

# **STATE OF MISSISSIPPI AND FEDERALLY ENFORCEABLE AIR POLLUTION CONTROL PERMIT**

**TO OPERATE AIR EMISSIONS EQUIPMENT AT A  
SYNTHETIC MINOR SOURCE**

## **THIS CERTIFIES THAT**

Delek Renewables, LLC  
Delek, New Albany  
835 Highway 15 North  
New Albany, Mississippi  
Union County

has been granted permission to operate air emissions equipment in accordance with emission limitations, monitoring requirements and conditions set forth herein. This permit is issued in accordance with 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:** March 06 2017

**Modified:** \_\_\_\_\_

**Permit No.: 2700-00043**

**Effective Date:** As specified herein.

**Expires:** February 28 2022

Draft/Proposed

**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.)

## SECTION 2 EMISSION POINT DESCRIPTION

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

Emission Point	Description
AA-101	Biodiesel Fuel (B100) Loading Operations
AA-102	Glycerin Loading Operations
AA-103	Biodiesel Production Process Equipment Leaks
AA-104	Two (2) Condensers in series to recover Methanol in the Biodiesel Production Process
AA-105	157,000 Gallon Fixed Roof Crude Organic Oil Storage Tank
AA-106	157,000 Gallon Fixed Roof Biodiesel Fuel Storage Tank (B100)
AA-107	20,000 Gallon Fixed Roof Glycerin Storage Tank
AA-108	20,000 Gallon Fixed Roof Glycerin Storage Tank
AA-109	20,000 Gallon Fixed Roof Glycerin Storage Tank
AA-110	9,000 Gallon Fixed Roof Methanol Storage Tank
AA-111	9,000 Gallon Fixed Roof Sodium Methylate Storage Tank (70% Methanol)
AA-112	20,000 Gallon Fixed Roof Biodiesel Spec Fuel Storage Tank (B100)
AA-113	20,000 Gallon Fixed Roof Biodiesel Spec Fuel Storage Tank (B100)
AA-114	14,000 Gallon Fixed Roof Finished Biodiesel Spec Fuel Storage Tank (B100)
AA-115	1,000 Gallon Fixed Roof Dirty Methanol Storage Tank
AA-116	1,000 Gallon Fixed Roof Dirty Methanol Storage Tank
AA-117	1,000 Gallon Fixed Roof Dirty Methanol Storage Tank
AA-118	8,500 Gallon Fixed Roof Biodiesel Process Storage Tank (B100)
AA-119	525 Gallon Fixed Roof Methanol Recovery Storage Tank

<b>Emission Point</b>	<b>Description</b>
AA-122	6,000 Gallon Fixed Roof Methanol Storage Tank
AA-123	30,000 Gallon Fixed Roof Crude Organic Oil Storage Tank
AA-124	30,000 Gallon Fixed Roof Crude Organic Oil Storage Tank
AA-125	30,000 Gallon Fixed Roof Crude Organic Oil Storage Tank
AA-126	30,000 Gallon Fixed Roof Methanol Storage Tank
AA-127	Methanol Recovery Process (Components)
AA-128	Methanol Recovery Process (Condenser)
AA-129	6,000 Gallon Fixed Roof Methanol Recovery Storage Tank
AA-130	6,000 Gallon Fixed Roof Hydrochloric Acid Storage Tank

### SECTION 3 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. 2.2.B(10).	3.3	HAP	9.9 tpy for any individual HAP 24.0 tpy for all combined HAPs
		3.4		Biodiesel production shall not exceed 13,000,000 gallons per year
Facility Wide	40 CFR 60, Subpart VVa  (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006)  40 CFR 60.480a, Subpart VVa	3.5	VOC	Applicability
AA-104 AA-128	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.6	HAP	Shall operate condensers at all times when Biodiesel Production Process is operating.

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 forty (40) percent opacity subject to the exceptions provided in (a) and (b).

