STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Pursue Energy Corporation, Thomasville Gas Plant
2173 Shell Oil Road
Brandon, MS 39042
Rankin 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: JAN 0 9 2013

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Expires: December 31, 2017

Permit No.: 2380-00036

1451 PER20120001

TABLE OF CONTENTS

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 judgments where such judgments 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 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.: 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))

1.12 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.)

1.16 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 2.37)

(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 2.34 & 2.29)

(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-001	The 100 MM cubic feet per day (2.832 MM cubic meters per day or 1465 long tons sulfur per day) maximum capacity, Sour Gas Treating, Glycol Dehydration and 3-Stage Claus Sulfur Recovery Facility for converting hydrogen Sulfide (H_2S) to elemental sulfur. The Tail Gas from the sulfur recovery facility is vented through a closed-vent system to a catalytic oxidizer then through a thermal oxidizer (emergency backup tail gas oxidizer which may be used in the event of catalytic oxidizer failure) and finally vented through a stack.
AA-002A*	86 MMBTUH, natural gas-fired, Riley Stoker Corp. Type MH Boiler (Boiler #1) with no pollution control devices.
AA-002B*	86 MMBTUH, natural gas-fired, Riley Stoker Corp. Type MH Boiler (Boiler #2) with no pollution control devices.
AA-003*	John Zink Co. Model STF-U-24 Emergency Plant Flare with a continuous pilot to control emissions from pressure release valves located throughout the processing plant.
AA-004	Sulfur Storage and Loading Facilities with a 10,000 long ton Sulfur Storage tank (T-226).
AA-005*	Tank Farm Precautionary Flare with continuous pilot to burn vented blanket gas from the normal breathing and working of the following six inhibitor oil tanks. 42,000 gallon tank (T-170) storing Inhibitor Oil 84,000 gallon tank (T-180) storing Inhibitor Oil 42,000 gallon tank (T-1000) storing Inhibitor Oil 8,820 gallon tank (T-190) storing Inhibitor Oil 8,820 gallon tank (T-200) storing Inhibitor Oil 12,600 gallon tank (T-210) storing Inhibitor Oil
AA-006*	415 HP Caterpillar G379 natural gas-fired compressor engine No. 1 with electronic air-fuel ratio control and a Houston, Inc. Silencing Catalytic Converter - Model #DN/S-4285C for the control of nitrogen oxide and carbon monoxide emissions.
AA-007*	415 HP Caterpillar G379 natural gas-fired compressor engine No. 2 with electronic air-fuel ratio control and a Houston, Inc. Silencing Catalytic Converter - Model #DN/S-4285C for the control of nitrogen oxide and carbon monoxide emissions.
AA-008*	330 HP Ingersoll Rank SVG-6 natural gas-fired compressor engine No. 3 with electronic air-fuel ratio control and a Houston, Inc. Silencing Catalytic Converter - Model #DN/S-4285C for the control of nitrogen oxide and carbon

Emission Point	Description
	monoxide emissions.
AA-009*	607 HP Waukesha 2895GS1 natural gas-fired compressor engine No. 4 with electronic air-fuel ratio control and a Miratec Catalytic Converter - Model #EO-501-10-01 for the control of nitrogen oxide and carbon monoxide emissions.
AA-010*	607 HP Waukesha 2895GS1 natural gas-fired compressor engine No. 5 with electronic air-fuel ratio control and a Miratec Catalytic Converter - Model #EO-501-10-01 for the control of nitrogen oxide and carbon monoxide emissions.

