



State of Mississippi



AIR POLLUTION CONTROL PERMIT

To Construct Air Emissions Equipment

THIS CERTIFIES

Tellus Operating Group LLC, Raleigh CO2 Plant
1080 Raleigh Oilfield Road, County Road 77
Raleigh, MS
Smith County

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

Mississippi Environmental Quality Permit Board

Mississippi Department of Environmental Quality

Issued/Modified: OCT 28 2014

Expires:

Permit No. 2500-00087

Agency Interest # 52285

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Other Relevant Documents:	

The federal regulations referenced in this permit may be found on-line at <http://ecfr.gpoaccess.gov/> and the State of Mississippi regulations may be found on-line at <http://www.mdeq.ms.state.us/> or a copy of the regulations may be obtained by contacting the Mississippi Department of Environmental Quality, Environmental Permitting Division, Post Office Box 2261, Jackson, Mississippi 39255, phone (601) 961-5171. The following regulations were referenced in this permit:

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

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

40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Internal Combustion Engines

40 CFR Part 63, Subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities

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Subject Item Inventory

Permit Number:2500-00087

Activity ID No.: PER20130003

Subject Item Inventory:

ID	Designation	Description
AI52285	52285	Carbon Dioxide Injection for Crude Oil and Natural Gas Production Facility
AREA1	AA-000	Fugitive Emissions (Facility Description: E-35)
AREA2	AA-018	Emissions from Maintenance Operation (Facility Description: E-36)
EQPT1	AA-001	74,760 gallons (1780 barrel) Crude Oil Storage Tank (Facility Description: Tank 1)
EQPT2	AA-002	16,800 gallons (400 barrel) Crude Oil Storage Tank (Facility Description: Tank 2)
EQPT3	AA-003	16,800 gallons (400 barrel) Crude Oil Storage Tank (Facility Description: Tank 3)
EQPT4	AA-004	16,800 gallons (400 barrel) Crude Oil Storage Tank (Facility Description: Tank 4)
EQPT5	AA-005	74,760 gallons (1780 barrel) Crude Oil Storage Tank (Facility Description: Tank 5)
EQPT6	AA-006	0.5 MMBtu/hr Natural Gas Fired Heater (Facility Description: Heater Treater, E-6)
EQPT7	AA-007	0.5 MMBtu/hr Natural Gas Fired Heater (Facility Description: Heater Treater, E-7)
EQPT8	AA-008	13.5 MMBtu/hr Direct Fired Heater (Ref. E-8)
EQPT9	AA-012	1,085 bhp Natural-Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engine used as a Generator(Facility Ref.: No. E-12)
EQPT10	AA-013	1,085 bhp Natural-Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engine used as a Generator (Facility Ref.: No. E-13)
EQPT11	AA-014	1,085 bhp Natural-Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engine used as a Generator (Facility Ref.: E-14)
EQPT12	AA-015	1,085 bhp Natural-Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engine used as a Generator (Facility Ref. No.: E-15)
EQPT13	AA-016	16,800 gallons (400 barrel) Produced Water Storage Tank (Facility Description: E-18)
EQPT14	AA-017	16,800 gallons (400 barrel) Produced Water Storage Tank (Facility Description: E-19)
EQPT16	AA-010	Glycol Dehydration Unit (Facility Description: E-10)
EQPT17	AA-011	Amine Regenerator Vent (Facility Description: E-11)
EQPT18	AA-009	Control Flare
EQPT19	AA-019	16,800 gallon (400 barrel) Crude Oil Storage Tank. (Facility Description: EQPT 19)

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ID	Designation	Description
EQPT20	AA-020	16,800 gallon (400 barrel) Crude Oil Storage Tank (Facility Description: EQPT 20)
EQPT21	AA-021	16,800 gallon (400 barrel) Crude Oil Storage Tank (Facility Description: EQPT 21)
EQPT23	AA-022	1,085 bhp Natural-Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engine used as a Generator (Facility Ref. No.: E-22)
EQPT24	AA-023	1,085 bhp Natural-Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engine used as a Generator (Facility Ref.: No. E-23)

Subject Item Groups:

ID	Description	Components
GRPT1	Crude Oil Storage Tanks	EQPT1 74,760 gallons (1780 barrel) Crude Oil Storage Tank (Facility Description: Tank 1)
		EQPT19 16,800 gallon (400 barrel) Crude Oil Storage Tank. (Facility Description: EQPT 19)
		EQPT2 16,800 gallons (400 barrel) Crude Oil Storage Tank (Facility Description: Tank 2)
		EQPT20 16,800 gallon (400 barrel) Crude Oil Storage Tank (Facility Description: EQPT 20)
		EQPT21 16,800 gallon (400 barrel) Crude Oil Storage Tank (Facility Description: EQPT 21)
		EQPT3 16,800 gallons (400 barrel) Crude Oil Storage Tank (Facility Description: Tank 3)
		EQPT4 16,800 gallons (400 barrel) Crude Oil Storage Tank (Facility Description: Tank 4)
		EQPT5 74,760 gallons (1780 barrel) Crude Oil Storage Tank (Facility Description: Tank 5)
GRPT2	Natural Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engines	EQPT10 1,085 bhp Natural-Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engine used as a Generator (Facility Ref.: No. E-13)
		EQPT11 1,085 bhp Natural-Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engine used as a Generator (Facility Ref.: E-14)
		EQPT12 1,085 bhp Natural-Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engine used as a Generator (Facility Ref. No.: E-15)
		EQPT23 1,085 bhp Natural-Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engine used as a Generator (Facility Ref. No.: E-22)
		EQPT24 1,085 bhp Natural-Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engine used as a Generator (Facility Ref.: No. E-23)
		EQPT9 1,085 bhp Natural-Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engine used as a Generator(Facility Ref.: No. E-12)
GRPT3	Produced Water Storage Tanks	EQPT13 16,800 gallons (400 barrel) Produced Water Storage Tank (Facility Description: E-18)

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ID	Description	Components
GRPT3	Produced Water Storage Tanks	EQPT14 16,800 gallons (400 barrel) Produced Water Storage Tank (Facility Description: E-19)
GRPT4	Heaters	EQPT6 0.5 MMBtu/hr Natural Gas Fired Heater (Facility Description: Heater Treater, E-6)
		EQPT7 0.5 MMBtu/hr Natural Gas Fired Heater (Facility Description: Heater Treater, E-7)

KEY

ACT = Activity

AREA = Area

CONT = Control Device

IA = Insignificant Activity

MAFO = Animal Feeding Operation

RPNT = Release Point

WDPT = Withdrawal Point

AI = Agency Interest

CAFO = Concentrated Animal Feeding Operation

EQPT = Equipment

IMPD = Impoundment

PCS = PCS

TRMT = Treatment

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AI0000052285 (52285) Carbon Dioxide Injection for Crude Oil and Natural Gas Production Facility:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Carbon Monoxide	<p>Carbon Monoxide: Facility-Wide Emission Limitations</p> <p>The permittee shall limit annual facility-wide Carbon Monoxide (CO) emissions to no greater tahn 99.0 tons per year (tpy). [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]</p>
L-2	Hydrogen sulfide	<p>Hydrogen sulfide: The permittee shall not cause or permit the emissions for any gas stream which contains hydrogen sulfide in excess of one (1) grain per 100 standard cubic feet (gr/100 scf). The permittee shall show compliance with this requirement through gas analysis. The demonstration of compliance shall be maintained and made available to the MDEQ personnel upon request. [11 Miss. Admin. Code Pt. 2, R. 4.2(b)]</p>
L-3	Natural Gas	<p>Natural Gas: The permittee shall only fire " natural gas" in combustion units at this facility that contains 1 grain or less of total sulfur per 100 standard cubic feet and is composed of at least 70 percent methane by volume or has a gross calorific value between 950 and 1100 Btu per standard cubic foot.</p> <p>. [11 Miss. Admin. Code Pt. 2, Ch. 2. II.B(10), 11 Miss. Admin. Code Pt. 2, Ch. 1. 4.2(b)]</p>
L-4	Nitrogen oxides	<p>Nitrogen oxides: Facility-Wide Emissions</p> <p>The permittee shall limit annual facility-wide Nitrogen Oxide (NOx) emssions to no greater than 99.0 tons per year (tpy). [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]</p>
L-5	HAP	<p>HAP: Facility-Wide Emission Limitations</p> <p>The permittee shall limit hazardous air pollutant (HAP) emissions to no more than 9.0 tpns/year (TPY) of any single HAP and to no more than 24.0 TPY of total combined HAPs as determined for each rolling 12-month period. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]</p>

