

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

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

THIS CERTIFIES THAT

Tellus Operating Group LLC, Baxterville Compressor Station
4 Gulf Camp Circle
Lumberton, Mississippi
Lamar 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

Becky Simonson

**AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

Issued: December 16, 2024

Permit No.: 1440-00030

Effective Date: As specified herein.

Expires: November 30, 2029

7463 PER20150003

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.)

2. 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-007	0.75 MMBtu/hr Glycol Dehydrator Reboiler, combusting produced natural gas and emissions from the Glycol Dehydrator (AA-013)
AA-009	Flare for control of natural gas venting during startups, shutdowns, and malfunctions. The flare may also control emissions from the Glycol Dehydrator (AA-013).
AA-010	Tank Battery consisting of the following three vertical, fixed-roof tanks storing oil condensate: Tank No. 1 (8,800 gal), Tank No. 2 (8,800 gal) and Tank No. 3 (10,500 gal)
AA-013	Glycol Dehydrator with emissions control by either the Glycol Reboiler (AA-007) or the Flare (AA-009)
AA-015	1,380 hp (9.7 MMBtu/hr) natural gas-fired, four-stroke, lean burn (4SLB) compressor engine with CO, VOC, and HAP emissions controlled by an oxidation catalyst. [2015 Model 3516B Caterpillar Engine]
AA-020	Fugitive emissions from equipment leaks
AA-021 [proposed]	500 hp to 1,750 hp (12.2 MMBtu/hr) natural gas-fired, four-stroke, lean burn (4SLB) compressor engine with CO, VOC, and HAP emissions controlled by an oxidation catalyst. [NSPS JJJJ-compliant stationary engine]
AA-022 [proposed]	500 hp to 1,750 hp (12.2 MMBtu/hr) natural gas-fired, four-stroke, lean burn (4SLB) compressor engine with CO, VOC, and HAP emissions controlled by an oxidation catalyst. [NSPS JJJJ-compliant stationary engine]

**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. 2.2.B(10).	3.1	CO	≤ 95 tpy (12-month rolling total)
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2	Opacity	≤ 40%
AA-007 AA-015 AA-021 AA-022	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.3	Opacity	≤ 40%
	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.4	PM (filterable)	0.6 lb/MMBtu heat input
AA-007	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.5	SO ₂	4.8 lb/MMBtu heat input
AA-009	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.6	Operation	Pilot flame must be lit at all times, and any gas vented as a result of a startup, shutdown, or malfunction shall be vented to the flare
	11 Miss. Admin. Code Pt. 2, R. 1.4.B(2)	3.7	H ₂ S	Control of gas streams with H ₂ S > 1 grain per 100 standard cubic feet
AA-013	40 CFR Part 63, Subpart HH (National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities) 40 CFR 63.760(a) and (b)(2) and 63.764(a), Subpart HH	3.8	HAP	Triethylene glycol (TEG) dehydration unit applicability
	40 CFR 63.764(e)(1)(ii), Subpart HH	3.9	HAP	Exemption for actual average emissions of benzene < 0.90 Mg/yr
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.10	HAP	Control emissions from the process vent at all times
AA-021 AA-022	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.11	PM (filterable)	$E = 0.8808 * I^{-0.1667}$

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-015 AA-021 AA-022	40 CFR 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants From Stationary Reciprocating Internal Combustion Engines) 40 CFR 63.6585 and 63.6590(a)(2)(iii) and (c)(1), Subpart ZZZZ	3.12	HAP	Applicability
	40 CFR 60, Subpart JJJJ (Standards of Performance for Stationary Spark Ignition Internal Combustion Engines) 40 CFR 60.4230(a)(4)(i) and 60.4246(a), Subpart JJJJ	3.13	NO _x , CO, VOC	Applicability
	40 CFR 60.4233(e), 60.4234, 63.4236, and Table 1, Subpart JJJJ	3.14	NO _x	1.0 g/hp-hr
CO			2.0 g/hp-hr	
VOC			0.7 g/hp-hr (not including emissions of formaldehyde)	
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.15	CO, VOC, HAP	Install, operate, and maintain an oxidation catalyst
AA-015	40 CFR Part 60, Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After August 23, 2011, and On or Before September 18, 2015) 40 CFR 60.5365(c), 60.5425, and Table 3, Subpart OOOO	3.16	GHG and VOC	Applicability

