# STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

# THIS CERTIFIES THAT

Tennessee Gas Pipeline Company LLC, Columbus Compressor Station Number 546
511 Crowe Road
Columbus, Mississippi
Lowndes 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: November 9, 2012

Permit Modified: JAN 1 4 2013

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: October 31, 2017 Permit No.: 1680-00023

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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.: APC-S-6, Section III.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.: APC-S-6, Section III.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.: APC-S-6, Section III.A.6.c.)
- 1.4 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: APC-S-6, Section III.A.6.d.)
- 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.: APC-S-6, Section III.A.6.e.)
- 1.6 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.: APC-S-6, Section III.A.5.)
- 1.7 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 APC-S-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 judgements where such judgements are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: APC-S-6, Section VI.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.: APC-S-6, Section VI.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.: APC-S-6, Section VI.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.: APC-S-6, Section VI.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.: APC-S-6, Section VI.C.)
- 1.8 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.: APC-S-6, Section III.A.8.)
- 1.9 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.: APC-S-6, Section II.E.)
- 1.10 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.: APC-S-6, Section III.C.2.)
- 1.11 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.: APC-S-1, Section 3.9(a))
- 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.: APC-S-1, Section 3.9(b))
- 1.13 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.: APC-S-6, Section III.F.1.)
- 1.14 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.: APC-S-6, Section III.F.2.)
- 1.15 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.: APC-S-6, Section III.H.)
- 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.: APC-S-6, Section IV.C.2., Section IV.B., and Section II.A.1.c.)
- 1.17 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.: APC-S-6, Section IV.F.)
- 1.18 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 Regulation APC-S-3, "Regulations for the Prevention of Air Pollution Emergency Episodes"

for the level of emergency declared. (Ref.: APC-S-3)

- 1.19 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations APC-S-2, "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations APC-S-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."
- 1.20 Any change in ownership or operational control must be approved by the Permit Board. (Ref.: APC-S-6, Section IV.D.4.)
- 1.21 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.: APC-S-6, Section III.B.1)

- 1.22 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.: APC-S-1, Section 3.7)
- 1.23 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.: APC-S-6, Section III.G.)
- 1.24 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 APC-S-1, Section 2.34)
    - (1) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
      - (i) an upset occurred and that the permittee can identify the cause(s) of the upset;
      - (ii) the source was at the time being properly operated;
      - (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
      - (iv) the permittee submitted notice of the upset to the DEQ within 5 working days of the time the upset began; and

- (v) the notice of the upset shall contain a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.
- (2) In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- (3) This provision is in addition to any upset provision contained in any applicable requirement.
- (b) Startups and Shutdowns (as defined by APC-S-1, Sections 2.31 & 2.26)
  - (1) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows:
    - (i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above;
    - (ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or
    - (iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit.
  - (2) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof.
  - (3) In the event this startup and shutdown provision conflicts with another applicable requirement, the more stringent requirement shall apply.

#### (c) Maintenance.

(1) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following:

- (i) the permittee can identify the need for the maintenance;
- (ii) the source was at the time being properly operated;
- (iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit;
- (iv) the permittee submitted notice of the maintenance to the DEQ within 5 working days of the time the maintenance began or such other times as allowed by DEQ; and
- (v) the notice shall contain a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken.
- (2) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof.
- (3) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. (Ref.: APC-S-1, Section 10)
- 1.25 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Regulation APC-S-1, Section 8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

# SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-000	Plantwide Equipment and Pipe Fugitive Emissions
AA-002	225 HP Caterpillar G343, auxiliary generator (Ref. No. AUX PT-1B)
AA-003	2500 HP Cooper Bess GMWA-10, natural gas fired compressor (Ref. No. ENG PT-1A)
AA-004	2500 HP Cooper Bess GMWA-10, natural gas fired compressor (Ref. No. ENG PT-2A)
AA-005	2500 HP Cooper Bess GMWA-10, natural gas fired compressor (Ref. No. ENG PT-3A)
AA-006	2500 HP Cooper Bess GMWA-10, natural gas fired compressor (Ref. No. ENG PT-4A)
AA-007	2500 HP Cooper Bess GMWA-10, natural gas fired compressor (Ref. No. ENG PT-5A)
AA-008	2500 HP Cooper Bess GMWA-10, natural gas fired compressor (Ref. No. ENG PT-6A)
AA-009	7500 HP Cooper Bessemer 12Z-330, natural gas fired compressor (Ref. No. ENG PT-7A)
AA-010	7500 HP General Electric M3752H-R, natural gas internal combustion turbine (Ref. No. TENG PT-1B)
AA-012	1,175 HP Waukesha natural gas fired emergency generator (Ref. No. AUX PT-2B)
AB-001	Natural Gas Blowdown