*** All combustion units are fired using sweetened natural gas. No sour gas is fired.**

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. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001	40 CFR 63.760 and 40 CFR 63.764(e)	3.B.1	HAP	Applicability of Subpart HH for Oil and Gas Production Facilities and General Standards Exemption
	40 CFR 63.762 (e)	3.B.2		SSM - Exemption
	Federally Enforceable Permit to Construct for Prevention of Significant Deterioration Issued: January 19, 1984 Modified: November 7, 2007	3.B.3	SO_2	0.084 lbs of SO_2 per lb of sulfur processed @ 1465 long tons per day
		3.B.4	$COS + CS_2$ [Expressed as SO_2]	0.009 lbs SO_2 per lb of Sulfur processed @ 1465 long tons per day
		3.B.5	Total SO_2 ($SO_2 + COS + CS_2$) [Expressed as SO_2]	0.093 lbs SO_2 per lb of Sulfur processed @ 1465 long tons per day
	APC S-1, Section 4.2(d)	3.B.6	SO_2 for the backup thermal oxidizer	0.12 lbs of SO_2 per lb of Sulfur processed
AA-002A AA-002B	APC S-1, Section 3.4 (a) (2)	3.B.7	PM	$E=0.8808*I^{-0.1667}$ or as otherwise limited by facility modification restrictions.
	APC S-1, Section 4.1 (a)	3.B.8	SO_2	4.8 lb/MMBTU or as otherwise limited by facility modification restrictions
	40 CFR 63 Subpart DDDDD	3.B.9	HAP	Applicability of Subpart DDDDD
AA-004	APC S-1 Section 4.2(a)	3.B.10	SO_2	2000 ppm (volume)
AA-006 AA-007 AA-008 AA-009 AA-010	APC S-1 Section 3.4(a)(1)	3.B.11	PM	0.6 lbs/MMBTU or as otherwise limited by facility modifications
	APC S-1 Section 4.1(a)	3.B.8	SO_2	4.8 lbs/MMBTU or as otherwise limited by facility modifications
	Federally Enforceable Permit to Construct Issued: March 26, 1996	3.B.12	Operation Limitation	Limited to the simultaneous operation of no more than 4 of the 5 compressors at any given time
AA-006 AA-007	Federally Enforceable Permit to Construct: March 26, 1996	3.B.13	NO_x	1.8 lbs/hour and 8.0 tons/year for each compressor

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
		3.B.14	CO	4.6 lbs/hour and 20.0 tons/year for each compressor
AA-008		3.B.15	NO_x	1.5 lbs/hour and 6.4 tons/year
		3.B.16	CO	3.6 lbs/hour and 15.9 tons/year
AA-009 AA-010		3.B.17	NO_x	2.7 lbs/hour and 11.7 tons/year for each compressor
		3.B.18	CO	6.7 lbs/hour and 29.3 tons/year for each compressor
	40 CFR 63.6580	3.B.19	HAP	Reduce Formaldehyde by 76%

3.B.1 Emission Point AA-001 is subject to and shall comply with the section 112, National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT), as described in 40 CFR 63, Subpart HH –National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities.

Specifically, only the glycol dehydration unit is subject to the Subpart HH MACT Standard. However, the glycol dehydration unit is exempt from the requirement of this subpart per 40 CFR 63.764(e):

(1) The owner or operator is exempt from the glycol dehydrator requirements if the criteria listed in paragraph (e)(1)(ii) of this section are met, except that the records of the determination of these criteria must be maintained as required in 40 CFR 63.774(d)(1).

(ii) The actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere are less than 0.90 megagrams per year, as determined by the procedures specified in 40 CFR 63.772(b)(2).

[Ref.: 40 CFR 63.760 and 40 CFR 63.764(e)]

3.B.2 For Emission Point AA-001, the permittee is not required to prepare a startup, shutdown, and malfunction plan for any facility where all of the affected sources meet the exemption criteria specified in 40 CFR 63.764(e). [Ref: 40 CFR 63.762(e)]

3.B.3 For Emission Point AA-001, the permittee shall limit the total emissions of SO_2 from the stack outlet to 0.084 lbs SO_2 per lb of sulfur processed @ 1465 LT/day.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

3.B.4 For Emission Point AA-001, the permittee shall limit the total emissions of Carbonyl Sulfide

(COS) + Carbon Disulfide (CS_2) [Expressed as SO_2] from the stack outlet to 0.009 lbs SO_2 per lb of sulfur processed @ 1465 LT/day.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

3.B.5 For Emission Point AA-001, the permittee shall limit the total SO_2 (expressed as: SO_2 + COS + CS_2) from the stack outlet to 0.093 lbs SO_2 per lb of sulfur processed @ 1465 LT/day.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

3.B.6 For Emission Point AA-001, while operating the back-up emergency thermal oxidizer in the event of catalytic oxidizer failure, the emission limitation for sulfur dioxide shall be 0.12 lb SO_2 per lb of sulfur processed, as stated in APC S 1, Section 4.2(d).
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

