STATE OF MISSISSIPPI
AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Australis TMS Inc, Saxby 10H-1 and Quin 30H-1 Production Facility
South Greensburg Road
Liberty, Mississippi
Amite County

has been granted permission to construct air emissions equipment to comply with the emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

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AUTHORIZED SIGNATURE
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: XXXXX **Permit No.: 0080-00054**

Draft/Proposed

SECTION 1

A. GENERAL CONDITIONS

1. This permit is for air pollution control purposes only. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)

2. Any activities not identified in the application are not authorized by this permit. (Ref.: Miss. Code Ann. 49-17-29 1.b)

3. 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 operating without a valid permit pursuant to State Law. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)

4. It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(6).)

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 the 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 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).)

8. The permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)

9. 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).)

10. Design and Construction Requirements: The stationary source shall be designed and constructed so as to operate without causing a violation of an Applicable Rules and Regulations, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A.)

11. Solids Removal: The necessary facilities shall be constructed so that solids removed in the course of control of air emissions may 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)

12. Diversion and Bypass of Air Pollution Controls: The air pollution control facilities shall be constructed such that diversion from or bypass of collection and control facilities is not needed 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.)

13. Fugitive Dust Emissions from Construction Activities: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(4).)

14. Right of Entry: The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon 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 emissions. (Ref.: Miss. Code Ann. 49-17-21)

15. Permit Modification or Revocation: After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to:

    a) Persistent violation of any of the 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.)

16. Public Record and Confidential Information: 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)

17. Permit Transfer: This permit shall not be transferred except upon approval of the Permit Board. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.16.B)

18. Severability: The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the 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).)

19. Permit Expiration: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance or if construction is suspended for eighteen (18) months or more. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(1).)

20. Certification of Construction: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(3).)

21. Beginning Operation: Except as prohibited in Section 1, Condition 24 of this permit, after certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate, whichever is applicable, is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by 11 Miss. Admin. Code Pt. 2, R. 2.13.G. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(4).)

22. Application for a Permit to Operate: Except as otherwise specified in Section 1, Condition 24 of this permit, the application for issuance or modification of the State Permit to Operate or the Title V Permit, whichever is applicable, is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).)

23. Operating Under a Permit to Construct: Except as otherwise specified in Section 1, Condition 24 of this permit, upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).)

24. Application Requirements for a Permit to Operate for Moderate Modifications: For moderate modifications that require contemporaneous enforceable emissions reductions from more than one emission point in order to "net" out of PSD/NSR, the applicable Title V Permit to Operate or State Permit to Operate must be modified prior to beginning operation of the modified facilities. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7).)

25. General Duty: All air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

26. Deviation Reporting: 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(10).)

27. 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).)

B. GENERAL NOTIFICATION REQUIREMENTS

1. Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(2).)

2. The permittee must notify DEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(3).)

3. Upon the completion of construction or installation of an approved stationary source or modification, and prior to commencing operation, the applicant shall notify the Permit Board that construction or installation was performed in accordance with the approved plans and specifications on file with the Permit Board. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(1) and (3).)

4. The Permit Board shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the Permit Board determines the changes are substantial, it may require the submission of a new application to construct with "as built" plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an "as built" application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(2).)

SECTION 2
EMISSION POINT DESCRIPTION

The permittee is authorized to construct and operate, upon certification of construction, air emissions equipment, as described in the following table.

Emission Point	Description
AA-000	**Entire Oil and Gas Production Facility**
AA-001	One (1) Three Phase Separator - emissions from this unit are routed to and controlled by the process flare (AA-008)
AA-002	Two (2) 0.5 MMBTU/hr Heater Treaters (V-103 and V-203) – emissions from these units are routed to and controlled by the process flare (AA-008)
AA-003	Six (6) 16,800 Gallon Crude Oil Storage Tanks (S-501 through S-506) – emissions from these units are routed to and controlled by the process flare (AA-008)
AA-004	Two (2) 16,800 Gallon Produced Water Storage Tank (S-507 and S-508) – emissions from these units are routed to and controlled by the process flare (AA-008)
AA-005	Oil Loading Operations (OilLL) – emissions from this unit are routed to and controlled by the process flare (AA-008)
AA-006	Produced Water Loading Operations (PWLL) – emissions from this unit are vented to atmosphere
AA-007	Facility-Wide Fugitive Emissions
AA-008	Process Control Flare (FL-1)