#### 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.: APC-S-1, Section 3.1)
- 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.: APC-S-1, Section 3.2)

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

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard	
AA-002	APC-S-1, Section 3.4(a)(1)	3.B.1	PM	0.6 lb/MMBTU	
AA-003 through AA-012	APC-S-1, Section 3.4(a)(2)	3.B.2	PM	E=0.8808*I -0.1667	
AA-002 through AA-012	APC-S-1, Section 4.1(a)	3.B.3	SO <sub>2</sub>	4.8 lb/MMBTU	
AA-003 through AA-009 and AA-012	40 CFR 63.6585, Subpart ZZZZ	3.B.4	НАР	MACT applicability only, not affected by the requirements of this standard	
	NESHAP Subpart ZZZZ, 40 CFR 63.6625(e)(2) and Item 9 of Table 6	3.B.5		Operate unit per manufacturer's emission- related written instructions or develop specific maintenance plan;	
	NESHAP Subpart ZZZZ, 40 CFR 63.6602 and Item 6 of Table 2c	3.B.6		Change oil and filter and inspect all hoses and belts every 500 hours; and Inspect spark plugs every 1,000 hours, and replace as necessary; or utilize optional oil analysis program.  Install a non-resettable hour meter; and	
	NESHAP Subpart ZZZZ, 40 CFR 63.6625(j)	3.B.7			
A A 002	NESHAP Subpart ZZZZ, 40 CFR 63.6625(f)	3.B.8	Operations		
AA-002	NESHAP Subpart ZZZZ, 40 CFR 63.6625(h) and Table 2c	3.B.9	Operations	Minimize engine's time spent at idle during startup and minimize startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes	
	NESHAP Subpart ZZZZ, 40 CFR 63.6640(f))	3.B.10		Operate only in emergency operation, maintenance and testing, and in non-emergency situations for $\leq 50$ hours per year.	
	NESHAP Subpart ZZZZ, 40 CFR 63.6665 and Table 8	3.B.11		General Provisions	
	NESHAP Subpart ZZZZ, 40 CFR 63.6665 and Table 8	3.B.12		Maintain compliance with operating limitations at all times	

- 3.B.1 For Emission Point AA-002, the permittee shall not have particulate emissions from fossil fuel burning installations of less than 10 MMBTU/hr heat input that exceeds 0.6 lb/MMBTU. (Ref.: APC-S-1, Section 3.4(a)1)
- 3.B.2 For Emissions Points AA-003 through AA-012, the permittee shall not have particulate emission from fossil fuel burning installations of greater than 10 MMBTU/hr heat input that exceeds the emission rate as determine by the relationship:

$$E = 0.8808 * I^{-0.1677}$$

where E is the emission rate in pounds per million BTU per hour input and I is the heat input in millions of BTU per hour. (Ref.: APC-S-1, Section 3.4(a)2)

- 3.B.3 For Emission Points AA-002 through AA-012, the shall not discharge sulfur oxides from any fuel burning installations in which fuel is burned primarily to produce heat of power by indirect heat transfer in excess of 4.8 lb/MMBTU (measured as sulfur dioxide) heat input. (Ref.: APC-S-1, Section 4.1(a))
- 3.B.4 For Emission Points AA-003 through AA-009 and for Emission Point AA-012, the permittee is subject to the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR 63, Subpart ZZZZ. These units are existing stationary RICE that are two stroke lean burn units and are not required to meet the requirements of Subpart ZZZZ or the General Provisions in Subpart A. (Ref.: 40 CFR 63.6585 & 63.6590(b)(3))
- 3.B.5 Beginning October 19, 2013, for Emission Point AA-002, the permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions [Ref.: 40 CFR 63.6625(e)(2) and Item 9 of Table 6 to Subpart ZZZZ]
- 3.B.6 Beginning October 19, 2013, for Emission Point AA-002, the permittee must,
  - (a) Change oil and filter every 500 hours of operation or annually, whichever comes first;
  - (b) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first; and
  - (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary, as described in Table 2c to Subpart ZZZZ.

