

State of Mississippi

AIR POLLUTION CONTROL PERMIT

Permit To Construct Air Emissions Equipment

THIS CERTIFIES

**Encana Oil and Gas USA Inc, Lawson 25H-1 and 25-13H-1 Production Facility
MS Highway 568 and 584
Gillsburg, MS
Amite County**

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

Mississippi Environmental Quality Permit Board

Mississippi Department of Environmental Quality

Issued/Modified: NOV 07 2012

Expires:

Permit No. 0080-00032

Agency Interest # 57842

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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 APC-S-1, Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants

Mississippi Air Regulations APC-S-2, Permit Regulations for the Construction and/or Operation of Air Emissions Equipment

40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines,

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 Emissions Standards for Hazardous Air Pollutants: Oil and Natural Gas Production Facilities: Area Sources

40 CFR Part 60, Subpart OOOO - New Source Performance Standards for Crude Oil and Natural Gas Production, Transmission, and Distribution

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Encana Oil and Gas USA Inc, Lawson 25H-1 and 25-13H-1 Production Facility

Subject Item Inventory

Permit Number:0080-00032

Activity ID No.: PER20120001

Subject Item Inventory:

ID	Designation	Description
AI57842	57842	Oil & Gas Production
EQPT1	AA-001	Process Flare (FL-701)
EQPT2	AA-002	0.35 MMBTU/hr Heater Treater Burner Stack (V-103)
EQPT3	AA-003	12,600 Gallon Crude Oil Storage Tank (S-501)
EQPT4	AA-004	12,600 Gallon Crude Oil Storage Tank (S-502)
EQPT8	AA-011	12,600 Gallon Crude Oil Storage Tank (S-503)
EQPT6	AA-006	12,600 Gallon Crude Oil Storage Tank (S-504)
EQPT5	AA-005	12,600 Gallon Slop Storage Tank (S-505)
EQPT9	AA-012	12,600 Gallon Produced Water Tank (S-506)
ACT2	AA-009	Produced Water Loading (PWLL)
ACT1	AA-008	Crude Oil Loading (OilLL)
EQPT7	AA-010	Two Phase Separator
EQPT16	AA-019	Heater Treater Vent
AREA1	AA-007	Fugitive Emissions (FUG)
EQPT15	AA-018	500 Hp Natural gas liquids (NGL) Compressor Engine (NGL C-1)
EQPT11	AA-015	NGL Glycol Dehydrator Still Column Vent (NGL D-1)
EQPT12	AA-016	NGL Glycol Dehydrator Reboiler (NGL GR-1)
EQPT13	AA-017	NGL Methanol Tank (NGL-M-1)

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Subject Item Inventory

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ID	Designation	Description
AREA2	AA-013	NGL Fugitive Emissions (NGL F-1)

Subject Item Groups:

ID	Description	Components
GRPT1	Oil Storage Tanks	EQPT3 12,600 Gallon Crude Oil Storage Tank (S-501)
		EQPT4 12,600 Gallon Crude Oil Storage Tank (S-502)
		EQPT8 12,600 Gallon Crude Oil Storage Tank (S-503)
		EQPT6 12,600 Gallon Crude Oil Storage Tank (S-504)

KEY

ACT = Activity

AREA = Area

CONT = Control Device

IA = Insignificant Activity

RPNT = Release Point

AI = Agency Interest

CAFO = Concentrated Animal Feeding Operation

EQPT = Equipment

MAFO = Animal Feeding Operation

TRMT = Treatment

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AI0000057842 (57842) Oil & Gas Production:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Fuel Combusted	Fuel Combusted: For all combustion units operating at this facility, the permittee shall combust only commercial grade propane or natural gas. [APC-S-2 11.B(10)]
L-2		The permittee shall comply with all applicable requirements of 40 CFR Part 60, Subpart OOOO, New Source Performance Standards for Crude Oil and Natural Gas Production, Transmission, and Distribution. The permittee shall comply with all applicable requirements of this subpart within 60 days of publication of the rule in the Federal Register or upon start up, whichever is later. [APC-S-2 II.B(10)]
L-3		The permittee shall not cause or permit the emission of any gas stream which contains hydrogen sulfide in excess of one grain per 100 standard cubic feet. Gas streams containing hydrogen sulfide in excess of one grain per 100 standard cubic feet shall be incinerated at temperatures of not less than 1600 degrees (fahrenheit) for a period of not less than 0.5 seconds, or processed in such manner which is equivalent to or more effective for the removal of hydrogen sulfide. [APC-S-1 4.2.b]

