

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

**TO OPERATE AIR EMISSIONS EQUIPMENT**

**THIS CERTIFIES THAT**

Petro Harvester Operating Company, LLC  
West Nancy Field Facility  
11570 County Road 280  
Vossburg, Mississippi  
Clarke 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: SEP 11 2012

Effective Date: As specified herein.

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**



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**AUTHORIZED SIGNATURE**

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Expires: August 31, 2017

Permit No.: 0440-00011

6375 PER20100001

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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 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 ordinance. 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	4-cycle, rich-burn power oil pump engine rated at 202 horsepower (2.02 MMBTU/hr) and designed to burn sweet natural gas (Ref. No. PM3).
AA-002	4-cycle, rich-burn power oil pump engine rated at 202 horsepower (2.02 MMBTU/hr) and designed to burn sweet natural gas (Ref. No. PM4).
AA-003	4-cycle, rich-burn power oil pump engine rated at 202 horsepower (2.02 MMBTU/hr) and designed to burn sweet natural gas (Ref. No. PM5).
AA-004	4-cycle, rich-burn power oil pump engine rated at 202 horsepower (2.02 MMBTU/hr) and designed to burn sweet natural gas (Ref. No. PM6).
AA-005	4-cycle, rich-burn power oil pump engine rated at 202 horsepower (2.02 MMBTU/hr) and designed to burn sweet natural gas (Ref. No. PM9).
AA-019	4-cycle, rich-burn power oil pump engine rated at 202 horsepower (2.02 MMBTU/hr) and designed to burn sweet natural gas (Ref. No. PM12).
AA-020	Tank truck loading process (Ref. No. TTL) where emissions are routed to the control flare (AA-034).
AA-021	Produced fluid streams from individual well sites are piped to heater treaters (not fuel-fired) where gas, oil, and water are separated (3-phase separators) and the gas is then piped to an off-site company for sales. The separated oil is sent to the power oil tanks and the water to the water storage tanks. Low pressure relief gas is vented to the flare (Ref. No. 24-10-LP-RG).
AA-022	Vapor Recovery Unit (VRU) consisting of an electric-powered compressor designed to capture vapors from the process storage tanks (AA-025 - 033), which is piped to an off-site company for sales and any relief gas is piped to the control flare for combustion (AA-034).
AA-025	300 barrel (12,600 gallon) fixed-roof crude oil storage tank with emissions captured by the VRU (AA-022) and controlled with the control flare (AA-034) by combustion (Ref. No. TK10).
AA-026	300 barrel (12,600 gallon) fixed-roof crude oil storage tank with emissions captured by the VRU (AA-022) and controlled with the control flare (AA-034) by combustion (Ref. No. TK11).
AA-027	300 barrel (12,600 gallon) fixed-roof crude oil storage tank with emissions captured by the VRU (AA-022) and controlled with the control flare (AA-034) by combustion (Ref. No. TK12).
AA-030	1,500 barrel (63,000 gallon) fixed-roof crude oil storage tank with emissions captured by the VRU (AA-022) and controlled with the control flare (AA-034) by combustion (Ref. No. 22a-10-OST-CV).
AA-031	400 barrel (16,800 gallon) fixed-roof bad crude oil storage tank with emissions captured by the VRU (AA-022) and controlled with the control flare (AA-034) by combustion (Ref. No. 22b-10-OST-CV).
AA-032	400 barrel (16,800 gallon) fixed-roof bad crude oil storage tank with emissions captured by the VRU (AA-022) and controlled with the control flare (AA-034) by combustion (Ref. No. 22c-10-OST-CV).
AA-033	Two (2) 400 barrel (16,800 gallon) fixed-roof produced water storage tanks with emissions captured by the VRU (AA-022) and controlled with the control flare (AA-034) by combustion (Ref. No. 22d-10-WST-CV and 22e-10-WST-CV).
AA-034	Control flare to combust vapors from storage tanks, tank truck loading process, low-pressure relief gas from process upsets, and the pilot gas stream (Ref. No. 23-10-F).
AA-035	Fugitive process emissions (or emissions from process equipment and component losses).

