

State of Mississippi



FEDERALLY ENFORCEABLE AIR POLLUTION CONTROL PERMIT

Permit to Operate Air Emissions Equipment at a Synthetic Minor Source

THIS CERTIFIES

Denbury Onshore LLC, Soso Central Processing Facility
473 County Road 5331
Soso, MS
Jasper 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 the Federal Clean Air Act and the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. set., Mississippi Code of 1972), the regulations and standards adopted and promulgated thereunder, and the State Implementation Plan for operating permits for synthetic minor sources.

Mississippi Environmental Quality Permit Board

Mississippi Department of Environmental Quality

Issued/Modified: JAN 0 6 2014

Expires: DEC 31 2018

Permit No. 1300-00071

Agency Interest # 20543

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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:

Title 11, Part 2, Chapter 1: Mississippi Commission on Environmental Quality, Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants (Adopted May 8, 1970. Last Amended December 14, 2011);

Title 11, Part 2, Chapter 2: Mississippi Commission on Environmental Quality, Permit Regulations for the Construction and/or Operation of Air Emissions Equipment (Adopted May 8, 1970; Last Amended July 28, 2005)

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Subject Item Inventory
Permit Number:1300-00071
Activity ID No.: PER20100001

Subject Item Inventory:

ID	Designation	Description
AI20543	20543	Enhanced CO2 Injection Oil and Gas Production
EQPT2	AA-002	Heater Treater Burner rated at 5 MMBtu/hr (Reference No. 2-05-HT-BS)
EQPT27	AA-004	Sand Blowdown Pit (Reference No. 4-05-SBP).
EQPT5	AA-005	Wet Oil Storage Tank with vapors routed to a control flare (63,000 gallons, Ref No. 5-05-OST-V)
EQPT6	AA-006	Dry Oil Storage Tank with vapors routed to a control flare (210,000 gallons, Ref No. 6a-05-OST-CV)
EQPT7	AA-007	Dry Oil Storage Tank with vapors routed to a control flare (210,000 gallons, Ref No. 6b-05-WST-CV)
EQPT9	AA-008	Skimmer Storage Tank with vapors routed to a control flare (63,000 gallons, Ref No. 7a-05-ST-CV)
EQPT10	AA-010	API Oil Separator (63,000 gallons, Ref No. 8-05-SEP)
EQPT12	AA-011	Produced Water Storage Tank with vapors routed to a control flare (210,000 gallons, Ref No. 9a-05-WST-CV)
EQPT13	AA-013	Water Disposal Storage Tank with vapors routed to a control flare (16,800 gallons, Ref No. 9c-05-WST-CV)
EQPT14	AA-014	Water Disposal Tank with vapors routed to a control flare (16,800 gallons, Ref No. 9d-05-WST-CV)
EQPT15	AA-015	Oil Disposal Tank with vapors routed to a control flare (16,800 gallons, Ref No. 9e-05-OST-CV)
EQPT16	AA-016	Chemical Blending Storage Tank with vapors routed to a control flare (63,000 gallons, Ref No. 10-05-CBT-CV)
EQPT17	AA-017	Chemical Blending Storage Tank with vapors routed to a control flare (63,000 gallons, Ref No. 11-05-CBT-CV)
EQPT19	AA-019	Chemical Storage Tank (2,000 gallons, Ref No. 13-05-ST)
EQPT20	AA-020	Chemical Storage Tank (500 gallons, Ref No. 14-05-ST)
EQPT21	AA-021	Chemical Storage Tank (500 gallons, Ref No. 15-05-ST)
EQPT22	AA-022	Heater Treater Vent (Ref No. 20-05-HT-WG) with relief gas routed to a control flare
EQPT23	AA-023	Water Storage Tank Flash Drum (Ref No. 21-05-WFD-WG) with waste gas routed to a control flare
CONT1	AA-024	Atmospheric Tip Flare (Facility Ref.: 17a-05-F)
CONT2	AA-025	Low Pressure Tip Flare (Facility Ref.: 17b-05-F)