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		The permittee shall conduct an annual produced gas analysis including hydrogen sulfide concentration, sulfur content, methane concentration (volume), gross heating value and speciated constituents. In addition, the permittee shall measure the specific gravity and gas-to-oil ratio (GOR) for the produced crude oil/gas. [APC-S-2 II.B(11)]

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AI0000057842 (continued):

Record-Keeping Requirements:

Condition No.	Condition
R-1	<p>For the facility, the permittee shall keep the following records:</p> <ol style="list-style-type: none">(1) Record the monthly and 12 month rolling lbs and/or tons of volatile organic compounds, total hazardous air pollutants and individual hazardous air pollutants including sample calculations;(2) Results of the annual produced gas analysis including hydrogen sulfide concentration, sulfur content, methane concentration (volume), gross heating value and speciated constituents and results of specific gravity and gas-to-oil ratio (GOR) measurements for the produced crude oil/gas(3) produced field gas (MMSCF), monthly and 12 month rolling;(4) produced crude oil (barrels), monthly and 12 month rolling;(5) produced water (barrels), monthly and 12 month rolling;(6) natural gas liquids (barrels), monthly and 12 month rolling;(7) cubic feet of gas flared, monthly and 12 month rolling;(8) record of corrective actions for all flare smoking events;(9) inlet gas volume to natural gas liquids plant. <p>The permittee shall maintain a copy of this record on site for at least five years and shall make them available upon request by the Mississippi Department of Environmental Quality (MDEQ) personnel. [APC-S-2 II.B(11)]</p>

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AI0000057842 (continued):

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. [APC-S-2 V.D]
S-2	The permittee shall submit a report to MDEQ detailing all requirements of 40 CFR Part 60, Subpart OOOO that are applicable to this facility. This report shall include, at minimum, standards, initial compliance demonstration, continuous compliance demonstration, recordkeeping, notification, performance testing, and reporting. This report shall be submitted no later than thirty (30) days after certification of construction. [APC-S-2 II.B(11)]
S-3	Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun. [APC-S-2 V.C(2)]
S-4	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. [APC-S-2 V.C(3)]

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Encana Oil and Gas USA Inc, Lawson 25H-1 and 25-13H-1 Production Facility
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AI0000057842 (continued):

Submittal/Action Requirements:

Condition No.	Condition
S-5	<p>Except as otherwise specified herein, the permittee shall submit a certified annual report, due by the 31st of January for the preceding calendar year. This report shall address the required monitoring specified in the permit including the following:</p> <ol style="list-style-type: none">(1) the monthly and rolling 12-month totals for: VOC, individual HAPs and total HAPs;(2) Results of the annual produced gas analysis including hydrogen sulfide concentration, sulfur content, methane concentration (volume), gross heating value and speciated constituents; and results of specific gravity and gas-to-oil ratio (GOR) measurements for the produced crude oil/gas(3) produced field gas (MMSCF), monthly and 12 month rolling;(4) produced crude oil (barrels), monthly and 12 month rolling;(5) produced water (barrels), monthly and 12 month rolling;(6) natural gas liquid (barrels), monthly and 12 month rolling;(7) cubic feet of gas flared, monthly and 12 month rolling;(8) record of corrective actions for all flare smoking events;(9) inlet gas volume to natural gas liquids plant. [APC-S-2 II.B(11)]

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AI0000057842 (continued):

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. [APC-S-2 V.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]
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 APC-S-1, "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", Section 10. [APC-S-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. [APC-S-2 II.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]

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Facility Requirements
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AI0000057842 (continued):

Narrative Requirements:

Condition No.	Condition
T-8	General Condition: This permit is for air pollution control purposes only. [APC-S-2 I.D]
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. [APC-S-2 II.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. [APC-S-2 I.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. [APC-S-2 II.B(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. [APC-S-2 II.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. [APC-S-2 II.B(15)b]
T-14	General Condition: The permit does not convey any property rights of any sort, or any exclusive privilege. [APC-S-2 II.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. [APC-S-2 II.B(15)d]
T-16	General Condition: This permit shall not be transferred except upon approval of the Permit Board. [APC-S-2 XVI.B]

