

STATE OF MISSISSIPPI AND FEDERALLY ENFORCEABLE AIR POLLUTION CONTROL

PERMIT

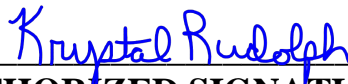
TO OPERATE AIR EMISSIONS EQUIPMENT AT A
SYNTHETIC MINOR SOURCE

THIS CERTIFIES THAT

Southern Energy Operating LLC, Burnside Facility
Off Highway 433
Satartia, Mississippi
Yazoo County
32° 38' 22" N
90° 30' 54" W

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 the Federal Clean Air Act and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), the regulations and standards adopted and promulgated thereunder, and the State Implementation Plan for operating permits for synthetic minor sources.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD



AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: April 25, 2023

Permit No.: 3020-00058

Effective Date: As specified herein.

Expires: March 31, 2028

SECTION 1.

A. GENERAL CONDITIONS

1. This permit is for air pollution control purposes only.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)
2. This permit is a Federally-approved permit to operate a synthetic minor source as described in 11 Miss. Admin. Code Pt. 2, R. 2.4.D.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.4.D.)
3. Any activities not identified in the application are not authorized by this permit.

(Ref.: Miss. Code Ann. 49-17-29 1.b)
4. The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for constructing or operating without a valid permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)
5. The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)
6. 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 unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(a).)
7. The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)
8. The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their authorized representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit, and
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emission.

(Ref.: Miss. Code Ann. 49-17-21)

9. Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality Office of Pollution Control.

(Ref.: Miss. Code Ann. 49-17-39)

10. 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. 2.1.D(7).)

11. This permit does not authorize a modification as defined in Regulation 11 Miss. Admin. Code Pt. 2, Ch.2., "Permit Regulations for the Construction and/or Operation of Air Emission Equipment." A modification may require a Permit to Construct and a modification of this permit. Modification is defined as "Any 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 Part 51, Subpart I, or 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 Part 51, Subpart I, or 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 Part 51, 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).)

B. GENERAL OPERATIONAL CONDITIONS

1. 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, 11 Miss. Admin. Code Pt. 2, "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.10.)

2. Any diversion from or bypass of collection and control facilities is prohibited, except as provided for in 11 Miss. Admin. Code Pt. 2, R. 1.10., "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants."

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

3. Solids removed in the course of control of air emissions shall be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits.

(Ref.: Miss. Code Ann. 49-17-29 1.a(i and ii))

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

- a. Upsets

- (1) For an upset defined in 11 Miss. Admin. Code Pt. 2, R. 1.2., 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 by 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.)

5. Compliance Testing: Regarding compliance testing:

- a. The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.
- b. Compliance testing will be performed at the expense of the permittee.
- c. Each emission sampling and analysis report shall include but not be limited to the following:
 - (1) Detailed description of testing procedures;
 - (2) Sample calculation(s);
 - (3) Results; and
 - (4) Comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B(3), (4), and (6).)

C. PERMIT RENEWAL / MODIFICATION / TRANSFER / TERMINATION

1. For renewal of this permit, the applicant shall make application not less than one-hundred eighty (180) days prior to the expiration date of the permit substantiated with current emissions data, test results or reports or other data as deemed necessary by the Mississippi Environmental Quality Permit Board. If the applicant submits a timely and complete application pursuant to this paragraph and the Permit Board, through no fault of the applicant, fails to act on the application on or before the expiration date of the existing permit, the applicant shall continue to operate the stationary source under the terms and conditions of the expired permit, which shall remain in effect until final action on the application is taken by the Permit Board. Permit expiration terminates the

source's ability to operate unless a timely and complete renewal application has been submitted.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.8.)

2. 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 permit or, for information claimed to be confidential, the permittee shall furnish such records to the 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. 2.2.B(15)(d).)

3. The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. 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. 2.2.B(15)(b).)

4. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to:
 - a. Persistent violation of any terms or conditions of this permit.
 - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - c. A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.C.)

5. This permit may only be transferred upon approval of the Mississippi Environmental Quality Permit Board.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.16.B.)

EMISSION POINT DESCRIPTION

The permittee is authorized to operate air emissions equipment, as described in the following table.

Emission Point	Facility Reference	Description
AB-001	ENG-1	1,340 hp (10.1 MMBtu/hr) Non-Emergency Compressor Engine Natural gas-fired Spark Ignition 4-Stroke Lean Burn Reciprocating Internal Combustion Engine Manufactured Date: August 2007
AB-005	AMINEREB2	8.0 MMBtu/hr Natural gas-fired Amine Unit 2 Reboiler
AB-006	GLYREB1	0.5 MMBtu/hr Natural gas-fired Glycol Unit 1 Reboiler
AB-007	GLYREB2	0.5 MMBtu/hr Natural gas-fired Glycol Unit 2 Reboiler
AB-009	LH-1	3.75 MMBtu/hr Natural gas-fired Burnside Line Heater
AB-010	LH-2	1.0 MMBtu/hr Natural gas-fired Williams 9-12 Line Heater
AB-011	TK-OIL	Two (2) 16,800 gallon Fixed Roof Oil Storage Tanks Controlled by Control Flare (Emission Point AB-020)
AB-012	TK-WATER	Two (2) 16,800 gallon Fixed Roof Produced Water Storage Tanks Controlled by Control Flare (Emission Point AB-020)
AB-013	LOAD-OIL	Oil Truck Loading
AB-014	LOAD-PW	Produced Water Truck Loading
AB-016	AM-FLASH2	Amine Unit 2 Flash Controlled by Control Flare (Emission Point AB-020)
AB-018	AM-REGEN2	Amine Unit 2 Regen Controlled by Control Flare (Emission Point AB-020)
AB-019	FUG	Gas Treatment Process Fugitive Emissions
AB-020	FLARE	Control Flare
AB-021	EG-FLASH1	Glycol Unit 1 Flash Controlled by Control Flare (Emission Point AB-020)
AB-022	EG-FLASH2	Glycol Unit 2 Flash Controlled by Control Flare (Emission Point AB-020)
AB-023	LP-OIL	Low-Pressure Separator Oil Flash Controlled by Control Flare (Emission Point AB-020)
AB-024	LP-WATER	Low-Pressure Separator Water Flash Controlled by Control Flare (Emission Point AB-020)

EMISSION LIMITATIONS AND STANDARDS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Smoke	Opacity shall not exceed 40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2		
	11 Miss. Admin. Code Pt. 2, R. 1.3.C.	3.3	Dust Fumes Gases	Good Air Pollution Control Practices
	11 Miss. Admin. Code Pt. 2, R. 2.2. B(10). Title V Operating Permit (TVOP) Avoidance Limitation	3.4	VOC	Emissions shall not exceed 90.0 tpy.
	11 Miss. Admin. Code Pt. 2, R. 2.2. B(10). TVOP Avoidance Limitation	3.5	Individual HAP	Emissions shall not exceed 9.0 tpy.
			Total HAP	Emissions shall not exceed 22.0 tpy.
40 CFR 63, Subpart HH (National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities) 40 CFR 63.760(a)(1) through (3) and (b)(2), Subpart HH	3.6	HAP	General Applicability	
AB-001	11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(b).	3.7	PM (Filterable only)	Emissions shall not exceed $E = 0.8808 * I^{-.01667}$
	40 CFR 60, Subpart OOOOa (Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015) 40 CFR 60.5360a and 60.5365a(c), Subpart OOOOa	3.8	SO ₂ VOC	General Applicability
	40 CFR 60.5385a(a)(1) and (2), Subpart OOOOa	3.9	VOC	Replace Rod Packing Requirement
	40 CFR 63, Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) 40 CFR 63.6580, 63.6585(a) and (c), 63.6590(a)(2)(iii), 63.6590(c)(1), Subpart ZZZZ	3.10	HAP	General Applicability
AB-005 AB-006 AB-007 AB-009 AB-010	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.11	SO ₂	Emissions shall not exceed 4.8 lbs/MMBtu

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AB-006 AB-007 AB-021 AB-022	11 Miss. Admin. Code Pt. 2, R. 2.2. B(10). and 40 CFR 63.764(e)(1)(ii), Subpart HH Maximum Achievable Control Technology (MACT) Avoidance Limitation	3.12	Individual HAP	Benzene emissions shall not exceed 0.90 megagram per year (0.992 tpy)
	40 CFR 63.764(j), Subpart HH	3.13	HAP	Safety and Good Air Pollution Control Practices Requirement
AB-011 AB-012 AB-016 AB-018 AB-021 AB-022 AB-023 AB-024	11 Miss. Admin. Code Pt. 2, R. 2.2. B(10). TVOP Avoidance Limitation	3.14	VOC Individual HAP Total HAP	Route all gaseous emissions to the Control Flare (Emission Point AB-020)
AB-019	40 CFR 60, Subpart KKK (Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984, and on or Before August 23, 2011) 40 CFR 60.630(a), Subpart KKK	3.15	VOC	General Applicability
	40 CFR 60.632(a) and (b), Subpart KKK	3.16		Comply with the applicable compliance requirements of 40 CFR 60, Subpart VV
AB-020	11 Miss. Admin. Code Pt. 2, R. 2.2. B(10). TVOP Avoidance Limitation	3.17	Amine Unit Inlet Gas	Install and operate a flow meter on the Amine Unit inlet
		3.18	Flare Pilot	Operate with a pilot flame present at all times
		3.19	Visible Emissions	Flare Requirements

- 3.1 For the entire facility, 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 40 percent opacity subject to the exceptions provided in (a) and (b).
- (a) Startup operations may produce emissions which exceed 40 percent opacity for up to 15 minutes per startup in any one hour and not to exceed three startups per stack in any 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-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.)

- 3.2 For the entire facility, 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 percent opacity, equivalent to that provided in Condition 3.1. This shall not apply to vision obscuration caused by uncombined water droplets.

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

- 3.3 For the entire facility, the permittee shall not cause, permit, or allow the emission of particles or any contaminants in sufficient amounts or of such duration from any process as to be injurious to humans, animals, plants, or property, or to be a public nuisance, or create a condition of air pollution.

The permittee shall not cause or permit the handling, transporting, or storage of any material in a manner which allows or may allow unnecessary amounts of particulate matter to become airborne.

When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance to property other than that from which it originated or to violate any other provision of 11 Miss. Admin. Code Pt. 2, Ch. 1, the Commission may order such corrected in a way that all air and gases or air and gasborne material leaving the building or equipment are controlled or removed prior to discharge to the open air.

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

- 3.4 For the entire facility, the permittee shall limit Volatile Organic Compound (VOC) emissions to 90.0 tons per year (tpy), as determined on a monthly basis and for each consecutive 12-month period on a rolling basis. The permittee shall calculate emissions using, but not limited to, process throughputs, hours of operation, manufacturer's specifications, and EPA AP-42.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2. B(10). [TVOP Avoidance Limitation])

- 3.5 For the entire facility, the permittee shall limit Individual Hazardous Air Pollutant (HAP) emissions to 9.0 tons per year (tpy), as determined on a monthly basis and for each consecutive 12-month period on a rolling basis. Total HAP emissions shall be limited to 22.0 tpy, as determined on a monthly basis and for each consecutive 12-month period on a rolling basis. The permittee shall calculate emissions using, but not limited to process throughputs, hours of operation, manufacturer's specifications, and EPA AP-42.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2. B(10). [TVOP Avoidance Limitation])

- 3.6 For the entire facility, the permittee is subject to and shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities (40 CFR 63, Subpart HH) and General Provisions (40 CFR 63, Subpart A).

(Ref.: 40 CFR 63.760(a)(1) through (3) and (b)(2), Subpart HH)

- 3.7 For Emission Point AB-001, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of equal to or greater than 10

million BTU per hour per heat input shall not exceed an emission rate as determined by the relationship

$$E = 0.8808 * I^{-0.1667}$$

where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3. D(1)(b).)

- 3.8 For Emission Point AB-001, the permittee is subject to and shall comply with all applicable requirements for the Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 (40 CFR 60, Subpart OOOOa) and General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.5360a and 60.5365a(c), Subpart OOOOa)

- 3.9 For Emission Point AB-001, the permittee shall replace the reciprocating compressor rod packing according to either paragraph (a) or (b) below:

- (a) Replace the reciprocating compressor rod packing on or before the compressor has operated for 26,000 hours. The number of operational hours must be continuously monitored beginning upon initial startup of your reciprocating compressor affected facility, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later, or;
- (b) Prior to 36 months from the date of the most recent rod packing replacement, or 36 months from the date of the startup for a new reciprocating compressor for which the rod packing has not yet been replaced.

(Ref.: 40 CFR 60.5385a(a)(1) and (2), Subpart OOOOa)

- 3.10 For Emission Point AB-001, the permittee is subject to and shall comply with all applicable requirements of the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (40 CFR 63, Subpart ZZZZ) and General Provisions (40 CFR 63, Subpart A).

(Ref.: 40 CFR 63.6580, 63.6585(a) and (c), 63.6590(a)(2)(iii), 63.6590(c)(1), Subpart ZZZZ)

- 3.11 For Emission Points AB-005, AB-006, AB-007, AB-009, and AB-010, 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.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).)

- 3.12 For Emission Points AB-006, AB-007, AB-021, and AB-022, the permittee shall limit benzene emissions from the glycol dehydration unit process vent to 0.90 megagram per year (0.992 tpy), as determined by the procedures specified in 40 CFR 63.772(b)(2), Subpart HH. The permittee is required to meet the requirements of 40 CFR 63.764(d), Subpart HH if the actual average emissions of benzene emissions exceed 0.90 megagram per year (0.992 tpy).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2. B(10). and 40 CFR 63.764(e)(1)(ii), Subpart HH [MACT Avoidance Limitation])

- 3.13 For Emission Points AB-006, AB-007, AB-021, and AB-022, at all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the DEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

(Ref.: 40 CFR 63.764(j), Subpart HH)

- 3.14 For Emission Points AB-011, AB-012, AB-016, AB-018, AB-021, AB-022, AB-023, and AB-024, the permittee shall route all gaseous emissions to the Control Flare (Emission Point AB-020).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2. B(10). [TVOP Avoidance Limitation])

3.15 For Emission Point AB-019, the permittee is subject to and shall comply with all applicable requirements for the Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984, and on or Before August 23, 2011 (40 CFR 60, Subpart KKK) and General Provisions (40 CFR 60, Subpart A).

(Ref.: 40 CFR 60.630(a), Subpart KKK)

3.16 For Emission Point AB-019, the permittee shall comply with all applicable requirements of Condition 5.10 (40 CFR 60.482-1(a), (b), and (d), Subpart VV) and Conditions 5.11 through 5.16 (40 CFR 60.482-2 through 40 CFR 60.482-10, Subpart VV), except as provided in Condition 5.9 (40 CFR 60.633, Subpart KKK). The permittee may elect to comply with the requirements of 40 CFR 60.483-1, Subpart VV and Condition 5.17 (40 CFR 60.483-2, Subpart VV).