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ID	Designation	Description
EQPT29	AA-026	Relief gas from the low pressure process vessels, not captured by the compressor system, routed to the control flare
EQPT24	AA-027	High-pressure Compressor Blowdowns (Reference No. 18-05-CB)
EQPT25	AA-028	Low-pressure Compressor Blowdowns (Reference No. 19-05-CB)
EQPT26	AA-029	Fugitive Emissions (Facility Ref.: 16-05-FE)

Subject Item Groups:

ID	Description	Components
GRPT2	AA-013 through AA-017 with emissions routed to the atmospheric tip flare (AA-024)	EQPT5 Wet Oil Storage Tank with vapors routed to a control flare (63,000 gallons, Ref No. 5-05-OST-V)
		EQPT6 Dry Oil Storage Tank with vapors routed to a control flare (210,000 gallons, Ref No. 6a-05-OST-CV)
		EQPT7 Dry Oil Storage Tank with vapors routed to a control flare (210,000 gallons, Ref No. 6b-05-WST-CV)
		EQPT9 Skimmer Storage Tank with vapors routed to a control flare (63,000 gallons, Ref No. 7a-05-ST-CV)
		EQPT12 Produced Water Storage Tank with vapors routed to a control flare (210,000 gallons, Ref No. 9a-05-WST-CV)
		EQPT13 Water Disposal Storage Tank with vapors routed to a control flare (16,800 gallons, Ref No. 9c-05-WST-CV)
		EQPT14 Water Disposal Tank with vapors routed to a control flare (16,800 gallons, Ref No. 9d-05-WST-CV)
		EQPT15 Oil Disposal Tank with vapors routed to a control flare (16,800 gallons, Ref No. 9e-05-OST-CV)

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ID	Description	Components
GRPT2	Emission Points AA-005 through AA-007, AA-011 and AA-013 through AA-017 with emissions routed to the atmospheric tip flare (AA-024)	EQPT16 Chemical Blending Storage Tank with vapors routed to a control flare (63,000 gallons, Ref No. 10-05-CBT-CV)
		EQPT17 Chemical Blending Storage Tank with vapors routed to a control flare (63,000 gallons, Ref No. 11-05-CBT-CV)
GRPT3	Heater Treater (AA-022), Water Storage Tank Flash Drum (AA-023) and Low Pressure Separator (AA-026) with waste gas and relief gas routed to the Low Pressure Tip Flare (AA-025)	EQPT22 Heater Treater Vent (Ref No. 20-05-HT-WG) with relief gas routed to a control flare
		EQPT23 Water Storage Tank Flash Drum (Ref No. 21-05-WFD-WG) with waste gas routed to a control flare
		EQPT29 Relief gas from the low pressure process vessels, not captured by the compressor system, routed to the control flare
GRPT4	Emission Point AA-019, AA-020 and AA-021 Chemical Storage Tanks	EQPT19 Chemical Storage Tank (2,000 gallons, Ref No. 13-05-ST)
		EQPT20 Chemical Storage Tank (500 gallons, Ref No. 14-05-ST)
		EQPT21 Chemical Storage Tank (500 gallons, Ref No. 15-05-ST)
GRPT5	Control Flares	CONT1 Atmospheric Tip Flare (Facility Ref.: 17a-05-F)
		CONT2 Low Pressure Tip Flare (Facility Ref.: 17b-05-F)
GRPT6	Compressor Blowdowns	EQPT24 High-pressure Compressor Blowdowns (Reference No. 18-05-CB)

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ID	Description	Components
GRPT6	Compressor Blowdowns	EQPT25 Low-pressure Compressor Blowdowns (Reference No. 19-05-CB)

<u>KEY</u>	
ACT = Activity	AI = Agency Interest
AREA = Area	CAFO = Concentrated Animal Feeding Operation
CONT = Control Device	EQPT = Equipment
IA = Insignificant Activity	MAFO = Animal Feeding Operation
PCS = PCS	RPNT = Release Point
TRMT = Treatment	WDPT = Withdrawal Point

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AI0000020543 (20543) Enhanced CO2 Injection Oil and Gas Production:

Limitation Requirements:

Condition No.	n Parameter	Condition
L-1	Hydrogen sulfide	Hydrogen sulfide: 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 . [11 Miss. Admin. Code Pt. 2, R. 1.4.B(2)]
be determined for each emission point on a case-by-case basis to insure that t of sulfur dioxide as determined by acceptable method or methods will be in c Standards for sulfur dioxide. Testing to determine the productive capacity of limitation provisions of the paragraph of the regulation providing such testin		Sulfur Dioxide: Sulfur dioxide concentration limitations in the gas streams resulting from such incineration or processing shall be determined for each emission point on a case-by-case basis to insure that the resulting maximum ground level concentration of sulfur dioxide as determined by acceptable method or methods will be in compliance with the National Ambient Air Quality Standards for sulfur dioxide. Testing to determine the productive capacity of new fields shall be exempted from emission limitation provisions of the paragraph of the regulation providing such testing has been previously negotiated and approved by the Mississippi Office of Pollution Control. [11 Miss. Admin. Code Pt. 2, R. 1.4.B(2)]
Monito	ring Requirements:	
Condition	1	
No.	Parameter	Condition
M-1		The permittee shall conduct an annual produced field gas analysis. This analysis shall include: hydrogen sulfide concentration, sulfur content, methane concentration (volume), gross heating value, molecular weight, specific gravity, well gas-to-oil ratio and produced field gas speciated analysis. The first annual produced field gas analysis shall be conducted no later than 30 days after the re-issuance of this permit
		Additionally, an updated produced field gas analysis must be conducted within 60 days from startup of any additional wells at this production site

. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]

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AI0000020543 (continued):

Submittal/Action Requirements:

Condition No.	Condition
S-1	The permittee shall record and submit, with the certified annual synthetic minor monitoring report, the following information: actual tons per year (in twelve rolling months) of volatile organic compounds; total HAPs; individual HAPs and individual HAPs; barrels of crude oil; barrels of produced water; cubic feet of waste gas combusted; and cubic feet of natural gas sold in twelve rolling months. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]
S-2	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.2.B(10).]
S-3	Except as otherwise specified herein, the permittee shall Submit a certified annual synthetic minor monitoring report: Due annually, by the 31st of January for preceding calendar year. This report shall address any required monitoring specified in the permit. [11 Miss. Admin.Code Pt. 2, R.2.2.B(11).]

Condition No.	Condition
T-1	General Condition: Any activities not identified in the application are not authorized by this permit. [Miss. Code Ann. 49-17-29 1.b]
T-2	General Condition: The permittee shall at all times maintain in good working order and operate as efficiently as possible all air pollution control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. [11 Miss. Admin. Code Pt. 2, R. 2.5.A.]
T-3	General Condition: Solids removed in the course of control of air emissions shall 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 1.a(i and ii)]
T-4	General Condition: Any diversion from or bypass of collection and control facilities is prohibited 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", [11 Miss. Admin.Code Pt. 2, R.1.10.]
T-5	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R.2.10.]

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AI0000020543 (continued):

Condition No.	Condition
<u>NO.</u>	Condition
T-6	General Condition: The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board 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-7	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 cause including, but not limited to: (a) 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 required either a temporary or permanent reduction or elimination of authorized air emissions. [11 Miss. Admin.Code Pt. 2, R. 2.2.C.]
T-8	General Condition: This permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for this 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 condition of the permit. [11 Miss. Admin.Code Pt. 2, R.2.2.B(15)(b).]
T-9	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]
T-10	General Condition: The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations. [11 Miss. Admin.Code Pt. 2, R. 2.2.B(15)(c).]
T-11	General Condition: Nothing herein contained shall be construed as releasing the permittee from any liability for damage to persons or property by reason of the installation, maintenance, or operation of the air cleaning facility, or from compliance with the applicable statutes of the State, or with local laws, regulations, or ordinances. [11 Miss. Admin.Code Pt. 2, R. 2.2.B(7).]

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AI0000020543 (continued):

Condition No.	Condition
T-12	General Condition: This permit may only be transferred upon approval of the Mississippi Environmental Quality Permit Board. [11 Miss. Admin. Code Pt. 2, R. 2.16.B.]
T-13	General Condition: This permit is for air pollution control purposes only. [11 Miss. Admin.Code Pt. 2, R. 2.1.D(1).]
T-14	General Condition: This permit is a Federally-approved permit to operate a synthetic minor source as described in 11 Miss. Admin. Code Pt. 2, R. 2.4.D [11 Miss. Admin.Code Pt. 2, R. 2.4.D.]
T-15	General Condition: 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. [11 Miss. Admin.Code Pt. 2, R. 2.1.D(7).]
T-16	General Condition: The permittee shall furnish to MDEQ within a reasonable time any information MDEQ 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 MDEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to MDEQ along with a claim of confidentiality. [11 Miss. Admin.Code Pt. 2, R. 2.2.B(15)(d).]

