STATE OF MISSISSIPPI AIR POLLUTION CONTROL TITLE V PERMIT

TO OPERATE AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Tellus Operating Group LLC, Trenton Plant
Highway 481
Raleigh, Mississippi
Smith 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 Title V of the Federal Clean Air Act (42 U.S.C.A. § 7401 - 7671) and 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 AUTHORIZED SIGNATURE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY	Permit Issued: Effective Date: As s	specified herein.	A
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Expires:[Date not to exceed 5 years from issuance]

Permit No.: 2500-00091

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SECTION 1. GENERAL CONDITIONS

1.1 The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Federal Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(a).)

1.2 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.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(b).)

1.3 This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. 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. 6.3.A(6)(c).)

- 1.4 Prior to its expiration, this permit may be reopened in accordance with the provisions listed below.
 - (a) This permit shall be reopened and revised under any of the following circumstances:
 - (1) Additional applicable requirements under the Federal Act become applicable to a major Title V source with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended.
 - (2) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (3) The Permit Board or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit.

- (4) The Administrator or the Permit Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (b) Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall only affect those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (c) Reopenings shall not be initiated before a notice of such intent is provided to the Title V source by the DEQ at least 30 days in advance of the date that the permit is to be reopened, except that the Permit Board may provide a shorter time period in the case of an emergency.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.G.)

1.5 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 permittee or, for information to be confidential, the permittee shall furnish such records to 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. 6.3.A(6)(e).)

1.6 This permit does not convey any property rights of any sort, or any exclusive privilege.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(6)(d).)

1.7 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. 6.3.A(5).)

- 1.8 The permittee shall pay to the DEQ an annual permit fee. The amount of fee shall be determined each year based on the provisions of regulated pollutants for fee purposes and the fee schedule specified in the Commission on Environmental Quality's order which shall be issued in accordance with the procedure outlined in Regulation 11 Miss. Admin. Code Pt. 2, Ch. 6.
 - (a) For purposes of fee assessment and collection, the permittee shall elect for actual or allowable emissions to be used in determining the annual quantity of emissions unless the Commission determines by order that the method chosen by the applicant for calculating actual emissions fails to reasonably represent actual emissions. Actual emissions shall be calculated using emission monitoring data or direct emissions measurements for the pollutant(s); mass balance calculations such as the amounts of

the pollutant(s) entering and leaving process equipment and where mass balance calculations can be supported by direct measurement of process parameters, such direct measurement data shall be supplied; published emission factors such as those relating release quantities to throughput or equipment type (e.g., air emission factors); or other approaches such as engineering calculations (e.g., estimating volatilization using published mathematical formulas) or best engineering judgments where such judgments are derived from process and/or emission data which supports the estimates of maximum actual emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

(b) If the Commission determines that there is not sufficient information available on a facility's emissions, the determination of the fee shall be based upon the permitted allowable emissions until such time as an adequate determination of actual emissions is made. Such determination may be made anytime within one year of the submittal of actual emissions data by the permittee.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.A(2).)

(c) If at any time within the year the Commission determines that the information submitted by the permittee on actual emissions is insufficient or incorrect, the permittee will be notified of the deficiencies and the adjusted fee schedule. Past due fees from the adjusted fee schedule will be paid on the next scheduled quarterly payment time.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D(2).)

(d) The fee shall be due September 1 of each year. By July 1 of each year, the permittee shall submit an inventory of emissions for the previous year on which the fee is to be assessed. The permittee may elect a quarterly payment method of four (4) equal payments; notification of the election of quarterly payments must be made to the DEQ by the first payment date of September 1. The permittee shall be liable for penalty as prescribed by State Law for failure to pay the fee or quarterly portion thereof by the date due.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.D.)

(e) If in disagreement with the calculation or applicability of the Title V permit fee, the permittee may petition the Commission in writing for a hearing in accordance with State Law. Any disputed portion of the fee for which a hearing has been requested will not incur any penalty or interest from and after the receipt by the Commission of the hearing petition.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.6.C.)

1.9 No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(8).)
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1.10 Any document required by this permit to be submitted to the DEQ shall contain a certification by a responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.2.E.)
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- 1.11 The permittee shall allow the DEQ, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to perform the following:
 - (a) enter upon the permittee's premises where a Title V source is located or emissionsrelated activity is conducted, or where records must be kept under the conditions of this permit;
 - (b) have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - (c) inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - (d) as authorized by the Federal Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(2).)
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1.12 Except as otherwise specified or limited herein, the permittee shall have necessary sampling ports and ease of accessibility for any new air pollution control equipment, obtained after May 8, 1970, and vented to the atmosphere.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(1).)
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1.13 Except as otherwise specified or limited herein, the permittee shall provide the necessary sampling ports and ease of accessibility when deemed necessary by the Permit Board for air pollution control equipment that was in existence prior to May 8, 1970.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.3.I(2).)
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1.14 Compliance with the conditions of this permit shall be deemed compliance with any

applicable requirements as of the date of permit issuance where such applicable requirements are included and are specifically identified in the permit or where the permit contains a determination, or summary thereof, by the Permit Board that requirements specifically identified previously are not applicable to the source.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(1).)
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- 1.15 Nothing in this permit shall alter or affect the following:
 - (a) the provisions of Section 303 of the Federal Act (emergency orders), including the authority of the Administrator under that section;
 - (b) the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - (c) the applicable requirements of the acid rain program, consistent with Section 408(a) of the Federal Act.
 - (d) the ability of EPA to obtain information from a source pursuant to Section 114 of the Federal Act.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.F(2).)
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1.16 The permittee shall comply with the requirement to register a Risk Management Plan if permittee's facility is required pursuant to Section 112(r) of the Act to register such a plan.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.H.)
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1.17 Expiration of this permit terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. A timely application is one which is submitted at least six (6) months prior to expiration of the Title V permit. If the permittee submits a timely and complete application, the failure to have a Title V permit is not a violation of regulations until the Permit Board takes final action on the permit application. This protection shall cease to apply if, subsequent to the completeness determination, the permittee fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.C(2)., R. 6.4.B., and R. 6.2.A(1)(c).)
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- 1.18 The permittee is authorized to make changes within their facility without requiring a permit revision (ref: Section 502(b)(10) of the Act) if:
 - (a) the changes are not modifications under any provision of Title I of the Act;
 - (b) the changes do not exceed the emissions allowable under this permit;

- (c) the permittee provides the Administrator and the Department with written notification in advance of the proposed changes (at least seven (7) days, or such other time frame as provided in other regulations for emergencies) and the notification includes:
 - (1) a brief description of the change(s),
 - (2) the date on which the change will occur,
 - (3) any change in emissions, and
 - (4) any permit term or condition that is no longer applicable as a result of the change;
- (d) the permit shield shall not apply to any Section 502(b)(10) change.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.F(1).)

1.19 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 11 Miss. Admin. Code Pt. 2, Ch. 3., "Regulations for the Prevention of Air Pollution Emergency Episodes" for the level of emergency declared.

(Ref.: 11 Miss. Admin. Code Pt. 2, Ch. 3.)

- Except as otherwise provided herein, a modification of the facility may require a Permit to Construct in accordance with the provisions of Regulations 11 Miss. Admin. Code Pt. 2, Ch. 2., "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment," and may require modification of this permit in accordance with Regulations 11 Miss. Admin. Code Pt. 2, Ch. 6., "Air Emissions Operating Permit Regulations for the Purposes of Title V of the Federal Clean Air Act." Modification is defined as [a]ny 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, 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 Subpart I or 40 CFR 51.166; or
- (f) any change in ownership of the stationary source.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.C(15).)
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1.21 Any change in ownership or operational control must be approved by the Permit Board.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.4.D(4).)
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1.22 This permit is a Federally approved operating permit under Title V of the Federal Clean Air Act as amended in 1990. All terms and conditions, including any designed to limit the source's potential to emit, are enforceable by the Administrator and citizens under the Federal Act as well as the Commission.

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(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.B(1).)
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1.23 Except as otherwise specified or limited herein, the open burning of residential, commercial, institutional, or industrial solid waste, is prohibited. This prohibition does not apply to infrequent burning of agricultural wastes in the field, silvicultural wastes for forest management purposes, land-clearing debris, debris from emergency clean-up operations, and ordnance. Open burning of land-clearing debris must not use starter or auxiliary fuels which cause excessive smoke (rubber tires, plastics, etc.); must not be performed if prohibited by local ordinances; must not cause a traffic hazard; must not take place where there is a High Fire Danger Alert declared by the Mississippi Forestry Commission or Emergency Air Pollution Episode Alert imposed by the Executive Director and must meet the following buffer zones.

- (a) Open burning without a forced-draft air system must not occur within 500 yards of an occupied dwelling.
- (b) Open burning utilizing a forced-draft air system on all fires to improve the combustion rate and reduce smoke may be done within 500 yards of but not within 50 yards of an occupied dwelling.
- (c) Burning must not occur within 500 yards of commercial airport property, private airfields, or marked off-runway aircraft approach corridors unless written approval to conduct burning is secured from the proper airport authority, owner or operator.

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

- 1.24 Except as otherwise specified herein, the permittee shall be subject to the following provision with respect to emergencies:
 - (a) Except as otherwise specified herein, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 - (b) An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (c) following are met.
 - (c) The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows:
 - (1) an emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) the permitted facility was at the time being properly operated;
 - (3) during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - (4) the permittee submitted notice of the emergency to the DEQ within 2 working days of the time when emission limitations were exceeded due to the emergency.

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This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

- (d) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (e) This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.G.)

- 1.25 Except as otherwise specified herein, the permittee shall be subject to the following provisions with respect to upsets, startups, and shutdowns.
 - (a) Upsets (as defined in 11 Miss. Admin. Code Pt. 2, R. 1.2.)
 - (1) For an upset, 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 69738 PER20210001

- 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 in 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.)

1.26 The permittee shall comply with all applicable standards for demolition and renovation activities pursuant to the requirements of 40 CFR Part 61, Subpart M, as adopted by reference in Regulation 11 Miss Admin. Code Pt. 2, R. 1.8. The permittee shall not be required to obtain a modification of this permit in order to perform the referenced activities.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.8.)

SECTION 2. EMISSION POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description
AA-001	Flare with 0.05 MMBtu/hr gas-fired pilot
AA-002	Oil/Gas Separator with produced gas routed to the Flare (Emission Point AA-001)
AA-003	Eight (8) 16,800-gallon (400-bbl) Vertical Fixed-Roof Oil Production Storage Tanks, with emissions vented to the Flare (Emission Point AA-001)
AA-004	One (1) 16,800-gallon (400-bbl) Vertical Fixed-Roof Untreated Oil Storage Tank for low quality oil, with emissions vented to the atmosphere
AA-005	One (1) 16,800-gallon (400-bbl) Vertical Fixed-Roof Produced Water Storage Tank, with emissions vented to the atmosphere
AA-006	Truck Loading Emissions vented to the atmosphere
AA-007	Fugitive Emissions from Equipment Leaks (Insignificant Activity)
AA-008	Compressor Engine (Less than 500 Horsepower) Manufactured: Pre-2006 Non-Emergency Natural gas-fired 4-Stroke Rich Burn Spark Ignition Internal Reciprocating Engine
AA-009	One (1) non-fired Heater Treater with produced gas routed to the Flare (Emission Point AA-001)
AA-010	One (1) natural gas-fired Line Heater with a 0.75 MMBTU/hr burner

SECTION 3. EMISSION LIMITATIONS & STANDARDS

- A. Facility-Wide Emission Limitations & Standards
- 3.A.1 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 subject to the exceptions provided in (a) & (b).
 - (a) Startup operations may produce emissions which exceed 40% opacity for up to fifteen (15) minutes per startup in any one hour and not to exceed three (3) startups per stack in any twenty-four (24) hour period.
 - (b) Emissions resulting from soot blowing operations shall be permitted provided such emissions do not exceed 60 percent opacity, and provided further that the aggregate duration of such emissions during any twenty-four (24) hour period does not exceed ten (10) minutes per billion BTU gross heating value of fuel in any one hour.

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

3.A.2 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.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.)

B. <u>Emission Point Specific Emission Limitations & Standards</u>

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
			VOC	240 tpy, determined for each consecutive 12-month period
AA-001 AA-002	11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Permit to Construct		СО	240 tpy, determined for each consecutive 12-month period
AA-003 AA-004 AA-005 AA-006	issued September 27, 2016, and 11 Miss. Admin. Code Pt. 2, R.2.15.C., as established in the TVOP modified June 20,	3.B.1	Total HAP	22 tpy, determined for each consecutive 12- month period
AA-000 AA-007 AA-008 AA-009 AA-010	2017.		Individual HAP	9.0 tpy, determined for each consecutive 12-month period
	11 Miss. Admin. Code Pt. 2, R.1.4.B (2).	3.B.2	H_2S	1 grain H ₂ S per 100 standard cubic feet (1 gr/100 scf)
	11 Miss. Admin. Code Pt. 2, R.2.15.C., as established in the TVOP modified June 20, 2017.	3.B.3	Production	Install and Operate a Flow Meter
	11 Miss. Admin. Code Pt. 2, R.2.2.B(10)., as established in the Permit to Construct	3.B.4	Flare Pilot	Operate with a flame present at all times.
AA-001	issued September 27, 2016, 11 Miss. Admin. Code Pt. 2, R.2.15.C, as established in the TVOP modified June 20, 2017, and 40 CFR 63, Subpart A (National Emission Standards for Hazardous Air Pollutants for Source Categories – General Provisions) 40 CFR 63.11(b)(4), Subpart A	3.B.5	Visible Emissions	Flare Requirements
	40 CFR Part 64 -Compliance Assurance Monitoring (CAM) 40 CFR 64.2(a), CAM	3.B.6	CO VOC HAP	CAM Applicability
AA-001 AA-008 AA-010	11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.B.7	PM	0.6 lbs/MMBTU

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001 AA-008 AA-010	11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.B.8	SO ₂	4.8 lbs/MMBTU
AA-002 AA-003 AA-009	11 Miss. Admin. Code Pt. 2, R.2.2.B(10)., as established in the Permit to Construct issued September 27, 2016, and 11 Miss. Admin. Code Pt. 2, R.2.15.C, as established in the TVOP modified June 20, 2017.	3.B.9	VOC CO	Route all produced gas to the flare.
AA-008	40 CFR, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines) 40 CFR 63.6585, 63.6585(a) and (c), and 63.6590(a)(1)(iii), Subpart ZZZZ	3.B.10	НАР	Applicability
AA-000	40 CFR 63.6603(a) and Item 10 of Table 2d, Subpart ZZZZ	3.B.11		O&M Requirements
	40 CFR 63.6605, Subpart ZZZZ	3.B.12	НАР	Maintain Good Air Pollution Control Practices
	40 CFR 63.6625(e)(8), 63.6655(d), and Item 9 of Table 6, Subpart ZZZZ	3.B.13	11/11	Maintain manufacturer's emission-related written instructions or develop a maintenance plan.
	40 CFR 63.6625(h), Subpart ZZZZ	3.B.14		Minimize Time Spent Idle

- 3.B.1 For Emission Points AA-001, AA-002, AA-003, AA-004, AA-005, AA-006, AA-007, AA-008, A-009, and AA-010, the permittee shall limit the following:
 - (a) Volatile Organic Compound (VOC) emissions shall not exceed 240.0 tons per year (tpy);
 - (b) Carbon Monoxide (CO) emissions shall not exceed 240.0 tpy;
 - (c) Total Hazardous Air Pollutant (HAP) emissions shall not exceed 22.0 tpy;
 - (d) Individual HAP emissions shall not exceed 9.0 tpy.

Emissions data shall be calculated utilizing gas flow measurement, gas analysis, AP-42 emissions factors, Table W-1A, W-1B, and W-1C to 40 CFR 98, Subpart W for fugitive

emissions, and any other relevant information. Emissions shall be determined on a monthly basis and for each consecutive 12-month period on a rolling basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)., as established in the Permit to Construct issued September 27, 2016, and 11 Miss. Admin. Code Pt. 2, R.2.15.C., as established in the TVOP modified June 20, 2017.)

3.B.2 For Emission Points AA-001, AA-002, AA-003, AA-004, AA-005, AA-006, AA-007, AA-008, AA-009, and AA-010, the permittee shall not cause or permit the emission of any gas stream which contains Hydrogen Sulfide (H₂S) in excess of one grain per 100 standard cubic feet

Gas streams containing H_2S in excess of one grain per 100 standard cubic feet shall be incinerated at temperatures of not less than $1600^{\circ}F$ for a period of not less than 0.5 seconds, or processed in such a manner which is equivalent to or more effective for the removal of H_2S .

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

3.B.3 For Emission Point AA-001, the permittee shall install, operate, and maintain a flow meter for measuring the total oil and gas production from the well(s) and for measuring total well(s) produced gas flow to the flare. The flow meter(s) shall be installed in a location that will represent the total flow. The flow meter(s) shall be operated and maintained in accordance to the manufacturer's specifications. Oil production and gas flow shall be determined on a monthly basis for each consecutive 12-month period on a rolling basis.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.2.15.C., as established in the TVOP modified June 20, 2017)

3.B.4 For Emission Point AA-001, the permittee shall operate the flare with a flame present at all times. 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 permittee shall maintain the thermocouple or equivalent device in accordance to the manufacturer's specifications. An alarm or other means of notification shall be triggered any time that the monitoring device indicates no flame is present.

(Ref.: 11 Miss. Admin. Code Pt. 2, R.2.2.B(10)., as established in the Permit to Construct issued September 27, 2016, 11 Miss. Admin. Code Pt. 2, R.2.15.C, as established in the TVOP modified June 20, 2017, and 40 CFR 63.11(b)(4), Subpart A)

3.B.5 For Emission Point AA-001, the permittee is subject to and shall comply with the provisions of 40 CFR 63, Subpart A. The permittee shall demonstrate a control

efficiency of at least 98% by operating the flare according to the requirements of 40 CFR 63.11(b), Subpart A, and the following requirements:

- (a) Monitor the flare to assure that it is operated and maintained in conformance with the manufacturer's designs and specifications.
- (b) The non-assisted flare shall be operated at all times when emissions may be vented to the control device.
- (c) The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Test Method 22 in appendix A of part 60 of this chapter shall be used to determine the compliance of flares with the visible emission provisions of this part. The observation period is 2 hours and shall be used according to Method 22.
- (d) The non-assisted 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)., as established in the Permit to Construct issued September 27, 2016, 11 Miss. Admin. Code Pt. 2, R.2.15.C, as established in the TVOP modified June 20, 2017, and 40 CFR 63.11(b)(1), (2), (3), (5), and (6)(ii), Subpart A)

3.B.6 For Emission Point AA-001, the permittee is subject to and shall comply with all applicable requirements of the Compliance Assurance Monitoring (CAM) program (40 CFR Part 64).

(Ref.: 40 CFR 64.2(a), Compliance Assurance Monitoring)

3.B.7 For Emission Points AA-001, AA-008, and AA-010, the maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour 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.B.8 For Emission Points AA-001, AA-008, and AA-010, the maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer 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.B.9 For Emission Points AA-002, AA-003, and AA-009, the permittee shall route all produced gas to the Flare (Emission Point AA-001) for control of emissions.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R.2.2.B(10)., as established in the Permit to Construct issued September 27, 2016 and 11 Miss. Admin. Code Pt. 2, R.2.15.C, as established in the TVOP modified June 20, 2017)
- 3.B.10 For Emission Point AA-008, the permittee is subject to and shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) (40 CFR 63, Subpart ZZZZ) and General Provisions (40 CFR 63, Subpart A). Emission Point AA-008 is an existing non-emergency stationary RICE located at an area source of HAP emissions.

(Ref.: 40 CFR 63.6580, 40 CFR 63.6585(a) and (c), and 40 CFR 63.6590(a)(1)(iii), Subpart ZZZZ)

- 3.B.11 For Emission Point AA-008, the permittee shall comply with the following requirements:
 - (a) Change oil and filter every 1,440 hours of operation or annually, whichever comes first:
 - (1) Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(j) in order to extend the specified oil change requirement.
 - (b) Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first, and replace as necessary; and
 - (c) Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

(Ref.: 40 CFR 63.6603(a) and Item 10 of Table 2d, Subpart ZZZZ)

3.B.12 For Emission Point AA-008, the permittee shall be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR 63, Subpart ZZZZ that apply at all times.

At all times the permittee shall operate and maintain any 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. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the DEQ 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 63.6605, Subpart ZZZZ)

3.B.13 For Emission Point AA-008, the permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(Ref.: 40 CFR 63.6625(e)(8), 63.6655(d), and Item 9 of Table 6, Subpart ZZZZ)

3.B.14 For Emission Point AA-008, the permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which the non-startup emission limitations apply.

(Ref.: 40 CFR 63.6625(h), Subpart ZZZZ)

C. <u>Insignificant and Trivial Activity Emission Limitations & Standards</u>

Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)(a).	3.C.1	PM	0.6 lbs/MMBTU
11 Miss. Admin. Code Pt. 2, R. 1.4.A(1).	3.C.2	SO_2	4.8 lbs/MMBTU

3.C.1 The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installations of less than 10 million BTU per hour 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.C.2 The maximum discharge of sulfur oxides from any fuel burning installation in which the fuel is burned primarily to produce heat or power by indirect heat transfer 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).)

D. <u>Work Practice Standards</u>

This Section was intentionally left blank.

SECTION 4. COMPLIANCE SCHEDULE

- 4.1 Unless otherwise specified herein, the permittee shall be in compliance with all requirements contained herein upon issuance of this permit.
- 4.2 Except as otherwise specified herein, the permittee shall submit to the Permit Board and to the Administrator of EPA Region IV a certification of compliance with permit terms and conditions, including emission limitations, standards, or work practices, by January 31 for the preceding calendar year. Each compliance certification shall include the following:
 - (a) the identification of each term or condition of the permit that is the basis of the certification;
 - (b) the compliance status;
 - (c) whether compliance was continuous or intermittent;
 - (d) the method(s) used for determining the compliance status of the source, currently and over the applicable reporting period;
 - (e) such other facts as may be specified as pertinent in specific conditions elsewhere in this permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.C(5)(a), (c), & (d).)

SECTION 5. MONITORING, RECORDKEEPING & REPORTING REQUIREMENTS

- A. General Monitoring, Recordkeeping and Reporting Requirements
- 5.A.1 The permittee shall install, maintain, and operate equipment and/or institute procedures as necessary to perform the monitoring and recordkeeping specified below.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

- 5.A.2 In addition to the recordkeeping specified below, the permittee shall include with all records of required monitoring information the following:
 - (a) the date, place as defined in the permit, and time of sampling or measurements;
 - (b) the date(s) analyses were performed;
 - (c) the company or entity that performed the analyses;
 - (d) the analytical techniques or methods used;
 - (e) the results of such analyses; and
 - (f) the operating conditions existing at the time of sampling or measurement.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(1).)

5.A.3 Except where a longer duration is specified in an applicable requirement, the permittee shall retain records of all required monitoring data and support information 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 for continuous monitoring instrumentation, and copies of all reports required by the permit.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(b)(2).)

5.A.4 Except as otherwise specified herein, the permittee shall submit reports of any required monitoring by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and all required reports must be certified by a responsible official consistent with 11 Miss. Admin. Code Pt. 2, R. 6.2.E.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c)(1).)

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- 5.A.5 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. 6.3.A(3)(c)(2).)
- 5.A.6 Except as otherwise specified herein, the permittee shall perform emissions sampling and analysis in accordance with EPA Test Methods and with any continuous emission monitoring requirements, if applicable. All test methods shall be those versions or their equivalents approved by the DEQ and the EPA.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)
- 5.A.7 The permittee shall maintain records of any alterations, additions, or changes in equipment or operation.
 - (Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

B. Specific Monitoring and Recordkeeping Requirements

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Monitoring/Recordkeeping Requirement
AA-001 AA-002 AA-003 AA-004 AA-005 AA-006 AA-007 AA-008 AA-009 AA-010	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.B.1	CO VOC Individual HAP Total HAP Production	Recordkeeping Requirement
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.B.2	Production	Recordkeeping Requirement
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)., 40 CFR 63.11(b)(1) through (5), and (6)(ii), Subpart A	5.B.3	Operations	Flare Monitoring Requirements
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).	5.B.4	Operations	Flare Recordkeeping Requirement
	40 CFR 64.3(a) and (b), 64.6(c), CAM	5.B.5	CO VOC HAP	CAM Plan: Visual Presence of Flame
AA-001	40 CFR 64.7(b) and (c), CAM	5.B.6	Operation & Maintenance	Operation and maintenance requirements for monitoring system(s)
	40 CFR 64.7(d), CAM	5.B.7	Corrective Action	Corrective Action response to an excursion/exceedance of a CAM indicator
	40 CFR 64.8, CAM	5.B.8	QIP	Upon request by DEQ, develop a Quality Improvement Plan (QIP)
	40 CFR 64.9(b), CAM	5.B.9	CAM Records	Maintain CAM records as specified
AA-008	40 CFR 63.6655(e)(3) and 63.6660, Subpart ZZZZ	5.B.10	НАР	Recordkeeping Requirement

- 5.B.1 For Emission Points AA-001, AA-002, AA-003, AA-004, AA-005, AA-006, AA-007, AA-008, AA-009, and AA-010, the permittee shall demonstrate compliance with Condition 3.B.1 by monitoring and recording the following:
 - (a) The calculated CO, VOC, individual HAP, and total HAP emissions, in tons, on a monthly basis and for each consecutive 12-month period on a rolling basis. Emissions data shall be calculated utilizing gas flow measurement, gas analysis, and any other relevant information. The calculations shall be performed according to the following paragraphs:

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- (1) VOC and HAP emissions from Emission Point AA-001 shall be calculated using the most recent gas analysis, the total metered gas flow to the flare, tank gas flared, oil and gas production from well(s), mass balance calculations, and a 98% destruction efficiency for those periods when the flare is in compliance with Conditions 3.B.4 and 3.B.5. For those periods when the flares is not in compliance, the permittee must use the emission reported in the deviations report required by Condition 5.A.5.
- (2) VOC and HAP emission from Emission Points AA-002, AA-003, AA-004, and AA-005 shall be calculated using oil production, EPA's Tanks 4.0, E&P Tanks software, and the flare combustion efficiency.
- (3) VOC and HAP emissions from Emission Point AA-006 shall be calculated using emission factors from the most recent version of EPA's AP-42 Chapter 5.2.
- (4) VOC and HAP emissions from Emission Point AA-007 shall be calculated using the most recent gas analysis and the emission factors from Table W-1A to 40 CFR 98, Subpart W.
- (5) CO, VOC, and HAP emissions from Emission Point AA-008 shall be calculated using emission factors from the most recent version of EPA's AP-42 Chapter 3.
- (6) CO, VOC, and HAP emission from Emission Point AA-010 shall be calculated using emission factors from EPA's AP-42 Chapter 1.
- (b) The monthly produced gas (MMCF) from the well(s) recorded from the data recorder.
- (c) The monthly tank gas flared (MMCF) based on calculations from the monthly well(s) production.
- (d) The monthly oil and gas production (MMCF/BBL) from the well(s) recorded from the data recorder.
- (e) The permittee shall record any periods the flow meter was inoperable, the date and extent of all maintenance conducted on the meter, and any corrective action taken to repair any noted problems.

The permittee shall keep all supporting documentation and/or calculations used to generate the records required by this condition including but not limited to purchase orders, lab results, strip charts, logbooks, etc.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

5.B.2 For Emission Point AA-001, the permittee shall conduct a semiannual field gas analysis of the produced gas routed to the flare. Each gas analysis shall include the following properties: hydrogen sulfide concentration, sulfur content, methane concentration (by volume), gross and net heating value, molecular weight, specific gravity, and speciated VOC components (minimally to C6+).

If a change is made at the facility, which causes the most recent gas analysis to no longer be representative, e.g., a well is completed, an existing well is recompleted, etc., or gas/oil processing equipment is changed then the facility shall perform a gas analysis within (90) days of the change.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)

- 5.B.3 For Emission Point AA-001, the permittee shall comply with the following monitoring requirements outlined in paragraphs (a) through (d):
 - (a) The permittee shall continuously monitor and record the presence of the flare pilot flame by use of a thermocouple or any other equivalent device to detect the presence of a flame;
 - (b) The permittee shall demonstrate initial compliance with the visible emissions limit in Condition 3.B.5(c). within ninety (90) days of permit issuance by conducting an EPA Method 22 test for a period of two (2) consecutive hours. The test shall be conducted while the facility is operating at the representative flow to the flare. The permittee shall monitor and maintain records of the gas flow rate to the flare during the test.

If a change is made at the facility, which causes the previous 2-hour visible emissions test to no longer be representative, e.g., a well is completed, an existing well is recompleted, etc., or the flare is replaced or modified, then the permittee must perform a Method 22 test within ninety (90) days of the change;

(c) Subsequent to the initial testing required by Condition 5.B.3(b), the permittee shall perform monthly visible emissions tests for a minimum of fifteen (15) minutes using EPA Method 22 while the facility is operating with all gases being flared. If visible emissions are observed for a period greater than one (1) minute, corrective action shall be taken immediately. Immediately following completion of the corrective action(s), the permittee shall demonstrate compliance by performing an EPA Method 22 test for a period of two (2) hours and shall monitor and maintain records of the flare rate during the test. The monthly visible emissions tests shall be separated by at least fifteen (15) days between each test, and;

- (d) The permittee shall demonstrate compliance with Condition 3.B.5(d). utilizing the net heating value from the gas analyses required by Condition 5.B.2.
- (Ref: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)., 40 CFR 63.11(b)(1) through (5), and (6)(ii), Subpart A)
- 5.B.4 For Emission Point AA-001, the permittee shall comply with the following recordkeeping requirements outlined in paragraphs (a) through (d):
 - (a) The permittee shall maintain a copy of the flare manufacturer operating and maintenance recommendations and detailed records of all maintenance performed on the flare.
 - (b) The permittee shall maintain continuous records of the thermocouple or equivalent device output demonstrating the presence of a flame in the control flare whenever the facility is in operation.
 - (c) The permittee shall maintain records of all EPA Method 22 tests, and details of any corrective/preventative action(s) taken.
 - (d) The permittee shall keep a record of the date, time, and duration that emissions are vented to the flare while a flame is not present. The permittee shall also record the date and extent of maintenance on the monitoring device, including calibrations, as recommended by the manufacturer.
 - (Ref: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3).)
- 5.B.5 For Emission Point AA-001, the permittee shall monitor the visual presence of the pilot flame and conduct daily visual observations in accordance with the CAM Plan found in Appendix B of the permit.
 - (Ref.: 40 CFR 64.3(a) and (b), 64.6(c), CAM)
- 5.B.6 For Emission Point AA-001, the permittee shall comply with the following requirements for the monitoring required by the approved CAM Plan:
 - (a) *Proper maintenance*. At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
 - (b) Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required

intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used, including in data averaging and calculations or in fulfilling a minimum data availability requirement, as applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(Ref.: 40 CFR 64.7(b) and (c), CAM)

5.B.7 For Emission Point AA-001, upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(Ref.: 40 CFR 64.7(d), CAM)

5.B.8 For Emission Point AA-001, based on the results of a determination made under Condition 5.B.7, the DEQ may require the permittee to develop and implement a Quality Improvement Plan (QIP) containing the elements specified in 40 CFR 64.8(b). The QIP shall be developed and implemented within 180 days of written notification from DEQ that a QIP is required. The DEQ may require the permittee make reasonable changes to the QIP if the QIP fails to address the cause of the control device performance problem or fails to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. Implementation of a QIP shall not excuse the permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that applies.

(Ref.: 40 CFR 64.8, CAM)

5.B.9 For Emission Point AA-001, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP required pursuant to Condition 5.B.8 and any activities undertaken to implement a QIP, data used to document the adequacy of monitoring, and monitoring maintenance or corrective actions, as applicable. As applicable, records of monitoring data and monitoring performance data should include date and time, who performed the analysis, analytical techniques or methods used, results and operating conditions at the time of the sampling or measurement. These records may be maintained in hard copy form or electronically, provided they are available for expeditious inspection and review.

(Ref.: 40 CFR 64.9(b), CAM)

- 5.B.10 For Emission Point AA-008, the permittee shall keep the following records:
 - (a) A copy of each notification or report submitted to comply with 40 CFR 63, Subpart ZZZZ;
 - (b) Records of the occurrence and duration of each malfunction of process, air pollution control, or monitoring equipment;
 - (c) Records of performance tests and performance evaluations;
 - (d) Records of all maintenance performed on the air pollution control and monitoring equipment;

Records shall be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1), Subpart A. Each record shall be kept in hard copy or electronic form for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(Ref.: 40 CFR 63.6655 and 63.6660, Subpart ZZZZ)

C. <u>Specific Reporting Requirements</u>

Emission Point(s)	Applicable Requirement	Condition Number	Pollutant/Parameter Monitored	Reporting Requirement
AA-001 AA-002 AA-003 AA-004 AA-005 AA-006 AA-007 AA-008 AA-009 AA-010	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).	5.C.1	CO VOC Individual HAP Total HAP Gas Flared Oil and Gas Production	Submit Semiannual Report
	11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).	5.C.2	Field Gas Analysis	Submit Report
	40 CFR 64.9(a), CAM	5.C.3	CAM Reporting	Semiannual reporting requirements
AA-001	40 CFR 64.7(e), CAM	5.C.4	CAM Modification	Promptly notify DEQ of failure to achieve limit/standard though no excursion or exceedance was indicated by approved monitoring
AA-008	40 CFR Part 63.6640(b) and 63.6650(a) through (d), Subpart ZZZZ	5.C.5	НАР	Submit Compliance Report

- 5.C.1 For Emission Points AA-001, AA-002, AA-003, AA-004, AA-005, AA-006, AA-007, AA-008, AA-009, and AA-010, the permittee shall submit a report in accordance with Condition 5.A.4 containing the monthly and rolling 12-month totals for the following:
 - (a) CO, VOC, individual HAP, and total HAP emissions;
 - (b) Produced gas flared from the well(s) in MMCF;
 - (c) Tank gas flared in MMCF; and
 - (d) Oil and gas production from the well(s) in MMCF/BBL.

The report shall detail each parameter on a monthly basis for each consecutive 12-month period.

(Ref: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).)

5.C.2 For Emission Point AA-001, the permittee shall submit a semiannual report in accordance with Condition 5.A.4 of the results of the field gas analysis of the produced gas routed to

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the flare.

(Ref: 11 Miss. Admin. Code Pt. 2, R. 6.3.A(3)(c).)

- 5.C.3 For Emission Point AA-001, the permittee shall submit reports in accordance with Condition 5.A.4 of the following information, as applicable:
 - (a) Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - (b) Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - (c) A description of the actions taken to implement a QIP during the reporting period as specified in Condition 5.B.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances.

(Ref: 40 CFR 64.9(a), CAM)

5.C.4 For Emission Point AA-001, if the permittee identifies a failure to achieve compliance with the emission limitation or standard for which the approved CAM monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or monitoring additional parameters.

(Ref.: 40 CFR 64.7(e), CAM)

- 5.C.5 For Emission Point AA-008, the permittee shall report each instance in which each applicable operating limitation was not met in accordance with Condition 5.A.4. These deviations shall be reported according to the following requirements:
 - (a) If there were no deviations from any applicable emission limitations or operating limitations, a statement shall be included that there were no deviations from the emission limitations or operating limitations during the reporting period; or

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- (b) If there was a deviation from any emission limitation or operating limitation during the reporting period, then the compliance report shall contain the following information:
 - (1) Company name and address.
 - (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - (3) Date of report and beginning and ending dates of the reporting period.
 - (4) The total operating time of the stationary RICE at which the deviation occurred during the reporting period.
 - (5) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- (c) If there was a malfunction during the reporting period, the compliance report shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report shall also include a description of actions taken by the permittee during a malfunction of an affected source to minimize emissions in accordance with Condition 3.B.12, including actions taken to correct a malfunction.

(Ref.: 40 CFR Part 63.6640(b) and 63.6650(a) through (d), Subpart ZZZZ)

SECTION 6. ALTERNATIVE OPERATING SCENARIOS

None permitted.

SECTION 7. TITLE VI REQUIREMENTS

The following are applicable or potentially applicable requirements originating from Title VI of the Clean Air Act – Stratospheric Ozone Protection. The full text of the referenced regulations may be found on-line at http://www.ecfr.gov/ under Title 40, or DEQ shall provide a copy upon request from the permittee.

- 7.1 If the permittee produces, transforms, destroys, imports or exports a controlled substance or imports or exports a controlled product, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A Production and Consumption Controls.
- 7.2 If the permittee performs service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart B Servicing of Motor Vehicle Air Conditioners.
- 7.3 The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart E The Labeling of Products Using Ozone-Depleting Substances, for the following containers and products:
 - (a) All containers in which a class I or class II substance is stored or transported;
 - (b) All products containing a class I substance; and
 - (c) All products directly manufactured with a process that uses a class I substance, unless otherwise exempted by this subpart or, unless EPA determines for a particular product that there are no substitute products or manufacturing processes for such product that do not rely on the use of a class I substance, that reduce overall risk to human health and the environment, and that are currently or potentially available. If the EPA makes such a determination for a particular product, then the requirements of this subpart are effective for such product no later than January 1, 2015.
- 7.4 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart F Recycling and Emissions Reduction:
 - (a) Servicing, maintaining, or repairing appliances;
 - (b) Disposing of appliances, including small appliances and motor vehicle air conditioners; or
 - (c) Refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recycling and recovery equipment, approved recycling and recovery equipment testing organizations, as well

as persons selling, offering for sale, and/or purchasing class I, class II, or non-exempt substitute refrigerants.

- 7.5 The permittee shall be allowed to switch from any ozone-depleting substance to any acceptable alternative that is listed in the Significant New Alternatives Policy (SNAP) program promulgated pursuant to 40 CFR Part 82, Subpart G Significant New Alternatives Policy Program. The permittee shall also comply with any use conditions for the acceptable alternative substance.
- 7.6 If the permittee performs any of the following activities, the permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart H Halon Emissions Reduction:
 - (a) Any person testing, servicing, maintaining, repairing, or disposing of equipment that contains halons or using such equipment during technician training;
 - (b) Any person disposing of halons;
 - (c) Manufacturers of halon blends; or
 - (d) Organizations that employ technicians who service halon-containing equipment.