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AI0000057842 (continued):

Narrative Requirements:

Condition No.	Condition
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. [APC-S-2 I.D(7)]
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. [APC-S-2 V.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. [APC-S-2 V.D(3)]
T-20	General Condition: Except as prohibited in APC-S-2, Section V.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. [APC-S-2 V.D(4)]
T-21	General Condition: Except as otherwise specified in APC-S-2, Section V.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. [APC-S-2 V.D(5)]
T-22	General Condition: Except as otherwise specified in APC-S-2, Section V.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. [APC-S-2 V.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. [APC-S-2 V.D(7)]

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AI0000057842 (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. [APC-S-2 VI.B(3, 4 and 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. [APC-S-2 V.A(4)]</p>

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EQPT0000000001 (AA-001) Process Flare (FL-701):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		<p>Particulate Matter: (1) The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installation of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.</p> <p>(2) The maximum permissible emission of ash and /or particulate matter from fossil fuel burning installations equal to or greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input shall not exceed an emission rate as determined by the relationship</p> $E = 0.8808 * I^{-0.1667}$ <p>Where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour. [APC-S-1 3.4(a)1]</p>
L-2		<p>The permittee shall operate the flare with no visible emissions as determined by EPA Method 22, except for periods not to exceed a total of 5 minutes during any consecutive two (2) hours. [APC-S-2 II.B(10)]</p>
L-3		<p>The permittee shall maintain a flare pilot flame at all times. [APC-S-2 II.B(10)]</p>
L-4		<p>In regards to the flare, the owner or operator has the choice of complying with the heat content specifications in 40 CFR 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR 60.18 (c)(4), or adhering to the requirements in 40 CFR 60.18(c)(3)(i). [APC-S-2 II.B(10)]</p>
L-5		<p>The flare shall be steam assisted, air-assisted, or nonassisted. [APC-S-2 II.B(10)]</p>
L-6		<p>The flare shall be monitored to ensure that it is operated and maintained in accordance with the design. [APC-S-2 II.B(11)]</p>
L-7		<p>The flare shall be operational at all times when emissions are vented to the flare. [APC-S-2 II.B(10)]</p>

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EQPT0000000001 (continued):

Monitoring Requirements:

Condition No.	Parameter	Condition
M-1		The permittee shall visually observe the flare for a minimum of five (5) minutes during operation using EPA Method 22, weekly. If smoking is observed, corrective actions must be taken. The permittee shall perform a follow-up visual observation for a period of two (2) hours using EPA Method 22 immediately after corrections are made to demonstrate compliance with the visible emissions limitations. [APC-S-2 II.B(11)]
M-2		The presence of a flare pilot flame shall be continuously monitored using a thermocouple or any other equivalent device to detect the presence of a flame. [APC-S-2 II.B(11)]

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. [APC-S-2 II.B(11)]
R-2	The permittee shall record anytime the facility is operated without a flare flame present including the date, time, duration and corrective action taken. [APC-S-2 II.B(11)]
R-3	The date and time that smoking was observed, the duration of smoking, the nature and cause of smoking, the date, time and description of the corrective actions(s) taken, and the results of the EPA Method 22 visual observation shall be recorded. [APC-S-2 II.B(11)]

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EQPT0000000002 (AA-002) 0.35 MMBTU/hr Heater Treater Burner Stack (V-103):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Particulate Matter	<p>Particulate Matter: (1) The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installation of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.</p> <p>(2) The maximum permissible emission of ash and /or particulate matter from fossil fuel burning installations equal to or greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input shall not exceed an emission rate as determined by the relationship</p> $E = 0.8808 * I^{-0.1667}$ <p>Where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour. [APC-S-1 3.4.a(1)]</p>
L-2	Opacity	Opacity: The permittee shall not have emissions of opacity greater than or equal to 40% as determined by EPA Reference Method 9, 40 CFR 60, Appendix A. [APC-S-1 4.1.a]

Narrative Requirements:

Condition No.	Condition
T-1	Such air emission 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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ACT0000000002 (AA-009) Produced Water Loading (PWLL):

Narrative Requirements:

Condition No.	Condition
T-1	Such air emission 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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ACT0000000001 (AA-008) Crude Oil Loading (OilLL):

Narrative Requirements:

Condition No.	Condition
T-1	Such air emission 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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EQPT0000000007 (AA-010) Two Phase Separator:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The permittee shall only operate the separator with separated gas routed to and controlled by a flare or routed to a pipeline for product recovery. [APC-S-2 II.B(10)]

Narrative Requirements:

Condition No.	Condition
T-1	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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EQPT0000000016 (AA-019) Heater Treater Vent:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The permittee shall only operate the heater treater with separated gas routed to and controlled by a flare or routed to a pipeline for product recovery. [APC-S-2 II.B(10)]

Narrative Requirements:

Condition No.	Condition
T-1	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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AREA0000000001 (AA-007) Fugitive Emissions (FUG):

Narrative Requirements:

Condition No.	Condition
T-1	Such air emission 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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EQPT0000000015 (AA-018) 500 Hp Natural gas liquids (NGL) Compressor Engine (NGL C-1) :

Limitation Requirements:

Condition No.	Parameter	Condition
L-1	Particulate Matter	<p>Particulate Matter: (1) The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installation of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input.</p> <p>(2) The maximum permissible emission of ash and /or particulate matter from fossil fuel burning installations equal to or greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input shall not exceed an emission rate as determined by the relationship</p> $E = 0.8808 * I^{-0.1667}$ <p>Where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour . [APC-S-1 3.4.a]</p>
L-2	Opacity	Opacity: The compressor engine shall have emissions of opacity less than or equal to 40%, as determined by EPA Reference Method 9, 40 CFR Part 60, Appendix A. [APC-S-1]
L-3		The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 CFR Part 63, Subpart ZZZZ for all stationary Reciprocating Internal Combustion Engines (RICE) operated at this facility. [40 CFR 63_Subpart ZZZZ.63.6585]
L-4		The permittee shall comply with all applicable requirements of the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines, 40 CFR Part 60, Subpart JJJJ for any internal combustion engines operated at this facility. [40 CFR 60.4230]

Permit To Construct Air Emissions Equipment

Encana Oil and Gas USA Inc, Lawson 25H-1 and 25-13H-1 Production Facility
Facility Requirements
Permit Number:0080-00032
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EQPT0000000015 (continued):

Record-Keeping Requirements:

Condition No.	Condition
R-1	The Permittee shall submit a report detailing all applicable requirements of 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ including limitations, notifications, monitoring, testing, reporting and recordkeeping no later than thirty (30) days from the certification of construction date. [APC-S-2 II.B(11)]

Narrative Requirements:

Condition No.	Condition
T-1	Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants. [APC-S-2 II.B(10)]

Permit To Construct Air Emissions Equipment

Encana Oil and Gas USA Inc, Lawson 25H-1 and 25-13H-1 Production Facility
Facility Requirements
Permit Number:0080-00032
Activity ID No.: PER20120001

EQPT000000011 (AA-015) NGL Glycol Dehydrator Still Column Vent (NGL D-1):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The permittee shall only operate the glycol dehydration unit still column vent with the vapors being routed to the flame zone of the glycol dehydration reboiler or to a control device or combination of control devices. [APC-S-2 II.B(10)]
L-2		The permittee shall have emissions of opacity less than or equal to 40%, as determined by EPA Reference Method 9, 40 CFR Part 60, Appendix A. [APC-S-1 3.1.a]
L-3		The glycol dehydration unit is an affected facility located at an area source of hazardous air pollutants; therefore, the permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Plants. [40 CFR 63_SUBPART HH]

Record-Keeping Requirements:

Condition No.	Condition
R-1	<p>Recordkeeping Requirements:</p> <p>The permittee shall maintain records verifying the exemption from the requirements of 40 CFR 63, Subpart HH; and</p> <p>The permittee shall determine glycol dehydration unit natural gas flow rate or benzene emissions as specified in 63.772(b). The permittee shall maintain records to support the determination of exemption in accordance with 40 CFR 63.774(d)(1)(i) or 40 CFR 63.774(d)(1)(ii). [40 CFR 60.670]</p>
R-2	The permittee shall record the date, start time, and duration of any event in which the vapors from the glycol dehydration unit still column vent bypass the flame zone of the glycol dehydration reboiler or the control device or combination of control devices. [APC-S-2 II.B(11)]

