

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

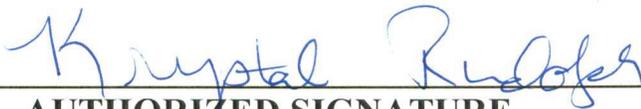
**TO OPERATE AIR EMISSIONS EQUIPMENT AT A
SYNTHETIC MINOR SOURCE**

THIS CERTIFIES THAT

World Energy Natchez LLC
151 L E Barry Road
Natchez, Mississippi
Adams 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: April 2, 2019; **SEP 18 2019**

Permit No.: 0040-00005

Effective Date: As specified herein.

Expires: March 31, 2024

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-001	Biodiesel Production Facility - 72,000,000 gal/yr biodiesel production capacity
AA-002	Equipment Leak Fugitives in the Biodiesel/Glycerol Production Units
AA-003	Wastewater Fugitives
AA-004	Railcar and Truck Loading
Fuel Burning Sources	
AB-001	59.64 MMBTU/hr Natural Gas-fired Boiler, Ref. B-931
Tanks and Process Vessels <i>(all tanks/vessels are fixed roof unless otherwise specified)</i>	
AC-101	87,150 gallon Biodiesel/Water Decanter Process Vessel, Ref. T-101
AC-114	37,700-gallon Biodiesel/Water Decanter Process Vessel, Ref. T-114
AC-115	37,700-gallon Biodiesel/Water Decanter Process Vessel, Ref. T-115
AC-116	37,700-gallon Biodiesel/Water Decanter Process Vessel, Ref. T-116
AC-228	37,367-gallon Methanol-Sodium Methylate Storage Tank, Ref. T-228 (Built in 1982), vented to scrubber AD-5300
AC-307	13,800-gallon Methanol Day Tank, Ref. T-307, vents to scrubber AD-921
AC-421	12,000-gallon Glycerol Surge Process Vessel, Ref. T-421, vented to a water scrubber (AD-921) via tank T-920
AC-600	21,000-gallon 1 st Stage Methanol/Water Wash Process Vessel, Ref. T-600
AC-610	21,000-gallon 2 nd Stage Methanol/Water Wash Process Vessel, Ref. T-610
AC-920	10,664-gallon Methanol/Water Process Vessel, Ref. T-920, collecting emissions from AC-421, AC-307, AD-303, AD-702 and heat exchanger E-474, prior to venting through a water scrubber AD--921
AC-2006	87,150-gallon Methanol Storage Tank, Ref. T-2006, vented to scrubber AD-5300 (Built 1973)

The following tanks are included for completeness but all have emissions less than 1 lb/hr of any regulated air

