of 40 CFR 63.6620(e)(2)(ii).
 - (3) Calculate the CO, THC, and formaldehyde gas concentrations adjusted to 15 percent O₂ using CO₂ as described in Equation 4 of 40 CFR 63.6620(e)(2)(iii).
- (h) The permittee shall determine engine percent load during a performance test by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. This report shall contain all required information from 63.6620(i)

(Ref.: 40 CFR 63.6620(a), (b)(2), (d), (e)(1) and (2) and Table 4 of Subpart ZZZZ)

5.B.12 For Emission Points AA-001 through AA-004, the permittee shall monitor and collect data according to the following:

- (a) Except for monitor malfunctions, associated repairs, required performance

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evaluations, and required quality assurance or control activities, the permittee must monitor continuously at all times that the engine is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

- (b) The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. All the valid data collected during all other periods must be used.

(Ref: 40 CFR 63.6635(a), (b), and (c))

5.B.13 For Emission Points AA-001 through AA-004, the permittee shall keep records of the following information:

- (a) All notifications submitted to comply with Subpart JJJJ and all documentation supporting any notification;
- (b) Maintenance conducted on the engine;
- (c) If the engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable; and
- (d) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

(Ref: 40 CFR60.4245(a)(1)-(4))

5.B.14 For Emission Points AA-005 and AA-024, the permittee shall monitor and record monthly the hours of operation. The total hours of operation for each consecutive 12-month period shall also be recorded. These records shall be kept on site for a period of five (5) years. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11))

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- 5.B.15 For Emission Points AA-017 and AA-018, the permittee shall maintain on site the natural gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the natural gas, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf (338 ppmv) or less and is either composed of at least 70% methane by volume or has a gross calorific value between 950 and 1,100 Btu/scf. The permittee shall make a copy of the current, valid tariff sheet available upon request by DEQ personnel and maintain this data in accordance with Permit Condition 5.A.3. (Ref: 40 CFR 60.4365(a) and 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2))
- 5.B.16 For Emission Points AA-017 & AA-018, the permittee shall perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance with the 25 ppmvd at 15% O₂ Nitrogen Oxides (NO_x) emission limitation. If the NO_x emission result from the performance test is less than or equal to 75 percent of the NO_x emission limit for the turbine, the permittee may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_x emission limit for the turbine, annual performance tests must be resumed. (Ref: 40 CFR 60.4340(a))

C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Reporting Requirement
AA-001 through AA-004	40 CFR 63.6640(b)	5.C.1	HAP	Deviations
	40 CFR 63.6645(g)	5.C.2	CO	Submit stack test notifications
	40 CFR 63.6645(h)	5.C.3	CO	Submit a Notification of Compliance Status
	40 CFR 63.6650(a)-(f) and Item 1 of Table 7 to Subpart ZZZZ	5.C.4	CO Formaldehyde	Submit semiannual compliance reports
	40 CFR 60.4245(d)	5.C.5	NO _x CO VOC	Submit stack test results
AA-005 AA-024	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.C.6	Hours	Submit report of monthly & 12-month hours of operation
AA-017 AA-018	40 CFR 60.4375(b)	5.C.7	NO _x	Submit stack test results
	11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11)	5.C.8	Fuel Content	Submit report of fuel sulfur content monitoring records

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- 5.C.1 For Emission Points AA-001 through AA-004, the permittee shall report each instance in which the engines did not meet each emission limitation or operating limitation in Conditions 3.B.11 through 3.B.13. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in §63.6650(f) and Permit Condition 5.A.5. If the catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the values of the operating parameters are reestablished, the permittee must also conduct a performance test to demonstrate the engine is meeting the applicable emission limitation. (Ref: 40 CFR 63.6640(b))
- 5.C.2 For Emission Points AA-001 through AA-004, the permittee shall submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1). (Ref: 40 CFR 63.6645(g))
- 5.C.3 For Emission Points AA-001 through AA-004, the permittee shall submit a Notification of Compliance Status according to §63.9(h)(2)(ii) for each performance test as specified in Tables 4 and 5 of Subpart ZZZZ.
- (a) For each initial compliance demonstration required in Table 5 of Subpart ZZZZ that does not include a performance test, the permittee must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.
- (b) For each initial compliance demonstration required in Table 5 of Subpart ZZZZ that includes a performance test conducted according to the requirements in Table 3 of Subpart ZZZZ, the permittee must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).
- (Ref: 40 CFR 63.6645(a) and (h))
- 5.C.4 For Emission Points AA-001 through AA-004, the permittee shall submit semiannual compliance reports.
- (a) If there are no deviations from any applicable emission limitations or operating limitations, submit a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the PMS, was out-of-control, as specified in §63.8(c)(7), submit a statement that there were no periods during which the CPMS was out-of-control during the reporting period.
- (b) If deviations from any emission limitation or operating limitation during the

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reporting period occurred, the permittee must submit the following information:

- (1) The total operating time of the engine at which the deviation occurred during the reporting period.
 - (2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- (c) If there were periods during which the CPMS was out-of-control, as specified in §63.8(c)(7), the permittee must submit the following information:
- (1) The date and time that each malfunction started and stopped.
 - (2) The date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks.
 - (3) The date, time, and duration that each CPMS was out-of-control, including the information in §63.8(c)(8).
 - (4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
 - (5) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
 - (6) A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
 - (7) A summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the engine at which the CPMS downtime occurred during that reporting period.
 - (8) An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the engine.
 - (9) A brief description of the engine.
 - (10) A brief description of the CPMS.
 - (11) The date of the latest CPMS certification or audit.

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(12) A description of any changes in CPMS, processes, or controls since the last reporting period.

- (d) If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.

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

- 5.C.5 For Emission Points AA-001 through AA-004, the permittee must submit the results of each performance test required in Condition 5.B.3 within 60 days after the test has been completed. (Ref: 40 CFR 60.4245(d))
- 5.C.6 For Emission Points AA-005 and AA-024, the permittee shall submit the monthly hours of operation and total hours of operation for the previous consecutive 12-month period in accordance with Permit Condition 5.A.4. (Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11))
- 5.C.7 For Emission Points AA-017 and AA-018, the permittee must submit a written report of the results of each performance test required in Condition 5.B.16 before the close of business on the 60th day following the completion of the performance test. (Ref.: 40 CFR 60.4375(b))
- 5.C.8 Emission Points AA-017 and AA-018, the permittee shall submit a copy of the Gas Quality Section of the current valid purchase contract, tariff sheet or transportation contract for natural gas combusted in the turbines by January 31st each year. (Ref: 11 Miss. Admin. Code Pt. 2, R. 2.2.B.(11))

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

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

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

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

APPENDIX A

List of Abbreviations Used In this Permit

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

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APPENDIX B

LIST OF REGULATIONS REFERENCED IN PERMIT

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

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

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

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

40 CFR 63, Subpart A – General Provisions

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

40 CFR 60, Subpart A – General Provisions

40 CFR 60, Subpart JJJJ – New Source Performance Standards for Stationary Spark Ignition Internal Combustion Engines

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