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Limitation/Standard
AA-021 AA-022	40 CFR Part 60, Subpart OOOO/ OOOOa/OOOOb (Standards of Performance for Crude Oil and Natural Gas Facilities) 40 CFR 60.5365(c), Subpart OOOO; 40 CFR 60.5365a(c), Subpart OOOOa; and 40 CFR 60.5365b(c), Subpart OOOOb	3.17	GHG and VOC	Applicability

3.1 For the entire facility, the permittee shall limit emissions of carbon monoxide (CO) to 95 tons per year, as determined 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 the entire facility, the permittee shall not cause, permit, or allow 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 11 Miss. Admin. Code Pt. 2, R. 1.3.A(1). This shall not apply to vision obscuration caused by uncombined water droplets.

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

3.3 For Emission Points AA-007, AA-015, AA-021, and AA-022, 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 paragraphs (a) and (b) below.

(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 Emission Points AA-007, AA-015, AA-021, and AA-022, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations less than 10 MMBtu/hr heat input shall not exceed 0.6 pounds per million BTU per hour heat input.

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

- 3.5 For Emission Point AA-007, the maximum 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).)
- 3.6 For Emission Point AA-009, the permittee shall operate the flare with a flame present at all times. During startups, shutdowns, or malfunctions, the permittee shall vent field gas to the flare such that there is no uncontrolled venting of field gas at the facility.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
- 3.7 The permittee shall not cause or permit the emission of any gas stream which contains hydrogen sulfide in excess of one grain per 100 standard cubic feet. Gas streams containing hydrogen sulfide in excess of one grain per 100 standard cubic feet shall be incinerated at temperatures of not less than 1600°F for a period of not less than 0.5 seconds or processed in such manner which is equivalent to or more effective for the removal of hydrogen sulfide.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.B(2).)
- 3.8 For Emission Point AA-013, the permittee is subject to and shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities (40 CFR 63, Subpart HH) and the applicable General Provisions (40 CFR 63, Subpart A) noted in Table 2 to Subpart HH.

(Ref.: 40 CFR 63.760(a) and (b)(2) and 63.764(a), Subpart HH)
- 3.9 For Emission Point AA-013, the permittee is exempt from the requirements of 40 CFR 63.764(d) as long as the actual average emissions of benzene from the glycol dehydration unit process vent to the atmosphere are less than 0.90 megagram per year, as determined by the procedures specified in Condition 5.4.

(Ref.: 40 CFR 63.764(e)(1)(ii), Subpart HH)
- 3.10 For Emission Point AA-013, the permittee shall control the emissions from the glycol dehydration unit process vent at all times by venting the emissions to the flame zone of the glycol reboiler (AA-007) or venting emissions to the flare (AA-009).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
- 3.11 For Emission Points AA-021 and AA-022, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations equal or greater than 10 MMBtu/hr heat input but less than 10,000 MMBtu/hr shall not exceed an emission rate determined by the relationship: $E = 0.8808 * I^{0.1667}$, where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour.

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

3.12 For Emission Points AA-015, AA-021, and AA-022, the permittee is subject to and shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) (40 CFR 63, Subpart ZZZZ) and the applicable General Provisions (40 CFR 63, Subpart A). Because Emission Points AA-015, AA-021, and AA-022 are new stationary RICE located at an area source, the permittee shall meet the requirements of 40 CFR 63, Subpart ZZZZ by meeting the requirements of 40 CFR 60, Subpart JJJJ. No further requirements of Subpart ZZZZ apply.

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

3.13 For Emission Points AA-015, AA-021, and AA-022, the permittee is subject to and shall comply with the applicable requirements of the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI ICE) (40 CFR 60, Subpart JJJJ) and the applicable General Provisions (40 CFR 60, Subpart A) noted in Table 3 to Subpart JJJJ.

(Ref.: 40 CFR 60.4230(a)(4)(i) and 60.4246(a), Subpart JJJJ)

3.14 For Emission Points AA-015, AA-021, and AA-022, the permittee must comply with the following emission standards and operate and maintain the SI ICE over the entire life of the engine. The permittee may not install stationary SI ICE that do not meet the emissions standards below:

- $\text{NO}_x \leq 1.0 \text{ g/hp-hr (82 ppmvd @ 15 \% O}_2\text{)}$
- $\text{CO} \leq 2.0 \text{ g/hp-hr (270 ppmvd @ 15 \% O}_2\text{)}$
- $\text{VOC} \leq 0.7 \text{ g/hp-hr (60 ppmvd @ 15 \% O}_2\text{)}^1$

¹ When calculating emissions of VOC, emissions of formaldehyde should not be included.

(Ref.: 40 CFR 60.4233(e), 60.4234, 63.4236, and Table 1, Subpart JJJJ)

3.15 For Emission Points AA-015, AA-021, and AA-022, the permittee shall install, operate, and maintain an oxidation catalyst according to the manufacturer's written instructions or site-specific written instructions for each engine. The permittee shall operate all control devices at all times when operating. Should the control device(s) become non-operational then the respective engine shall be shut down immediately, but not as to cause damage to equipment or property, or cause further environmental problems. The engine shall not startup until such time that the control device(s) becomes operational.

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

3.16 For Emission Point AA-015, the permittee is subject and shall comply with the applicable requirements of the Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced after August 23, 2011, and on or before September 18, 2015 (40 CFR 60, Subpart OOOO) and the applicable

General Provisions (40 CFR 60, Subpart A) noted in Table 3 to Subpart OOOO. The affected facility under Subpart OOOO is the reciprocating compressor, Emission Point AA-015.

(Ref.: 40 CFR 60.5365(c), 60.5425, and Table 3, Subpart OOOO)

3.17 For Emission Points AA-021 and AA-022, upon startup of the reciprocating compressor, the permittee shall comply with the applicable requirements of the following Standards of Performance based upon the date the reciprocating compressor was constructed, reconstructed, or modified. The permittee shall submit the information required by Condition 6.11 to identify the specific requirements of the applicable subpart:

- (a) Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced after August 23, 2011, and on or before September 18, 2015 (40 CFR 60, Subpart OOOO);
- (b) Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced after September 18, 2015, and on or before December 6, 2022 (40 CFR 60, Subpart OOOOa); or
- (c) Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced after December 6, 2022 (40 CFR 60, Subpart OOOOb).

(Ref.: 40 CFR 60.5365(c), Subpart OOOO; 40 CFR 60.5365a(c), Subpart OOOOa; and 40 CFR 60.5365b(c), Subpart OOOOb)

**SECTION 4
WORK PRACTICES**

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/Parameter	Work Practice
AA-013	40 CFR 63.764(j), Subpart HH	4.1	HAP	Good air pollution control practices
Facility-Wide	40 CFR 60.5371, Subpart OOOO	4.2	GHG and VOC	Comply with super-emitter event standards
AA-015	40 CFR 60.5385(a)(1) and (2) and 60.5415(c)(3), Subpart OOOO	4.3	GHG and VOC	Replace compressor rod packing every 26,000 hours of operation or every 36 months

4.1 For Emission Point AA-013, the permittee must operate and maintain the affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the MDEQ which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

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

4.2 For the entire facility, the permittee must initiate a super-emitter event investigation according to 40 CFR 60.5371(a) within five (5) calendar days of receiving notification from EPA of the super-emitter event.

(Ref.: 40 CFR 60.5371(a), Subpart OOOO)

4.3 For Emission Point AA-015, the permittee must replace the compressor rod packing within 26,000 hours of operation or prior to 36 months following the date of the most recent rod packing replacement. If using the hours of operation to determine the next rod packing replacement, the number of hours of operation must be continuously monitored.

(Ref.: 40 CFR 60.5385(a)(1) and (2) and 60.5415(c)(3), Subpart OOOO)

**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 five (5) years.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.2	CO	Calculate and maintain monthly and 12-month rolling total CO emissions
AA-009	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.3	Pilot Flame	Use thermocouple or equivalent to monitor presence of flame
AA-013	40 CFR 63.772(b)(2), Subpart HH	5.4	Benzene or BTEX	Benzene or BTEX emissions determination
	40 CFR 63.774(d)(1)(ii), Subpart HH	5.5	Benzene or BTEX	Records of actual average benzene or BTEX emissions
AA-015 AA-021 AA-022	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.6	Oxidation catalyst	Inspect oxidation catalyst once every six (6) months
	40 CFR 60.4243(b)(2)(ii) and 60.4244, Subpart JJJJ; 40 CFR 60.8(a), Subpart A; and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.7	NO _x , CO, VOC	Initial and subsequent performance testing and routine maintenance
	40 CFR 60.4243(g), Subpart JJJJ	5.8	Air-to-Fuel Ratio	Maintain air-to-fuel ratio controllers
	40 CFR 60.4245(a)(1), (2), and (4), Subpart JJJJ	5.9	Records	Maintain records of notifications, maintenance, and performance testing
AA-015	40 CFR 60.5415(c)(1), Subpart OOOO	5.10	Hours of operation	Continuously monitor hours of operation or track months since last rod packing replacement
	40 CFR 60.5385(d) and 60.5420(c)(3), Subpart OOOO	5.11	Records	Records of cumulative hours of operation or months since last rod packing replacement and date and time of each rod packing replacement

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, the permittee shall calculate the monthly emissions of CO and the 12-month rolling total as follows:

- (a) Emissions from the engines (AA-015, AA-021, and AA-022) shall be determined using the most recent performance test for each engine and the hp-hr the engine operated during the calendar month.
- (b) Emissions from the flare (AA-009) shall be determined using the actual flow of natural gas vented to the flare or the maximum design throughput of natural gas (i.e., 16 mmscfd) and the actual hours that natural gas was vented to the flare during the calendar month and the emission factor provided in the application.
- (c) For all other fuel combustion sources, CO shall be calculated using the emission factor provided in the application and the actual hours of operation and design capacity of the source or the actual fuel usage during the calendar month.

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

5.3 For Emission Point AA-009, the presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame. The device shall be equipped with a continuous recorder that indicates the continuous ignition of the pilot flame. The permittee shall record the date, start time, and duration that the recorder indicates the pilot flame was not lit, as well as the date, start time, and duration that gas is vented to the flare. A deviation shall be defined as any time the pilot flame was not lit while gas was being vented to the flare.

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

5.4 For Emission Point AA-013, the permittee shall determine the actual average benzene or BTEX emissions from the glycol dehydration unit using the procedures of either paragraph (a) or (b) below. Emissions shall be determined either uncontrolled or with federally enforceable controls in place.

- (a) The permittee shall determine actual average benzene or BTEX emissions using the model GRI-GLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled “Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions” (GRI-95/0368.1); or

- (b) The permittee shall determine an average mass rate of benzene or BTEX emissions in kilograms per hour through direct measurement using the methods in 40 CFR 63.772(a)(1)(i) or (ii), or an alternative method according to 40 CFR 63.7(f). Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year.

(Ref.: 40 CFR 63.772(b)(2), Subpart HH)

- 5.5 For Emission Point AA-013, the permittee shall maintain records of the actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with Condition 5.4.

(Ref.: 40 CFR 63.764(d)(1)(ii), Subpart HH)

- 5.6 For Emission Points AA-015, AA-021, and AA-022, the permittee shall inspect the oxidation catalysts once every six (6) months to ensure proper operation and maintenance. If a catalyst malfunction is detected, the compressor engine shall be taken offline until such a time that repairs can be made.