[Ref.: 40 CFR 63.6602 and Item 6 of Table 2c to Subpart ZZZZ]

If an emergency engine is operating during an emergency and it is not possible to shut

down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [Ref.: Footnote 1 of Table 2c to Subpart ZZZZ]

- 3.B.7 Beginning October 19, 2013, for Emission Point AA-002, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [Ref.: 40 CFR 63.6625(j)]
- 3.B.8 Beginning October 19, 2013, for Emission Point AA-002, the permittee must install a non-resettable hour meter if one is not already installed [Ref.: 40 CFR 63.6625(f)]
- 3.B.9 Beginning October 19, 2013, for Emission Point AA-002, the permittee must 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 in Tables 2c to Subpart ZZZZ apply. [Ref.: 40 CFR 63.6625(h) and Table 2c to Subpart ZZZZ]
- 3.B.10 Beginning October 19, 2013, for Emission Point AA-002, the permittee must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of 40 CFR 63.6640. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of 40 CFR 63.6640, is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of 40

CFR 63.6640, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines. Specifically, paragraphs (f)(1)(i) through (iii) include:

- (i) There is no time limit on the use of emergency stationary RICE in emergency situations.
- (ii) The owner or operator may operate your emergency stationary RICE for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year.
- The owner or operator may operate the emergency stationary RICE (iii) up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving 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; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power. [Ref.: 40 CFR 63.6640(f)]

- 3.B.11 Beginning October 19, 2013, for Emission Point AA-002, the permittee shall comply with applicable General Provisions specified in Table 8 to Subpart ZZZZ, that shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply. [Ref.: 40 CFR 63.6665]
- 3.B.12 Beginning October 19, 2013, for Emission Point AA-002, the permittee must be in compliance with the operating limitations in Subpart ZZZZ that apply at all times. At all times you must operate and maintain Emission Point AA-002, including associated air pollution control equipment and 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 this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator 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)-(b)]

## C. <u>Insignificant and Trivial Activity Emission Limitations & Standards</u>

Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
APC-S-1, Section 3.4(a)(1)	3.C.1 & 1.19	PM	0.6 lbs/MMBTU or as otherwise limited by facility modification restrictions
APC-S-1, Section 4.1(a)	3.C.2 & 1.19	$SO_2$	4.8 lbs/MMBTU or as otherwise limited by facility modification restrictions

- 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.
- 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.

### 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.: APC-S-6, Section III.C.5.a.,c.,&d.)

# SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

- A. General Monitoring, Recordkeeping and Reporting Requirements
- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.
- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
  - (a) the date, place as defined in the permit, and time of sampling or measurements;
  - (b) the date(s) analyses were performed;
  - (c) the company or entity that performed the analyses;
  - (d) the analytical techniques or methods used;
  - (e) the results of such analyses; and
  - (f) the operating conditions existing at the time of sampling or measurement. (Ref.: APC-S-6, Section III.A.3.b.(1)(a)-(f))
- 5.A.3 Except as otherwise specified herein, 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.: APC-S-6, Section III.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 APC-S-6, Section II.E. (Ref.: APC-S-6, Section III.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.: APC-S-6, Section III.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)	Pollutant/Parameter Monitored	Monitoring and Recordkeeping Requirement	Condition Number	Applicable Requirement
AA-002 thru AA-012	Fuel	Type and quality of fuels used	5.B.1	Title V Permit reissued herein
	Notifications/ Monitoring/ Operations	Notifications, malfunctions, evaluations, maintenance, corrective actions, CEMS or CPMS records, and Table 6 requirements	5.B.2	NESHAP Subpart ZZZZ, 40 CFR 63.6655(a)-(b)
AA-002	Operating Limitations	Maintain records to demonstrate continuous compliance with the operating limitations.	5.B.3	NESHAP Subpart ZZZZ, 40 CFR 63.6655(d)
	Recordkeeping and Retention	Maintain records readily available for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.	5.B.4	NESHAP Subpart ZZZZ, 40 CFR 63.6660
	Maintenance	Maintain maintenance records	5.B.5	NESHAP Subpart ZZZZ, 40 CFR 63.6655(e)
	Hours of Operations	Maintain records of the hours of operation that is recorded through the non-resettable hour meter	5.B.6	NESHAP Subpart ZZZZ, 40 CFR 63.6655(f)