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AI0000020543 (continued):

Condition No.	Condition
T-17	General Condition: This permit does not authorize a modification as defined in 11 Miss. Admin. Code Pt. 2, Ch. 2 "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment". Modification is defined as "Any physical change in or change in the method of operation of a facility which increases actual emissions or 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 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 a norder 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: (i) 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 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 52.51, or under regulations approved pursuant to Subpart I or 40 CFR 51.166; or (f) any change in ownership of the stationary source" [11 Miss. Admin.Code Pt. 2, R. 2.1.D(2).]
T-18	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 this 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-19	General Condition: The permittee shall retain all required records, monitoring data, supported information and reports for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-chart recordings or other data for continuous monitoring instrumentation, and copies of all reports required by this permit. Copies of such records shall be submitted to MDEQ as required by Applicable Rules and Regulations or this permit upon request. [11 Miss. Admin.Code Pt. 2, R.2.9.]
T-20	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 constructing or operating without a valid permit. [11 Miss. Admin.Code Pt. 2, R.2.2.B(5).]

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AI0000020543 (continued):

Narrative Requirements:

Condition No.	Condition
T-21	General Condition: Emergencies (a) Except as otherwise specified herein, an emergency means any situation arising from sudden and reasonably unforseeable 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 as follows:
- (i) an emergency occurred and that the permittee can identify the cause(s) of the emergency; (ii) the permitted facility was at the time being properly operated;
- (iii) 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 (iv) the permittee submitted notice of the emergency to MDEQ within two (2) working days of the time when emission limitations were exceeded due to the emergency which contained 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 any 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 [11 Miss. Admin.Code Pt. 2, R.2.2.B(10).]

T-22 General Condition: Upsets

- (a) The occurrence of an upset constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards or other requirements of Applicable Rules and Regulations or any applicable permit if the permittee demonstrates through properly signed contemporaneous operating logs, or other relevant evidence that include information as follows: (i) an upset occurred and that the permittee can identify the cause(s) of the upset; (ii) the source was at the time being properly operated; (iii) during the upset the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit; (iv) the permittee submitted notice of the upset to the DEQ within five (5) working days of the time the upset began which contained a description of the upset, any steps taken to mitigate emissions, and corrective actions taken.
- (b) In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.
- (c) This provision is in addition to any upset provision contained in any applicable requirement. [11 Miss. Admin.Code Pt. 2, R.1.10.]

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AI0000020543 (continued):

Narrative Requirements:

[11 Miss. Admin.Code Pt. 2, R.2.8.]

Condition	
No.	Condition
T-23	General Condition: Startups and Shutdowns (a) Startups and shutdowns are part of normal source operation. Emissions limitations applicable to normal operation apply during startups and shutdowns except as follows: (i) when sudden, unavoidable breakdowns occur during a startup or shutdown, the event may be classified as an upset subject to the requirements above; (ii) when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons; or (iii) when the emissions standards applicable during a startup or shutdown are defined by other requirements of Applicable Rules and Regulations or any applicable permit. (b) In any enforcement proceeding, the permittee seeking to establish the applicability of any exception during a startup or shutdown has the burden of proof. (c) In the event this startup and shutdown provision conflicts with another applicable requirement, the more stringent requirement shall apply. [11 Miss. Admin.Code Pt. 2, R.1.10.]
T-24	General Condition: Maintenance (a) Maintenance should be performed during planned shutdown or repair of process equipment such that excess emissions are avoided. Unavoidable maintenance that results in brief periods of excess emissions and that is necessary to prevent or minimize emergency conditions or equipment malfunctions constitutes an affirmative defense to an enforcement action brought for noncompliance with emission standards, or other regulatory requirements if the permittee can demonstrate the following: (i) the permittee can identify the need for the maintenance; (ii) the source was at the time being properly operated; (iii) during the maintenance the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements of Applicable Rules and Regulations or any applicable permit; (iv) the permittee submitted notice of the maintenance to MDEQ within five (5) working days of the time the maintenance began or such other times as allowed by MDEQ, which contained a description of the maintenance, any steps taken to mitigate emissions, and corrective actions taken. (b) In any enforcement proceeding, the permittee seeking to establish the applicability of this section has the burden of proof. (c) In the event this maintenance provision conflicts with another applicable requirement, the more stringent requirement shall apply. [11 Miss. Admin.Code Pt. 2, R.1.10.]
T-25	General Condition: For renewal of this permit the applicant shall make application not less than one-hundred eighty (180) days prior to the expiration date of the permit substantiated with current emissions data, test results or reports or other data as deemed necessary by the Mississippi Environmental Quality Permit Board.