(Ref.: 40 CFR 60.632(a) and (b), Subpart KKK)

3.17 For Emission Point AB-020, the permittee shall install, operate, and maintain a flow meter to measure the volume of gas treated in the Amine Unit. The permittee shall operate and maintain the flow meter(s) in accordance with the manufacturer's specifications. The permittee shall determine volume of gas treated by the Amine Unit on a monthly basis and for each consecutive 12-month period on a rolling basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2. B(10). [TVOP Avoidance Limitation])

3.18 For Emission Point AB-020, the permittee shall operate the flare with a pilot flame present at all times. The permittee shall monitor the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame. The permittee shall maintain the thermocouple or equivalent device in accordance with the manufacturer's specifications. The permittee shall check the flare pilot flame detection device daily to confirm it is ensuring the pilot flame is present.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2. B(10). [TVOP Avoidance Limitation])

- 3.19 For Emission Point AB-020, the permittee shall demonstrate a control efficiency of at least 98% by operating the flare according to the requirements of 40 CFR 60.18(b), Subpart A, and the following requirements:
- (a) Monitor the flare to assure that it is operated and maintained in conformance with the manufacturer's designs and specifications.
 - (b) The flare shall be operated at all times when emissions may be vented to the control device.
 - (c) The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. EPA Test Method 22 in appendix A of 40 CFR part 60 shall be used to determine the compliance of flares with the visible emission provisions of 40 CFR part 60. The observation period is 2 hours and shall be used according to EPA Test Method 22.
 - (d) The flare shall only be used with a combustion gas mixture whose net heating value is 300 BTU/scf or greater if the flare is air or steam-assisted. If the flare is non-assisted, the flare shall only be used with a combustion gas mixture whose net heating value is 200 BTU/scf or greater.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2. B(10). [TVOP Avoidance Limitation])

SECTION 4. WORK PRACTICES

THIS SECTION WAS INTENTIONALLY LEFT BLANK SINCE NO WORK PRACTICE STANDARDS APPLY TO THIS PERMIT ACTION.

MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Monitoring/Recordkeeping Requirement
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.1	Recordkeeping	Maintain records for a minimum of 5 years.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.2	VOC Individual HAP Total HAP	Monitor and Record Emissions
		5.3		Monthly Oil Production Hours of Operation for Amine Units Monthly Gas Throughput Gas Flow Meter Deviations
		5.4		Conduct an Annual Produced Gas Analysis
AB-001	40 CFR 60.5415a(c)(1) and (3), Subpart OOOOa	5.5		Engine Efficiency
	40 CFR 60.5420a(c)(3), Subpart OOOOa	5.6	Rod Packing Replacement Recordkeeping	
AB-006 AB-007 AB-021 AB-022	40 CFR 63.774(d)(1) and 63.772(b)(2), Subpart HH	5.7	Individual HAP	Monitor and Record Benzene Emissions
	40 CFR 63.774(g), Subpart HH	5.8	HAP	Maintain Records of Each Malfunction
AB-019	40 CFR 60.633, Subpart KKK	5.9	Fugitives	Compliance Demonstration Exceptions
	40 CFR 60.482-1(a), (b), and (d), Subpart VV	5.10	Fugitives	Compliance Demonstration Requirement
	40 CFR 60.482-2, Subpart VV	5.11		Pumps in Light Liquid Service Requirements
	40 CFR 60.482-4, Subpart VV	5.12		Pressure Relief Requirements
	40 CFR 60.482-6, Subpart VV	5.13		Open-Ended Valves or Lines Requirements
	40 CFR 60.482-7, Subpart VV	5.14		Valve Requirements
	40 CFR 60.482-9, Subpart VV	5.15		Delay of Repair Requirements
	40 CFR 60.482-10, Subpart VV	5.16		Closed Vent Systems and Control Devices Requirements
	40 CFR 60.483-2, Subpart VV	5.17		Alternative Standards for Valves
	40 CFR 60.485, Subpart VV	5.18		Test Methods and Procedures
	40 CFR 60.486, Subpart VV	5.19		Leak Detection Recordkeeping Requirements
AB-020	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.20	Operations	Flare Monitoring Requirements
		5.21		Flare Recordkeeping Requirement

5.1 The permittee shall retain all required records, monitoring data, supporting information and reports 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 or other data for continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to DEQ as required by Applicable Rules and Regulations or this permit upon request.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.9.)

5.2 For the entire facility, the permittee shall calculate and record VOC, Individual HAP, and Total HAP emissions, in tons, on a monthly basis and for each consecutive 12-month period on a rolling basis. The permittee shall calculate emissions using, but not limited to, hours of operation, throughputs, and gas analysis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.3 For the entire facility, the permittee shall monitor and record the following:

- (a) Monthly oil production (BBL).
- (b) Hours of operation for the Amine Unit (Emission Points AB-016 and AB-018).
- (c) Monthly gas throughput of the Amine Unit (Emission Points AB-016 and AB-018).
- (d) Amine inlet gas flowmeter operation: record any periods when the flow meter was inoperable, the date and extent of all maintenance conducted on the meter, and any corrective action taken to repair any noted problems.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.4 For the entire facility, the permittee shall conduct an inlet gas analysis of the produced gas routed to the gas treatment plant. The permittee shall perform the gas analysis on an annual basis, not to exceed 14 months from the previous analysis. Each gas analysis shall include the following hydrogen sulfide concentration, sulfur content, methane concentration (by volume), gross and net heating value, molecular weight, specific gravity, and speciated VOC components (minimally to C6+).

If a change is made at the facility, which causes the most recent gas analysis to no longer be representative, e.g., a well is completed, an existing well is recompleted, etc., or gas/oil processing equipment is changed then the facility shall perform a gas analysis within ninety (90) days of the change.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 5.5 For Emission Point AB-001, the permittee shall demonstrate continuous compliance with Condition 3.9 (40 CFR 60.5385a(1) and (2), Subpart OOOOa) by continuously monitoring the number of hours of operation for the reciprocating compressor or track the number of months since initial startup, or since the date of the most recent reciprocating compressor rod packing replacement, whichever is latest. The permittee shall replace the reciprocating compressor rod packing on or before the total number of hours of operation reaches 26,000 hours or the number of months since the most recent rod packing replacement reaches 36 months.

(Ref.: 40 CFR 60.5415a(c)(1) and (3), Subpart OOOOa)

- 5.6 For Emission Point AB-001, the permittee shall demonstrate compliance with Condition 3.9 (40 CFR 60.5385a(1) and (2), Subpart OOOOa) by keeping the records below:
- (a) Records of the cumulative number of hours of operation or number of months since initial startup, or since the previous replacement of the reciprocating compressor rod packing, whichever is latest. Alternatively, a statement that emissions from the rod packing are being routed to a process through a closed vent system under negative pressure.
 - (b) Records of the date and time of each reciprocating compressor rod packing replacement.
 - (c) Records of deviations in cases where the reciprocating compressor was not operated in compliance with Condition 3.9 (40 CFR 60.5385a(a)(1) and (2), Subpart OOOOa) including the date and time the deviation began, duration of the deviation, and a description of the deviation.

The permittee shall maintain the records either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by 40 CFR 60, Subpart OOOOa that are submitted electronically via the EPA's CDX may be maintained in electronic format.

(Ref.: 40 CFR 60.5420a(c)(3), Subpart OOOOa)

- 5.7 For Emission Points AB-006, AB-007, AB-021, and AB-022, the permittee shall record the actual average benzene emissions (in terms of benzene emissions per year).

The determination of actual average benzene or BTEX emissions from a glycol dehydration unit shall be made using the procedures of either paragraph (a) or (b) of this condition. Emissions shall be determined either uncontrolled, or with federally enforceable controls in place.

- (a) The permittee shall determine actual average benzene or BTEX emissions using the model GRI-GLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled “Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions” (GRI-95/0368.1); or
- (b) The permittee shall determine an average mass rate of benzene or BTEX emissions in kilograms per hour through direct measurement using an alternative method according to 40 CFR 63.7(f), Subpart A or the following:
 - (1) For a piece of ancillary equipment and compressors to be considered not in VHAP service, it must be determined that the percent VHAP content can be reasonably expected never to exceed 10.0 percent by weight. For the purposes of determining the percent VHAP content of the process fluid that is contained in or contacts a piece of ancillary equipment or compressor, the permittee shall use the method in either paragraph (i) or paragraph (ii) of this condition.

- (i) Method 18 of 40 CFR part 60, appendix A, or
- (ii) ASTM D6420-99 (2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (incorporated by reference - see 40 CFR 63.14, Subpart A), provided that the permittee complies with the following:
 - (A) The target compound(s) are those listed in section 1.1 of ASTM D6420-99 (2004);
 - (B) The target concentration is between 150 parts per billion by volume and 100 parts per million by volume;
 - (C) For target compound(s) not listed in Table 1.1 of ASTM D6420-99 (2004), but potentially detected by mass spectrometry, the additional system continuing calibration check after each run, as detailed in section 10.5.3 of ASTM D6420-99 (2004), is conducted, met, documented, and submitted with the data report, even if there is no moisture condenser used or the compound is not considered water soluble; and
 - (D) For target compound(s) not listed in Table 1.1 of ASTM D6420-99 (2004), and not amenable to detection by mass spectrometry, ASTM D6420-99 (2004) may not be used.

Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year.

(Ref.: 40 CFR 63.774(d)(1) and 63.772(b)(2), Subpart HH)

- 5.8 For Emission Points AB-006, AB-007, AB-021, and AB-022, the permittee shall maintain records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control equipment and monitoring equipment. The permittee shall maintain records of actions taken during periods of malfunction to

minimize emissions in accordance with Condition 3.13 (40 CFR 63.764(j), Subpart HH), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(Ref.: 40 CFR 63.774(g), Subpart HH)

5.9 For Emission Point AB-019, the permittee may comply with the following exceptions to the provisions of 40 CFR 60, Subpart VV.

(a) Pressure Relief Devices

- (1) Each pressure relief device in gas/vapor service may be monitored quarterly and within 5 days after each pressure release to detect leaks by the methods specified in Condition 5.18(b) (40 CFR 60.485(b), Subpart VV) except as provided in 40 CFR 60.632(c), paragraph (a)(4) of this condition (40 CFR 60.633(b)(4), Subpart KKK), and Condition 5.12(a) through (c) (40 CFR 60.482-4 (a) through (c), Subpart VV).
- (2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (3) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in Condition 5.15 (40 CFR 60.482-9, Subpart VV). A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (4) Any pressure relief device that is located in a nonfractionating plant that is monitored only by nonplant personnel may be monitored after a pressure release the next time the monitoring personnel are on site, instead of within 5 days as specified in paragraph (a)(1) above and Condition 5.12(b) (40 CFR 60.482-4(b)(1), Subpart VV). No pressure relief device shall be allowed to operate for more than 30 days after a pressure release without monitoring.

(b) Sampling connection systems are exempt from the requirements of 40 CFR 60.482-5, Subpart VV.

- (c) Pumps in light liquid service, valves in gas/vapor and light liquid service, and pressure relief devices in gas/vapor service that are located at a nonfractionating plant that does not have the design capacity to process 283,200 standard cubic meters per day (scmd) (10 million standard cubic feet per day) or more of field gas are exempt from the routine monitoring requirements of Condition 5.11(a) (40 CFR 60.482-2(a)(1)) and Condition 5.14(a) (40 CFR 60.482-7(a), Subpart VV), and paragraph (a)(1) of this condition.
- (d) Reciprocating compressors in wet gas service are exempt from the compressor control requirements of 40 CFR 60.482-3, Subpart VV

(Ref.: 40 CFR 60.633, Subpart KKK)

5.10 For Emission Point AB-019, the permittee shall comply with the following compliance standards:

- (a) The permittee shall demonstrate compliance with the requirements of Conditions 5.10 through 5.16 (40 CFR 60.482-1 through 60.482-10, Subpart VV) or 40 CFR 60.480(e), Subpart VV for all equipment within 180 days of initial startup.
- (b) The permittee shall determine compliance with Conditions 5.10 through 5.16 (40 CFR 60.482-1 through 60.482-10, Subpart VV) by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in Condition 5.18 (40 CFR 60.485, Subpart VV).
- (c) Equipment that is in vacuum service is excluded from the requirements of Conditions 5.11 through 5.16 (40 CFR 60.482-2 through 60.482-10, Subpart VV) if it is identified as required in Condition 5.19(d)(5) (40 CFR 60.486(e)(5), Subpart VV).

(Ref.: 40 CFR 60.482-1(a), (b), and (d), Subpart VV)

5.11 For Emission Point AB-019, the permittee shall comply with the following requirements:

- (a) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in Condition 5.18(b) (40 CFR 60.485(b), Subpart VV),

except as provided in 40 CFR 60.482-1(c) and (f), Subpart VV and paragraphs (d), (e), and (f) of this condition. A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in 40 CFR 60.482-1(c) and (f), Subpart VV and paragraphs (d), (e), and (f) of this condition. Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 CFR 60.482-1(f), Subpart VV.

- (b) If an instrument reading 10,000 ppm or greater is measured, a leak is detected. If there are indications of liquids dripping from the pump seal, the permittee shall follow the procedure specified in either paragraph (b)(1) or (2) of this condition. This requirement does not apply to a pump that was monitored after a previous weekly inspection if the instrument reading for that monitoring event was less than 10,000 ppm and the pump was not repaired since that monitoring event.
 - (1) Monitor the pump within 5 days as specified in Condition 5.18(b) (40 CFR 60.485(b), Subpart VV). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. The leak shall be repaired using the procedures in paragraph (c) of this condition.
 - (2) Designate the visual indications of liquids dripping as a leak, and repair the leak within 15 days of detection by eliminating the visual indications of liquids dripping.
- (c) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition 5.15 (40 CFR 60.482-9, Subpart VV). A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in paragraphs (c)(1) and (2) of this condition, where practicable.
 - (1) Tightening the packing gland nuts;

- (2) Ensuring that the seal flush is operating at design pressure and temperature.
- (d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this condition, provided the requirements specified in paragraphs (d)(1) through (6) of this condition are met.
 - (1) Each dual mechanical seal system is –
 - (i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
 - (ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of Condition 5.16 (40 CFR 60.482-10, Subpart VV); or
 - (iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
 - (2) The barrier fluid system is in heavy liquid service or is not in VOC service.
 - (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
 - (4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in either (i) or (ii) below.
 - (i) Monitor the pump within 5 days as specified in Condition 5.18(b) (40 CFR 60.485(b), Subpart VV) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
 - (ii) Designate the visual indications of liquids dripping as a leak.

- (5) Each sensor as described in paragraph (d)(3) of this paragraph is checked daily or is equipped with an audible alarm. The permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both. If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in this paragraph, a leak is detected.
- (6) When a leak is detected pursuant to paragraph (d)(4)(i) of this condition, it shall be repaired as specified in paragraph (c) of this condition. A leak detected pursuant to paragraph (d)(5) of this condition shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor. A designated leak pursuant to paragraph (d)(4)(ii) of this condition shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.
- (e) Any pump that is designated, as described in Condition 5.19(e)(1) and (2) (40 CFR 60.486(e)(1) and (2), Subpart VV), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this condition if the pump:
 - (1) Has no externally actuated shaft penetrating the pump housing,
 - (2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in Condition 5.18(c) (40 CFR 60.485(c), Subpart VV), and
 - (3) Is tested for compliance with paragraph (e)(2) of this condition initially upon designation, annually, and at other times requested by the DEQ.
- (f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of Condition 5.16 (40 CFR 60.482-10, Subpart VV), it is exempt from paragraphs (a) through (e) of this condition.

- (g) Any pump that is designated, as described in Condition 5.19(e)(1) (40 CFR 60.486(f)(1), Subpart VV), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this condition if:
 - (1) The permittee demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this condition; and
 - (2) The permittee has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this condition if a leak is detected.

- (h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this condition, and the daily requirements of paragraph (d)(5) of this condition, provided that each pump is visually inspected as often as practicable and at least monthly.

(Ref.: 40 CFR 60.482-2, Subpart VV)

5.12 For Emission Point AB-019, the permittee shall comply with the following requirements:

- (a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in Condition 5.18(c) (40 CFR 60.485(c), Subpart VV).

- (b) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in Condition 5.15 (40

CFR 60.482-9, Subpart VV). No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in Condition 5.18(c) (40 CFR 60.485(c), Subpart VV).

- (c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in Condition 5.16 (40 CFR 60.482-10, Subpart VV) is exempted from the requirements of paragraphs (a) and (b) of this condition.
- (d) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this condition, provided the permittee installs a new rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in Condition 5.15 (40 CFR 60.482-9, Subpart VV).

(Ref.: 40 CFR 60.482-4, Subpart VV)

5.13 For Emission Point AB-019, the permittee shall comply with the following requirements:

- (a) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR 60.482-1(c), Subpart VV and paragraphs (d) and (e) of this condition. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
- (b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

- (c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.
- (d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c) of this condition.
- (e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this condition are exempt from the requirements of paragraphs (a) through (c) of this condition.

(Ref.: 40 CFR 60.482-6, Subpart VV)

5.14 For Emission Point AB-019, the permittee shall comply with the following requirements:

- (a) Each valve shall be monitored monthly to detect leaks by the methods specified in Condition 5.17(b) (40 CFR 60.485(b), Subpart VV) and shall comply with paragraphs (b) through (e) of this condition, except as provided in paragraphs (f), (g), and (h) of this condition, 40 CFR 60.482-1(c) and (f), Subpart VV, and 40 CFR 60.483-1, Subpart VV and Condition 5.17 (40 CFR 60.483-2, Subpart VV). A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to paragraphs (a)(1) or (2), except for a valve that replaces a leaking valve and except as provided in paragraphs (f), (g), and (h) of this condition, 40 CFR 60.482-1(c), and 40 CFR 60.483-1, Subpart VV and Condition 5.17 (40 CFR 60.483-2, Subpart VV).
 - (1) Monitor the valve as in paragraph (a)(1) of this condition. The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation.

- (2) If the valves on the process unit are monitored in accordance with 40 CFR 60.483-1, Subpart VV or Condition 5.17 (40 CFR 60.483-2, Subpart VV), count the new valve as leaking when calculating the percentage of valves leaking as described in Condition 5.17 (40 CFR 60.483-2(b)(5), Subpart VV). If less than 2.0 percent of the valves are leaking for that process unit, the valve must be monitored for the first time during the next scheduled monitoring event for existing valves in the process unit or within 90 days, whichever comes first.
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (c) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. As an alternative to monitoring all of the valves in the first month of a quarter, the permittee may elect to subdivide the process unit into 2 or 3 subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The permittee must keep records of the valves assigned to each subgroup. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
- (d) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR 60.482-9, Subpart VV. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (e) First attempts at repair include, but are not limited to, the following best practices where practicable:
- (1) Tightening of bonnet bolts;
 - (2) Replacement of bonnet bolts;
 - (3) Tightening of packing gland nuts;
 - (4) Injection of lubricant into lubricated packing.

- (f) Any valve that is designated, as described in Condition 5.19(e)(2) (40 CFR 60.486(e)(2), Subpart VV), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:
 - (1) Has no external actuating mechanism in contact with the process fluid,
 - (2) Is operated with emissions less than 500 ppm above background as determined by the method specified in Condition 5.18(c) (40 CFR 60.485(c), Subpart VV), and
 - (3) Is tested for compliance with paragraph (f)(2) of this condition initially upon designation, annually, and at other times requested by the DEQ.

- (g) Any valve that is designated, as described in Condition 5.19(f)(1) (40 CFR 60.486(f)(1), Subpart VV), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:
 - (1) The permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a), and
 - (2) The permittee adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

- (h) Any valve that is designated, as described in Condition 5.19(f)(2) (40 CFR 60.486(f)(2), Subpart VV), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:
 - (1) The permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
 - (2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 60.15, Subpart A or the permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and

- (3) The permittee follows a written plan that requires monitoring of the valve at least once per calendar year.

(Ref.: 40 CFR 60.482-7, Subpart VV)

5.15 For Emission Point AA-019, the permittee shall comply with the following requirements:

- (a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pressure relief devices in light liquid, the permittee shall follow either one of the following procedures:
 - (1) The permittee shall monitor the equipment within 5 days by the method specified in Condition 5.18(b) (40 CFR 60.485(b), Subpart VV) and shall comply with the requirements of paragraphs (b) through (d) of this condition.
 - (2) The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (c) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Condition 5.15 (40 CFR 60.482-9, Subpart VV). The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (d) First attempts at repair include, but are not limited to, the best practices described under Condition 5.11(c)(2) (40 CFR 60.482-2(c)(2), Subpart VV) and Condition 5.14(e) (40 CFR 60.482-7(e), Subpart VV).

(Ref.: 40 CFR 60.482-9, Subpart VV)

5.16 For Emission Point AB-019, the permittee shall comply with the following requirements:

- (a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown.

Repair of this equipment shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within 15 days after startup of the process unit.

- (b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.
- (c) Delay of repair for valves will be allowed if:
 - (1) The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
 - (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with Condition 5.16 (40 CFR 60.482-10, Subpart VV).
- (d) Delay of repair for pumps will be allowed if:
 - (1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
 - (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
- (e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.
- (f) When delay of repair is allowed for a leaking pump or valve that remains in service, the pump or valve may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

(Ref.: 40 CFR 60.482-10, Subpart VV)

5.17 For Emission Point AB-019, the permittee may elect to comply with the following alternative standards for valves:

- (a) The permittee shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in Condition 5.14 (40 CFR 60.482-7, Subpart VV).
- (b) After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
- (c) After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
- (d) If the percent of valves leaking is greater than 2.0, the permittee shall comply with the requirements as described in Condition 5.14 (40 CFR 60.482-7, Subpart VV).
- (e) The percent of valves leaking shall be determined as described in Condition 5.18 (40 CFR 60.485(h), Subpart VV).
- (f) The permittee shall keep a record of the percent of valves found leaking during each leak detection period.
- (g) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for a process unit following one of the alternative standards in this condition must be monitored in accordance with Condition 5.14 (40 CFR 60.482-7(a)(2)(i) or (ii), Subpart VV) before the provisions of this condition can be applied to the valve.

The permittee shall notify the DEQ before implementing the alternative standards according to Condition 6.12 (40 CFR 60.487(d), Subpart VV).