3.B.7 For Emission Points AA-002A and AA-002B, the maximum discharge of 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 of heat input and I is the heat input in millions of BTU per hour.
[Ref.: APC-S-1, Section 3.4.(a)(2)]

3.B.8 For Emission Point AA-002A, AA-002B, AA-006, AA-007, AA-008, AA-009 and AA-010, the maximum discharge of sulfur oxides shall not exceed 4.8 lbs (measured as sulfur dioxide) per million BTU heat input.
[Ref.: APC-S-1, Section 4.1(a)]

3.B.9 Emission Points AA-002A and AA-002B are subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63.7480 – Subpart DDDDD for Industrial, Commercial, and Institutional Boilers and Process Heaters. Specifically:

(A) Emission Points AA-002A and AA-002B meet the definition for the Large Gaseous Fuel Subcategory:

> Large gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual capacity factor of greater than 10 percent. 40 CFR 63.7575

(B) Emission Points AA-002A and AA-002B, as promulgated for the Large Gaseous Fuel Subcategory, are subject to the Limited MACT Requirements as specified at 40 CFR 63.7506(b) :

> For existing large gaseous fuel units, the affected boilers and process heaters are subject to only the initial notification requirements in 40 CFR 63.9(b) (i.e., they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSMP, site-specific monitoring plans,

recordkeeping and reporting requirements of Subpart DDDDD or any other requirements in 40 CFR 63, Subpart A).
[Ref.: 40 CFR 63.7480]

3.B.10 For Emission Point AA-004, the sulfur storage and loading facilities shall be limited to an SO_2 emission limit of 2000 ppm (volume). [Ref.: APC-S-1, Section 4.2(a)]

3.B.11 For Emission Points AA-006, AA-007, AA-008, AA-009 and AA-010, the maximum discharge of particulate matter shall not exceed an emission rate of 0.6 pounds per million BTU per hour heat input.
[Ref.: APC-S-1, Section 3.4(a)(1)]

3.B.12 For Emission Points AA-006, AA-007, AA-008, AA-009 and AA-010, the permittee shall be limited to the simultaneous operation of no more than 4 of the 5 compressor engines at any given time.
[Ref.: Construction Permit issued March 26, 1996]

3.B.13 For Emission Points AA-006 and AA-007, the compressor engines shall be limited to a NO_x emission rate of 1.8 lbs/hour and 8.0 tons/year for each compressor
[Ref.: Construction Permit issued March 26, 1996]

3.B.14 For Emission Points AA-006 and AA-007, the compressor engines shall be limited to a CO emission rate of 4.6 lbs/hour and 20.0 tons/year for each compressor
[Ref.: Construction Permit issued March 26, 1996]

3.B.15 For Emission Point AA-008, the compressor engines shall be limited to a NO_x emission rate of 1.5 lbs/hour and 6.4 tons/year for each compressor
[Ref.: Construction Permit issued March 26, 1996]

3.B16 For Emission Points AA-008, the compressor engine shall be limited to a CO emission rate of 3.6 lbs/hour and 15.9 tons/year for each compressor
[Ref.: Construction Permit issued March 26, 1996]

3.B.17 For Emission Points AA-009 and AA-010, the compressor engines shall be limited to a NO_x emission rate of 2.7 lbs/hour and 11.7 tons/year for each compressor
[Ref.: Construction Permit issued March 26, 1996]

3.B.18 For Emission Points AA-009 and AA-010, the compressor engines shall be limited to a CO emission rate of 6.7 lbs/hour and 29.3 tons/year for each compressor
[Ref.: Construction Permit issued March 26, 1996]

3.B.19 Emission Points AA-009 and AA-010 are subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63.6580 – Subpart ZZZZ for Stationary Reciprocating Internal Combustion Engines. Specifically the permittee shall reduce

the formaldehyde emissions by 76% or more from each compressor engine.
[Ref.: 40 CFR 63.6580 and 40 CFR 63.6600(a) and Table 1(a) of the Subpart]

C. Insignificant and Trivial Activity Emission Limitations & Standards

Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
APC-S-1, Section 3.4(a)(1)	3.C.1	PM	0.6 lbs/MMBTU
APC-S-1, Section 4.1(a)	3.C.2	SO_2	4.8 lbs/MMBTU

3.C.1 The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.