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EQPT0000000002 (AA-002) Heater Treater Burner rated at 5 MMBtu/hr (Reference No. 2-05-HT-BS):

Condition No.	Parameter	Condition
L-1	Particulate Matter	Particulate Matter: Particulate Matter Limitation:
		(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. [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)a]
L-2	Opacity	Opacity: The heater treater burner (AA-002) shall have emissions of opacity less than or equal to 40% as determined by EPA Reference Method 9, 40 CFR 60, Appendis A. [11 Miss. Admin. Code Pt. 2, R. 1.3.A(1)]
L-3		The heater treater burner (AA-002) 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(11)]

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EQPT0000000027 (AA-004) Sand Blowdown Pit (Reference No. 4-05-SBP).:

Condition No.	Parameter	Condition
L-1		The sand blow down pit 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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GRPT000000002 (Above Ground Storage Tanks) Emission Points AA-005 through AA-007, AA-011 and AA-013 through AA-017 with emissions routed to the atmospheric tip flare (AA-024):

Condition		
No.	Parameter	Condition
L-1		For Emission Points AA-005 through AA-007, AA-011 and AA-013 through AA-017, the permittee shall only operate with emissions routed to and controlled by the flare (Emission Point AA-024). [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-2		Emission Points AA-005 through AA-007, AA-011 and AA-013 through AA-017 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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GRPT000000003 (Separators & Relief Gas) Heater Treater (AA-022), Water Storage Tank Flash Drum (AA-023) and Low Pressure Separator (AA-026) with waste gas and relief gas routed to the Low Pressure Tip Flare (AA-025):

Condition No.	Parameter	Condition
L-1		For Emission Point AA-022, AA-023, and AA-026 the permitee shall only operate the air emission equipment with emissions routed to and controlled by the flare (Emission Point AA-025). [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-2		Emission Points AA-022, AA-023 and AA-026 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 (Chemical Storage Tanks) Emission Point AA-019, AA-020 and AA-021 Chemical Storage Tanks:

Condition No. Parameter	Condition
L-1	Emission Points AA-019, AA-020 and AA-021 shall operate air emissions equipment 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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GRPT0000000005 (Control Flares) Control Flares:

Condition		
No.	Parameter	Condition
L-1		Control Flare (AA-024) shall be used to control emissions from the following equipment: 1500 BBL Oil Storage Tank (AA-005), 5000 BBL Oil Storage Tank (AA-006), 5000 BBL Oil Storage Tank (AA-007), 5000 BBL Produced Water Storage Tank (AA-011), 400 BBL Water Disposal Tank-Vent (AA-013), 400 BBL Water Disposal Tank-Vent (AA-014), 400 BBL Oil Disposal Tank (AA-015), 1500 BBL Inhibitor Oil Tank (AA-016), 1500 BBL Inhibitor Oil Tank (AA-017). [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]
L-2		Control Flare AA-025 shall be used to control emissions from the following equipment: Heater Treater (AA-022), Water Flash Drum Waste Gas (AA-023), Low Pressure Separator Relief Gas (AA-026), [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-3		For the flares, the permittee shall comply with all applicable requirements of 40 CFR 60.18, unless otherwise noted herein. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-4		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. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]
L-5		Particulate Matter Limitation:
		(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 . [11 Miss. Admin. Code Pt. 2, R. 1.3.D(1)]