- (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen minutes per startup in any one hour and not to exceed three startups per stack in any twenty-four-hour period.
- (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed sixty (60) percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four-hour period does not exceed ten 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% opacity, equivalent to that provided in Condition 3.1. This shall not apply to vision obscuration cause by uncombined water droplets.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R.1.3.B.)
- 3.3. For the entire facility, the permittee shall limit the emissions of any individual Hazardous Air Pollutant (HAP) to no more than 9.9 tons per year (tpy) based on a 12 month rolling total. The permittee shall limit the emissions of all combined HAPs to no more than 24.0 tpy on a 12 month rolling total.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
- 3.4. For the entire facility, the permittee's annual biodiesel production shall not exceed 13,000,000 gallons per year as determined on a 12 month rolling total.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
- 3.5. For the entire facility, the permittee is subject to 40 CFR 60 Subpart VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006.  
(Ref.: 40 CFR 60.480a, Subpart VVa)
- 3.6. For Emission Points AA-004 and AA-128, the permittee shall operate the condensers at all times when the Biodiesel Production Process is operating. Should the condensers become non-operational then the process shall be shut down immediately, but not as to cause damage to equipment or property, or cause further environmental problems. The process shall not startup until such time that the condensers become operational.  
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

**SECTION 4**  
**WORK PRACTICES**

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Work Practice
<i>This Section Has Been Intentionally Left Blank</i>				

## SECTION 5 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(10).	5.2		Facility-wide recordkeeping requirements
Facility Wide	40 CFR 60.482-2a(a), Subpart VVa	5.3	VOC	Light liquid pump monitoring requirements
	40 CFR 60.482-2a(b), Subpart VVa	5.4		Pump leak monitoring requirements
	40 CFR 60.582-2a(c), Subpart VVa	5.5		Pump leak repair requirements
	40 CFR 60.482-3a(a, b, h), Subpart VVa	5.6		Compressor seal system requirements
	40 CFR 60.482-3a(c), Subpart VVa	5.7		Compressor barrier fluid system sensor requirements
	40 CFR 60.482-3a(d, e), Subpart VVa	5.8		
	40 CFR 60.482-3a(f, g), Subpart VVa	5.9		Compressor exemption requirements
	40 CFR 60.482-3a(i), Subpart VVa	5.10		
	40 CFR 60.482-4a(a), Subpart VVa	5.11		Pressure relief valve requirements
	40 CFR 60.482-4a(b), Subpart VVa	5.12		
	40 CFR 60.48204a(c), Subpart VVa	5.13		Pressure relief valve exemption requirements
	40 CFR 60.482-5a, Subpart VVa	5.14		Sampling connection system requirements
	40 CFR 60.482-6a(a), Subpart VVa	5.15		Open-ended valve equipping requirements
	40 CFR 60.482-6a(b), Subpart VVa	5.16		
	40 CFR 60.482-6a(c), Subpart VVa	5.17		Double block-and-bleed requirements

Facility Wide	40 CFR 60.482-6a(d), Subpart VVa	5.18	VOC	Open-ended valve lines exemption
	40 CFR 60.482-7a, Subpart VVa	5.19		Valve monthly leak detection requirements
	40 CFR 60.482-8a, Subpart VVa	5.20		Leak detection monitoring requirements
	40 CFR 60.482-9a, Subpart VVa	5.21		Leak repair delay schedule requirements
	40 CFR 60.483-1a, Subpart VVa	5.22		Valve leak allowable percentage requirements
	40 CFR 60.483-2a, Subpart VVa	5.23		Alternative work practices
	40 CFR 60.485a, Subpart VVa	5.24		Performance test requirements
	40 CFR 60.486a(b), Subpart VVa	5.25		Leak requirements
	40 CFR 60.486a(a)(3), Subpart VVa	5.26		Recordkeeping
	40 CFR 60.486a(c), Subpart VVa	5.27		Leak recordkeeping
	40 CFR 60.486a(d), Subpart VVa	5.28		Design recordkeeping
	40 CFR 60.486a(e), Subpart VVa	5.29		Equipment recordkeeping
	40 CFR 60.486a(f), Subpart VVa	5.30		Valve, pump, and connector recordkeeping
	40 CFR 60.486a(g), Subpart VVa	5.31		Alternative valve recordkeeping
	40 CFR 60.486a(h), Subpart VVa	5.32		Log keeping requirements
	40 CFR 60.486a(i), Subpart VVa	5.33		Log keeping exemptions
	40 CFR 60.486a(j), Subpart VVa	5.34		Equipment not in VOC service recordkeeping requirements