All inspections, and any maintenance activities made on the oxidation catalysts, shall be kept in log form. This log shall include the date the inspection was made, any problems detected, any corrective action taken to fix the problem and the name of the person responsible for conducting the inspection.

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

- 5.7 For Emission Points AA-015, AA-021, and AA-022, the permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or three (3) years, whichever comes first, to demonstrate compliance. The initial performance test must be conducted within 60 days after achieving the maximum production rate at which the engine will be operated, but not later than 180 days after initial startup. The test methods and procedures specified in 40 CFR 60.4244 shall be used to conduct the performance tests. Each engine installed and operated on-site shall be treated as a new engine for purposes of conducting initial and subsequent performance testing.

(Ref.: 40 CFR 60.4243(b)(2)(ii) and 60.4244, Subpart JJJJ; 40 CFR 60.8(a), Subpart A; and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 5.8 For Emission Points AA-015, AA-021, and AA-022, the permittee shall operate an air-to-fuel ratio (AFR) controller with the operation of the three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in

order to ensure proper operation of the engine and control device to minimize emissions at all times.

(Ref.: 40 CFR 60.4243(g), Subpart JJJJ)

5.9 For Emission Points AA-015, AA-021, and AA-022, the permittee must keep records of the information in paragraphs (a) through (c) below.

- (a) All notifications submitted to comply with Subpart JJJJ and all documentation supporting any notification.
- (b) Maintenance conducted on the engine.
- (c) Documentation that the engine meets the emission standards in Condition 3.14.

(Ref.: 40 CFR 60.4245(a)(1), (2), and (4), Subpart JJJJ)

5.10 For Emission Point AA-015, the permittee must continuously monitor the number of hours of operation for the compressor or track the number of months since the date of the most recent reciprocating compressor rod packing replacement.

(Ref.: 40 CFR 60.5415(c)(1), Subpart OOOO)

5.11 For Emission Point AA-015, the permittee must maintain the following records either onsite or at the nearest local field office for at least five (5) years. Any records that are submitted electronically via the EPA's CDX may be maintained in electronic format.

- (a) Records of the cumulative number of hours of operation or number of months since the previous replacement of the reciprocating compressor rod packing.
- (b) Records of the date and time of each reciprocating compressor rod packing replacement.
- (c) Records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in Condition 4.3, including the date and time the deviation began, duration of the deviation, and a description of the deviation.

(Ref.: 40 CFR 60.5385(d) and 60.5420(c)(3), Subpart OOOO)

**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.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.4	Report monthly and 12-month rolling CO emissions and related data annually
	40 CFR 60.5371(b)(2) and (3), Subpart OOOO, and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.5	Super-emitter investigation report
AA-009	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.6	Report deviations
AA-013	40 CFR 63.765(c)(8), Subpart HH	6.7	Exemption from reporting requirements
AA-021 AA-022	40 CFR 60.4245(c), Subpart JJJJ	6.8	Initial notification postmarked no later than 30 days following commencement of construction
AA-015 AA-021 AA-022	40 CFR 60.4245(d) and (f), Subpart JJJJ	6.9	Submit performance test reports within 60 days after the test is completed
	40 CFR 60.4245(g) through (j), Subpart JJJJ and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.10	Submit reports to EPA electrically via CEDRI (Continue to submit reports directly to MDEQ)
AA-021 AA-022	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.11	Submit notifications of when the compressor engines are brought on site and removed
AA-009 AA-015 AA-021 AA-022	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.12	Report monthly and 12-month rolling CO emissions and related data annually
AA-015	40 CFR 60.5385(d) and 60.5420(b)(1) and (4), Subpart OOOO	6.13	Annual reports of cumulative hours of operation since last rod packing replacement and any deviations

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 In accordance with Condition 6.2, the permittee shall provide a summary of the data used to calculate the facility-wide CO emissions each month and shall provide the monthly and 12-month rolling total CO emissions (in tons) for each month during the reporting period.