(Ref.: 40 CFR 60.483-2, Subpart VV)

- 5.18 For Emission Point AB-019, the permittee shall comply with the following requirements:
- (a) In conducting the performance tests required in 40 CFR 60.8, Subpart A, the permittee shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60 or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b), Subpart A.
 - (b) The permittee shall determine compliance with the standards in Conditions 5.10 through 5.16 (40 CFR 60.482-1 through 60.482-10, Subpart VV), 60.483, and 60.484, Subpart VV as follows:
 - (1) EPA Test Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in EPA Test Method 21. The following calibration gases shall be used:
 - (i) Zero air (less than 10 ppm of hydrocarbon in air); and
 - (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.
 - (c) The permittee shall determine compliance with the no detectable emission standards in Condition 5.11(e) (40 CFR 60.482-2(e), Subpart VV) 40 CFR 60.482-3(i), Subpart VV, Condition 5.12 (40 CFR 60.482-4, Subpart VV), Condition 5.14(f) (40 CFR 60.482-7(f), Subpart VV), and Condition 5.16(e) (40 CFR 60.482-10(e), Subpart VV) as follows:
 - (1) The requirements of paragraph (b) shall apply.
 - (2) EPA Test Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

- (d) The permittee shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:
 - (1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference - see 40 CFR 60.17, Subpart A) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.
 - (2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.
 - (3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the DEQ disagrees with the judgment, paragraphs (d) (1) and (2) of this condition shall be used to resolve the disagreement.

- (e) The permittee shall demonstrate that a piece of equipment is in light liquid service by showing that all the following conditions apply:
 - (1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H₂O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference - see 40 CFR 60.17, Subpart A) shall be used to determine the vapor pressures.
 - (2) The total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H₂O at 68 °F) is equal to or greater than 20 percent by weight.
 - (3) The fluid is a liquid at operating conditions.

- (f) Samples used in conjunction with paragraphs (d), (e), and (g) of this condition shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.
- (g) The permittee shall determine compliance with the standards of flares as follows:
- (1) EPA Test Method 22 shall be used to determine visible emissions.
 - (2) A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.
 - (3) The maximum permitted velocity for air assisted flares shall be computed using the following equation:

$$V_{max} = K_1 + K_2 H_T$$

Where:

V_{max} = Maximum permitted velocity, m/sec (ft/sec)

H_T = Net heating value of the gas being combusted, MJ/scm (Btu/scf)

K_1 = 8.706 m/sec (metric units) = 28.56 ft/sec (English units)

K_2 = 0.7084 m⁴/(MJ-sec) (metric units) = 0.087 ft⁴/(Btu-sec) (English units)

- (4) The net heating value (H_T) of the gas being combusted in a flare shall be computed using the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

Where:

K = Conversion constant, 1.740×10^{-7} (g-mole)(MJ)/(ppm-scm-kcal) (metric units) = 4.674×10^{-6} [(g-mole)(Btu)/(ppm-scf-kcal)] (English units)

C_i = Concentration of sample component "i," ppm

H_i = Net heat of combustion of sample component “i” at 25 °C and 760 mm Hg (77 °F and 14.7 psi), kcal/g-mole

- (5) EPA Test Method 18 or ASTM D6420-99 (2004) (where the target compound(s) are those listed in Section 1.1 of ASTM D6420-99, and the target concentration is between 150 parts per billion by volume and 100 parts per million by volume) and ASTM D2504-67, 77 or 88 (Reapproved 1993) (incorporated by reference - see 40 CFR 60.17, Subpart A) shall be used to determine the concentration of sample component “i.”
 - (6) ASTM D2382-76 or 88 or D4809-95 (incorporated by reference - see 40 CFR 60.17, Subpart A) shall be used to determine the net heat of combustion of component “i” if published values are not available or cannot be calculated.
 - (7) EPA Test Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.
- (h) The permittee shall determine compliance with 40 CFR 60.483-1, Subpart VV or Condition 5.17 (40 CFR 60.483-2, Subpart VV) as follows:
- (1) The percent of valves leaking shall be determined using the following equation:

$$\%V_L = (V_L/V_T) * 100$$

Where:

$\%V_L$ = Percent leaking valve

V_L = Number of valves found leaking

V_T = The sum of the total number of valves monitored

- (2) The total number of valves monitored shall include difficult-to-monitor and unsafe-to-monitor valves only during the monitoring period in which those valves are monitored.
- (3) The number of valves leaking shall include valves for which repair has been delayed.
- (4) Any new valve that is not monitored within 30 days of being placed in service shall be included in the number of valves leaking and the total number of valves monitored for the monitoring period in which the valve is placed in service.
- (5) If the process unit has been subdivided in accordance with Condition 5.14 (40 CFR 60.482-7(c)(1)(ii), Subpart VV), the sum of valves found leaking during a monitoring period includes all subgroups.
- (6) The total number of valves monitored does not include a valve monitored to verify repair.

(Ref.: 40 CFR 60.485, Subpart VV)

5.19 For Emission Point AB-019, the permittee shall comply with the following recordkeeping requirements:

- (a) When each leak is detected as specified in Condition 5.11 (40 CFR 60.482-2, Subpart VV), 40 CFR 60.482-3, Subpart VV, Condition 5.14 (40 CFR 60.482-7, Subpart VV) and 40 CFR 60.482-8, Subpart VV the following requirements apply:
 - (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
 - (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in Condition 5.14(c) (40 CFR 60.482-7(c), Subpart VV) and no leak has been detected during those 2 months.

- (3) The identification on equipment except on a valve, may be removed after it has been repaired.
- (b) When each leak is detected as specified in Condition 5.11 (40 CFR 60.482-2, Subpart VV), 40 CFR 60.482-3, Subpart VV, Condition 5.14 (40 CFR 60.482-7, Subpart VV) and 40 CFR 60.482-8, Subpart VV, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
- (1) The instrument and operator identification numbers and the equipment identification number.
 - (2) The date the leak was detected and the dates of each attempt to repair the leak.
 - (3) Repair methods applied in each attempt to repair the leak.
 - (4) “Above 10,000” if the maximum instrument reading measured by the methods specified in Condition 5.18(a) (40 CFR 60.485(a), Subpart VV) after each repair attempt is equal to or greater than 10,000 ppm.
 - (5) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
 - (6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
 - (7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
 - (8) Dates of process unit shutdowns that occur while the equipment is unrepaired.
 - (9) The date of successful repair of the leak.
- (c) The following information pertaining to the design requirements for closed vent systems and control devices described in Condition 5.16 (40 CFR 60.482-10, Subpart VV) shall be recorded and kept in a readily accessible location:

- (1) Detailed schematics, design specifications, and piping and instrumentation diagrams.
 - (2) The dates and descriptions of any changes in the design specifications.
 - (3) A description of the parameter or parameters monitored, as required in Condition 5.16(e) (40 CFR 60.482-10(e), Subpart VV), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
 - (4) Periods when the closed vent systems and control devices required in Condition 5.11 (40 CFR 60.482-2, Subpart VV), 60.482-3, Condition 5.12 (40 CFR 60.482-4, Subpart VV), and 40 CFR 60.482-5, Subpart VV are not operated as designed, including periods when a flare pilot light does not have a flame.
 - (5) Dates of startups and shutdowns of the closed vent systems and control devices required in Condition 5.11 (40 CFR 60.482-2, Subpart VV), 60.482-3, Condition 5.12 (40 CFR 60.482-4, Subpart VV), and 40 CFR 60.482-5, Subpart VV.
- (d) The following information pertaining to all equipment subject to the requirements in Condition 5.10 to Condition 5.16 (40 CFR 60.482-1 to 60.482-10, Subpart VV) shall be recorded in a log that is kept in a readily accessible location:
- (1) A list of identification numbers for equipment subject to the requirements of 40 CFR 60, Subpart VV.
 - (2) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of Condition 5.11(e) (40 CFR 60.482-2(e), Subpart VV), 40 CFR 60.482-3(i), Subpart VV, and Condition 5.14(f) (40 CFR 60.482-7(f), Subpart VV). The designation of equipment as subject to the requirements of Condition 5.11(e) (40 CFR 60.482-2(e), Subpart VV) 40 CFR 60.482-3(i), Subpart VV, or Condition 5.14(f) (40

CFR 60.482-7(f), Subpart VV) shall be signed by the permittee. Alternatively, the permittee may establish a mechanism with the DEQ that satisfies this requirement.

- (3) A list of equipment identification numbers for pressure relief devices required to comply with Condition 5.12 (40 CFR 60.482-4, Subpart VV).
 - (4) The dates of each compliance test as required in Condition 5.11(e) (40 CFR 60.482-2(e), Subpart VV) 40 CFR 60.482-3(i), Subpart VV, Condition 5.12 (40 CFR 60.482-4, Subpart VV), and Condition 5.14(f) (40 CFR 60.482-7(f), Subpart VV). The background level measured during each compliance test. The maximum instrument reading measured at the equipment during each compliance test.
 - (5) A list of identification numbers for equipment in vacuum service.
 - (6) A list of identification numbers for equipment that the owner or operator designates as operating in VOC service less than 300 hr/yr in accordance with 40 CFR 60.482-1(e), Subpart VV, a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.
- (e) The following information pertaining to all valves subject to the requirements of Condition 5.14(g) and (h) (40 CFR 60.482-7(g) and (h), Subpart VV) and to all pumps subject to the requirements of Condition 5.11 (40 CFR 60.482-2(g), Subpart VV) shall be recorded in a log that is kept in a readily accessible location:
- (1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
 - (2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

- (f) The following information pertaining to all valves subject to the requirements of Condition 5.14(g) and (h) (40 CFR 60.482-7(g) and (h), Subpart VV) and to all pumps subject to the requirements of Condition 5.11(g) (40 CFR 60.482-2(g), Subpart VV) shall be recorded in a log that is kept in a readily accessible location:
 - (1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
 - (2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.
- (g) The following information shall be recorded for those valves complying with Condition 5.17 (40 CFR 60.483-2, Subpart VV):
 - (1) A schedule of monitoring; and
 - (2) The percentage of valves found leaking during each monitoring period.
- (h) The following information shall be recorded in a log that is kept in a readily accessible location:
 - (1) Design criterion required in Condition 5.11(d)(5) (40 CFR 60.482-2(d)(5), Subpart VV) and Condition 5.17 (40 CFR 60.483-2, Subpart VV) and explanation of the design criterion; and
 - (2) Any changes to this criterion and the reasons for the changes.
- (i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480(d), Subpart VV:
 - (1) An analysis demonstrating the design capacity of the affected facility,

- (2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and
- (3) An analysis demonstrating that equipment is not in VOC service.
- (j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.
- (k) The provisions of 40 CFR 60.7 (b) and (d), Subpart A do not apply to affected facilities subject to 40 CFR 60, Subpart VV.

(Ref.: 40 CFR 60.486, Subpart VV)

5.20 For Emission Point AB-020, the permittee shall comply with the monitoring requirements outlined in paragraphs (a) and (b). Additionally, the permittee shall comply with either paragraph (c) or (d):

- (a) The permittee shall perform monthly visible emissions tests for a minimum of fifteen (15) minutes using EPA Method 22 while the facility is operating with all gases being flared. If visible emissions are observed for a period greater than one (1) minute, corrective action shall be taken immediately. Immediately following completion of the corrective action(s), the permittee shall demonstrate compliance by performing an EPA Method 22 test for a period of two (2) hours and shall monitor and maintain records of the flare rate during the test. The monthly visible emissions tests shall be separated by at least fifteen (15) days between each test;
- (b) The permittee shall demonstrate compliance with Condition 3.19(d) utilizing the minimum net heating value from the annual flare gas analyses.
- (c) The permittee shall monitor and record the presence of the flare pilot flame; or
- (d) The permittee shall continuously maintain and operate an auto-igniter system on the flare to ensure a flame is immediately restored when emissions are being sent to the flare. At a minimum, the permittee shall comply with the following:

- (1) The auto-igniter system shall be an electric arc ignition system. The electric arc ignition system shall pulse continually when there is flow to the flare.
- (2) The auto-igniter system shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
- (3) If the auto-igniter system fails to light the flame, it must be relit as soon as safely possible and the auto-igniter system must be repaired or replaced as soon as practicable.
- (4) The permittee shall perform quarterly physical inspections of all equipment associated with the auto-igniter system. The permittee shall respond to any observation of any auto-igniter failure and ensure the equipment is returned to proper operation as soon as practicable and safely possible after an observation or an alarm sounds.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

5.21 For Emission Point AB-020, the permittee shall comply with the following recordkeeping requirements outlined in paragraphs (a) through (e):

- (a) The permittee shall maintain a copy of the flare manufacturer operating and maintenance recommendations and detailed records of all maintenance performed on the flare.
- (b) The permittee shall maintain daily records that the thermocouple / auto-igniter is functioning which demonstrates a pilot flame is detected in the control flare whenever the facility is in operation.
- (c) The permittee shall maintain records of all EPA Method 22 tests, and details of any corrective/preventative action(s) taken.
- (d) The permittee shall keep a record of the date, time, and duration that emissions are vented to the flare while a flame is not present. The permittee shall also record the date and extent of maintenance on the monitoring device, including calibrations, as recommended by the manufacturer. The permittee shall maintain

records of all gas analyses performed to determine the net heating value of the gas being combusted in the flares.

- (e) For the auto-igniter system, the permittee shall maintain records of any instances in which the auto-igniter system did not function, the date and times of the occurrence, the corrective actions taken, preventative measures adopted to prevent reoccurrence, all instances of alarm activation, including the date and cause of alarm activation, actions taken to bring the flare into normal operating conditions, and any maintenance activities conducted on the auto-igniter system.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

REPORTING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Reporting Requirement
Facility-Wide	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.1	Report permit deviations within five (5) working days.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.2	Submit Certified Annual Monitoring Report.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.3	All documents submitted to DEQ shall be certified by a Responsible Official.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.4	VOC, Individual HAP, and Total HAP Emissions Annual Report
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.5	Oil Production, Hours of Operation, Gas Throughput, and Flowmeter Deviations.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.6	Submit Annual Inlet Gas Analysis
AB-001	40 CFR 60.5415(c)(2), 60.5420(b)(1), (4)(i) and (ii), and (11), Subpart OOOOa	6.7	Reciprocating Compressor Rod Packing Replacement Report
AB-006 AB-007 AB-021 AB-022	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.8	Annual Monitoring Report (including Actual Average Benzene Emissions)
	40 CFR 63.775(f), Subpart HH	6.9	Process Change Notification
AB-019	40 CFR 60.636(b), Subpart KKK	6.10	NSPS KKK/VV Report (including Pressure Relief Devices)
	40 CFR 60.636(c), Subpart KKK	6.11	NSPS KKK/VV Report (including Pressure Relief Devices Leak Detection and Repair)
	40 CFR 60.487(a), (b), (c), and (d), Subpart VV	6.12	NSPS KKK/VV Report (including Valve and Pump Leak Detection and Repair)
AB-020	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.13	Annual Flare Report

6.1 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) working days of the time the deviation began.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

6.2 Except as otherwise specified herein, the permittee shall submit certified annual synthetic minor monitoring report postmarked no later than January 31st for the preceding calendar year period. This report shall address any required monitoring specified in the permit. All instances of deviations from permit requirements must be

clearly identified in the report. Where no monitoring data is required to be reported and/or there are no deviations to report, the report shall contain the appropriate negative declaration.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 6.3 Any document required by this permit to be submitted to the DEQ shall contain a certification signed by a responsible official stating 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. 2.2.B(11).)

- 6.4 For the entire facility, the permittee shall submit annual reports, in accordance with Condition 6.2, containing the VOC, Individual HAP, and Total HAP emissions, in tons, on a monthly basis and for each consecutive 12-month period on a rolling basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 6.5 For the entire facility, the permittee shall submit annual reports, in accordance with Condition 6.2, containing the following information:

- (a) Monthly oil production (BBL)
- (b) Hours of operation for the Amine Unit (Emission Points AB-016 and AB-018).
- (c) Monthly gas throughput of the Amine Unit (Emission Points AB-016 and AB-018).
- (d) Amine inlet flowmeter deviations.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 6.6 For the entire facility, the permittee shall submit a certified annual gas analysis report postmarked no later than 31st of January for the preceding calendar year. This report shall address the parameters of Condition 5.4. Any additional gas analysis performed because of a change described in Condition 5.4 shall be reported in the following annual report.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

6.7 For Emission Point AB-001, the permittee shall submit annual reports, in accordance with Condition 6.2, containing the following information:

- (a) The company name, facility site name associated with the affected facility, U.S. Well ID or U.S. Well ID associated with the affected facility, if applicable, and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.
- (b) An identification of each affected facility being included in the annual report.
- (c) Beginning and ending dates of the reporting period.
- (d) A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (e) The cumulative number of hours of operation or the number of months since initial startup, since August 2, 2016, or since the previous reciprocating compressor rod packing replacement, whichever is latest. Alternatively, a statement that emissions from the rod packing are being routed to a process through a closed vent system under negative pressure.
- (f) If applicable, for each deviation that occurred during the reporting period and recorded as specified in Condition 5.6(c) (40 CFR 60.5420a(c)(3)(iii), Subpart OOOOa), the date and time the deviation began, duration of the deviation and a description of the deviation.

The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to 40 CFR 60.5410a(c), Subpart OOOOa. Subsequent annual reports are due no later than same date each year as the initial annual report. If the permittee owns or operates more than one affected facility, the permittee may submit one report for multiple affected facilities provided the report contains all of

the information required as specified in 40 CFR 60.5420a(b)(1) through (8) and (12), Subpart OOOOa. Annual reports may coincide with Condition 6.2 as long as all the required elements of the annual report are included. The permittee may arrange with the DEQ a common schedule on which reports required by this part may be submitted as long as the schedule does not extend the reporting period.

The permittee shall submit annual reports to the EPA via CEDRI (CEDRI can be accessed through the EPA's CDX (<https://cdx.epa.gov/>)). **These reports shall also be submitted directly to the DEQ.** The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Anything submitted using CEDRI cannot later be claimed CBI. You must use the appropriate electronic report in CEDRI for 40 CFR 60, Subpart OOOOa or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri/>). If the reporting form specific to 40 CFR 60, Subpart OOOOa is not available in CEDRI at the time that the report is due, you must submit the report to the EPA at the appropriate address listed in 40 CFR 60.4, Subpart A. Once the form has been available in CEDRI for at least 90 calendar days, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in 40 CFR 60, Subpart OOOOa, regardless of the method in which the reports are submitted. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim, submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Fuels and Incineration Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via CEDRI. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required

to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(Ref.: 40 CFR 60.5415(c)(2), 60.5420(b)(1), (4)(i) and (ii), and (11), Subpart OOOOa)

- 6.8 For Emission Points AB-006, AB-007, AB-021, and AB-022, the permittee shall demonstrate compliance with Condition 3.12 (40 CFR 63.764(e)(1)(ii), Subpart HH) by submitting annual reports, in accordance with Condition 6.2, containing the actual average benzene emissions (in terms of benzene emissions per year) as determined by Condition 5.7 (40 CFR 63.774(d)(1) and 63.772(b)(2), Subpart HH).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 6.9 For Emission Points AB-006, AB-007, AB-021, and AB-022, whenever a process change is made, or a change in any of the information submitted in the Notification of Compliance Status Report, the permittee shall submit a report within 180 days after the process change is made. The report shall include:

- (a) A brief description of the process change;
- (b) A description of any modification to standard procedures or quality assurance procedures;
- (c) Revisions to any of the information reported in the original Notification of Compliance Status Report under 40 CFR 63.775(d), Subpart HH; and
- (d) Information required by the Notification of Compliance Status Report under 40 CFR 63.775(d), Subpart HH for changes involving the addition of processes or equipment.

(Ref.: 40 CFR 63.775(f), Subpart HH)

- 6.10 For Emission Point AB-019, the permittee shall submit semiannual reports postmarked no later than July 31st and January 31st for the preceding six-month period. The semiannual reports shall contain the number of pressure relief devices subject to the requirements of Condition 5.9(b) (40 CFR 60.633(b), Subpart KKK) except for those pressure relief devices designated for no detectable emissions under the provisions of

Condition 5.12(a) (40 CFR 60.482-4(a), Subpart VV) and those pressure relief devices complying with Condition 5.12(c) (40 CFR 60.482-4(c), Subpart VV).

(Ref.: 40 CFR 60.636(b), Subpart KKK)

6.11 For Emission Point AB-019, the permittee shall submit semiannual reports postmarked no later than July 31st and January 31st for the preceding six-month period. The semiannual reports shall contain the following:

- (a) Number of pressure relief devices for which leaks were detected as required in Condition 5.9(b)(2) (40 CFR 60.633(b)(2), Subpart KKK) and
- (b) Number of pressure relief devices for which leaks were not repaired as required in Condition 5.9(b)(3) (40 CFR 60.633(b)(3), Subpart KKK).

(Ref.: 40 CFR 60.636(c), Subpart KKK)

6.12 For Emission Point AB-019, the permittee shall submit semiannual reports postmarked no later than July 31st and January 31st for the preceding six-month period. The semiannual reports shall contain the following information, summarized from the information in Condition 5.19 (40 CFR 60.486, Subpart VV):

- (a) Process unit identification.
- (b) For each month during the semiannual reporting period,
 - (1) Number of valves for which leaks were detected as described in Condition 5.14(b) (40 CFR 60.482-7(b), Subpart VV) or Condition 5.17 (40 CFR 60.483-2, Subpart VV),
 - (2) Number of valves for which leaks were not repaired as required in Condition 5.14(d)(1) (40 CFR 60.482-7(d)(1), Subpart VV),
 - (3) Number of pumps for which leaks were detected as described in Condition 5.11(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii) (40 CFR 60.482-2(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii), Subpart VV),
 - (4) Number of pumps for which leaks were not repaired as required in Condition 5.11(c)(1) and (d)(6) (40 CFR 60.482-2(c)(1) and (d)(6), Subpart VV),

- (5) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
- (c) Dates of process unit shutdowns which occurred within the semiannual reporting period.
- (d) Revisions to items reported according to initial semiannual report (40 CFR 60.487(b), Subpart VV) if changes have occurred since the initial report or subsequent revisions to the initial report.
- (e) If the permittee elects to comply with Condition 5.17 (40 CFR 60.483-2, Subpart VV), the permittee shall notify the DEQ of the alternative standard selected 90 days before implementing either of the provisions.

(Ref.: 40 CFR 60.487(a), (b), (c), (d), Subpart VV)

6.13 For Emission Point AB-020, the permittee shall submit annual reports, in accordance with Condition 6.2, containing the following:

- (a) Details of any periods where the pilot flame was not present or the auto-igniter system was not operational, including date, start and end times, duration, cause, corrective and preventative actions taken, and whether or not any gases were being vented to the flare.
- (b) Copies of all data sheets for daily smoke when smoke was observed, or a negative declaration if during the reporting period no smoke was observed, checks during manned operating days and any EPA Method 22 tests performed during the reporting period.
- (c) Auto-igniter system data: report of any instances in which the auto-igniter system did not function, the date and times of the occurrence, the corrective actions taken, preventative measure adopted to prevent reoccurrence, all instances of alarm activation, including the date and cause of alarm activation, actions taken to bring the flare into normal operating conditions; and any maintenance activities conducted on the auto-igniter system.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