- 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 MDEQ 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, in order to demonstrate compliance with the limitations specified in Section 3, the permittee shall maintain the following records:
- (a) Individual and total HAPs emitted, in tons per year, on a monthly basis and for each consecutive 12-month period based on a rolling 12-month total as specified in Condition 3.3.
  - (b) Actual production data, throughput, etc. and all calculations.
  - (c) A log of the total volume of materials produced, including biodiesel and glycerin on a 12-month rolling total as specified in Condition 3.4.
  - (d) Weekly routine maintenance inspection records on all control devices and air emissions equipment. These records shall include; the date of the inspections, the name of the person who performs the inspections, and any maintenance conducted.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 5.3. For the entire facility, each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485a(b) except as provided in 40 CFR 60.482-1a(c) and (f), and 60.482-2a(d), (e), and (f). 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 60.482-1a(c), and 60.482-2a(d), (e), and (f). Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal except as provided in 40 CFR 60.481-2a(f).

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

- 5.4. For the entire facility, the instrument reading that defines a leak is 2,000 parts per million (ppm). If there are indications of liquids dripping from the pump seal, the permittee shall follow the procedures outlined below. This requirement does not apply to a pump that was monitored after a previous weekly inspection and the instrument readings was less than 2,000 ppm.
- (a) Monitor the pump within 5 days. A leak is detected if the instrument reading measured during monitoring indicates a leak. The leak shall be repaired using the procedures in Condition 5.5.
  - (b) Designate the visual indications of liquids dripping as a leak, and repair the leak using either the procedures in Condition 5.5 by eliminating the visual indications of liquids dripping.

(Ref.: 40 CFR 60.482-2a(b), Subpart VVa)

5.5. For the entire facility, when a leak is detected, it shall be repaired as soon as practicable, but not later than 15 days after it is detected, except as provided in Condition 5.21. A first attempt at repair shall be made no later than five calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described below:

- (a) Tightening the packing gland nuts;
- (b) Ensuring that the seal flush is operating at design pressure and temperature.

(Ref.: 40 CFR 60.482-2a(c), Subpart VVa)

5.6. For the entire facility, each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere except as provided in 40 CFR 60.482-1a(c) and 40 CFR 60.483-2a(h), (i), and (j). Each compressor seal system shall be:

- (a) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
- (b) Equipped with a barrier fluid system 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 3.8; or
- (c) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

A compressor is exempt from the above requirements if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of Condition 3.5.

(Ref.: 40 CFR 60.482-3a(a, b, h), Subpart VVa)

5.7. For the entire facility, the barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

(Ref.: 40 CFR 60.482-3a(c), Subpart VVa)

5.8. For the entire facility, each barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. Each sensor shall be checked daily or shall be equipped with an audible alarm. The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(Ref.: 40 CFR 60.482-3a(d, e), Subpart VVa)

- 5.9. For the entire facility, if the sensor indicates failure of the seal system, the barrier system, or both, a leak is detected. 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 5.21. A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.

(Ref.: 40 CFR 60.482-3a(f, g), Subpart VVa)

- 5.10. For the entire facility, any compressor that is designated, as described in 40 CFR 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR 60.482-3a(a – h), if the compressor:

- (a) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measure by the methods specified in 40 CFR 60.485a(c); and
- (b) Is tested for compliance with paragraph (a) above initially upon designation, annually, and at other times requested by The Administrator.

(Ref.: 40 CFR 60.482-3a(i), Subpart VVa)

- 5.11. For the entire facility, 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 40 CFR 60.485a(c).

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

- 5.12. For the entire facility, 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 five (5) calendar days after the pressure release, except as provided in Condition 5.21. No later than five (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 40 CFR 60.485a(c).

(Ref.: 40 CFR 60.482-4a(b), Subpart VVa)

- 5.13. For the entire facility, 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 3.5 is exempted from the requirements of Condition 5.11 and Condition 5.12.