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

- 6.5 The permittee shall submit the results of the super-emitter event investigation conducted according to Condition 4.2 in accordance with 40 CFR 60.5371(b)(1), including the attestation in 40 CFR 60.5371(b)(3). If the super-emitter event is ongoing at the time of the initial report, submit the additional information in accordance with 40 CFR 60.5371(b)(2). Reports shall be submitted through EPA's Super-Emitter Program Portal, as well as to MDEQ.

(Ref.: 40 CFR 60.5371(b)(2) and (3), Subpart OOOO and 11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).)

- 6.6 For Emission Point AA-009, in accordance with Condition 6.2, the permittee shall report any deviations required to be recorded in Condition 5.3.

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

- 6.7 For Emission Point AA-013, the permittee is exempt from the reporting requirements of 40 CFR 63, Subpart HH.

(Ref.: 40 CFR 63.775(c)(8), Subpart HH)

- 6.8 For Emission Points AA-021 and AA-022, the permittee must submit an initial notification of the date construction commenced postmarked no later than 30 days after such date. The notification must include the information in paragraphs (a) through (e) below. Beginning on February 26, 2025, the permittee shall submit the notification electronically to the EPA according to Condition 6.10, in addition to submitting notifications directly to MDEQ.
- (a) Name and address of the owner or operator;
 - (b) The address of the affected source;
 - (c) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
 - (d) Emission control equipment; and
 - (e) Fuel used.

(Ref.: 40 CFR 60.4245(c), Subpart JJJJ)

- 6.9 For Emission Points AA-015, AA-021, and AA-022, the permittee must submit a copy of each performance test as conducted according to Condition 5.7 within 60 days after the test has been completed. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference – see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7. Beginning on February 26, 2025, performance tests must be reported electronically to the EPA within 60 days after the date of completing each performance test, according to Condition 6.10, in addition to submitting test reports directly to MDEQ.

(Ref.: 40 CFR 60.4245(d) and (f), Subpart JJJJ)

- 6.10 For Emission Points AA-015, AA-021, and AA-022, if notifications or reports are required to be submitted according to this condition, the permittee must submit notifications or reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The permittee shall refer to 40 CFR 60.4245(g) through (j) for further information related to electronic submittal via CEDRI. In addition to submittal via CEDRI, the permittee shall continue to submit all required reports directly to MDEQ.

(Ref.: 40 CFR 60.4245(g) through (j), Subpart JJJJ and 11 Miss. Admin. Code Pt. 2, R. 2.B(11).)

- 6.11 For Emission Points AA-021 and AA-022, the permittee shall notify the MDEQ each time a compressor engine is constructed/installed at the facility and each time the compressor engine is subsequently removed from the facility. These notifications shall be submitted within 30 days of bringing the compressor engine on-site or removing a compressor engine

from the site. For a newly installed compressor engine, the notification shall include the MDEQ forms relevant to the compressor and any associated equipment components (i.e., Section B, Section D, Section N, etc.). The MDEQ reserves the right to modify the permit to address any newly applicable requirements.

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

6.12 For Emission Point AA-015, the permittee shall submit annual reports in accordance with Condition 6.2. The annual reports shall contain the information specified in paragraphs (a) through (c) below.

- (a) The following general information:
 - (1) The company name and facility site name associated with the affected facility.
 - (2) An identification of each affected reciprocating compressor being included in the annual report.
 - (3) Beginning and ending dates of the reporting period.
 - (4) A certification by a certifying official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The cumulative number of hours of operation or the number of months since the previous reciprocating compressor rod packing replacement.
- (c) If applicable, for each deviation that occurred during the reporting period and recorded as specified in Condition 5.11(c), the date and time the deviation began, duration of the deviation and a description of the deviation.

(Ref.: 40 CFR 60.5385(d) and 60.5420(b)(1) and (4), Subpart OOOO)