- 5.B.1 The permittee shall maintain records of the type and quantity of fuel used on a monthly basis in accordance to Condition 5.A.3.
- 5.B.2 For Emission Point AA-002, the permittee shall demonstrate compliance with the operating limitations, and maintain the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) of 40 CFR 63.6655, which includes the following:
  - (a)(1) A copy of each notification and report that the permittee submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv);
  - (2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment;
  - (3) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii);
  - (4) Records of all required maintenance performed on the air pollution control and monitoring equipment;

- (5) Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 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.
- (b) For each CEMS or CPMS, the permittee must keep the records listed in paragraphs (b)(1) through (3), of 40 CFR 63.6655, including:
  - (1) Records described in 40 CFR 63.10(b)(2)(vi) through (xi);
  - (2) Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3); and
  - (3) Requests for alternatives to the relative accuracy test for CEMS or CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable.

[Ref.: 40 CFR 63.6655(a)-(b)]

- 5.B.3 For Emission Point AA-002, the permittee shall keep the records required in Table 6 of Subpart ZZZZ to show continuous compliance with each operating limitation that applies. [Ref.: 40 CFR 63.6655(d)]
- 5.B.4 For Emission Point AA-002, the permittee shall maintain records in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). As specified in 40 CFR 63.10(b)(1), records must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. Each record must be 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.5 For Emission Point AA-002, the permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the permittee's own maintenance plan. [Ref.: 40 CFR 63.6655(e)]
- 5.B.6 For Emission Point AA-002, the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [Ref.: 40 CFR 63.6655(f)]

## C. Specific Reporting Requirements

Emission Point(s)	Pollutant/Parameter Monitored	Reporting Requirement	Condition Number	Applicable Requirement
AA-002 thru AA-012	Fuel	Submit Fuel Usage Records	5.C.1	Title V Permit reissued herein
AA-002	Operating Limitations	Report deviations	5.C.2	NESHAP Subpart ZZZZ, 40 CFR 63.6640(a, b, and e) and Title V Permit reissued herein

- 5.C.1 The permittee shall submit fuel usage report summarizing the type of fuel and the quantity of fuel used in accordance with Condition 5.A.4.
- 5.C.2 For Emission Point AA-002, the permittee must demonstrate continuous compliance with each operating limitation in Table 2c to Subpart ZZZZ that applies according to methods specified in Table 6 to Subpart ZZZZ. The permittee must report each instance in which it did not meet each applicable operating limitation in Table 2c to Subpart ZZZZ. These instances are deviations from the operating limitations in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.6650. [Ref.: 40 CFR 63.6640(a),(b), and (e)]

# 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

APC-S-1	Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants
APC-S-2	Permit Regulations for the Construction and/or Operation of Air Emissions Equipment
APC-S-3	Regulations for the Prevention of Air Pollution Emergency Episodes
APC-S-4	Ambient Air Quality Standards
APC-S-5	Regulations for the Prevention of Significant Deterioration of Air Quality
APC-S-6	Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air
	Act

APC-S-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  $10 \Phi m$  in diameter

ppm Parts per Million

PSD Prevention of Significant Deterioration, 40 CFR 52

SIP State Implementation Plan

SO2Sulfur DioxideTPYTons per YearTRSTotal Reduced Sulfur

VEE Visible Emissions Evaluation
VHAP Volatile Hazardous Air Pollutant
VOC Volatile Organic Compound

# **APPENDIX B**

## 40 CFR 82 - PROTECTION OF STRATOSPHERIC OZONE

# **APPENDIX C**

40 CFR 63, SUBPART ZZZZ – NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES