STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Tellus Operating Group LLC, Trenton Plant Highway 481 Raleigh, Smith, Mississippi

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

	AUTHORIZED SIGNATURE
	MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
Issue	d: Permit No.: 2500-00091

Part I.

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", Section 10. (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:
 - 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 Part I, 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 Part I, 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 Part I, 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. 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, 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).)

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 POINTS & POLLUTION CONTROL DEVICES

Emission Point	Description		
AA-001	Oil production facility with a capacity of 1,700 mcf/day of produced natural gas and 600 bbl/day of crude oil equipped with a Flare, and a 0.05 MMBTU/hr gas-fired pilot, to control VOC emissions from the following sources:		
	Gas produced from the Oil/Gas Separator, and		
	Emissions from the Vapor Recovery Unit (VRU) controlling the three (3) oil production storage and process tanks		
AA-002	Oil/Gas Separator with produced gas routed to the Flare (AA-001)		
AA-003	Three (3) 16,800-gallon (400-bbl) Vertical Fixed-Roof Oil Production Storage Tanks, with emissions vented to the VRU followed by the Flare (AA-001)		
AA-004	One (1) 16,800-gallon (400-bbl) Vertical Fixed-Roof Untreated Oil 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)		

SECTION 3. EMISSION LIMITATIONS AND 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 Paragraph 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. Emission Point Specific Emission Limitations & Standards

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001 through AA-007	11 Miss. Admin. Code Pt. 2, R. 1.4.B(2).	3.B.1	H ₂ S	1 grain H ₂ S per 100 standard cubic feet (1 gr/100 scf)
AA-001 through		3.B.2	VOC and CO	240 tpy (each), determined for each consecutive 12-month period
AA-007			Total HAPs	22 tpy, determined for each consecutive 12-month period
			Individual HAP	9.0 tpy, determined for each consecutive 12-month period
			Oil and Gas	Record oil and gas production

Emission Point(s)	Applicable Requirement	Condition Number(s)	Pollutant/ Parameter	Limit/Standard
AA-001	Ref.: Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.B.3	Visible Emissions	No visible emissions
		3.B.4	Flare Pilot	Operate with a flame present at all times
AA-002	Ref.: Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.B.5	VOC and CO	Flare all produced gas from the separator
AA-003	Ref.: Miss. Admin. Code Pt. 2, R. 2.2.B(10).	3.B.6	VOC and CO	Route all emissions to the VRU followed by the Flare

- 3.B.1 For Emission Points AA-001 through AA-007, 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 H₂S in excess of one grain per 100 standard cubic feet shall be incinerated at temperatures of not less than 1600°F for a period of not less than 0.5 seconds, or processed in such a manner which is equivalent to or more effective for the removal of H₂S. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.4.B(2).)
- 3.B.2 For Emission Points AA-001 through AA-007, the permittee shall limit emissions from the flare as follows:
 - (a) Volatile Organic Compounds (VOC) to less than or equal to 240 tons per year;
 - (b) Carbon Monoxide (CO) to less than or equal to 240 tons per year;
 - (c) Total Hazardous Air Pollutants (HAPs) to less than or equal to 22 tons per year; and
 - (d) Individual HAPs to less than or equal to 9.0 tons per year.

The facility-wide emissions for each pollutant shall be determined for each consecutive 12-month period. The permittee shall also monitor and record the oil and gas produced from the well(s) by using a calibrated metering device. This data shall be used in calculated emissions to ensure compliance with the above limits. (Ref.: Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

3.B.3 For Emission Point AA-001, the permittee shall design for and operate the flare with no visible emissions. (Ref.: Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

- 3.B.4 For Emission Point AA-001, the permittee shall operate the flare with a flame present at all times. (Ref.: Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
- 3.B.5 For Emission Point AA-002, the permittee shall route all produced gas from the Oil/Gas Separator to the Flare (AA-001). (Ref.: Miss. Admin. Code Pt. 2, R. 2.2.B(10).)
- 3.B.6 For Emission Point AA-003, the permittee shall route all emissions from the three (3) Oil Production Tanks to the Vapor Recovery Unit (VRU), which is controlled by the Flare (AA-001). (Ref.: Miss. Admin. Code Pt. 2, R. 2.2.B(10).)

Page 11 of 12 Permit No.:2500-00091

SECTION 4. WORK PRACTICES

Intentionally Left Blank - No Work Practices Are Being Established Through This Permit Action.

SECTION 5. MONITORING, RECORDKEEPING and REPORTING REQUIREMENTS

No monitoring and recordkeeping is included in the Permit to Construct issued [DATE]. Monitoring and recordkeeping will be established in any required Permit to Operate per Miss. Admin. Code Pt. 2.