<i>pollutant and less than 0.1 lb/hr of any hazardous air pollutant and none are subject to an NSPS or MACT standard. Therefore, the following tanks are all insignificant activities and have no specific permit requirements.</i>	
AC-125	21,000-gallon Citric Acid (50% solution) Storage Tank, Ref. T-125
AC-229	74,407-gallon Biodiesel (FAME) Storage Tank, Ref. T-229
AC-430	15,500-gallon Soybean Oil Storage Tank, Ref. T-430
AC-501	21,168-gallon Free Fatty Acids (FFA) Storage Tank, Ref. T-501
AC-512	21,138-gallon Biodiesel (FAME) Storage Tank, Ref. T-512
AC-514	63,682-gallon Biodiesel (FAME) Storage Tank, Ref. T-514
AC-520	9,700-gallon Methanol (20%) Water Surge Process Tank, Ref. T-520
AC-522	19,500-gallon Methanol(20%)/Water Storage Tank, Ref. T-522
AC-704	21,191-gallon Methanol (20%)/Water Storage Tank, Ref. T-704
AC-706	20,826-gallon Methanol(20%)/Water Storage Tank, Ref. T-706
AC-750	22,500-gallon Methanol(20%)/Water Storage Tank, Ref. T-750
AC-916	18,500-gallon API Wastewater (Skimmed Oil) Storage Tank, Ref. T-916
AC-917	19,000-gallon API Wastewater (Skimmed Oil) Storage Tank, Ref. T-917
AC-1000	42,566-gallon Recovered Biodiesel Surge Process Vessel, Ref. T-1000
AC-2004	87,041-gallon Glycerol Storage Tank, Ref. T-2004
AC-2005	87,246-gallon Glycerol/Free Fatty Acid (FFA) Separation Tank, Ref. T-2005
AC-2008	87,342-gallon Methanol/Water Wash Process Vessel, Ref. T-2008
AC-2009	87,150-gallon Biodiesel (FAME) Storage Tank, Ref. T-2009
AC-2010	87,425-gallon Soybean Oil Storage Tank, Ref. T-2010
AC-5000	211,483-gallon Biodiesel (FAME) Storage Tank, Ref. T-5000
AC-5001	211,483-gallon Biodiesel (FAME) Storage Tank, Ref. T-5001
AC-5002	211,483-gallon Biodiesel (FAME) Storage Tank, Ref. T-5002
AC-5003	211,376-gallon Soybean Oil Storage Tank, Ref. T-5003
AC-5004	211,357-gallon Soybean Oil Storage Tank, Ref. T-5004
AC-6310	1,900-gallon Soybean Oil Receiver Process Tank, Ref. T-6310

AC-15070	634,962-gallon Biodiesel (FAME) Storage Tank, Ref. T-15070
AC-18350	770,758-gallon Soybean Oil Storage Tank, Ref. T-18350
Miscellaneous Equipment	
AD-001	6,000 gpm Cooling Tower
AD-303	Recovered Methanol Drum, D-303b, vented to a water scrubber (Emission Point AD-921)
AD-702	4,510-gallon Condensation Drum, Ref. D-702, vented to a water scrubber (Emission Point AD-921)
AD-751	Methanol Recovery Column, Ref. C-751
AD-752	Knock-out Condenser Drum, Ref. D-752, for the methanol recovery distillation column (C-751)
AD-921	Spray Scrubber, Ref. T-921, controls methanol emissions from knockout pot T-920 for AC-421, AC-307, AD-303, AD-702, and heat exchanger E-474
AD-5300	Venturi, Packed Column Scrubber, Ref. T-5300, controls methanol emissions from AC-2006 and AC-228

**SECTION 3
EMISSION LIMITATIONS AND STANDARDS**

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.1	HAP (methanol) VOC	≤ 9.9 tpy HAP (methanol) (12 month rolling total) – <i>Title V and MACT avoidance</i> < 95.0 tpy VOC (12 month rolling total) – <i>Title V avoidance</i>
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2	Opacity	≤ 40 % opacity
	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.3	Opacity	≤ 40% opacity (fuel burning)
AA-002	New Source Performance Standards (NSPS), 40 CFR 60, Subpart VVa – Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006	3.4	VOC	Applicability to Leak Detection and Repair (LDAR) for the Biodiesel/Glycerol Production Unit
	40 CFR 60.482-1a(d) and (e), Subpart VVa	3.5	VOC	General Standards
	40 CFR 60.482-4a(a), Subpart VVa	3.6	VOC	Pressure relief devices in gas/vapor service operated with no detectable emissions
	40 CFR 60.482-4a(c), Subpart VVa	3.7	VOC	Exemption for pressure relief devices routed to a process or fuel gas system
	40 CFR 60.482-4a(d), Subpart VVa	3.8	VOC	Exemption for pressure relief devices complying with Condition 5.6
	40 CFR 60.482-5a(a), Subpart VVa	3.9	VOC	Sampling connection system requirements
	40 CFR 60.482-5a(c), Subpart VVa	3.10	VOC	Exemption for in-situ sampling systems and sampling systems without purges
	40 CFR 60.482-6a	3.11	VOC	Open-ended valve or line requirements

