STATE OF MISSISSIPPI
AND FEDERALLY ENFORCEABLE
AIR POLLUTION CONTROL

PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT AT A SYNTHETIC MINOR SOURCE

THIS CERTIFIES THAT

Denbury Onshore LLC, Martinville EOR Facility
327 Coho Drive
Mendenhall, Mississippi
Simpson 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

Krystal Rudolph

AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: JUL 18 2018 **Permit No.: 2480-00068**

Effective Date: As specified herein.

Expires: JUN 30 2023

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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. Nothing herein contained shall be construed as releasing the permittee from any liability for damage to persons or property by reason of the installation, maintenance, or operation of the air cleaning facility, or from compliance with the applicable statutes of the State, or with local laws, regulations, or ordinances. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)

11. 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).)

12. 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 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 40CFR 51.66;

e. An increase in the hours of operation or in the production rate unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or

f. Any change in ownership of the stationary source.

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

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	Facility Identification	Description
AA-000	**---**	**Entire Oil and Gas Production Facility**
AA-001	1-05-LH-BS	One (1) 2.5 MMBTU/hr Line Heater – emissions from this unit (combustion products) are vented to the atmosphere
AA-002	3-05-LH-BS	One (1) 0.5 MMBTU/hr Line Heater – emissions from this unit (combustion products) are vented to the atmosphere
AA-003a	4-05-HT-BS	One (1) 0.5 MMBTU/hr Heater Treater Burner – emissions from this unit (combustion products) are vented to the atmosphere
AA-003b	2-05-HT-BS	One (1) 1.5 MMBTU/hr Heater Treater – emissions from this unit (combustion products) are vented to the atmosphere
AA-003c	25-05-HT-WG	Heater Treater Waste Gas - emissions from this unit (waste gas) are routed to and controlled by the low pressure flare (AA-019)
AA-004	5-05-SBP	Sand Blowdown Pit
AA-005	6a-05-GBT-V	One (1) 63,000 Gallon (1,500 BBL) Gun Barrel Tank – emissions from this unit are routed to and controlled by the atmospheric flare (AA-018)
AA-006a	6b-05-OST-CV	One (1) 42,000 Gallon (1,000 BBL) Dry Oil Tank – emissions from this unit are routed to and controlled by the atmospheric flare (AA-018)
AA-006b	6c-05-OST-CV	One (1) 42,000 Gallon (1,000 BBL) Dry Oil Tank – emissions from this unit are routed to and controlled by the atmospheric flare (AA-018)
AA-006c	6d-05-OST-CV	One (1) 42,000 Gallon (1,000 BBL) Dry Oil Tank – emissions from this unit are routed to and controlled by the atmospheric flare (AA-018)
AA-007	6e-05-OST-CV	One (1) 42,000 Gallon (1,000 BBL) Wet Oil Tank – emissions from this unit are routed to and controlled by the atmospheric flare (AA-018)
AA-008	6f-05-OST-CV	One (1) 42,000 Gallon (1,000 BBL) Wet/Dry Oil Tank – emissions from this unit are routed to and controlled by the atmospheric flare (AA-018)
AA-009	7-05-ST-V	One (1) 84,000 Gallon (2,000 BBL) Skimmer Tank - emissions from this unit are routed to and controlled by the atmospheric flare (AA-018)
AA-010a	8-05-WST-V	One (1) 63,000 Gallon (1,500 BBL) Produced Water Storage Tank – emissions from this unit are vented to the atmosphere
AA-010b	9-05-WST-V	One (1) 63,000 Gallon (1,500 BBL) Produced Water Storage Tank – emissions from this unit are vented to the atmosphere

Emission Point	Facility Identification	Description
AA-011	10-05-SOT-V	One (1) 21,000 Gallon (500 BBL) Slop Oil Tank – emissions from this unit are vented to the atmosphere
AA-012a	11-05-IOT-V	One (1) 16,800 Gallon (400 BBL) Inhibitor Oil Blending Tank – emissions from this unit are vented to the atmosphere
AA-012b	12-05-IOT-V	One (1) 16,800 Gallon (400 BBL) Inhibitor Oil Blending Tank – emissions from this unit are vented to the atmosphere
AA-013	14-05-GST	One (1) 550 Gallon Glycol Storage Tank
AA-014	15-05-WST	One (1) 550 Gallon Demineralized Water Storage Tank
AA-015	16a-O5-WST-CV	One (1) 16,800 Gallon (400 BBL) API Water Holding Tank
AA-016	17-05-SEP	One (1) API Separator
AA-017	18-05-FE	Facility-Wide Fugitive Emissions
AA-018	19-05-F	Atmospheric Flare
AA-019	20-05-F	Low Pressure Flare
AA-020	21-05-CB 22-05-CB	High Pressure Compressor Blowdowns
AA-021	23-05-CB 24-05-CB	Low Pressure Compressor Blowdowns
AA-022	26-10-ST	One (1) Inhibitor Transfer Storage Tank

SECTION 3
EMISSION LIMITATIONS AND STANDARDS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limitation/Standard
AA-000	11 Miss. Admin. Code Pt. 2, R. 1.3.A.	3.1	Opacity	Facility-wide opacity limitations
	11 Miss. Admin. Code Pt. 2, R. 1.3.B.	3.2		
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.3	VOC	95.0 tpy
		3.4	HAPs	9.0 tpy for any individual HAP 24.0 tpy for all combined HAPs
		3.5	Fuel Requirements	Combust only natural gas
	11 Miss. Admin. Code Pt. 2, R. 1.4.B(2).	3.6	H_2S	One (1) grain per 100 standard cubic feet
AA-001 AA-002 AA-003a AA-003b	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.7	PM/PM_{10} (*filterable only*)	0.6 lb/MMBTU per hour heat input
	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.8	SO_2	4.8 lb/MMBTU
AA-004	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.9	Hours of Operation	No more than 730 hours per year
AA-018 AA-019	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.10	PM/PM_{10} (*filterable only*)	0.6 lb/MMBTU per hour heat input ***Demonstration of compliance through Condition 4.3(c)*
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.11	Control Efficiency	Demonstrate a control efficiency of 98% by operating according to 40 CFR Part 60.18

3.1 For the entire facility (Emission Point AA-000), except as otherwise specified or limited herein, the permittee shall not cause, permit, or allow the emission of smoke from a point source into the open air from any manufacturing, industrial, commercial or waste disposal process which exceeds forty (40) percent opacity. 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.A(1) and (2).)

3.2 For the entire facility (Emission Point AA-000), except as otherwise specified or limited herein, the permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity, equivalent to that provided in

Condition 3.1. This shall not apply to vision obscuration caused by uncombined water droplets.

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

3.3 For the entire facility (Emission Point AA-000), the permittee shall limit the emissions of Volatile Organic Compounds (VOC) to no more than 95.0 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).)

3.4 For the entire facility (Emission Point AA-000), the permittee shall limit the emissions of any individual hazardous air pollutant (HAP) from both sources to no more than 9.0 tpy for each consecutive 12-month period on a rolling basis. The permittee shall limit the emissions of all combined HAPs from both sources to no more than 24.0 tpy for each consecutive 12-month period on a rolling basis.

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

3.5 For the entire facility (Emission Point AA-000), the permittee shall only combust natural gas in all combustion units operating at the facility.

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

3.6 For Emission Point AA-000, the permittee shall not permit the emission of any gas stream which contains hydrogen sulfide (H_2S) 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 no less than 1600 °F for a period of no less than 0.5 seconds or processed in such a 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).)

3.7 For Emission Points AA-001, AA-002, AA-003a, and AA-003b, the permittee shall limit the particulate emissions from fossil fuel burning installations of less than 10 MMBTU/hr heat input to no more than 0.6 pounds per MMBTU per hour heat input.

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

3.8 For Emission Point AA-001, AA-002, AA-003a, and AA-003b, the permittee shall not discharge sulfur oxides from any fuel burning installation in which fuel is burned primarily to produce heat or power by indirect heat transfer in excess of 4.8 pounds per MMBTU heat input (measured as sulfur dioxide).

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).)

3.9 For Emission Point AA-004, the permittee shall limit the total number of hours during which blowdown operations occur to no more than 730 hours for each consecutive 12-month period on a rolling basis.

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

3.10 For Emission Points AA-018 and AA-019, the permittee shall limit the particulate emissions from fossil fuel burning installations of less than 10 MMBTU/hr heat input to

no more than 0.6 pounds per MMBTU per hour heat input. The permittee shall demonstrate compliance with this condition by complying with the requirements of Condition 4.3(c).

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

3.11 For Emission Point AA-018 and AA-019, in order to demonstrate a control efficiency of at least 98%, the permittee shall operate the control flares according to the requirements of 40 CFR Part 60 (§60.18(b)) and Condition 4.3 at all times when receiving gas streams.

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

SECTION 4
WORK PRACTICES

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Work Practice
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	4.1	VOC/HAP	Operate all equipment as efficiently as possible and perform routine maintenance
AA-003c AA-005 AA-006a AA-006b AA-006c AA-007 AA-008 AA-009	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	4.2	VOC/HAP	Route all gaseous emissions to the flares for control
AA-008	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	4.3	VOC/HAP	Control flare operating requirements

4.1 For the entire facility (Emission Point AA-000), in order to minimize the emissions of air pollutants, the permittee shall operate all air emissions equipment as efficiently as possible. Furthermore, the permittee shall perform routine maintenance on all air emissions equipment such that the equipment may be operated in an efficient manner.

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

4.2 For Emission Point AA-003c, the permittee shall route all gaseous emissions to Emission Point AA-019 (the Low Pressure Flare) for control. For Emission Points AA-005, AA-006a, AA-006b, AA-006c, AA-007, AA-008, and AA-009, the permittee shall route all gaseous emissions to Emission Point AA-018 (the Atmospheric Flare)) for control.

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

4.3 For Emission Points AA-018 and AA-019, the permittee shall operate the control flares according to the requirements specified in paragraphs (a) through (e):

(a) The control flares shall be operated at all times when emissions may be vented to them.

(b) The flares shall be operated and maintained according to their respective manufacturer's recommendations.

(c) The flares shall be operated with no visible emissions as determined by EPA Method 22, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.

(d) The permittee shall maintain a flare pilot flame, auto ignitor, or any equivalent device at all times when emissions may be vented to the flares.

(e) The flares shall only be used with a combustion gas mixture whose net heating value is 300 BTU/scf or greater if the flares are air or steam-assisted. If the flares

are non-assisted, the flares shall only be used with a combustion gas mixture whose net heating value is 200 BTU/scf or greater.

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

SECTION 5
MONITORING AND RECORDKEEPING REQUIREMENTS

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Monitoring/Recordkeeping Requirement
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.9.	5.1	Recordkeeping	Maintain records for a minimum of 5 years.
	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.2	Produced Gas	Perform biennial natural gas analysis
		5.3	Recordkeeping	Facility-wide recordkeeping requirements
AA-018 AA-019	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.4	VOC/HAP	Control flare monitoring requirements
		5.5		Control flare recordkeeping requirements

5.1 The permittee shall retain all required records, monitoring data, supporting information and reports for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings or other data for continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to MDEQ as required by Applicable Rules and Regulations or this permit or upon request.

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

5.2 The permittee shall perform a biennial natural gas analysis which shall determine the following properties of the gas: hydrogen sulfide concentration, sulfur content, methane concentration (by volume), gross heating value, molecular weight, specific gravity, and speciated VOC components. Additionally, an updated field gas analysis shall be conducted no later than 90 days following the startup of any new wells.

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

5.3 For the entire facility (Emission Point AA-000), in order to demonstrate compliance with the limitations specified in Section 3, the permittee shall maintain the following records:

(a) The amount of VOC, individual HAP, and total HAPs emitted, in tons per year, on a monthly basis and for each consecutive 12-month period on a rolling basis. This record shall demonstrate compliance utilizing gas flow measurement, gas analysis, calculations, and any other relevant information.

(b) Monthly records of the number of hours during which sand blowdown operations occurred for each calendar month and for each 12-month consecutive period on a rolling basis.

(c) The results of the gas analysis conducted on the produced natural gas specified in Condition 5.2.

(d) The number of hours in which fuel burning equipment is operated on a monthly basis, as well as the heat input for each piece of fuel burning equipment (in

MMBTU/hr), and the emission factors for each potential pollutant (in lb/MMBTU).

(e) The barrels of oil produced on a monthly basis.

(f) The cubic feet of natural gas produced on a monthly basis.

(g) The cubic feet of natural gas flared on a monthly basis.

(h) Records of the monthly visible emission observation on the flare.

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

5.4 For Emission Points AA-018 and AA-019, the permittee shall comply with the following monitoring requirements outlined in paragraphs (a) through (d):

(a) If the permittee utilizes a pilot flame in one or both flares, the permittee shall monitor presence of the pilot flame(s) by one of the methods described in paragraphs (1) or (2) below.

(1) The use of a thermocouple or any other equivalent device to detect the presence of a flame, or

(2) Visual observation of the presence of a flame at least once daily.

(b) If the permittee utilizes an auto-ignitor in one or both flares, the permittee shall keep a weekly log showing that the auto-ignitor is activated and operating in a manner such that the gas emissions routed to the flare(s) are controlled.

(c) The permittee shall perform monthly visual observations of the flare for a minimum of five (5) minutes during operation using EPA Method 22. If smoking is observed, corrective actions shall be taken. To demonstrate compliance with the visible emission limitation in Condition 4.3(c), the permittee shall perform a follow-up visual observation for a period of two (2) hours using EPA Method 22 immediately after the appropriate corrective action(s) has been made.

(d) In order to demonstrate compliance with Condition 4.3(e), the permittee shall perform a biennial field gas analysis to determine the net heating value of the gas being combusted by the flare.

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

5.5 For Emission Points AA-018 and AA-019, the permittee shall comply with the following recordkeeping requirements outlined in paragraphs (a) through (d):

(a) The permittee shall keep records of all maintenance performed on the flares in order to operate the flares in accordance with their respective manufacturer's recommendation.

(b) The permittee shall maintain hourly records of the thermocouple or equivalent device output demonstrating the presence of a flame in the control flare(s) whenever gaseous emissions are routed to the flare(s) or shall operate an auto-ignition system. If the permittee is complying with the flame detection requirement using the visual observation requirement, then the permittee shall maintain daily records which document that the observation occurred, the date

and time of the observation, whether or not the flame was present, and what, if any, corrective actions were taken.

(c) The permittee shall maintain records of all visual observations, the nature and cause of any visible emissions, any corrective action(s) taken, the date and time when visual observations were conducted and any corrective action(s) was taken.

(d) The permittee shall maintain records of the biennial field gas analysis performed to determine the net heating value of the gas being combusted.

(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
AA-000	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	6.1	Report permit deviations within five (5) working days.
		6.2	Submit certified annual monitoring report.
		6.3	All documents submitted to MDEQ shall be certified by a Responsible Official or Duly Authorized Representative

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. Specifically, this report shall include the 12-month rolling totals of VOCs and HAPs, in tons per year, for the previous calendar year, as well as the 12-month total of the number of hours during which sand blowdown operations occurred for the previous calendar year. Furthermore, this report shall include the results of the required biennial field gas analysis during the years on which the biennial gas analysis occurs. 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 or duly authorized representative 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).)