(Ref.: 40 CFR 60.482-4a(c), Subpart VVa)

- 5.14. For the entire facility, each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system except as provided in 40 CFR 60.482-1a(c) and 60.482-5a(c). Each closed-purge, closed-loop, or closed-vent system shall comply with the following requirements:
- (a) Gases displaced during filling of the sample container are not required to be collected or captured;
  - (b) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied;
  - (c) Gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured.
  - (d) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet the following requirements:
    - (1) Return the purged process fluid directly to the process line.
    - (2) Collect and recycle the purged process fluid to a process.
    - (3) Capture and transport all the purged process fluid to a control device.

(Ref.: 40 CFR 60.482-5a, Subpart VVa)

- 5.15. For the entire facility, 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 60.482-1a(c) and 60.482-6a(d) and (e). 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.

(Ref.: 40 CFR 60.482-6a(b), Subpart VVa)

- 5.16. For the entire facility, 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.

(Ref.: 40 CFR 60.482-6a(b), Subpart VVa)

- 5.17. For the entire facility, 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 Condition 5.15 at all other times.

(Ref.: 40 CFR 60.482-6a(c), Subpart VVa)

- 5.18. For the entire facility, all 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 Conditions 5.15 through 5.17.

(Ref.: 40 CFR 60.482-6a(d), Subpart VVa)

- 5.19. For the entire facility, each valve shall be monitored monthly to detect leaks by the requirements in 40 CFR 60.485a(b) and shall comply with the following except as provided in 40 CFR 60.482-1a(c) and (f), 60.483-2a and 60.482-7a(f), (g), and (h):

- (a) If an instrument reading of 500 ppm or greater is measured, a leak is detected.
- (b) Any valve for which a leak is not detected for two (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 the valves in the first month of a quarter, the permittee may elect to subdivide the process unit into two or three subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every three (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 two (2) successive months.
- (c) When a leak is detected, the valve shall be repaired as soon as practical, but no later than 15 calendar days after the leak is detected, except as provided in Condition 5.21. A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.
- (d) First attempts at repair include, but are not limited to, the following best practices where practical:
  - (1) Tightening of bonnet bolts,
  - (2) Replacement of bonnet bolts,
  - (3) Tightening of packing gland nuts;
  - (4) Injection of lubricant into lubricated packing.

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

- 5.20. For the entire facility, if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service, the permittee shall monitor the equipment within five (5) days or the permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak within five (5) calendar days of detection.

If the permittee monitors the equipment and an instrument reading of 10,000 ppm or greater is measured then a leak is detected. 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 5.27. The first attempt at repair shall be made no later than five (5) calendar days after each leak is detected. First attempts at repair include, but are not limited to the best practices described in Condition 5.5 and Condition 5.19.

(Ref.: 40 CFR 60.482-8a, Subpart VVa)

- 5.21. For the entire facility, 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. Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service. Delay of repair for valves and connectors will be allowed if:

- (a) 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
- (b) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device.

Delay of repair for pumps will be allowed if:

- (a) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
- (b) Repair is completed as soon as practical, but not later than 6 months after the leak was detected.

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. When delay of repair is allowed for a leaking pump, valve, or connector that remains in service, the pump, valve, or connector 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 60.482-9a, Subpart VVa)

- 5.22. For the entire facility, the permittee may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent instead of Condition 5.19. The following requirements shall be met if the permittee wishes to comply with an allowable percentage of valves leaking:

- (a) The permittee shall notify MDEQ if the permittee has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard.

- (b) A performance test shall be conducted initially upon designation, annually, and at other times requested by MDEQ.
- (c) If a valve leak is detected, it shall be repaired in accordance with Condition 5.25(d) and (e).

Performance tests shall be conducted in the following manner:

- (d) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in 40 CFR 60.485a(b).
- (e) If an instrument reading of 500 ppm or greater is measured, a leak is detected.
- (f) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.

Permittees who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent, determined as specified in 40 CFR 60.485a(h).

(Ref.: 40 CFR 60.483-1a, Subpart VVa)

5.23. For the entire facility, the permittee may elect to comply with one of the alternative work practices specified below. The permittee must notify MDEQ before implementing one of the alternative work practices.

- (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 5.19.
- (b) After two (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 one (1) of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
- (c) After five (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 three (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 5.25 but can again elect to use this section.
- (e) The percent of valves leaking shall be determined as specified in 40 CFR 60.485a(h).
- (f) The permittee must keep a record of the percent of valves found leaking during each leak detection period.

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

- 5.24. For the entire facility, in conduction the performance tests required in 40 CFR 60.8, the permittee shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section. The permittee shall determine compliance with the standards in 40 CFR 60.482-1a through 60.482-11a, 60.483a, and 60.484a.

(Ref.: 40 CFR 60.485a, Subpart VVa)

- 5.25. For the entire facility, when each leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, Condition 5.20, 60.482-11a, and Condition 5.23, the following requirements apply:

- (a) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
- (b) The identification on a valve may be removed after it has been monitored for two (2) successive months as specified in Condition 5.19(c) and no leak has been detected during those two (2) months.
- (c) The identification on a connector may be removed after it has been monitored as specified in 40 CFR 60.482-11a(b)(3) and no leak has been detected during that monitoring.
- (d) The identification on equipment, except on a valve or connector, may be removed after it has been repaired.

(Ref.: 40 CFR 60.486a(b), Subpart VVa)

- 5.26. For the entire facility, the permittee shall record the following information for each monitoring event required by 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, Condition 5.20, 60.482-11a, and Condition 5.23:

- (a) Monitoring instrument identification.
- (b) Operator identification.
- (c) Equipment identification.
- (d) Date of monitoring.
- (e) Instrument reading.

(Ref.: 40 CFR 60.486a(a)(3), Subpart VVa)

- 5.27. For the entire facility, when a leak is detected as specified in 40 CFR 60.482-2a, 60.482-3a, 60.482-7a, Condition 5.20, 60.482-11a, and Condition 5.23, the following information shall be recorded in a log and shall be kept for two (2) years in a readily accessible location:

- (a) The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak.
- (b) The date the leak was detected and the dates of each attempt to repair the leak.
- (c) Repair methods applied in each attempt to repair the leak.
- (d) Maximum instrument reading measured by Method 21 of appendix A-7 of 40 CFR Part 60, at the time the leak is successfully repaired or determined to be non-repairable, except when a pump is repaired by elimination indications of liquids dripping.
- (e) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
- (f) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
- (g) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
- (h) Dates of process unit shutdowns that occur while the equipment is unrepaired.
- (i) The date of successful repair of the leak.

(Ref.: 40 CFR 60.486a(c), Subpart VVa)

5.28. For the entire facility, the following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR 60.482-10a shall be recorded and kept in a readily accessible location:

- (a) Detailed schematics, design specifications, and piping and instrumentation diagrams.
- (b) The dates and descriptions of any changes in the design specifications.
- (c) A description of the parameter or parameters monitored, as required in 40 CFR 60.482-10a(e), 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.
- (d) Periods when the closed vent systems and control devices required in 40 CFR 60.482-2a, 60.482-3a, 60.482-4a, and Condition 5.14 are not operated as designed.
- (e) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a.

(Ref.: 40 CFR 60.486a(d), Subpart VVa)

- 5.29. For the entire facility, the following information pertaining to all equipment subject to the requirements in 40 CFR 60.482-1a to 60.482-11a shall be recorded in a log that is kept in a readily accessible location:
- (a) A list of identification numbers for equipment subject to the requirements of this subpart.
  - (b) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR 60.482-2a(e), Condition 5.10 and 60.482-7a(f).
    - (1) The designation of equipment as subject to the requirements of 40 CFR 60.482-2a(e), Condition 5.10, or 60.482-7a(f) shall be signed by the owner or operator.
  - (c) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 60.482-4a.
  - (d) The dates of each compliance test as required in 40 CFR 60.482-2a(e), Condition 5.16, 60.482-4a, and 60.482-7a(f).
    - (1) The background level measured during each compliance test.
    - (2) The maximum instrument reading measured at the equipment during each compliance test.
  - (e) A list of identification numbers for equipment in vacuum service.
  - (f) 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 60.482-1a(e), 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.
  - (g) The date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service.
  - (h) Records of the information specified in paragraphs (1) through (6) below, for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of appendix A-7 40 CFR Part 60 Subpart VVa and 40 CFR 60.485a(b).
    - (1) Date of calibration and initials of operator performing the calibration.
    - (2) Calibration gas cylinder identification, certification date, and certified concentration.
    - (3) Instrument scale(s) used.
    - (4) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value in accordance with section 10.1 of Method 21 of appendix A-7 of 40 CFR Part 60 Subpart VVa.