AB-001	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.12	SO ₂	4.8 lb/MMBTU
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.13	PM (filterable only)	$E=0.8808*I^{-0.1667}$
	Permit to Construct issued July 15, 2011, and modified March 4, 2013	3.14	Fuel	Burn only natural gas
AD-751	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.15	HAP (Methanol)	Reflux Control Temperature: $\leq 162^{\circ}\text{F}$, Bottom Control temperature: 182 - 206 $^{\circ}\text{F}$
AD-921 AD-5300	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.16	HAP (Methanol)	Shall operate at all times emissions are venting
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.17	HAP (Methanol)	L/G Ratios: AD-921 ≥ 109 AD-5300 ≥ 214

3.1 For Emission Point AA-001, the permittee shall limit the emission of Hazardous Air Pollutants (HAP) to 9.9 tons per year of a single HAP specifically methanol and 24.0 tons per year of any combination of HAPs for each consecutive 12-month period on a rolling basis. Also, the permittee shall limit the emissions of Volatile Organic Compounds (VOC) to 95 tons per year for each consecutive 12-month period on a rolling basis.

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

3.2 For Emission Point AA-001, 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 3.3. 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 Emission Points AA-001, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity subject to the exceptions provided in (a) & (b).

(a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3)

startups per stack in any twenty-four (24) hour period.

- (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

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

- 3.4 For the Biodiesel/Glycerol Production Units, the permittee is subject to and shall comply with all applicable requirements of the 40 CFR Part 60, Subpart VVa - New Source Performance Standards for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 and the General Provisions in 40 CFR Part 60, Subpart A.

(Ref.: 40 CFR 60.480a, Subpart VVa)

- 3.5 For Emission Point AA-002, the following general standards apply:

- (a) Equipment that is in vacuum service is excluded from the requirements of 40 CFR 60.482-2a through 60.482-10a if it is identified as required in 40 CFR 60.486a(e)(5).
- (b) Equipment that an owner or operator designates as being in VOC service less than 300 hr/yr is excluded from the requirements of 40 CFR 60.482-2a through 60.482-11a if it is identified as required in 40 CFR 60.486a(e)(6) and it meets any of the conditions specified in paragraphs (i) through (iii) below.
 - i. The equipment is in VOC service only during startup and shutdown, excluding startup and shutdown between batches of the same campaign for a batch process.
 - ii. The equipment is in VOC service only during process malfunctions or other emergencies.
 - iii. The equipment is backup equipment that is in VOC service only when the primary equipment is out of service.

(Ref.: 40 CFR 60.482-1a(d) and (e), Subpart VVa)

- 3.6 For Emission Point AA-002, 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)

- 3.7 For Emission Point AA-002, any pressure relief device that is routed to a process or fuel gas system is exempted from the requirements of Conditions 3.6 and 5.4.
(Ref.: 40 CFR 60.482-4a(c), Subpart VVa)
- 3.8 For Emission Point AA-002, any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of Condition 3.6 provided the owner or operator complies Condition 5.6, except as provided in Condition 5.13.
(Ref.: 40 CFR 60.482-4a(d), Subpart VVa)
- 3.9 For Emission Point AA-002, 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 Condition 5.7.
(Ref.: 40 CFR 60.482-5a(a), Subpart VVa)
- 3.10 For Emission Point AA-002, in-situ sampling systems and sampling systems without purges are exempt from the requirements of Conditions 3.9 and 5.6.
(Ref.: 40 CFR 60.482-5a(c), Subpart VVa)
- 3.11 For Emission Point AA-002, each open-ended valve or line shall meet 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 paragraphs (d) and (e) below. 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) of this section 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 60.482-6a, Subpart VVa)

- 3.12 For Emission Points AB-001, the discharge of sulfur oxides 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).)

- 3.13** For Emission Points AB-001, the maximum permissible emission of ash and/or particulate matter shall not exceed an emission rate as determined by the relationship: $E = 0.8808 * I^{-0.1667}$, where E is the emission rate in pounds per million BTU per hour 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).)

- 3.14 For Emission Point AB-001, the permittee shall only burn natural gas.

(Ref.: Permit to Construct issued July 15, 2011, and modified March 4, 2013)

- 3.15 For Emission Point AD-751, the permittee shall operate in such as manner in which the reflux control temperature shall maintain an operating temperature $\leq 162^{\circ}\text{F}$, and the bottom of the column's control temperature shall maintain an operating temperature between 182 and 206 $^{\circ}\text{F}$.

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

- 3.16 For Emission Points AD-921 and AD-5300, the permittee shall operate the control equipment at all times emissions may vent.

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

- 3.17 For Emission Points AD-921 and AD-5300, the permittee shall operate in such a manner that the 24-hr average Liquid to Gas (L/G) ratio is greater than 109 for AD-921 and 214 for AD-5300 to achieve 95% methanol removal efficiency.

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

**SECTION 4
WORK PRACTICES**

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

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.
AA-002	40 CFR 60.482-1a(b), Subpart VVa	5.2	VOC	Compliance Demonstration
	40 CFR 60.482-2a(a)-(c), Subpart VVa	5.3	VOC	Pumps in light liquid service: Monthly monitoring, weekly visual inspections
	40 CFR 60.482-4a(b), Subpart VVa	5.4	VOC	Pressure relief devices in gas/vapor service: Return to no detectable emissions
	40 CFR 60.482-4a(d), Subpart VVa	5.5	VOC	Pressure relief devices in gas/vapor service: exemption for device equipped with rupture disk
	40 CFR 60.482-5a(b)	5.6	VOC	Sampling Connection Systems
	40 CFR 60.482-5a(c), Subpart VVa	5.7	VOC	Sampling Connection Systems
	40 CFR 60.482-7a(a)(1) and 60.483-2a(b), Subpart VVa	5.8	VOC	Valves in gas/vapor or light liquid service: monitoring requirement
	40 CFR 60.482-7a(a)(2) and 60.483-2a(b)(7), Subpart VVa	5.9	VOC	Monitor new valve within 30 days of startup
	40 CFR 60.482-7a(b), Subpart VVa	5.10	VOC	Leak definition of 500 ppm or greater
	40 CFR 60.482-7a(f), Subpart VVa	5.11	VOC	Requirements/exemptions for valves designated for no detectable emissions
	40 CFR 60.482-7a(h), Subpart VVa	5.12	VOC	Requirements/exemptions for valves designated as difficult-to-monitor
	40 CFR 60.482-8a(a), Subpart VVa	5.13	VOC	Pumps, valves, and connectors in heavy liquid service and pressure relief devices in heavy or light liquid service
	40 CFR 60.482-9a, Subpart VVa	5.14	VOC	Delay of Repair Requirements
40 CFR 60.482-11a, Subpart VVa	5.15	VOC	Indefinite stay of standards for connectors on gas/vapor and light liquid service	
AA-002	40 CFR 60.486a(a)(3)	5.16	VOC	Records for each monitoring event
	40 CFR 60.486a(b), Subpart VVa	5.17	VOC	Identification requirements for leaking pump, valve, or connector

	40 CFR 60.486a(c), Subpart VVa	5.18	VOC	Records required for leaking pumps, valves, and connectors
	40 CFR 60.486a(e), Subpart VVa	5.19	VOC	Identification of applicable and excluded equipment
	40 CFR 60.486a(f)(2), Subpart VVa	5.20	VOC	Records for valves designated as difficult-to-monitor
	40 CFR 60.486a(g), Subpart VVa	5.21	VOC	Monitoring schedule for valves and percent leaking valves
AA-003	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.22	HAP (Methanol)	Monitor methanol concentration in wastewater from Methanol Recovery
AD-001	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.23	HAP (Methanol)	Monitor methanol concentration in cooling tower
AD-751	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.24	HAP (Methanol)	Continuously monitor the temperature at the top and bottom of the column
AD-921 AD-5300	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.25	HAP (Methanol)	Continuously monitor 24-hr avg. L/G ratio, daily methanol concentration
Process Vessels and storage tanks	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.26	HAP (Methanol)	Record monthly throughput and determine monthly methanol emissions

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 Emission Point AA-002, compliance with 40 CFR 60.482-1a to 60.482-10a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR 60.485a.

(Ref.: 40 CFR 60.482-1a(b), Subpart VVa)

5.3 For Emission Point AA-002, the permittee shall comply with the following standards for pumps in light liquid service:

- a. 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 40 CFR 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 40 CFR 60.482-2a(d),(e), and (f).

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 60.482-1a(f).

- b. The instrument reading that defines a leak is 2,000 ppm or greater.

If there are indications of liquids dripping from the pump seal, the owner or operator shall follow the procedure specified in either (i) or (ii) below. This requirement does not apply to a pump that was monitored after a previous weekly inspection and the instrument reading was less than the concentration specified in paragraph (b)(i) of this condition.

- i. Monitor the pump within 5 days as specified in 40 CFR 60.485a(b). A leak is detected if the instrument reading measured during monitoring indicates a leak. The leak shall be repaired using the procedures in paragraph (c) of this condition.
 - ii. Designate the visual indications of liquids dripping as a leak, and repair the leak using either the procedures in paragraph (c) below or 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 5.14.

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 (i) and (ii) below, where practicable.

- i. Tightening the packing gland nuts;
- ii. Ensuring that the seal flush is operating at design pressure and temperature.

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

- 5.4 For Emission Point AA-002, the permittee shall comply with the following standards for pressure relief devices in gas/vapor service:

- a. 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 5.13.
- b. 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 40 CFR 60.485a(c).

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

- 5.5 For Emission Point AA-002, as stated in Condition 3.8, any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of Condition 3.6 provided the permittee complies with the following requirement: After each pressure release, a new rupture disk shall be installed 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 5.13.

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

- 5.6 For Emission Point AA-002, the permittee shall comply with the following standards for sampling connection systems required by Condition 3.7:
- 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 one of the following requirements below:
 - i. Return the purged process fluid directly to the process line.
 - ii. Collect and recycle the purged process fluid to a process.
 - iii. Capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR 60.482-10a.
 - iv. Collect, store, and transport the purged process fluid to one of the systems or facilities meeting the requirements in 40 CFR 60.482-5a(b)(4)(iv)(A)-(E).

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

- 5.7 For Emission Point AA-002, for valves in gas/vapor service and in light liquid service, each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR 60.485a(b), except as specified below:
- a. After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip one (1) of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

- b. After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip three (3) of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
- c. If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in 40 CFR 60.482-7a but can again elect to use this condition when applicable again.
- d. The percent of valves leaking shall be determined as described in 40 CFR 60.485a(h).
- e. The permittee must keep a record of the percent of valves found leaking during each leak detection period.

(Ref.: 40 CFR 60.482-7a(a)(1) and 60.483-2a(b), Subpart VVa)

- 5.8 For Emission Point AA-002, a valve that begins operation in gas/vapor service or light liquid service after the initial startup date for a process unit must be monitored as follows:

Count the new valve as leaking when calculating the percentage of valves leaking per Condition 5.7(d). 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.

(Ref.: 40 CFR 60.482-7a(a)(2)(ii) and 60.483-2a(b)(7), Subpart VVa)

- 5.9 For valves under Emission Point AA-002, if an instrument reading of 500 ppm or greater is measured, a leak is detected.

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

- 5.10 For Emission Point AA-002, any valve that is designated, as described in Condition 5.18(b), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the periodic monitoring requirements of Conditions 5.7 and 5.8 if the valve:

- a. Has no external actuating mechanism in contact with the process fluid,
- b. Is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR 60.485a(c), and
- c. Is tested for compliance with (b) above initially upon designation, annually, and at other times requested by the MDEQ.

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

- 5.11 For Emission Point AA-002, any valve that is designated, as described in 40 CFR 60.486a(f)(2), as a difficult-to-monitor valve is exempt from the periodic monitoring requirements of Conditions 5.7 and 5.8 if:

- a. The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
- b. The process unit within which the valve is located either:
 - i. Becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 and was constructed on or before January 5, 1981; or
 - ii. Has less than 3.0 percent of its total number of valves designated as difficult-to-monitor by the owner or operator.
- c. The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

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

5.12 For Emission Point AA-002, for pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service, 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 follow either one of the following procedures:

- a. The owner or operator shall monitor the equipment within 5 days by the method specified in 40 CFR 60.485a(b) and shall comply with the requirements
 - i. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected
 - ii. When a leak is detected, the first attempt at repair should be made no later than 5 calendar days after each leak is detected, and it shall be repaired as soon as practicable, but not later than 15 calendars after it is detected except as provided in Condition 5.13.
 - iii. First attempts as repair include, but are not limited to, the best practices described under Condition 5.3(c)(ii) and 60.482-7a(e).
- b. The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.

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

5.13 For Emission Point AA-002, the permittee may delay repair as allowed in (a) – (f) below:

- 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 and connectors will be allowed if:
 - i. The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
 - ii. When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR 60.482-10a.
- d. Delay of repair for pumps will be allowed if:
 - i. Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
 - ii. 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, 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)

- 5.14 For Emission Point AA-002, per 73 FR 31376, June 2, 2008, the standards for connectors in gas/vapor service and in light liquid service found in 40 CFR 60.482-11a were stayed until further notice.

(Ref.: 40 CFR 60.482-11a, Subpart VVa)

- 5.15 For Emission Point AA-002, the permittee shall record the information specified in (a) through (e) below for each monitoring event required by Conditions 5.3, 5.7 through 5.12, and 40 CFR 60.483-2a.
- 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)

- 5.16 For Emission Point AA-002, when each leak is detected as specified in Conditions 5.3, 5.7 through 5.12, and 40 CFR 60.483-2a, 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 2 successive months as specified in 40 CFR 60.482-7a(c) and no leak has been detected during those 2 months.
 - c. 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)

- 5.17 For Emission Point AA-002, when each leak is detected as specified Conditions 5.3, 5.7 - 5.12, and 40 CFR 60.483-2a, the following information shall be recorded in a log and shall be kept in accordance with Condition 5.1 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 nonrepairable, except when a pump is repaired by eliminating 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 permittee (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)

- 5.18 For Emission Point AA-002, 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) and 60.482-7a(f). The designation of equipment as subject to the requirements of 40 CFR 60.482-2a(e) or 60.482-7a(f) shall be signed by the permittee.
 - c. A list of equipment identification numbers for pressure relief devices required to comply with Condition 3.6.
 - d. The dates of each compliance test as required in 40 CFR 60.482-2a(e), 60.482-4a, and 60.482-7a(f). Also, the background level measured during each compliance test, and 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 40 CFR 60.486a(e)(8)(i) through (vi) for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of Appendix A-7 of 40 CFR Part 60 and 40 CFR 60.485a(b).
 - i. Records of each release from a pressure relief device subject to Condition 3.6.

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

- 5.19 For Emission Point AA-002, the following information pertaining to all valves subject to the requirements of Condition 5.11 shall be recorded in a log that is kept in a readily accessible location: 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)(2), Subpart VVa)

- 5.20 For Emission Point AA-002, the following information shall be recorded for valves complying with 40 CFR 60.483-2a:

- a. A schedule of monitoring.

- b. The percent of valves found leaking during each monitoring period.
(Ref.: 40 CFR 60.486a(g), Subpart VVa)
- 5.21 For Emission Point AA-003, the permittee shall measure the methanol concentration in the wastewater from the Methanol Recovery Column (C-751) monthly and continuously monitor flow from the column. The permittee shall use an EPA approved or ASTM method to determine the concentration leaving the column. The permittee shall use the monthly concentration and total monthly flow to calculate the methanol emissions based on methanol loading to the wastewater pretreatment system.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
- 5.22 For Emission Point AD-001, the permittee shall measure the methanol concentrations in the inlet and outlet of the cooling tower monthly and continuously monitor the flow through the cooling tower. The permittee shall use an EPA approved or ASTM method (having a detection limit of at least 10 ppm) to determine the methanol concentration in both the inlet and outlet streams. Three samples are to be taken and averaged at both locations. The averaged concentrations shall be used with the monthly flow of water through the cooling tower.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
- 5.23 For Emission Point AD-751, the permittee shall continuously monitor the temperature at the top and bottom of the Methanol Recovery Column. The permittee shall record the results of all calibration checks and maintenance for monitoring devices.
(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)
- 5.24 For Emission Points AD-921 and AD-5300, the permittee shall continuously monitor (at least every 15 minutes) the liquid and gas flow to determine the daily (24-hr) average liquid to gas (L/G) ratio. If the L/G ratio falls below the design specifications in Condition 3.17, the permittee shall shut down the process and take immediate corrective action to return the scrubber to the designed L/G ratio. The permittee shall record the date, time, and duration when the scrubber L/G ratio is below the minimum design ratio and note any corrective actions taken.

Also, the permittee shall monitor and record the methanol concentration in the scrubbing liquid daily using an EPA approved or ASTM method. If the methanol concentration is found to be above 30% by volume for AD-921 or 20% by volume for AD-5300, the permittee shall immediately add make-up water and remove scrubbing liquid to reduce the concentration below design standard.

The permittee shall calibrate and maintain monitoring equipment in accordance with the manufacture's recommendations and keep records of all calibration checks and maintenance performed.

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

- 5.25 For Process Vessels and Storage Tanks, the permittee shall record the monthly throughput for each process vessel and storage tank and determine monthly emissions of methanol.

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

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.
AA-002	40 CFR 60.487a(a)	6.4	Semiannual LDAR reporting frequency
	40 CFR 60.487a(c)	6.5	Requirements for all semiannual LDAR reports
	40 CFR 60.487a(d)	6.6	Notification of alternative LDAR standards
	40 CFR 60.487a(e)	6.7	Reporting LDAR performance tests
AD-751 AD-921 AD-5300	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	6.8	Report any deviation from permitted operating ranges

6.1 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 For Emission Point AA-002, the permittee shall submit semiannual reports by July 31 and January 31 for the preceding six-month period and consistent with the reporting requirements of Condition 6.5.

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

- 6.5 For Emission Point AA-002, all of the semiannual reports required by 40 CFR 60.487a(a) shall include the following information:

- a. Process unit identification.
- b. For each month during the semiannual reporting period,
 - i. Number of valves for which leaks were detected as described in Condition 5.10 or 40 CFR 60.483-2a,
 - ii. Number of valves for which leaks were not repaired as required in 40 CFR 60.482-7a(d)(1),
 - iii. 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),
 - iv. Number of pumps for which leaks were not repaired as required in 40 CFR 60.482-2a(c)(1) and (d)(6),
 - v. Number of compressors for which leaks were detected as described in 40 CFR 60.482-3a(f),
 - vi. 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 paragraph (b) above if changes have occurred since the initial report or subsequent revisions to the initial report.

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

- 6.6 For Emission Point AA-002, if the permittee elects to comply with the provisions of 40 CFR 60.483-1a or 60.483-2a, the permittee shall notify the DEQ of the alternative standard selected 90 days before implementing either of the provisions.

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

- 6.7 For Emission Point AA-002, the permittee shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart VVa except that an owner or operator must notify the DEQ of the schedule for the initial performance tests at least 30 days before the initial performance tests.

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

- 6.8 For Emission Point AD-751, AD-921, and AD-5300, the permittee shall report all instances where the units are operated outside of the permitted operating ranges specified in Conditions 3.15 and 3.17 in accordance with Condition 6.1.

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