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AI0000052285 (continued):

Record-Keeping Requirements:

Condition No.	Condition
R-1	Records of semi-annual natural gas analysis shall be maintained by the permittee and made available to the MDEQ personnel upon request. The permittee shall report to MDEQ within 30 days of the analysis date when the natural gas does not meet the specifications in this permit. [11 Miss. Admin. Code Pt. 2, Ch. 2. II.B(11)]
R-2	The permittee shall keep records of the following; Monthly and 12-month rolling total CO and NOx emission rate for the facility Monthly and 12-month rolling total hours of operation on each of the six (6) 1085 HP engines Monthly and 12-month rolling total of each individual HAP and 12-month rolling total of total HAP emissions. [11 Miss. Admin. Code Pt. 2, R. 2.2 .B(10)]

Submittal/Action Requirements:

Condition No.	Condition
S-1	General Condition: The permittee shall submit certification of construction: Due within thirty (30) days of completion of construction or installation of an approved stationary source or prior to startup, whichever is earlier. The notification shall certify that construction or installation was performed in accordance with the approved plans and specifications. In the event there is any change in construction from the previously approved plans and specifications or permit, the permittee shall promptly notify MDEQ in writing. If MDEQ determines the changes are substantial, MDEQ 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. [11 Miss. Admin. Code Pt. 2, R. 2.5.D.]
S-2	Within fifteen (15) days of the permit issuance date, the permittee must notify DEQ in writing of the dates that each emission point represented in the permit were constructed. This notification shall include a statement verifying that construction commenced according to the permit application representation for each emissions point. Any deviation from the permit application must be reported. [11 Miss. Admin. Code Pt. 2, R. 2.5.C(2)]

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AI0000052285 (continued):

Submittal/Action Requirements:

Condition No.	Condition
S-3	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. [11 Miss. Admin.Code Pt. 2, R.2.5.C(4).]
S-4	<p>The permittee shall submit to the MDEQ by January 31st of each year, the following information:</p> <p>Monthly and 12-month rolling total of CO emissions for the facility to demonstrate compliance with the 99 tpy limit</p> <p>Monthly and 12-month rolling total of NOx emissions for the facility to demonstrate compliance with the 99 tpy limit</p> <p>Monthly and 12-month rolling total of individual HAP and 12-month total of total HAP emission rate to demonstrate compliance with the 9.0 tpy limit for single HAPs and the 24.0 tpy limit for total HAPs</p> <p>Semiannual gas analysis, demonstrating compliance with the natural gas specifications in this permit . [11 Miss. Admin. Code Pt. 2, Ch. 2. II.B(11)]</p>

Narrative Requirements:

General Condition:

Condition No.	Condition
T-1	General Condition: The stationary source shall be designed and constructed so as to operate without causing a violation of any Applicable Rules and Regulations or this permit, 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. [11 Miss. Admin.Code Pt. 2, R.2.5.A.]
T-2	General Condition: Any activities not identified in the application are not authorized by this permit. [Miss. Code Ann. 49_17_29 1.b]

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AI0000052285 (continued):

Narrative Requirements:

General Condition:

Condition No.	Condition
T-3	General Condition: 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. [Miss. Code Ann. 49_17_29]
T-4	General Condition: 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 Regulation 11 Miss. Admin. Code Pt.2, R. 1.10 "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", Section 10. [11 Miss. Admin. Code Pt. 2, R. 1.10]
T-5	General Condition: The permittee shall allow the Mississippi Environmental Quality Commission, the Mississippi Environmental Quality Permit Board, MDEQ staff and/or their authorized representatives, upon the presentation of credentials: a. To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring equipment or monitoring method required in this permit, and to sample any air emission. [Miss. Code Ann. 49_17_21]
T-6	General Condition: After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for good cause shown including, but not limited to, the following: a. Persistent violation of any terms or conditions of this permit; b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or c. A change in any condition that requires either a temporary or permanent reduction or elimination of previously authorized air emissions. [11 Miss. Admin.Code Pt. 2, R.2.2.C.]
T-7	General Condition: 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. [Miss. Code Ann. 49_17_39]
Condition No.	Condition
T-8	General Condition:This permit is for air pollution control purposes only. [11 Miss. Admin.Code Pt. 2, R.2.1.D.]

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AI0000052285 (continued):

Narrative Requirements:

Condition No.	Condition
T-9	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.2.B(5).]
T-10	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.1.D(6).]
T-11	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.1.D(7).]
T-12	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(a).]
T-13	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(b).]
T-14	General Condition: The permit does not convey any property rights of any sort, or any exclusive privilege. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(c).]
T-15	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(d).]
T-16	General Condition: This permit shall not be transferred except upon approval of the Permit Board. [11 Miss. Admin.Code Pt. 2, R.2.16.B.]
T-17	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.1.1.D(7).]

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AI0000052285 (continued):

Narrative Requirements:

Condition No.	Condition
T-18	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.5.C(1).]
T-19	General Condition: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee. [11 Miss. Admin.Code Pt. 2, R.2.5.D(3).]
T-20	General Condition: Except as prohibited in 11 Miss. Admin. Code Pt. 2,R. 2.5.D(7) 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 APC-S-2, Section XIII.G. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(4).]
T-21	General Condition: Except as otherwise specified in 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7), 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. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).]
T-22	General Condition: Except as otherwise specified in 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7), 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. [11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).]
T-23	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.5.D(7).]

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AI0000052285 (continued):

Narrative Requirements:

Condition No.	Condition
T-24	<p>General Condition: Regarding compliance testing:</p> <p>(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.</p> <p>(b) Compliance testing will be performed at the expense of the permittee.</p> <p>(c) Each emission sampling and analysis report shall include but not be limited to the following:</p> <ol style="list-style-type: none">1. detailed description of testing procedures;2. sample calculation(s);3. results; and4. comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit. [11 Miss. Admin.Code Pt. 2, R.2.6.B(3),(4)&(6).]
T-25	<p>General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.5.A(4).]</p>

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EQPT0000000008 (AA-008) 13.5 MMBtu/hr Direct Fired Heater (Ref. E-8):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		For Emission Point AA-008, the permittee shall have emissions of opacity less than or equal to 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-2		For Emission Point AA-008, 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. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)a]
L-3		Benzene emissions from this emission point shall be below 1 tpy. Any emissions in excess of 1 tpy shall be reported to MDEQ. The permittee shall report an exceedance of benzene emissions orally within 24 hours and must submit a written notification of exceedance within 7 days of the event. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-4		Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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EQPT0000000016 (AA-010) Glycol Dehydration Unit (Facility Description: E-10):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The facility is subject to and shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Plants, as described in 40 CFR 63, Subpart HH. [40 CFR 63_SUBPART HH]
L-2		For Emission Point AA-010, the exhaust from the glycol dehydration unit shall comply with the control device requirements in 40 CFR 63.771 (f). [40 CFR 63.771(f)]
L-3		For Emission Point AA-010, the control device shall be one of the control devices specified in paragraphs (d)(1)(i) through (iii) of 40 CFR 63.771, as follows: (i) An enclosed combustion device (e.g., thermal vapor incinerator, catalytic vapor incinerator, boiler, or process heater) that is designed and operated in accordance with the specified performance requirements; (ii) a vapor recovery device (e.g., carbon adsorption system or condenser) or other non-destructive control device that is designed and operated to reduce the mass content of either TOC or total HAP in the gases vented to the device by 95.0 percent by weight or greater as determined in accordance with the requirements of 63.772(e); or (iii) A flare, as defined in 63.761, that is designed and operated in accordance with the requirement of 63.11 (b). [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