### 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 thru AA-005, AA-019, and AA-034	Mississippi Air Regulations APC-S-1, Section 3.4 (a)(1)	3.B.1	PM/PM <sub>10</sub>	0.6 lb/MMBTU, or as otherwise limited by facility modification restrictions
	Mississippi Air Regulations APC-S-1, Section 4.1(a)	3.B.2	SO <sub>2</sub>	4.8 lbs/MMBTU, or as otherwise limited by facility modification restrictions
AA-034	Mississippi Air Regulations APC-S-1, Section 4.2(b) and Title V Operating Permit No. 0440-00011 (TVOP) issued on April 19, 2006	3.B.3	H <sub>2</sub> S	1 grain/100 scf
AA-034	Compliance Assurance Monitoring (CAM), 40 CFR 64 – CAM Plan provided in Appendix B	3.B.4	H <sub>2</sub> S Gas Volume Pilot Flame	100,000 ppm <sub>v</sub> (measured monthly) 800 scfh (average hourly rate) Verify presence of pilot flame (daily)

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
AA-001 thru AA-005 and AA-019	40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE (§63.6580, §63.6585, §63.6590, §63.6595, §63.6603, §63.6605, §63.6640, Table 2d, and Table 6)	3.B.5, 3.B.6, 3.B.7, and 3.B.8	Operating Limits and Work Practices	Operating Limitations and Operating and Maintenance Requirements
Facility-Wide	Mississippi Air Regulations APC-S-1, Section 4.2(a)	3.B.9	SO <sub>2</sub>	500 ppm from any process equipment

- 3.B.1 For Emission Points AA-001 through AA-005, AA-019, and AA-034, the maximum permissible emission of ash and/or particulate matter (PM/PM<sub>10</sub>) when burning fossil fuels shall not exceed 0.6 pounds per million BTU per hour heat input. (Ref.: APC-S-1, Section 3.4 (a)(1))
- 3.B.2 For Emission Points AA-001 through AA-005, AA-019, and AA-034, 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 SO<sub>2</sub>) per million BTU heat input or as otherwise specified herein. (Ref.: APC-S-1, Section 4.1(a))
- 3.B.3 For Emission Point AA-034, the maximum discharge from any gas stream that contains hydrogen sulfide (H<sub>2</sub>S) shall not be in excess of one grain per 100 standard cubic feet. (Ref.: APC-S-1, Section 4.2(b))
- 3.B.4 For Emission Point AA-034, the permittee shall meet the Compliance Assurance Monitoring (CAM) regulatory requirements and CAM Plan (provided in Appendix B). The CAM Plan provides a monitoring approach to ensure compliance with the 1 grain per 100 standard cubic feet of H<sub>2</sub>S emission limit. The permittee plans to measure gas H<sub>2</sub>S content, monitor gas volume, and verify the presence of the pilot flame at specified frequencies. (Ref.: 40 CFR 64, Compliance Assurance Monitoring Regulations)
- 3.B.5 For Emission Points AA-001 through AA-005 and AA-019, the permittee is subject to and shall comply with the NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE), 40 CFR Part 63, Subpart ZZZZ. Emission Points AA-001 through AA-005 and AA-019 are *existing* spark ignition (SI) rich burn stationary RICE with a site rating less than 500 brake horsepower (hp). (Ref.: 40 CFR 63, Subpart ZZZZ (§63.6580, §63.6585, §63.6590, §63.6595, and §63.6603 and Table 2d))
- 3.B.6 For Emission Points AA-001 through AA-005 and AA-019, the permittee shall comply with the applicable emission limitations and operating limitations in Subpart ZZZZ at all times. The permittee shall at all times operate and maintain the affected sources, 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 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, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspections. (Ref.: 40 CFR 63, Subpart ZZZZ (§63.6605))

3.B.7 For Emission Points AA-001 through AA-005 and AA-019, existing non-emergency SI stationary RICE less than or equal to 500 brake horsepower located at an area source of HAP emissions, the permittee shall operate the units according to the requirements below beginning on October 19, 2013, except during periods of startup:

- (a) Change oil and filter every 1,440 hours of operation or annually, whichever comes first;
- (b) Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and
- (c) Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

During periods of startup, the permittee shall minimize the engine's time spent at idle 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 non-startup emission limitations shall apply. (Ref.: 40 CFR 63, Subpart ZZZZ (Table 2d))

3.B.8 For Emission Points AA-001 through AA-005 and AA-019, existing non-emergency SI stationary RICE less than or equal to 500 brake horsepower located at an area source of HAP emissions, the permittee shall operate the units according to the following work or management practices beginning on October 19, 2013.