APPENDIX A

List of Abbreviations Used In this Permit

11 Miss. Admin. Code Pt. 2, Ch. 1. Air Emission Regulations for the Prevention, Abatement, and Control

of Air Contaminants

11 Miss. Admin. Code Pt. 2, Ch. 2. Permit Regulations for the Construction and/or Operation of Air

Emissions Equipment

11 Miss. Admin. Code Pt. 2, Ch. 3. Regulations for the Prevention of Air Pollution Emergency Episodes

11 Miss. Admin. Code Pt. 2, Ch. 4. Ambient Air Quality Standards

11 Miss. Admin. Code Pt. 2, Ch. 5. Regulations for the Prevention of Significant Deterioration of Air

Quality

11 Miss. Admin. Code Pt. 2, Ch. 6. Air Emissions Operating Permit Regulations for the Purposes of Title

V of the Federal Clean Air Act

11 Miss. Admin. Code Pt. 2, Ch. 7. Acid Rain Program Permit Regulations for Purposes of Title IV of the

Federal Clean Air Act

BACT Best Available Control Technology CEM Continuous Emission Monitor

CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

CO Carbon Monoxide

COM Continuous Opacity Monitor

COMS Continuous Opacity Monitoring System

DEQ Mississippi Department of Environmental Quality EPA United States Environmental Protection Agency

gr/dscf Grains Per Dry Standard Cubic Foot

HP Horsepower

HAP Hazardous Air Pollutant lb/hr Pounds per Hour

M or K Thousand

MACT Maximum Achievable Control Technology

MM Million

MMBTUH Million British Thermal Units per Hour

NA Not Applicable

NAAQS National Ambient Air Quality Standards

NESHAP National Emissions Standards for Hazardous Air Pollutants, 40 CFR

61 or National Emission Standards for Hazardous Air Pollutants for

Source Categories, 40 CFR 63

NMVOC Non-Methane Volatile Organic Compounds

NO_x Nitrogen Oxides

NSPS New Source Performance Standards, 40 CFR 60

O&M Operation and Maintenance

PM Particulate Matter

PM $_{10}$ Particulate Matter less than 10 μ m in diameter

ppm Parts per Million

PSD Prevention of Significant Deterioration, 40 CFR 52

SIP State Implementation Plan

SO₂ Sulfur Dioxide
TPY Tons per Year
TRS Total Reduced Sulfur

VEE Visible Emissions Evaluation
VHAP Volatile Hazardous Air Pollutant
VOC Volatile Organic Compound

APPENDIX A

Compliance Assurance Monitoring Plan

COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

Emission Source: AA-001

I. Background

A. Emission Unit

Description: One (1) flare controlling Volatile Organic Compounds (VOC),

Carbon Monoxide (CO), Total Hazardous Air Pollutants (HAPs), & Individual HAP emissions, from gas produced by the

well and processed by the tank battery.

Identification: AA-001

Facility: Tellus Operating Group, LLC - Trenton Plant

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: 40 CFR 64, CAM

Emission limits: VOC must be less than or equal to 240 tons per year (tpy); CO

must be less than or equal to 240 tons per year; Total HAPs must be less than or equal to 22 tpy; & Individual HAPs must

be less than or equal to 9.0 tpy.

Monitoring Requirements: Visible Presence of a Flame and Design and

Operational Controls to ensure the flare operates at all times during well production

C. Control Technology

Thermal Combustion

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table A.

Table A. Monitoring Approach for Emission Point AA-001.

	Indicator No. 1	Indicator No. 2
I. Indicator		
	Visible Presences of a Flame	Operational Design & Controls
	A visual observation for the	Auto-ignitor will initiate a relighting sequence to produce a new flame if the flame is lost. A low temperature detection and
	presence of a flame is	alarm system is installed.
	determined daily.	The flare is equipped with low temperature sensor.
Measurement Approach		The well and battery is equipped with an auto-shutdown alarm.
II. Indicator Range		Alarm thresholds are established at 725°F and 2-minutes; Both may be adjusted if determined appropriate.
	An excursion is defined as no flame visibly present while the well is producing gas to the flare.	A gas analysis ensuring adequate BTU content of produced gas is measured semiannually.
	Excursions trigger a reporting requirement within five (5) working days. Not more than 6 excursions in	An excursion is defined as no flame visibly present while the well is producing gas to the flare.
	any semi-annual reporting period.	Excursions trigger a reporting requirement within 5 working days.
		Not more than 6 excursions in any semi-annual reporting period.
III. Performance Criteria		
A. Data Representativeness	Visible presence of a flame	Visible presence of a flame
B. Verification of Operational Status	Visible presence of a flame	Visible presence of a flame and auto detection system

C. QA/QC Practices and Criteria	N/A	N/A
D. Monitoring Frequency	The flare is observed daily.	The flare is observed daily.
E. Data Collection Procedure	N/A, the flare is observed daily.	N/A, the flare is observed daily.
F. Averaging period	N/A, the flare is observed daily.	N/A, the flare is observed daily.

JUSTIFICATION

I. Background

The pollutant-specific emission unit is the flare controlling VOC, CO, and HAP emissions from the wells' produced gas and tank battery's process gas.

II. Rationale for Selection of Performance Indicators

Visible Flame Presence:

Visible determination of a flame was selected as a performance indicator because it is indicative of thermal combustion of emissions from the flame. When the flare is operating, there will be a flame present.

Design and Controls:

The facility's flare is operated with a pilot light supplied by sweet gas from the well. In the event that the flare fame is diminished, then the auto-ignitor will initiate the re-lighting sequence to produce a new flame. The well and battery is also equipped with a low temperature detection and alarm system. The flare is equipped with a probe near the tip of the stack; if the probe sensor detects a low temperature, then the auto-ignitor will initiate a relighting sequence for approximately two-minutes. If the flare fails to re-light within two-minutes, then the auto-shutdown sequence will commence and the well will be shut in. Thence, the well's alarm will notify personnel of the well's auto-shutdown and shut in. Thus, personnel will be onsite shortly following the event. Current thresholds are established at 725°F and two-minutes; however, both thresholds may be adjusted if determined appropriate.

Well production activities will not recommence until all problems are resolved with the flare and associated activities and the flare is relit and properly maintained. All alarms and engineering controls will be properly established and tested prior to commencing operations.

III. Rationale for Selecting Indicator Ranges

The indicator range is simply a daily visual observation of a flame, as well as, auto detection of a flame with the thermocouple. Additionally, a gas analysis of produced gas is measure semiannually to ensure the BTU content is appropriate for adequate combustion.