

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

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Petro Harvester Operating Company LLC, South Cypress Creek Facility
697 Wayne Hunting Club Road
Waynesboro, Mississippi
Wayne 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: _____

Effective Date: As specified herein.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

**AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Expires:

Permit No.: 2840-00006

TABLE OF CONTENTS

SECTION 1. GENERAL CONDITIONS	3
SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES.....	13
SECTION 3. EMISSION LIMITATIONS & STANDARDS.....	14
SECTION 4. COMPLIANCE SCHEDULE	16
SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS	17
SECTION 6. ALTERNATIVE OPERATING SCENARIOS.....	21
SECTION 7. TITLE VI REQUIREMENTS.....	22

APPENDIX A LIST OF ABBREVIATIONS USED IN THIS PERMIT

APPENDIX B LIST OF REGULATIONS REFERENCED IN THIS PERMIT

APPENDIX C COMPLIANCE ASSURANCE MONITORING PLAN

SECTION 1. GENERAL CONDITIONS

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

Draft/Proposed

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

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

- 1.5 The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permittee or, for information to be confidential, the permittee shall furnish such records to DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(e).)
- 1.6 This permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)
- 1.7 The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(5).)
- 1.8 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation 11 Miss. Admin. Code Pt. 2, Ch. 6.
 - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

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

- (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- (d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(2).)

- 1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(1).)
- 1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)
- 1.14 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)
- 1.15 Nothing in this permit shall alter or affect the following:
 - (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
 - (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
 - (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(2).)

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

1.20 Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment", and may require modification of this permit in accordance with Regulations 11 Miss. Admin. Code Pt. 2, Ch. 6., "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act". Modification is defined as "[a]ny physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:

- (a) routine maintenance, repair, and replacement;
- (b) use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
- (c) use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
- (d) use of an alternative fuel or raw material by a stationary source which:
 - (1) the source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; or
 - (2) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;
- (e) an increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or
- (f) any change in ownership of the stationary source.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.C(15).)

1.21 Any change in ownership or operational control must be approved by the Permit Board.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)

- 1.22 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B(1).)
- 1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.
- (a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.
 - (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.
 - (c) Burning must not occur within 500 yards of commercial airport property, private air fields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.G.)

- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies:
- (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 - (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.

- (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) the permitted facility was at the time being properly operated;
 - (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - (4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)

1.25 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.

- (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) For an upset, the Commission may pursue an enforcement action for noncompliance with an emission standard or other requirement of an applicable rule, regulation, or permit. In determining whether to pursue enforcement action, and/or the appropriate enforcement action to take, the Commission may consider whether the source has demonstrated through properly signed contemporaneous operating logs or other relevant evidence the following:
 - (i) An upset occurred and that the source can identify the cause(s) of the upset;
 - (ii) The source was at the time being properly operated;

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

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)

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

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-001	Primary waste gas control flare for relief gas from the vapor recovery unit (VRU) which collects emissions from the process oil tanks and the tank truck loading process. The flare also handles VRU discharge during gas line downtime.
AA-002	Emergency waste gas control flare used to control emissions from the process oil tanks during VRU downtime and low-pressure relief gas from process upsets during an emergency.
AA-004	500-barrel (21,000 gallon) power oil tank with emissions routed to a VRU then AA-001
AA-005	400-barrel (16,800 gallon) crude oil storage tank with emissions routed to a VRU then AA-001 (Ref. No. 9a-12-OST-CV)
AA-006	400-barrel (16,800 gallon) crude oil storage tank with emissions routed to a VRU then AA-001 (Ref. No. 9b-12-OST-CV)
AA-007	400-barrel (16,800 gallon) crude oil storage tank with emissions routed to a VRU then AA-001 (Ref. No. 9c-12-OST-CV)
AA-008	400-barrel (16,800 gallon) gun barrel crude oil storage tank with emissions routed to a VRU then AA-001 (Ref. No. 5d-09-GBT-CV)
AA-009	400-barrel (16,800 gallon) water suction storage tank with emissions routed to a VRU then AA-001 (Ref. No. 5e-09-WST-CV)
AA-010	500-barrel (21,000 gallon) skim oil storage tank with emissions routed to a VRU then AA-001 (Ref. No. 5f-09-SOT-CV)
AA-011	3,000-barrel (126,000 gallon) crude oil storage tank (Ref. No. 6-09-ST-V)
AA-012	Fugitive Emissions from component leaks (i.e., valves, flanges, pumps, connections, etc.)
AA-013	Tank Truck Loading with emissions routed to a VRU then AA-001

SECTION 3. EMISSION LIMITATIONS & STANDARDS

A. Facility-Wide Emission Limitations & Standards

3.A.1 Except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).

- (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
- (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A.)

3.A.2 Except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in Paragraph 3.A.1. This shall not apply to vision obscuration caused by uncombined water droplets. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.B.)

B. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limit/Standard
Facility Wide	11 Miss. Admin. Code Pt. 2, R. 1.4.B(2).	3.B.1	H ₂ S	1 grain/100 scf
AA-001	Operating Permit issued August 28, 1979, per the State Implementation Plan approved by EPA on August 11, 1980	3.B.2	SO ₂	282.0 lb/hr (24-hr average)
AA-001 AA-002	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.3	PM/PM ₁₀ (filterable only)	0.6 lb/MMBTU per hour heat input

- 3.B.1 The permittee shall not cause or permit the emission of any gas stream which contains hydrogen sulfide (H₂S) in excess of one grain per 100 standard cubic feet. Gas streams containing hydrogen sulfide in excess of one grain per 100 standard cubic feet shall be incinerated at temperatures of not less than 1600 °F for a period of not less than 0.5 seconds, or processed in such a manner which is equivalent to or more effective for the removal of hydrogen sulfide. To ensure compliance with this standard, the permittee shall at all times route emissions from the process oil tanks and the truck loading operation to Emission Point AA-001 when not routed to the sales gas line, except during process upsets or emergencies at which time the emissions shall be routed to the emergency flare, Emission Point AA-002. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.B(2).)
- 3.B.2 For Emission Point AA-001, the permittee shall not allow emissions of sulfur dioxide (SO₂) to exceed 282.0 pounds per hour (lb/hr), as determined on a 24-hour average basis. (Ref.: Operating Permit issued August 28, 1979, per the State Implementation Plan revisions approved by EPA on August 11, 1980)
- 3.B.3 For Emission Points AA-001 and AA-002, the maximum permissible emission of ash and/or particulate matter when burning fossil fuels shall not exceed 0.6 pounds per million BTU per hour heat input. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).)

C. Insignificant and Trivial Activity Emission Limitations & Standards

All insignificant activities are addressed in Section 3.B of the permit.

SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, by January 31 for the preceding calendar year. Each compliance certification shall include the following:
- (a) the identification of each term or condition of the permit that is the basis of the certification;
 - (b) the compliance status;
 - (c) whether compliance was continuous or intermittent;
 - (d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
 - (e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit.
- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(5)(a), (c), & (d).)

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. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)
- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
- (a) the date, place as defined in the permit, and time of sampling or measurements;
 - (b) the date(s) analyses were performed;
 - (c) the company or entity that performed the analyses;
 - (d) the analytical techniques or methods used;
 - (e) the results of such analyses; and
 - (f) the operating conditions existing at the time of sampling or measurement.
- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(1).)
- 5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(2).)
- 5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with 11 Miss. Admin. Code Pt. 2, R. 6.2.E. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)
- 5.A.5 Except as otherwise specified herein, the permittee shall report all deviations from permit requirements, including those attributable to upsets, the probable cause of such deviations, and any corrective actions or preventive measures taken. Said report shall be made within five (5) days of the time the deviation began. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(2).)

Draft/Proposed

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

5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-001	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.1	H ₂ S	Monitor and record the H ₂ S content (gr/scf) in sour gas on a monthly basis
		5.B.2	Gas Flared	Record amount of gas flared (scf) and record the number of hours gas is flared.
		5.B.3	SO ₂	Calculate sulfur dioxide emissions from the flare flow rate (scf/hr) and the H ₂ S content of the flared gas.
	Compliance Assurance Monitoring, 40 CFR 64	5.B.4	H ₂ S	Measure gas H ₂ S concentration at the flare tip, and verify the presence of the pilot flame.
AA-002	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).	5.B.5	Operating Hours	Monitor and record the time and cause for which the emergency flare operates and ensure the flare is lit prior to and during use.

5.B.1 For Emission Point AA-001, the permittee shall analyze the hydrogen sulfide content (in gr/scf) of the sour gas on a monthly basis. The sample shall be taken where all waste streams combine but prior to combustion in the flare. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

5.B.2 For Emission Point AA-001, the permittee shall monitor and record the amount of gas flared in each 24-hour block period (e.g., a calendar day) and include the basis for the estimate (e.g., meter, production records, engineering estimate, etc.). The monitor(s) or meter(s) used to determine gas flow shall be calibrated in accordance with the manufacturer's recommendations and at least monthly. Records of these calibrations shall be maintained on site. All gas streams that are routed to the flare shall be included in the determination of gas flow, including gas vented due to downstream compressor shutdowns, gas sent from the VRU, tank loading emissions, shutdowns, malfunctions, etc. The flow rate in scf/hr shall be calculated for each 24-hour block period using the total gas flow during the 24-hour period and the actual hours gases were vented to the flare during the 24-hour period. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

Draft/Proposed

- 5.B.3 For Emission Point AA-001, the permittee shall calculate and maintain records of the 24-hour average SO₂ emission rate in lb/hr. The permittee shall use the most recently monthly H₂S measurement of the flared gas and the 24-hour average gas flow to determine SO₂ emissions for each 24-hour block period. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)
- 5.B.4 For Emission Point AA-001, the permittee shall comply with the Compliance Assurance Monitoring (CAM) Plan contained in Appendix C of this permit. For each excursion, the permittee shall document the event and corrective actions taken in accordance with Condition 5.A.3. If more than three (3) excursions occur within a semi-annual reporting period, a Quality Improvement Plan (QIP) shall be submitted in accordance with the CAM regulations found in 40 CFR 64. The permittee shall comply with the CAM Plan requirements as specified in sections 64.7 through 64.9, detailed in the plan provided in Appendix C, and summarized below.

The CAM Plan requires the permittee to monitor hydrogen sulfide continually at the flare. When the monitoring device detects a hydrogen sulfide concentration of 10 ppm (0.655 gr/100 scf) or greater an alarm will sound, and the permittee shall immediately take corrective action and record the action taken. The permittee is required to record all events in which the concentration exceeds 10 ppm. In addition, any H₂S concentration at the outlet of the flare measuring greater than 16 ppm (1.05 gr/100 scf) shall be considered an exceedance of the permit limit (i.e., the 1 gr/100 scf standard) and shall be reported as a permit deviation in accordance with Condition 5.A.5. In addition, the permittee shall visually observe the presence of the flare flame on a daily basis. If the flame is observed to be extinguished, the permittee shall immediately take corrective action and document all actions that were taken. (Ref.: 40 CFR 64)

- 5.B.5 For Emission Point AA-002, the permittee shall monitor and record the duration the emergency flare is used to combust emissions from the storage tanks during periods when the VRU is not operating. The permittee shall also ensure the flare pilot is lit prior to use and during operation. Records shall contain the date, time and duration the emergency flare is used, the reason it was used, and certification that a flame was present during its use. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(a)(2).)

C. Specific Reporting Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Reporting Requirement
AA-001	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.1	SO ₂ H ₂ S of flared gas Gas Flow	Semiannual report of 24-hr average SO ₂ emissions (lb/hr) and supporting information
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1), and 40 CFR 64.9	5.C.2	H ₂ S at flare outlet and presence of a flame	Semiannual report of excursions from the CAM indicators and corrective actions taken, and exceedances of the H ₂ S standard
AA-002	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).	5.C.3	Operating Hours	Semiannual report summarizing hours gases vented to emergency flare and reason