Permit To Construct Air Emissions Equipment

Encana Oil and Gas USA Inc, Lawson 25H-1 and 25-13H-1 Production Facility
Facility Requirements
Permit Number:0080-00032
Activity ID No.: PER20120001

EQPT0000000011 (continued):

Submittal/Action Requirements:

Condition No.	Condition
S-1	The permittee shall submit an annual report summarizing the date, start time and duration of any upsets which result in bypass of the vapors from the glycol dehydration unit process vent being routed to the flame zone of the glycol dehydration reboiler or to a control device or combination of control devices. If no bypasses have occurred, the facility should submit a negative declaration. The annual report shall be submitted to MDEQ by the 31st of January. [APC-S-2 II.B(11)]

Narrative Requirements:

Condition No.	Condition
T-1	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)]

Permit To Construct Air Emissions Equipment

Encana Oil and Gas USA Inc, Lawson 25H-1 and 25-13H-1 Production Facility
Facility Requirements
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EQPT0000000012 (AA-016) NGL Glycol Dehydrator Reboiler (NGL GR-1):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The permittee shall have emissions of opacity less than or equal to 40%, as determined by EPA Reference Method 9, 40 CFR Part 60, Appendix A. [APC-S-1 3.1.a]
L-2		Particulate Matter: (1) The maximum permissible emission of ash and/or particulate matter from fossil fuel burning installation of less than 10 million BTU per hour heat input shall not exceed 0.6 pounds per million BTU per hour heat input. (2) The maximum permissible emission of ash and /or particulate matter from fossil fuel burning installations equal to or greater than 10 million BTU per hour heat input but less than 10,000 million BTU per hour heat input shall not exceed an emission rate as determined by the relationship $E = 0.8808 * I - 0.1667$ Where E is the emission rate in pounds per million BTU per hour heat input and I is the heat input in millions of BTU per hour . [APC-S-1 3.4.a]

Narrative Requirements:

Condition No.	Condition
T-1	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)]

Permit To Construct Air Emissions Equipment

Encana Oil and Gas USA Inc, Lawson 25H-1 and 25-13H-1 Production Facility
Facility Requirements
Permit Number:0080-00032
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EQPT0000000013 (AA-017) NGL Methanol Tank (NGL-M-1):

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		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)]

Permit To Construct Air Emissions Equipment

Encana Oil and Gas USA Inc, Lawson 25H-1 and 25-13H-1 Production Facility
Facility Requirements
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GRPT0000000001 (Group 1) Oil Storage Tanks:

Limitation Requirements:

Condition No.	Parameter	Condition
L-1		The permittee shall route vapors from the crude oil storage tanks to the flare or to a pipeline for product recovery. [APC-S-2 II.B(10)]

Narrative Requirements:

Condition No.	Condition
T-1	Such air emission equipment shall be operated as efficiently as possible to provide the maximum reduction of air contaminants. [APC-S-2 II.B(10)]

GENERAL INFORMATION

Encana Oil and Gas USA Inc, Lawson 25H-1 and 25-13H-1 Production Facility
MS Highway 568 and 584
Gillsburg, MS
Amite County

Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
57842	Encana Oil and Gas (USA), Inc.	Official Site Name	6/18/2012	
2800500032	Encana Oil and Gas (USA), Inc.	Air-AIRS AFS (MDEQ USE ONLY)	6/18/2012	
008000032	Encana Oil and Gas USA Inc, Lawson 25H-1 and 25-13H-1 Production Facility	Air-Construction	11/7/2012	

Basin: South Independent Streams 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 APC-S-1, Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants

Mississippi Air Regulations APC-S-2, Permit Regulations for the Construction and/or Operation of Air Emissions Equipment

40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines,

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 Emissions Standards for Hazardous Air Pollutants: Oil and Natural Gas Production Facilities: Area Sources

40 CFR Part 60, Subpart OOOO - New Source Performance Standards for Crude Oil and Natural Gas Production, Transmission, and Distribution