- (5) Results of each calibration drift assessment required by 40 CFR 60.485a(b)(2) (i.e., instrument reading for calibration at the end of monitoring day and the calculated percent difference from the initial calibration value.)
  - (6) If an owner or operator makes their own calibration gas, a description of the procedure used.
  - (i) The connector monitoring schedule for each process unit as specified in 40 CFR 60.482-11a(b)(3)(v).
  - (j) Records of each release from a pressure relief device subject to 40 CFR 60.482-4a.  
(Ref.: 40 CFR 60.486a(e), Subpart VVa)
- 5.30. For the entire facility, the following information pertaining to all valves subject to the requirements of 40 CFR 60.482-7a(g) and (h), all pumps subject to the requirements of 40 CFR 60.482-2a(g), and all connectors subject to the requirements of 40 CFR 60.482-11a(e) shall be recorded in a log that is kept in a readily accessible location:
- (a) A list of identification numbers for valves, pumps, and connectors that are designated as unsafe-to-monitor, and explanation for each valve, pump, or connector stating why the valve, pump, or connector is unsafe-to-monitor, and the plan for monitoring each valve, pump, or connector.
  - (b) 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.
- (Ref.: 40 CFR 60.486a(f), Subpart VVa)
- 5.31. For the entire facility, the following information shall be recorded for valves complying with Condition 5.23:
- (a) A schedule of monitoring.
  - (b) The percent of valves found leaking during each monitoring period.
- (Ref.: 40 CFR 60.486a(g), Subpart VVa)
- 5.32. For the entire facility, the following information shall be recorded in a log that is kept in a readily accessible location:
- (a) Design criterion required in 40 CFR 60.482-2a(d)(5) and 60.482-3a(e)(2) and explanation of the design criterion; and
  - (b) Any changes to this criterion and the reasons for the changes.
- (Ref.: 40 CFR 60.486a(h), Subpart VVa)

- 5.33. For the entire facility, 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 60.480a(d):
- (a) An analysis demonstrating the design capacity of the affected facility,
  - (b) 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
  - (c) An analysis demonstrating that equipment is not in VOC service.
- (Ref.: 40 CFR 60.486a(i), Subpart VVa)
- 5.34. For the entire facility, the 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.
- (Ref.: 40 CFR 60.486a(j), Subpart VVa)

## SECTION 6 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 MDEQ shall be certified by a Responsible Official.
	40 CFR 60.487a(a), Subpart VVa	6.4	Submit semiannual reports
	40 CFR 60.487a(c), Subpart VVa	6.5	

- 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 a certified annual synthetic minor monitoring report postmarked no later than 31st of January for the preceding calendar year. 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 MDEQ 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. Each owner or operator subject to the provisions of this subpart shall submit semiannual reports postmarked no later than January 31<sup>st</sup> and July 31<sup>st</sup> for the previous 6 month period to MDEQ beginning 6 months after the initial startup date.

(Ref.: 40 CFR 60.487a(a), Subpart VVa)

- 6.5. All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 CFR 60.486a:

- (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 5.19(b) or Condition 5.23,
  - (2) Number of valves for which leaks were not repaired as required in Condition 5.19(d)(1),
  - (3) Number of pumps for which leaks were detected as described in 40 CFR 60.482-2a(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii),
  - (4) Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2a(c)(1) and (d)(6),
  - (5) Number of compressors for which leaks were detected as described in 40 CFR 60.482-3a(f),
  - (6) Number of compressors for which leaks were not repaired as required in 40 CFR 60.482-3a(g)(1),
  - (7) Number of connectors for which leaks were detected as described in 40 CFR 60.482-11a(d), and
  - (8) 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 40 CFR Part 60.487a(b) if changes have occurred since the initial report or subsequent revisions to the initial report.

(Ref.: 40 CFR 60.487a(c), Subpart VVa)