Record-Keeping Requirements:

Condition No.	Condition
R-1	For the glycol dehydration unit, the permittee shall maintain records of the actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with 40 CFR 63.772(b)(2) from the glycol unit venting to Emission Point AA-008 (heater). The permittee shall show, during an inspection by MDEQ, a demonstration that all emissions are routed to one of the allowable control devices for combustion and that benzene emissions exhausted from the respective device(s) are below one ton per year (1 tpy). Any bypass of the approved routing of exhaust from the glycol dehydration unit is prohibited. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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EQPT0000000016 (continued):

Submittal/Action Requirements:

Condition	
No.	Condition
S-1	The permittee shall report a bypass to the MDEQ orally within 24 hours and submit written notice of bypass within 7 days of the event. [40 CFR 63_SUBPART HH, 11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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EQPT0000000017 (AA-011) Amine Regenerator Vent (Facility Description: E-11):

Limitation Requirements:

Condition		
Condition No.	Parameter	Condition
L-1		Such air emissions equipment shall be managed as efficiently as possible to provide the maximum reduction of air contaminants. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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EQPT0000000018 (AA-009) Control Flare:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		Emission Point AA-009, the flare, shall be operated with a flame present at all times. [40 CFR 63.11(b)(5)]
L-2		Emission Point AA-009, the flare, shall be designed and operated as specified in 40 CFR 63.11 (b). [40 CFR 63.771(d)(1)iii]
L-3		Flares shall be designed 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 40 CFR 60 shall be used to determine the compliance of flares with the visible emission provisions. The observation period is 2 hours and shall be used according to Method 22. [40 CFR 63.11(b)(4)]
L-4		Flares shall be steam-assisted, air-assited, or non-assisted. [40 CFR 63.11(b)(2)]
L-5		Flares shall be operated at all times when emissions may be vented to them. [40 CFR 63.11(b)(2)]
L-6		The permittee shall comply with the heat content specifications in 40 CFR 63. 11 (b)(6) and the maximum tip velocity specifications in 40 CFR 63.11 (b)(7) or (b)(8). [40 CFR 63.11(b)(6)]
L-7		Such air emissions equipment shall be managed as efficiently as possible to provide the maximum reduction of air contaminants. [11 Miss. Admin. Code Pt. 2, Ch. 2. II.B(10)]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		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. [40 CFR 63.b(5)]
M-2		The permittee shall perform visual observation for a period of two (2) hours using EPA Method 22 to demonstrate compliance with the visible emissions limitation, quarterly. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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EQPT0000000018 (continued):

Monitoring Requirements:

Condition No.	Parameter	Condition
M-3		The permittee shall monitor the flare to assure that it is operated and maintained in conformance with its design. [40 CFR 63.11(b)]

Record-Keeping Requirements:

Condition No.	Condition
R-1	The permittee shall keep records of all maintenance performed on the flare in order to operate in a manner consistent with good air pollution control practices to minimize emissions and shall make said records available upon request during an inspection visit by the MDEQ personnel. All records shall be maintained by the permittee for a period of (5) years following the date of such record. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]

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GRPT0000000001 (Crude Oil Tank Group) Crude Oil Storage Tanks:

Limitation Requirements:

Condition		
Condition No.	Parameter	Condition
L-1		Such are emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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GRPT0000000002 (Reciprocating Internal Combustion Engines) Natural Gas Fired Four Stroke Lean Burn Reciprocating Internal Combustion Engines:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		For Emissions Points AA-012, AA-013, AA-014, AA-015, AA-022 and AA-023, the permittee shall comply with the requirement to only fire natural gas meeting the specifications for "natural gas" as defined in this permit. [11 Miss. Admin. Code Pt. 2, Ch. 2. II.B(10)]
L-2		For this combustion engine, 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. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)a]
L-3		For Emission Points AA-012, AA-013, AA-014, AA-015, AA-022 and AA-023, the permittee shall comply with emissions of opacity less than or equal to 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-4		Emission Points AA-012, AA-013, AA-014, AA-015, AA-022 and AA-023 are subject to and shall comply with 40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) for existing four stroke lean burn (4SLB) non-emergency stationary RICE with a rating greater than 500 HP located at an area source of HAP emissions. [40 CFR 63.6590]
L-5		Emission Points AA-012, AA-013, AA-014, AA-015 , AA-022 and AA-023 are 4 stroke lean burn spark ignition reciprocating internal combustion engines that meet the definition of Remote Stationary RICE in 40 CFR 63.6675. [40 CFR 63.6675]
L-6		For Emission Points AA-012, AA-013, AA-014, AA-015, AA-022 and AA-023, the permittee shall: A. Change oil & filter every 2,160 hours of operation or annually, whichever comes first; B. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, & replace as necessary C. Inspect all hoses & belts every 2,160 hours of operation or annually, whichever comes first & replace as necessary. the permittee may use the optional oil analysis to extend the specified oil change requirements. [40 CFR 63.Table 2d(Item 8)]

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GRPT0000000002 (continued):

Limitation Requirements:

Condition No.	Parameter	Condition
L-7		For Emission Points AA-012, AA-013, AA-014, AA-015, AA-022 and AA-023, the permittee shall operate & maintain the stationary RICE & aftertreatment control device (if any) according to the manufacturer's emission-related written instructions or develop their own maintenance plan, which must provide to the extent practicable for the maintenance & operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.Table 6(Item 9)]
L-8		For Emission Points AA-012, AA-013, AA-014, AA-015, AA-022 and AA-023, the permittee shall conduct a review of the surrounding area every 12 months to determine if the nearby population has changed. If the engine no longer meets the criteria for a sparsely populated area, must comply within 1 year with the emission standards specified for populated areas. [40 CFR 63.6603(f)]
L-9		Such air emissions equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants. [APC-S-2 II.B(10)]

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GRPT0000000003 (Produced Water Tank Group) Produced Water Storage Tanks:

Limitation Requirements:

Condition		
Condition No.	Parameter	Condition
L-1		Such are emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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GRPT0000000004 (Heaters) Heaters:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		For Emission Point AA-006 and AA-007, the permittee shall have emissions of opacity less than or equal to 40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A. [11 Miss. Admin. Code Pt. 2, R. 1.3.A]
L-2		For Emission Point AA-006 and AA-007, 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. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)a]
L-3		Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

GENERAL INFORMATION

Tellus Operating Group LLC, Raleigh CO2 Plant
1080 Raleigh Oilfield Road, County Road 77
Raleigh, MS
Smith County

Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
52285	Tellus Operating Group, LLC	Official Site Name	7/28/2014	
250000087	TreeTop Midstream Services LLC, Raleigh CO2 Plant	Air-Construction	10/28/2010	10/28/2014
2812900087	Tellus Operating Group, LLC	Air-AIRS AFS	1/4/2010	
52285	TreeTop Midstream Services, LLC	Historic Site Name	1/4/2010	7/28/2014
250000087	Tellus Operating Group LLC, Raleigh CO2 Plant	Air-Construction	10/28/2014	

Basin: Pascagoula River Basin

Location Description:

GENERAL INFORMATION

Relevant Documents:

The federal regulations referenced in this permit may be found on-line at <http://ecfr.gpoaccess.gov/> and the State of Mississippi regulations may be found on-line at <http://www.mdeq.ms.state.us/> or a copy of the regulations may be obtained by contacting the Mississippi Department of Environmental Quality, Environmental Permitting Division, Post Office Box 2261, Jackson, Mississippi 39255, phone (601) 961-5171. The following regulations were referenced in this permit:

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

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

40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Internal Combustion Engines

40 CFR Part 63, Subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities