

**STATE OF MISSISSIPPI
AIR POLLUTION CONTROL
PERMIT**

TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

Samson Resources Company
Sandy Hook Compressor Station,
625 Highway 43 South
Columbia, Mississippi
Marion 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



AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: MAY 04 2006

Permit No.: 1740-00049

Part I
General Conditions

1. Any activities not identified in the application are not authorized by this permit.
2. All air pollution control facilities shall be designed and constructed such as to allow proper operation and maintenance of the facilities.
3. 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.
4. 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.
5. The construction of facilities shall be performed in such a manner as to reduce both point source and fugitive dust emissions to a minimum.
6. The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon presentation of credentials:
 - 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 emissions.
7. 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 requires either a temporary or permanent reduction or elimination of authorized air emissions.

Part I
General Conditions
(Continued)

8. 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.
9. 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.
10. 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. This permit may only be transferred upon approval of the Mississippi Environmental Quality Permit Board.
12. This permit is for air pollution control purposes only.
13. Approval to construct will expire should construction not begin within eighteen (18) months of the issuance of this permit, or should construction be suspended for eighteen (18) months.
14. Prior to startup of air emissions equipment at this source, the permittee must obtain a Permit to Operate and submit certification that construction was completed in accordance with the approved plans and specifications.

Part II
Emission Points and Pollution Control Device Summary

Emission Point	Description
AA-001	The 1,215 brake horsepower, 3.1 MMBTUH, natural gas fired, Waukesha compressor engine (Model L 5790 GSI). The unit is equipped with a catalytic converter for control of Nitrogen Oxides (NO _x), carbon monoxide (CO) and Volatile Organic Compound (VOC) emissions.

Part III
Emission Limitations and Monitoring Requirements

Beginning **[Issuance Date]**, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from Emission Point AA-001, the 1,215 HP Waukesha Compressor Engine.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

EMISSION LIMITATIONS

Nitrogen Oxides (NO _x)	5.3 lbs/hr and 23.3 tons/year, as determined by EPA Test Method 7, 40 CFR 60, Appendix A.
Carbon Monoxide (CO)	5.3 lbs/hr and 23.3 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.
Volatile Organic Compounds (VOC)	0.64 lbs/hr and 2.82 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A.
Opacity	40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.

All test methods specified above shall be those versions, or their approved equivalents, which are in effect **[Issuance Date]**.

OPERATING RESTRICTIONS

- (1) The permittee shall not operate Emission Point AA-001 without a catalytic converter.
- (2) The permittee shall operate and maintain the engine and catalytic converter in a manner consistent with good air pollution control practices to minimize emissions. This operation and maintenance shall occur in accordance with the manufacturer's written instructions or other written instructions as developed and maintained by the permittee.

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PART III
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS
(Emission Point AA-001 Continued)

RECORDKEEPING REQUIREMENTS

- (3) The permittee shall develop and keep on-site, an adequately detailed, written inspection and maintenance plan, per manufactures specifications, outlining:
- a. The monitoring equipment involved with the operation of the engine and catalytic converter.
 - b. Data recording procedures.
 - c. Acceptable operating parameters necessary for ensuring proper operation of the engine and catalytic converter. These parameters should match the operating conditions identified during the most recent demonstration of compliance.
 - d. Specific corrective actions should the parametric monitoring indicate equipment failure.
- (4) The permittee shall keep records of all maintenance performed on each engine and/or catalytic converter as a support of the requirement to operate each engine in a manner consistent with good air pollution control practices to minimize emissions.

DEMONSTRATION OF COMPLIANCE

- (5) The permittee shall demonstrate compliance with the NO_x, CO and VOC emission limitations by stack testing in accordance with EPA Reference Methods 7, 10 and 25 or their approved equivalents and submittal of a stack test report within 180 days of startup, but no later than 60 days of attaining maximum production rate.

A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least TEN (10) DAYS notice should be given so that an observer may be scheduled to witness the test(s).

Part IV
Other Requirements

- (1) This permit does not authorize a modification as defined in Regulation APC-S-2, "Permit Regulations for the Construction and/or Operation of Air Emissions Equipment". A modification requires a Permit to Construct and a modification of this permit. Modification is defined as "Any physical change in or change in the method of operation of a facility which increases the actual emissions or the potential uncontrolled emissions of any air pollutant subject to regulation under the Federal Act emitted into the atmosphere by that facility or which results in the emission of any air pollutant subject to regulation under the Federal Act into the atmosphere not previously emitted. A physical change or change in the method of operation shall not include:
- a. routine maintenance, repair, and replacement;
 - b. use of an alternative fuel or raw material by reason of an order under Sections 2 (a) and (b) of the Federal Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;
 - c. use of an alternative fuel by reason of an order or rule under Section 125 of the Federal Act;
 - d. use of an alternative fuel or raw material by a stationary source which:
 - 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 52.21 or under regulations approved pursuant to 40 CFR 51.166; or
 - ii) the source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved 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 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166; or
 - f. any change in ownership of the stationary source."

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PART IV
OTHER REQUIREMENTS
(CONTINUED)

- (2) The permittee shall retain all required records and support information on-site and in log form for a period of at least five (5) years from the date of the record. These records shall be made available to the Mississippi Department of Environmental Quality Office of Pollution Control, the Mississippi Environmental Quality Permit Board and/or their authorized representatives upon request.
- (3) 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) days of the time the deviation began.