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.

There are no other requirements applicable to the insignificant activities listed in the source's Title V permit application.

D. Work Practice Standards and Operation Requirements

Emission Point(s)	Applicable Requirement	Condition Number(s)	Limit/Standard
AA-001	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Issued: January 19, 1984 Modified: **November 7, 2007**	3.D.1	Utilize the thermal oxidation control device in the event of failure of the catalytic oxidation control device.
		3.D.2	Minimum thermal oxidizer residence time of 1.5 seconds with a minimum temperature of 870^{o}F
AA-009	40 CFR 63, Subpart ZZZZ	3.D.3	Maintain catalyst pressure drop
AA-010		3.D.4	Maintain catalyst inlet temperature
Facility and Gas Production Wells	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Issued: January 19, 1984 Modified: **November 7, 2007**	3.D.5	Adjust the time of any scheduled flaring at the production well(s) of untreated gas to coincide with periods of optimum dispersion

3.D.1 For Emission Point AA-001, in the event of failure of the catalytic oxidation control device, the permittee shall utilize the thermal oxidation device until operation of the catalytic oxidation control device can be resumed.[Ref.: PSD Construction Permit issued January 19, 1984 and modified November 7, 2007]

3.D.2 For Emission Point AA-001, in the event the thermal oxidizer is operated in lieu of the catalytic oxidizer, the permittee shall assure a minimum tail gas residence time of 1.5 seconds in the mixing chamber and maintain a minimum temperature of 870 °F in the mixing chamber. [Ref.: PSD Construction Permit issued January 19, 1984 and modified November 7, 2007]

3.D.3 For Emission Points AA-009 and AA-010, the permittee shall maintain the catalyst of each engine so that the pressure drop across the catalyst does not change by more than two inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test. [Ref.: 40 CFR 63, Subpart ZZZZ]

3.D.4 For Emission Points AA-009 and AA-010, the permittee shall maintain the temperature of the stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450^{o}F and less than or equal to 1350^{o}F. [Ref.: 40 CFR 63, Subpart ZZZZ]

3.D.5 The permittee shall adjust the time of any scheduled flaring at the production well(s) of untreated gas to coincide with periods of optimum dispersion. [Ref.: PSD Construction Permit issued January 19, 1984 and modified November 7, 2007]

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.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 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.: 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/Recordkeeping Requirement	Condition Number	Applicable Requirement
AA-001	Sulfur/SO_2	Monitor and record the pounds of sulfur processed each day via daily monitoring of volume of untreated gas processed and semi-annual analysis of sulfur content of untreated gas	5.B.1(a)	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Authority: Issued: January 19, 1984 Modified: **November 7, 2007**
	Sulfur/SO_2	Monitor and record the pounds of sulfur recovered each day via daily gauging of sulfur tanks	5.B.1(b)	
	Sulfur/SO_2	Monitor and record the composition of the acid gas feed, the tail gas and the incinerator stack gas once per quarter via chromatographic analysis and calculate the overall sulfur recovery efficiency	5.B.1(c)	
	Sulfur/SO_2	Calculate the actual SO_2 emissions (lbs per lb of sulfur processed) using the monitoring data from the Conditions above as follows: (a) for each day using each day's operational data and the most recent untreated gas analysis; and (b) once per quarter based on the most recent acid gas, tail gas, and stack gas analyses. The calculations shall address actual emissions of SO_2, COS and CS_2 (lb/hr, daily average), and total SO_2 (including COS and CS_2 expressed as SO_2). In lieu of this speciation of emissions, the permittee may calculate emissions as total sulfur expressed as SO_2 (lbs per lb of sulfur processed) provided the calculated value is less than 0.084 pounds per pound of sulfur processed	5.B.2	
	H_2S, COS, CS_2	Calculate the actual emissions of H_2S, COS and CS_2 (lb/hr, daily average) for each day using each day's operational data and the most recent stack gas analysis	5.B.3	
	H_2S, COS, CS_2 SO_2 and Total SO_2	Biennial stack testing to be performed while plant is operating at maximum available production. The production rate shall be documented and reported in the stack test report	5.B.4	
	H_2S, COS, CS_2	Monitor and record the catalytic oxidizer inlet and bed temperatures	5.B.5	