- (a) Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
- (b) Develop and follow a 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, Subpart ZZZZ (§63.6640 (Table 6))

3.B.9 Except as otherwise specified or limited herein, the permittee shall limit the discharge of sulfur oxides (measured as SO<sub>2</sub>) to a maximum of 500 ppm (volume) from any process equipment, including Emission Points AA-001 through AA-035. (Ref.: APC-S-1, Section 4.2(a))

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/PM <sub>10</sub>	0.6 lbs/MMBTU, or as otherwise limited by facility modification restrictions
APC-S-1, Section 4.1(a)	3.C.2	SO <sub>2</sub>	4.8 lbs/MMBTU, or as otherwise limited by facility modification restrictions
APC-S-1, Section 3.6(a)	3.C.3	PM/PM <sub>10</sub>	$E=4.1(p)^{-0.67}$ , 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. (Ref.: APC-S-1, Section 3.4(a)(1))

3.C.2 The maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer shall not exceed 4.8 pounds (measured as sulfur dioxide) per million BTU heat input. (Ref.: APC-S-1, Section 4.1(a))

3.C.3 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission from any manufacturing process, in any one hour from any point source, particulate matter in total quantities in excess of the amount determined by the relationship:

$$E=4.1(p)^{-0.67}$$

Where E is the emission rate in pounds per hour and p is the process weight input rate in tons per hour. If the process weight input rate (p) changes, the emissions rate (E) will change accordingly. (Ref.: APC-S-1, Section 3.6(a))



## 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.)
- 4.3 For Emission Points AA-001 through AA-005 and AA-019, the permittee is subject to and shall comply with the applicable requirements of 40 CFR Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (RICE). The permittee shall comply with the requirements of Subpart ZZZZ as specified in Section 3 and Section 5 of this permit by no later than October 19, 2013.

## 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, Recordkeeping, and Reporting Requirements**

Emission Point(s)	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement	Condition Number	Applicable Requirement
AA-001 thru AA-005, AA-019, and AA-034	Fuel	Record the type, quantity, and quality of fuels used.	5.B.1	Mississippi Air Regulation APC-S-1, Section 3.4 (a)(1) and 4.1(a) and TVOP issued April 19, 2006
AA-034	Gas Flared	Monitor and record the amount of gas flared.	5.B.2	APC-S-6, Section III.A.3(a)(2) and TVOP issued April 19, 2006
AA-034	H <sub>2</sub> S	Monitor and record the H <sub>2</sub> S concentration of gas flared.	5.B.3	APC-S-1, Section 4.2(b) and TVOP issued April 19, 2006
AA-034	SO <sub>2</sub>	Calculate and record SO <sub>2</sub> concentration and emissions of gas flared.	5.B.4	APC-S-1, Section 4.2(a) and APC-S-6, Section III.A.3(a)(2)
AA-034	H <sub>2</sub> S	Monitor the H <sub>2</sub> S concentration and volume of gas flared and monitor pilot flame presence.	5.B.5	Compliance Assurance Monitoring (CAM), 40 CFR 64
AA-001 thru AA-005 and AA-019	Performance Testing	Initial Performance Testing Requirements.	5.B.6	40 CFR 63, Subpart ZZZZ, §63.6612(a) and (b) and §63.6620
AA-001 thru AA-005 and AA-019	Operating and Maintenance Standards	Monitoring, Operation, and Maintenance Requirements.	5.B.7	40 CFR 63, Subpart ZZZZ, §63.6625(e)(8), (h), and (j)
AA-001 thru AA-005 and AA-019	Operating and Maintenance Standards	Emission and Operating Limitation Requirements	5.B.8	40 CFR 63, Subpart ZZZZ, §63.6640(a) and (b) and §63.6650
AA-001 thru AA-005 and AA-019	Notifications	Notification Requirements	5.B.9	40 CFR 63, Subpart ZZZZ, §63.6645(a), (g), and (h)
AA-001 thru AA-005 and AA-019	Recordkeeping	Recordkeeping Requirements	5.B.10	40 CFR 63, Subpart ZZZZ, §63.6655, §63.6660, and 5.A.3

- 5.B.1 For Emissions Points AA-001 through AA-005, AA-019, and AA-034, the fuel-burning equipment, the permittee shall maintain records of the type, quantity, quality (including sulfur content), and heating value (BTU/gal or BTU/ft<sup>3</sup>) of the fuel or fuels used. The results shall be maintained in accordance with Permit Condition 5.A.3.
- 5.B.2 For Emission Point AA-034, the permittee shall record and maintain the amount of gas flared in any 24-hour period (summarized each month with a 12-month rolling total) and include the basis for the estimate (e.g., meter, production records, engineering estimate, etc.). All gas streams that are sent to the flare shall be recorded including gas due to downstream compressor shutdowns, gas sent from the VRU, tank loading emissions, shutdowns and malfunctions, etc. The results shall be maintained in accordance with Permit Condition 5.A.3.
- 5.B.3 For Emission Point AA-034, the permittee shall measure the hydrogen sulfide (H<sub>2</sub>S) content, in gr/scf, of the emitted gas on a monthly basis, and the results shall be maintained in accordance with Permit Condition 5.A.3.
- 5.B.4 For Emission Point AA-034, the permittee shall measure or calculate the sulfur dioxide (SO<sub>2</sub>) content, in ppm and lb/MMBTU, of the emitted gas on a monthly basis. In addition, the permittee shall calculate SO<sub>2</sub> emissions each month (in tons/month) and on a twelve (12) month rolling basis (in tons/year) using the most current gas analysis report and measured gas flow rate or other approved engineering estimates or calculation methods. The results shall be maintained in accordance with Permit Condition 5.A.3.
- 5.B.5 For Emission Point AA-034, the permittee shall comply with the Compliance Assurance Monitoring (CAM) Plan contained in Appendix B. For each excursion, the permittee shall document the event and the corrective actions taken in accordance with Permit Condition 5.A.5, and if more than three (3) excursions occur within the semi-annual reporting period, a Quality Improvement Plan (QIP) shall be submitted in accordance with the CAM Plan regulations. The permittee shall comply with the CAM Plan requirements as specified in Parts 64.1-10 and detailed in the plan provided in Appendix B.
- 5.B.6 For Emission Points AA-001 through AA-005 and AA-019, the permittee shall conduct applicable initial performance test or other initial compliance demonstration according to 40 CFR 63, Subpart ZZZZ, Table 4 and §63.6620 within 180 days after the compliance date (i.e., October 19, 2013) specified in §63.6595 and according to the provisions in §63.7(a)(2). The permittee is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the following conditions:
- (a) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.

- (b) The test must not be older than 2 years.
- (c) The test must be reviewed and accepted by the Administrator.
- (d) Either no process or equipment changes must have been made since the test was performed, or the permittee must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

5.B.7 Beginning October 19, 2013, for Emission Points AA-001 through AA-005 and AA-019, the permittee shall comply with the following monitoring, operating and maintenance requirements:

- (a) Operate and maintain the stationary RICE in accordance with the manufacturer's emission-related written instruction or develop a maintenance plan that provides 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.
- (b) 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 40 CFR 63, Subpart ZZZZ, Table 2d apply.
- (c) Utilize an oil analysis program (as an alternative compliance option) to extend the specified oil change requirements in Section 3.B. provided the analysis analyzes the parameters identified in 63.6625(j).

5.B.8 Beginning October 19, 2013, for Emission Points AA-001 through AA-005 and AA-019, the permittee shall demonstrate continuous compliance with each emission limitations and operating limitations in 40 CFR 63, Subpart ZZZZ, Table 2d that applies according to methods specified in Table 6 of the Subpart. In addition, the permittee shall report each instance in which an emission limitation or operating limitation in Table 2d was not met. These instances are deviations from the emission and operating limitations, and the deviations must be reported according to the requirements in §63.6650 of the Subpart and Permit Condition 5.A.5. If there are no deviations from any applicable emission or operating limitations, the permittee shall provide a statement that there were no deviations from the emission or operating limitations during the reporting period.

5.B.9 For Emission Points AA-001 through AA-005 and AA-019, the permittee shall prepare and submit the following notifications:

- (a) All applicable notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply by the dates specified;
- (b) If required to conduct a performance test, the permittee shall submit a Notification of Intent to conduct a performance test at least sixty (60) days before the performance

test is scheduled to begin as required in §63.7(b)(1).

- (c) If required to conduct a performance test or other initial compliance demonstration (as specified in Table 4 of 40 CFR 63, Subpart ZZZZ), the permittee shall submit a Notification of Compliance Status according to §63.9(h)(2)(ii).

5.B.10 For Emission Points AA-001 through AA-005 and AA-019, the permittee shall maintain records associated with 40 CFR 63, Subpart ZZZZ and keep them readily accessible for at least five (5) years after the date of each occurrence.

**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 <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 <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 Fm in diameter
ppm	Parts per Million
PSD	Prevention of Significant Deterioration, 40 CFR 52
SIP	State Implementation Plan
SO <sub>2</sub>	Sulfur Dioxide
TPY	Tons per Year
TRS	Total Reduced Sulfur
VEE	Visible Emissions Evaluation
VHAP	Volatile Hazardous Air Pollutant
VOC	Volatile Organic Compound

# **APPENDIX B**

## **COMPLIANCE ASSURANCE MONITORING (CAM) PLAN**

## Compliance Assurance Monitoring Plan

(prepared in accordance with 40 CFR 64)

<b>Operator:</b>	<b>Facility:</b>	
Denbury Onshore, LLC	West Nancy Field	
<b>Permit No.:</b>	<b>AI No.:</b>	<b>County, State:</b>
0440-00011	6375	Clarke County, MS

### 1. Background Information

<b>Process/Emissions Unit:</b>	300 BBL Oil Storage Tank (EPN: TK10) 300 BBL Oil Storage Tank (EPN: TK11) 300 BBL Oil Storage Tank (EPN: TK12) Tank Truck Loading Loses (EPN: TTL) 1500 BBL Power Oil Tank (EPN: 22a-10-OST-CV) 400 BBL Oil Storage Tank (EPN: 22b-10-OST-CV) 400 BBL Oil Storage Tank (EPN: 22c-10-OST-CV) 400 BBL Water Storage Tank (EPN: 22d-10-WST-CV) 400 BBL Water Storage Tank (EPN: 22e-10-WST-CV)
<b>Description:</b>	Vapor recovery unit relief vapors from the storage tanks, vapors from the oil tank truck loading process and facility-wide low pressure gas resulting from the sales gas line being shut-in.
<b>Pollutant:</b>	Hydrogen Sulfide (H <sub>2</sub> S)
<b>Emission Control Technique:</b>	Control Flare (EPN: 23-10-F)
<b>Applicable Requirement:</b>	APC-S-1, Section 4.2(b)
<b>Emission Limit:</b>	1 grain/100 scf H <sub>2</sub> S

### 2. Monitoring Approach

<b>Applicable Requirement:</b>	Emissions of H <sub>2</sub> S shall not exceed 1 grain/100 scf		
<b>Monitoring Approach/Method:</b>	Measure H <sub>2</sub> S content of sour gas	Record volume of sour gas routed to flare	Operate flare with the pilot flame present at all times and record downtime
<b>Indicator Range:</b>	100,000 ppm <sub>v</sub>	800 scfh (average hourly rate)	Visible flame observation

<b>Frequency:</b>	Monthly	Each rolling 24-hour period and monthly	Daily
<b>Recordkeeping:</b>	Record sour gas content in units of ppm, and retain records for at least five (5) years from the sample date.	Record flare gas volumes in any rolling 24-hour period and each month and retain records for at least five (5) years.	Record whether or not a pilot flame was observed each day. If no flame is observed, record the downtime hours. Retain records for at least five (5) years.

#### 4. Basis

**H<sub>2</sub>S Content & Sour Gas Flare Volume:** These values are utilized to calculate the volume and mass quantities of H<sub>2</sub>S routed to the control flare for combustion.

**Presence of a pilot flame:** Presence of a pilot flame indicates that the flare is operating and that the appropriate combustion of the flare gas is attained. Visual observations are made to ensure that the pilot is lit and immediate corrective action is taken if the pilot light is observed to be extinguished.

#### 5. Additional Comments

The data associated with this monitoring plan, along with the standard combustion efficiency of the control flare device, is used to determine the concentration of H<sub>2</sub>S present in the non-combusted flare gas and therefore demonstrate applicability to the requirements outlined above. Excursions outside of the indicator ranges and/or the H<sub>2</sub>S emission limit will trigger an investigation, corrective action, and reporting, if necessary.