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-003 AA-004 AA-005	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.7	VOC/HAP	Route all produced gas to the flare for control
AA-002	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.8	PM/PM_{10} (*filterable only*)	0.6 lb/MMBTU per hour heat input
	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.9	SO_2	4.8 lb/MMBTU
AA-007	40 CFR Part 60, Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015 (60.5365a(i))	3.10	VOC	Applicability
	40 CFR Part 60, Subpart OOOOa (60.5397a(a-g))	3.11		Develop a fugitive emission monitoring plan
	40 CFR Part 60, Subpart OOOOa (60.5397a(h))	3.12		Fugitive emission source repair or replacement requirements
	40 CFR Part 60, Subpart OOOOa (60.5425a and Table 3 to Subpart OOOOa)	3.13	General Provisions	Applicability
AA-008	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(b).	3.14	PM/PM_{10} (*filterable only*)	$E = 0.8808*I^{-0.1667}$ ***Demonstration of compliance through Condition 4.2(c)*

Emission Point	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limitation/Standard
AA-008	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.14	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-003, AA-004, and AA-005, the permittee shall route all gaseous emissions to Emission Point AA-008 (the process flare)) for control.

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

3.8 For Emission Point AA-002, 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).)

3.9 For Emission Point AA-002, 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).)

3.10 Emission Point AA-007 is the collection of fugitive emissions components from equipment leaks at a well site. As such, this emission point is subject to and shall comply with all applicable requirements of 40 CFR Part 60, Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015.

(Ref.: 40 CFR 60.5365a(i))

3.11 For Emission Point AA-007, the permittee shall demonstrate compliance with Subpart OOOOa by monitoring all fugitive emission components, as defined in 40 CFR 60.5430a. For the purposes of this condition, fugitive emissions are defined as: Any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 ppm or greater using Method 21.

The permittee shall develop an emissions monitoring plan that covers the collection of fugitive emissions components within each company-defined area. This monitoring plan shall include the information specified in paragraphs (a) through (l) below:

(a) The permittee shall conduct an initial monitoring survey within 60 days of the startup of production, as defined in 40 CFR 60.5430a, for each collection of fugitive emissions components at a new well site. A monitoring survey shall be conducted at least semiannually after the initial survey. Consecutive semiannual monitoring surveys must be conducted at least 4 months apart. Each monitoring survey shall observe each fugitive emissions component, as defined in 40 CFR 60.5430a, for fugitive emissions.

(b) The permittee shall specify the technique used in determining the presence of fugitive emissions (i.e. Method 21 from 40 CFR Part 60, Appendix A-7 or optical gas imaging).

(c) The permittee shall include the manufacturer and model number of all fugitive emission detection equipment used.

(d) The permittee shall include the procedures and timeframes for identifying and repairing fugitive emissions components from which fugitive emissions are detected. This includes timeframes for fugitive emission components that are unsafe to repair. At a minimum, the repair schedule shall meet the requirements of Condition 3.12.

(e) The permittee shall include procedures and timeframes for verifying fugitive emission component repairs.

(f) The permittee shall specify what records will be kept and the length of time these records will be kept.

(g) If the permittee utilizes optical gas imaging, the monitoring plan shall include the information specified in subparagraphs (i) through (vii) below:

i. Verification that the optical gas imaging equipment is capable of imaging gases in the spectral range for the compound of highest concentration in the potential fugitive emissions. The optical gas imaging equipment must be capable of imaging a gas that is half methane, half propane at a concentration of 10,000 parts per million (ppm) at a flow rate of ≤ 60 grams per hour (g/hr) from a quarter inch diameter orifice. This verification is an initial verification and may either be performed by the facility, by the manufacturer, or by a third party. For the purposes of complying with the fugitives emissions monitoring program with optical gas imaging, a fugitive emission is defined as any visible emissions observed using optical gas imaging.

ii. Procedures for a daily verification check.

iii. Procedures for determining the permittee's maximum viewing distance from the equipment and procedures for how the permittee will ensure that this distance is maintained.

iv. Procedures for determining maximum wind speed during which monitoring can be performed and procedures for how the permittee will ensure monitoring occurs only at wind speeds below this threshold.

v. Procedures for conducting surveys, including how the permittee will ensure an adequate thermal background is present in order to view potential fugitive emissions, how the permittee will deal with adverse monitoring conditions, such as wind, and how the permittee will deal with interferences (e.g., steam).

vi. Specification of the training and experience needed prior to performing surveys.

vii. Procedures for calibration and maintenance. At a minimum, procedures must comply with those recommended by the manufacturer.

(h) If the permittee utilizes Method 21 from 40 CFR Part 60, Appendix A-7, the monitoring plan shall include the information specified in subparagraphs (i) and (ii) below. For the purposes of complying with the fugitive emissions monitoring

program using Method 21 a fugitive emission is defined as an instrument reading of 500 ppm or greater.

i. Verification that all monitoring equipment meets the requirements specified in Section 6.0 of Method 21 from 40 CFR Part 60, Appendix A-7. For purposes of instrument capability, the fugitive emissions definition shall be 500 ppm or greater methane using a FID-based instrument. If the permittee uses an analyzer other than a FID-based instrument, the permittee shall develop a site-specific fugitive emission definition that would be equivalent to 500 ppm methane using a FID-based instrument (*e.g.*, 10.6 eV PID with a specified isobutylene concentration as the fugitive emission definition would provide equivalent response to your compound of interest).

ii. Procedures for conducting surveys. At a minimum, these procedures shall ensure that the surveys comply with the relevant sections of Method 21 from 40 CFR Part 60, Appendix A-7, including Section 8.3.1.

(i) A site map

(j) A defined observation path that ensures that all fugitive emissions components are within sight of the path. The observation path must account for interferences.

(k) If the permittee utilizes Method 21, the plan shall also include a list of fugitive emissions components to be monitored and the method for determining location of fugitive emissions components to be monitored in the field (*e.g.* tagging, identification on a process and instrumentation diagram, etc.).

(l) The plan shall also include the written plan developed for all of the fugitive emission components designated as difficult-to-monitor in accordance with 40 CFR 60.5397(g)(3)(i) and the written plan for fugitive emission components designated as unsafe-to-monitor in accordance with 40 CFR 60.5397(g)(3)(ii).

(Ref.: 40 CFR 60.5397a(a-g))

3.12 For Emission Point AA-007, each identified source of fugitive emissions shall be repaired or replaced in accordance with paragraphs (a) through (c) below:

(a) Each identified source of fugitive emissions shall be repaired or replaced as soon as practicable, but no later than 30 calendar days after detection of the fugitive emissions.

(b) If the repair or replacement is technically infeasible, would require a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next well shutdown, well shut-in, after an unscheduled, planned or emergency vent blowdown or within 2 years, whichever is earlier.

(c) Each repaired or replaced fugitive emissions component must be resurveyed as soon as practicable, but no later than 30 days after being repaired, to ensure that there are no fugitive emissions. This survey shall comply with the requirements of subparagraphs (i) through (iv), as applicable:

i. For repairs that cannot be made during the monitoring survey when the fugitive emissions are initially found, the operator may resurvey the repaired fugitive emissions components using either Method 21 or optical gas imaging within 30 days of finding such fugitive emissions.

ii. For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph must be taken of that component or the component must be tagged for identification purposes. The digital photograph must include the date that the photograph was taken, must clearly identify the component by location within the site (e.g., the latitude and longitude of the component or by other descriptive landmarks visible in the picture).

iii. If the permittee utilizes Method 21 to resurvey the repaired fugitive emissions components, then the fugitive emissions component is considered repaired when the Method 21 instrument indicates a concentration of less than 500 ppm above background or when no soap bubbles are observed when the alternative screening procedures specified in Section 8.3.3 of Method 21 are used. The permittee shall utilize the Method 21 monitoring requirements specified in Condition 3.11(h)(ii) or the alternative screening procedures specified in Section 8.3.3 of Method 21.

iv. If the permittee utilizes optical gas imaging to resurvey the repaired fugitive emissions components, then the fugitive emissions component is considered repaired when the optical gas imaging instrument shows no indication of visible emissions. The permittee shall utilize the optical gas monitoring requirements specified in Condition 3.11(g).

(Ref.: 40 CFR 60.5397a(h))

3.13 For Emission Point AA-007, the permittee must comply with the General Provisions of 40 CFR 60.1 through 40 CFR 60.19 except for 40 CFR 60.11.

(Ref.: 40 CFR 60.5425a and Table 3 to Subpart OOOOa)

3.14 For Emission Point AA-008, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of equal to or greater than 10 MMBTU per hour per heat input shall not exceed an emission rate as determined by the relationship

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

where E is the emission rate in pounds per MMBTU per hour heat input and I is the heat input in MMBTU per hour. The permittee shall demonstrate compliance with this condition by complying with the requirements of Condition 4.2(c).

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

3.15 For Emission Point AA-008, in order to demonstrate a control efficiency of at least 98%, the permittee shall operate the control flare according to the requirements of 40 CFR Part 60 (§60.18(b)) and Condition 4.2 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-008	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10).	4.2	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-008, the permittee shall operate the control flare according to the requirements specified in paragraphs (a) through (e):

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

(b) The flare shall be operated and maintained according to the manufacturer's recommendations.

(c) The flare 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 flare.

(e) The flare shall only be used with a combustion gas mixture whose net heating value is 300 BTU/scf or greater if the flare is air or steam-assisted. If the flare is non-assisted, the flare shall only be used with a combustion gas mixture whose net heating value is 200 BTU/scf or greater.

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

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-007	40 CFR 60, Subpart OOOOa (§60.5410a(j))	5.4	VOC	Demonstration of initial compliance
	40 CFR 60, Subpart OOOOa (§60.5415a(h))	5.5		Demonstration of continuous compliance
	40 CFR 60, Subpart OOOOa (§60.5420a(c))	5.6		Recordkeeping requirements
AA-008	11 Miss. Admin. Code Pt. 2, R. 2.2.B(11).	5.7	VOC/HAP	Control flare monitoring requirements
		5.8		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) The results of the natural gas analysis conducted on the produced natural gas specified in Condition 5.2.

(c) The calculated cubic feet of natural gas burned, as fuel, on a monthly basis.

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

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

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

(g) 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 Point AA-007, the permittee shall demonstrate initial compliance with the fugitive emission standards for each collection of fugitive emissions components at a well site by complying with the requirements of paragraphs (a) through (e) below. The initial compliance period begins upon initial startup and ends no later than one (1) year after the initial startup date. The initial compliance period may be less than one full year.

(a) The permittee shall develop a fugitive emissions monitoring plan as required in Condition 3.11.

(b) The permittee shall conduct an initial monitoring survey as required in Condition 3.11(a).

(c) The permittee shall maintain the records specified in Condition 5.6.

(d) The permittee shall repair each identified source of fugitive emissions for each affected facility as required in Condition 3.12.

(e) The permittee shall submit the initial annual report for each collection of fugitive emissions components at a well site as required in Condition 6.4.

(Ref.: 40 CFR 60.5410a(j))

5.5 For Emission Point AA-007, the permittee shall demonstrate continuous compliance with the fugitive emission standards for each collection of fugitive emissions components at a well site by complying with the requirements of paragraphs (a) through (d) below:

(a) The permittee shall conduct periodic monitoring surveys as required in Condition 3.11(a).

(b) The permittee shall repair or replace each identified source of fugitive emissions as required in Condition 3.12.

(c) The permittee shall maintain the records specified in Condition 5.6.

(d) The permittee shall submit annual reports for the collection of fugitive emissions components at a well site as required in Condition 6.4.

(Ref.: 40 CFR 60.5415a(h))

5.6 For Emission Point AA-007, the permittee shall maintain the records identified in 40 CFR 60.7(f) and 40 CFR 5420a(c)(15). All required records must be maintained either on-site or at the nearest local field office for at least five (5) years. Any required records which are submitted electronically via EPA's CDX may be maintained in electronic format.

(Ref.: 40 CFR 60.5420a(c))

5.7 For Emission Point AA-008, the permittee shall comply with the following monitoring requirements outlined in paragraphs (a) through (d):

(a) If the permittee utilizes a pilot flame in the flare, the permittee shall monitor presence of the flare pilot flame 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 the flare, 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 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 4.2(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 4.2(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).)

5.8 For Emission Point AA-008, 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 flare in order to operate the flare in accordance with the 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 whenever the flare is in operation or 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
AA-007	40 CFR 60, Subpart OOOOa (§60.5420a(b))	6.4	Reporting requirements

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. Furthermore, this report shall include the results of the required field gas analysis during the years on which the 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).)

6.4 For Emission Point AA-007, the permittee shall submit annual reports containing the information specified in 40 CFR 60.5420a(b)(1), (b)(7), and (b)(11). The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to 40 CFR 63.5410a. Subsequent annual reports are due no later than same date each year as the initial annual report. If the permittee owns or operates more than one affected facility, the permittee may submit one report for multiple affected facilities provided the report contains all of the information required as specified in 40 CFR 60.5420a(b)(1) through (b)(8), as applicable, except as provided in 40 CFR 60.5420a(b)(13). Annual reports may coincide with the annual reports required in Condition 6.2 as long as all the required elements of the annual report are included. If the

permittee wishes to change the due date for the annual reports (with the exception of the initial annual report) to synchronize with the annual monitoring report due in Condition 6.2, the permittee shall submit a formal request to MDEQ before the end of the initial compliance period.

The permittee must submit reports to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX (https://cdx.epa.gov/).) The permittee must use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI Web site (https://www3.epa.gov/ttn/chief/cedri/). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 60.4. Once the form has been available in CEDRI for at least 90 calendar days, the permittee must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified 40 CFR Part 60 Subpart OOOOa regardless of the method in which the reports are submitted.

(Ref.: 40 CFR 60.5420a(b))