Emission Point AA-001 continued on next page

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AA-001	H_2S, SO_2	Weekly inspection of Ametek (DuPont) Tail Gas Analyzer. Record of inspections, maintenance and repairs must be maintained	5.B.6	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Authority: Issued: January 19, 1984 Modified: **November 7, 2007** 40 CFR 64 40 CFR 63.774(d)(1)
	H_2S, COS, CS_2 SO_2	Maintain records of any event or failure or bypass of the catalytic oxidizer. The records shall include the date, time, duration, cause and remedial and preventive actions taken or planned.	5.B.7	
	H_2S, COS, CS_2 SO_2	Compliance Assurance Monitoring Plan for the sulfur recovery unit, catalytic converter and thermal oxidizer	5.B.16	
	HAP	Maintain test record showing no benzene in Glycol vent to support exemption status.	5.B.17	
AA-003	H_2S, COS, CS_2	Maintain records of any flaring or direct venting of gases through the emergency flare. The records shall include the date, time, duration, cause, and remedial and preventive actions taken or planned.	5.B.18	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Authority: Issued: January 19, 1984 Modified: **November 7, 2007**
AA-006 AA-007 AA-008 AA-009 AA-010	NO_x CO	Biennial stack testing	5.B.8	Title V monitoring to assure compliance with the emissions limits set in the Federally Enforceable Permit to Construct Issued: March 26, 1996
	NO_x CO	Monitor the air-to-fuel ratio for each compressor engine for controlling NOx and CO emissions.	5.B.9	
	Hours of Operation	Keep records of the date of operation and corresponding hours of operation for each emission point in order to demonstrate compliance with the operating limitation under Condition 3.B.12	5.B.10	
	Fuel Monitoring	Monitor and maintain records of fuel type and quantity fired	5.B.11	
AA-009 AA-010	Formaldehyde	Conduct the performance tests and establish operating parameters.	5.B.19	40 CFR 63.6615 40 CFR 63.6620 40 CFR 63.6640
	Pressure drop Temperature	Install operate and demonstrate continuous compliance using a continuous parameter monitoring system (CPMS).	5.B.20	40 CFR 63.6625 40 CFR 63.6630 40 CFR 63.6635 40 CFR 63.6640
	Formaldehyde Pressure drop Temperature	Keep records of monitoring data and notifications	5.B.21	40 CFR 63.6655 40 CFR 63.6660

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
Facility & Gas Production Wells	SO_2 & H_2S	The permittee shall operate and maintain the existing SO_2 and H_2S ambient monitoring network. The permittee must obtain approval from the DEQ prior to making any changes which would reduce the existing capabilities of the network. Monitoring data generated by this network is exempt from the reporting requirements of Paragraph 5.A.4; however, the data must be made available upon written request by DEQ personnel.	5.B.12	STATE ONLY REQUIREMENT
	Well Flaring	The permittee shall adjust the time of any scheduled flaring at the production well(s) of untreated gas to coincide with periods of optimum dispersion.	5.B.15	Federally Enforceable Permit to Construct for the Prevention of Significant Deterioration Authority: Issued: January 19, 1984 Modified: **November 7, 2007**

5.B.1 (a) For Emission Point AA-001, the permittee shall monitor and record the pounds of sulfur processed each day via daily monitoring of volume of untreated gas processed and semi-annual analysis of sulfur content of untreated gas

(b) For Emission Point AA-001, the permittee shall monitor and record the pounds of sulfur recovered each day via daily gauging of sulfur tanks

(c) For Emission Point AA-001, the permittee shall monitor and record the composition of the acid gas feed, the tail gas and the incinerator stack gas once per quarter via chromatographic analysis and calculate the overall Sulfur Recovery Efficiency (expressed in percent) of the Sulfur Recovery Unit as determined by Carbon Balance Calculations using the Acid Gas and Tail Gas chromatograph analyses.

[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

5.B.2 For Emission Point AA-001, the permittee shall calculate the actual SO2 emissions (lbs per lb of sulfur processed) using the monitoring data from the Conditions above as follows:

(a) For each day using each day's operational data and the most recent untreated gas analysis; and

(b) Once per quarter based on the most recent acid gas, tail gas, and stack gas analyses.

The calculations shall address actual emissions of SO2, COS and CS2 (lb/hr, daily average), and total SO2 (including COS and CS2 expressed as SO2). In lieu of this speciation of emissions, the permittee may calculate emissions as total sulfur expressed as SO2 (lbs per lb of sulfur processed) provided the calculated value is less than 0.084 pounds per pound of sulfur processed.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

5.B.3 For Emission Point AA-001, the permittee shall calculate the actual emissions of H2S, COS and CS2 (lb/hr, daily average) for each day using each day's operational data and the most recent stack gas analysis.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

5.B.4 For Emission Point AA-001, the permittee shall monitor SO_2, H_2S, COS, CS_2, total SO_2 (including COS and CS_2 expressed as SO_2), sulfur plant recovery efficiency and catalytic oxidizer conversion efficiency using carbon balance calculations. Stack testing will be in accordance with EPA Test Methods 6 and 15, or their approved equivalents, during the fourth quarter of 1999 and biennially thereafter. The testing shall be performed while the Plant is operating at the maximum available production from the existing sour gas wells in the Field
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

5.B.5 For Emission Point AA-001 (Catalytic Oxidizer Unit) the permittee shall continuously monitor, low temperature alarm and record the inlet gas temperature. Additionally the inlet and catalyst bed temperatures shall be manually logged once per day.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

5.B.6 For Emission Point AA-001, the permittee shall perform weekly inspections of the air pollution control equipment and monitoring devices (namely the Dupont (Ametek) Tail Gas Analyzer). Maintenance shall be performed as necessary to maintain proper operation of the pollution control equipment and monitoring devices. Records of weekly inspections and any maintenance work shall be kept in log form and must be made available for review upon request during any inspection visit by Office of Pollution Control personnel.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

5.B.7 For Emission Point AA-001, the permittee shall maintain records of any event of failure or bypass of the catalytic oxidizer. The records shall include the date, time, duration, cause, whether or not the backup thermal oxidizer functioned properly during the event, and

remedial and preventive actions taken or planned.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

5.B.8 For Emission Points AA-006, AA-007, AA-008, AA-009 and AA-010, the permittee shall monitor NOx and CO emissions by stack testing in accordance with EPA Reference Methods 7 and 10, or their approved equivalents, within two years of the previous compliance demonstration event and biennially thereafter. The NOx and CO testing shall be performed simultaneously and while the compressor engine is operating at peak load conditions.
[Ref.: Federally Enforceable Permit to Construct Issued: March 26, 1996]

5.B.9 For Emission Points AA-006, AA-007, AA-008, AA-009 and AA-010, the permittee shall once daily, monitor NO_x and CO emissions via monitoring of the electronic air/fuel ratio controller for proper operation at each compressor then operating, by observing and logging the controller signal voltage. Any unit that appears to be malfunctioning shall be checked and repaired as soon as practical to assure the NO_x and CO emissions are minimized.
[Ref.: Federally Enforceable Permit to Construct Issued: March 26, 1996]

5.B.10 For Emission Points AA-006, AA-007, AA-008, AA-009 and AA-010, the permittee shall keep records of the date of operation and corresponding hours of operation for each compressor in order to demonstrate compliance with the operating limitation under Condition 3.B.12
[Ref.: Federally Enforceable Permit to Construct Issued: March 26, 1996]

5.B.11 The permittee shall maintain records of the type and quality of the natural gas fuel used.
[Ref.: Federally Enforceable Permit to Construct Issued: March 26, 1996]

5.B.12 As it pertains to the entire facility and the gas production wells, the permittee shall operate and maintain the existing SO2 and H2S ambient monitoring network. The permittee must obtain approval from the DEQ prior to making any changes which would reduce the existing capabilities of the network. Monitoring data generated by this network is exempt from the reporting requirements of Paragraph 5.A.4; however, the data must be made available upon written request by DEQ personnel.
[**STATE ONLY REQUIREMENT]**

Note: Requirements 5.B.13 and 5.B.14 were removed from previous permit.

5.B.15 As it pertains to the entire facility and the gas production wells, the permittee shall adjust the time of any scheduled flaring at the production well(s) of untreated gas to coincide with periods of optimum dispersion.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

5.B.16 For Emission Point AA-001, the permittee shall assure compliance with the H_2S, COS, CS_2 and SO_2 emissions limitations by utilizing the Compliance Assurance Monitoring Plan for the

sulfur recovery unit, catalytic oxidizer and thermal oxidizer. The following three tables identify the monitoring approach and indicator values for each unit. A complete copy of the CAM Plan is attached in Appendix C.
[Ref.: 40 CFR 64]

5.B.17 For Emission Point AA-001, the permittee that is exempt from control requirements under §63.764(e)(1) and shall maintain the following records, as appropriate, for each glycol dehydration unit that is not controlled according to the requirements of §63.764(c)(1)(i).

(i) The actual annual average natural gas throughput (in terms of natural gas flowrate to the glycol dehydration unit per day) as determined in accordance with §63.772(b)(1),

or

(ii) The actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with §63.772(b)(2).
[Ref.: 40 CFR 63.774(d)(1)].

5.B.18 For Emission Point AA-003, the permittee shall maintain records of any flaring or direct venting of gases through the emergency flare. The records shall include the date, time, duration, cause, and remedial and preventive actions taken or planned.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

5.B.19 For Emission Points AA-009 and AA-010, the permittee shall conduct the performance tests required to demonstrate compliance with the formaldehyde reduction standards and establish catalyst operating parameters.
[Ref.: 40 CFR 63.6615, 40 CFR 63.6620, 40 CFR 63.6640]

5.B.20 For Emission Points AA-009 and AA-010, the permittee shall install, operate and demonstrate continuous compliance using a continuous parameter monitoring system (CPMS).
[Ref.: 40 CFR 63.6625, 40 CFR 63.6630, 40 CFR 63.6635, 40 CFR 63.6640]

5.B.21 For Emission Points AA-009 and AA-010, the permittee shall keep records of the required notifications and the monitoring data from the CPMS.
[Ref.: 40 CFR 63.6655, 40 CFR 63.6660]

TABLE NO. 1

MONITORING APPROACH - SULFUR RECOVERY UNIT

Pursue Energy-Thomasville Plant, Brandon, MS		
	Indicator No. 1	Indicator No. 2
I. Indicator	H2S+SO2 Content Mol % in Tail Gas	Reactor No. 1 - Average of Lower Bed Temps (I15+R13+R14+I14) / 4
Measurement Approach	Dupont (Ametek) Ultraviolet Analyzer	Temperature Measurement by Thermocouples
II. Indicator Range	1.850% H2S+SO2 Max Indicator Range (0.080lb/lb) 1.95% MAX LIMIT Equivalent to 0.084 lbSO2/lbS	570°F Minimum Indicator Range 560°F Minimum Limit
III. Performance Criteria		
A. Data Representativeness	Long established and proven UV Analytical Technology and monitoring location.	Long established and proven thermocouple temperature measurement technology and monitoring locations.
B. Verification of Operational Status	Existing Unit - Operation, calibration, and accuracy have been well confirmed and documented.	Existing - Temperature Monitoring System. Proper operation of thermocouples, display and strip chart have long been confirmed.
C. QA/QC Practices	Analyzer is calibrated at least weekly as per Title V permit requirement, Condition 5.B.6.	Inoperative thermocouples are repaired / replaced as required.
D. Monitoring Frequency	Continuous	Continuous
Data Collection Procedures	Strip Chart (H2S&SO2) Backed up by manual logging of H2S and SO2 readings every 4 hours.	Strip Chart (R13& R14) Backed up by manual logging of all Bed Temperatures (15 points) once per week.

TABLE NO. 2

MONITORING APPROACH - CATALYTIC INCINERATOR (Oxidizer)

Pursue Energy-Thomasville Plant, Brandon, MS		
	Indicator No. 1	Indicator No. 2
I. Indicator	Catalytic Reactor Bed Inlet, Outlet, and Bed Temps.	None.
Measurement Approach	Temperature Measurement by Thermocouples	
II. Indicator Range	580°F inlet Temperature Minimum Indicator Range 570° Minimum Limit	Note: There is a Temperature Indicating Control on the inlet temperature (TIC-3510) and a Low Temp Alarm on the inlet temperature. (TAL-3510)
III. Performance Criteria		
A. Data Representativeness	Long established and proven thermocouple temperature measurement technology and monitoring locations.	
B. Verification of Operational Status	Existing - Temperature Monitoring System. Proper operation of thermocouples and digital display have long been confirmed.	
C. QA/QC Practices	Inoperative thermocouples are repaired / replaced as required.	
D. Monitoring Frequency	Continuous - Title V permit requirement, Condition 5.B.5	
Data Collection Procedures	Strip Chart on Inlet Temp (R-10) The Inlet, Outlet and Bed Temperatures are manually logged once per day.	

TABLE NO. 3

MONITORING APPROACH - (BACKUP) THERMAL OXIDIZER

Pursue Energy-Thomasville Plant, Brandon, Ms		
	Indicator No. 1	Indicator No. 2
I. Indicator	Thermo Oxidizer Temperature (TRC-8 in mixing chamber)	None.
Measurement Approach	Temperature Measurement by Thermocouples	
II. Indicator Range	880°F Minimum Indicator Range 870°F Minimum Limit	
III. Performance Criteria		
A. Data Representativeness	Long established and proven thermocouple temperature measurement technology and monitoring locations.	
B. Verification of Operational Status	Monitoring System. Proper operation of thermocouple and Temp Recording Control have long been confirmed	
C. QA/QC Practices	Inoperative thermocouple is repaired / replaced as required.	
D. Monitoring Frequency	Continuous - Title V permit requirement, Condition 5.B.7	
Data Collection Procedures	Strip Chart (TRC-8) and Manually logged once per day.	

C. Specific Reporting Requirements

5.C.1 For Emission Points AA-001, AA-006, AA-007, AA-008, AA-009 and AA-010, the

permittee shall submit a written test protocol at least thirty (30) days prior to the intended test date(s) to ensure that all test methods and procedures are acceptable to the DEQ. Also, the permittee shall notify the DEQ in writing at least ten (10) days prior to the intended test date(s) so that an observer may be afforded the opportunity to witness the test.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]
[Ref.: Federally Enforceable Permit to Construct Issued: March 26, 1996]

5.C.2 For Emission Points AA-001, AA-006, AA-007, AA-008, AA-009 and AA-010, the permittee shall submit a test report of the results of the stack test (as required by Condition 5.B.8 above) within forty-five (45) days of the test date.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]
[Ref.: Federally Enforceable Permit to Construct Issued: March 26, 1996]

5.C.3 For Emission Point AA-001, the permittee shall submit semiannually, the quarterly reports detailing the required monitoring, SO_2, COS, and CS_2 calculated daily average emissions, and the sulfur recovery efficiency determined by carbon balance calculations .calculations, the efficiency of the catalyst and the expected catalyst life.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

5.C.4 For Emission Point AA-001, the permittee shall report any calculated emissions exceeding the allowable rate in writing within five (5) days of the close of the week in which the exceedence occurred. The report shall provide the emission rate, date, duration, cause, and remedial and preventative actions taken or planned.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

5.C.5 For Emission Point AA-001, the permittee shall give notice as soon as possible after the thermal oxidizer is operated in lieu of the catalytic oxidizer. The permittee shall follow up the initial notice with submittal of a written report within five (5) days of the end of the event.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

5.C.6 For Emission Point AA-003, the permittee shall give notice of any flaring or direct venting of gases through the emergency flare as soon as possible after the event commences. The permittee shall follow up the initial notice with submittal of a written report within five (5) days of the end of the event.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]

5.C.7 As it pertains to the entire facility and the gas production wells, the permittee shall give prior notice of any scheduled flaring at a production well(s) of untreated gas including the date, time, location, cause, composition of gas, and expected duration and volume of gas. If verbal notice is given, the permittee will follow up with written notification within five (5) days.
[Ref.: PSD Construction Permit issued January 19, 1984 and modified **November 7, 2007**]
STATE ONLY REQUIRMENT

5.C.8 For Emission Points AA-009 and AA-010, the permittee shall submit a Notice of Compliance Status in accordance with the MACT Subpart ZZZZ reporting requirements.
[Ref.: 40 CFR 63.6630]

5.C.9 For Emission Points AA-009 and AA-010, the permittee shall submit reports in accordance with the MACT Subpart ZZZZ reporting requirements.
[Ref.: 40 CFR 63.6655, 45 CFR 63.6650]

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

6.1 None permitted.

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at **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

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_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

APPENDIX B