- 5.C.1 For Emission Point AA-001, the permittee shall submit a summary, in accordance with Condition 5.A.4, of the 24-hour average SO₂ emissions calculated daily during the reporting period, the H₂S concentrations obtained in the monthly samples analyzed during the reporting period, the 24-hour gas flow and the hours of operation for the flare during each 24-hour period. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)
- 5.C.2 For Emission Point AA-001, the permittee shall submit a summary of all excursions from the CAM indicators, including all corrective actions taken, and any exceedances of the H₂S standard, as required to be monitored and recorded in accordance with the CAM Plan in Appendix C of this permit. This information shall be submitted in accordance with Condition 5.A.4, 5.A.5 (as applicable), and 40 CFR 64.9. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1), and 40 CFR 64.9(a)(1) and (2))
- 5.C.3 For Emission Point AA-002, the permittee shall submit information concerning the amount of time and the reason the emergency flare operated during the reporting period. This information shall be submitted in accordance with Condition 5.A.4. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

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

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

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

APPENDIX A

List of Abbreviations Used In this Permit

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

APPENDIX B

LIST OF REGULATIONS REFERENCED IN THIS PERMIT

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

11 Miss. Admin. Code, Part 2, Ch. 1. – Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants (Amended November 10, 2016)

11 Miss. Admin. Code, Part 2, Ch. 2. – Permit Regulations for the Construction and/or Operation of Air Emissions Equipment (Amended July 28, 2005)

11 Miss. Admin. Code, Part 2, Ch. 6. – Air Emission Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act (Amended June 28, 2012)

40 CFR 64, Compliance Assurance Monitoring

40 CFR 82, Protection of Stratospheric Ozone

APPENDIX C

COMPLIANCE ASSURANCE MONITORING PLAN

Draft/Proposed

Compliance Assurance Monitoring Plan

(prepared in accordance with 40 CFR 64)

Operator:		Facility:	
Petro Harvester Operating Company, LLC		South Cypress Creek Facility	
Permit No.:		AI No.:	County, State:
2840-00006		7774	Wayne County, MS

1. Background Information

Process/Emissions Unit:	500 BBL Power Oil Tank-Vent (EPN: AA-004) 400 BBL Gun Barrel Tank-Common Vent (EPN: AA-008; 5d-09-GBT-CV) 400 BBL Water Suction Tank-Common Vent (EPN: AA-009; 5e-09-WST-CV) 500 BBL Skim Oil Tank-Common Vent (EPN: AA-010; 5f-09-SOT-CV) 400 BBL Oil Storage Tank-Common Vent (EPN: AA-005; 9a-12-OST-CV) 400 BBL Oil Storage Tank-Common Vent (EPN: AA-006; 9b-12-OST-CV) 400 BBL Oil Storage Tank-Common Vent (EPN: AA-007; 9c-12-OST-CV) Tank Truck Loading Losses (EPN: AA-013; 7-09-LL) Low Pressure Relief Gas (EPN: 8-10-LP-RG)
Description:	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.
Pollutant:	Hydrogen Sulfide (H ₂ S)
Emission Control Technique:	Control Flare (EPN: AA-001)
Applicable Requirement:	Miss. Admin. Code Pt. 2, R. 1.4.B(2).
Emission Limit:	1 grain/100 scf

2. Monitoring Approach

Applicable Requirement:	Emissions of H ₂ S shall not exceed 1 grain/100 scf	
Monitoring Approach/Method:	Utilize H ₂ S monitor to indicate when flare flame is extinguished	Operate flare with the pilot flame present at all times and record downtime
Indicator Range:	Alarm will sound at 10 ppm and greater H ₂ S	Visible flame observation An exceedance is defined as any time the flare flame is not present while gases are begin emitted.
Frequency:	Continuously	Daily
Excursion:	Any instance when flare pilot is not lit.	Any instance when flare pilot is not lit.
Exceedance:	Any H ₂ S measurement above 16 ppm.	N/A
QA/QC	Calibrate the H ₂ S monitor in	N/A

Draft/Proposed

	accordance with the manufacturer's recommendations and at least annually.	
Recordkeeping:	Record instances when flare flame is extinguished and duration that the flare is not lit. Record all corrective actions taken. 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. Record all corrective actions taken. Retain records for at least five (5) years.

*It is requested with this submittal that the previously authorized indicator ranges be revised.

3. Basis

H₂S Monitor: The monitor is installed and will sound at the indicator ranges specified. These ranges would only be met if the flare is not lit and the vapors are venting from the flare without being combusted.

4. 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 H₂S 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 H₂S emission limit will trigger an investigation, corrective action, and reporting, if necessary.