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GRPT0000000005 (continued):

Limitation Requirements:

Condition		
No.	Parameter	Condition
L-6		The permittee shall maintain a flare pilot flame, auto ignitor, or any other equivalent device at all times when emissions are routed to it. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-7		The net heating value of the gas being combusted shall be 300 Btu/scf or greater if the flare is steam-assisted or air-assisted; or the net heating value of the gas being combusted shall be 200 Btu/scf or greater if the flare is non-assisted. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-8		Flares shall be operated at all times when emissions are being vented to them. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
L-9		Flares shall be operated and maintained in conformance with their design and manufacturer's recommendations. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
Monitori	ing Requirements:	

Monitoring Requirements.

Condition No.	Parameter	Condition
M-1		The permittee shall monitor the presence of the flare pilot flame or auto ignitor by one of the following methods: using a thermo-couple or any other equivalent device to detect the presence of a flame; or visually observe the presence of the flare flame, daily. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]
M-2		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 immediatley after corrections are made to demonstrate compliance with the visible emissions limitations. [11 Miss. Admin. Code Pt. 2, Ch. 2. 2.2.B(10)]

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GRPT0000000005 (continued):

Monitoring Requirements:

Condition No.	on Parameter	Condition
M-3		The net heating value of the gas being combusted shall be determined annually by the methods specified in 40 CFR 60.18 (f) or by the annual flare gas analysis. Analysis must demonstrate that the heat content of the flare gas is 300 Btu/scf or greater, if the flare is steam-assisted; or the net heating value of the gas being combusted is 200 Btu/scf or greater, if the flare is non-assisted. [11 Miss. Admin. Code Pt. 2, Ch. 1. 2.2.B(11)]
M-4		The permittee shall monitor the volume of gas combusted in the flare. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(11)]
R-2	The permittee shall maintain a record and/or a log documenting all visual observations/test, the nature and cause of any visible emissions, any corrective actions(s) taken to prevent or minimize the emissions, the date and time when visible observations were conducted and the date and time when corrective action was taken. [11 Miss. Admin. Code Pt. 2, Ch. 2. 2.2.B(11)]
R-3	The permittee shall record on a log sheet anytime the facility is operating without a flame present and the corrective action taken. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]
R-4	The permittee shall keep a record of the net heating value of the stream combusted in the flare. [11 Miss. Admin. Code Pt. 2, R. 2.2.B(10)]

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GRPT000000006 (Compressor Blowdown) Compressor Blowdowns:

Condition No.	Parameter	Condition
L-1		The low and high compressor blowdown (AA-026 and AA-027) shall be operated as efficiently as possible to provide the maximum reduction of air contaminants. [APC-S-2 II.B(10)]

GENERAL INFORMATION

Denbury Onshore LLC, Soso Central Processing Facility
473 County Road 5331
Soso, MS
Jasper County

Alternate/Historic Identifiers

ID	Alternate/Historic Name	User Group	Start Date	End Date
20543	Denbury Onshore, LLC, Soso Central Processing Facility	Official Site Name	4/4/2005	
2806100071	Denbury Onshore, Soso Central Processing	Air-AIRS AFS	6/1/2005	
MSR103574	Denbury Onshore, LLC, Soso Central Processing Facility	GP-Construction	6/27/2005	5/29/2012
130000071	Denbury Onshore, LLC, Soso Central Processing Facility	Air-Construction	10/5/2005	
130000071	Denbury Onshore, LLC, Soso Central Processing Facility	Air-Synthetic Minor Operating	10/5/2005	1/31/2012
130000071	Denbury Onshore LLC, Soso Central Processing Facility	Air-Synthetic Minor Operating	1/6/2014	12/31/2018

Basin: Pascagoula River Basin

Location Description: PG- Plant Entrance (General). Data collected by J. Dewayne Headrick on 11/14/2005.

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:

Title 11, Part 2, Chapter 1: Mississippi Commission on Environmental Quality, Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants (Adopted May 8, 1970. Last Amended December 14, 2011);

Title 11, Part 2, Chapter 2: Mississippi Commission on Environmental Quality, Permit Regulations for the Construction and/or Operation of Air Emissions Equipment (Adopted May 8, 1970; Last Amended July 28, 2005)