

STATE OF MISSOURI **PERMIT BOOK**



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: **022008-001** Project Number: 2007-10-064

Parent Company: MoGas Pipeline LLC

Parent Company Address: 110 Algana Court, St. Peters, MO 63376

Installation Name: Curryville Compressor Station

Installation Address: 16140 Pike County Road 31, Curryville, MO 63339

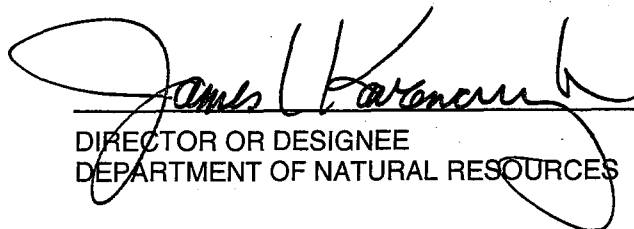
Location Information: Pike County, S19, T53N, R4W

Application for Authority to Construct was made for:
The construction of a new compression station. This review was conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

FEB 4 2008

EFFECTIVE DATE



DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available not more than 60 days but at least 30 days in advance of this date. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located with 15 days after the actual start up of this (these) air contaminant source(s).

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

Page No.	3
Permit No.	
Project No.	2007-10-064

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Curryville Compressor Station
Pike County, S19, T53N, R4W

1. Performance Testing

- A. Curryville Compressor Station (MoGas) shall conduct a performance test to verify that the emission rates from each of the compressor engines (EP-01, EP-02, EP-03 and EP-04) while combusting natural gas do not exceed those stated in the application as listed below:

Pollutant	Emission Rate (pound per MMBTU)
NO _x *	0.4754

*Nitrogen Oxide

- B. This test shall be performed within sixty (60) days after achieving the maximum production rate of the installation, but not later than 180 days after initial start-up of operation and shall be conducted in accordance with the Stack Test Procedures outlined in Special Condition Number 2.
- C. If the test results indicate that MoGas is exceeding the emissions rate listed in condition 1.A, MoGas will be in violation of the conditions of this permit, and a new permit will be required.

2. Proposed Test Plan

- A. A completed Proposed Test Plan Form (enclosed) must be submitted to the Air Pollution Control Program thirty (30) days prior to the proposed test date so that the Air Pollution Control Program may arrange a pretest meeting, if necessary, and assure that the test date is acceptable for an observer to be present. The Proposed Test Plan may serve the purpose of notification and must be approved by the Director prior to conducting the required emission testing.
- B. Two (2) copies of a written report of the performance test results shall be submitted to the Director within thirty (30) days of completion of any required testing. The report must include legible copies of the raw data sheets, analytical instrument laboratory data, and complete sample calculations from the required U.S. EPA Method for at least one (1)

Page No.	4
Permit No.	
Project No.	2007-10-064

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

sample run.

- C. The test report is to fully account for all operational and emission parameters addressed both in the permit conditions as well as in any other applicable state or federal rules or regulations.
3. Emergency Generator Requirements
- A. The operating hours of the emergency generator (EP-05) shall not exceed 500 hours in any consecutive twelve (12) month period. To facilitate the record keeping for this condition, the emergency equipment shall be equipped with a non-resettable running time meter.
 - B. MoGas shall maintain an accurate record of the number of hours the emergency generators are operated. Attachment A or an equivalent form shall be used for this purpose. MoGas shall maintain all records required by this permit for not less than five (5) years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include the operating hours for that month and the total hours of operation for the previous twelve (12) month period.
 - C. MoGas shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of the month during which the records from Special Condition 2.B indicate that the source exceeds the Special Condition 2.A.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (6) REVIEW

Project Number: 2007-10-064
Installation ID Number: 163-0055
Permit Number:

Curryville Compressor Station
16140 Pike County Road 31
Curryville, MO 63339

Complete:

Parent Company:
MoGas Pipeline LLC
110 Algana Court
St. Peters, MO 63376

Pike County, S19, T53N, R4W

REVIEW SUMMARY

- Curryville Compressor Station has applied for authority to construct a new compression station.
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are formaldehyde.
- None of the New Source Performance Standards (NSPS) apply to the proposed equipment.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) or currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- A Miratech catalytic converter system is being used to control the volatile organic compound (VOC), carbon monoxide (CO) and hazardous air pollutant (HAP) emissions from the equipment in this permit.
- This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of nitrogen oxides (NO_x) and volatile organic compounds (VOCs) are above de minimis levels.
- This installation is located in Pike County, an attainment area for all criteria air pollutants.
- This installation is not on the List of Named Installations [10 CSR 10-6.020(3)(B), Table 2].
- Ambient air quality modeling was performed to determine the ambient impact of NO_x.

- Emissions testing is required for the new equipment.
- A Basic Operating Permit application is required for this installation within 30 days of equipment startup.
- Approval of this permit is recommended with special conditions.

PROJECT DESCRIPTION

MoGas Pipeline LLC has applied for authority to construct a new compression station in Curryville, Missouri. This compressions station will be comprised of four (4) 1,478 brake horse power natural gas fired Waukesha L7042GL lean burn engines and one Caterpillar G3412C LE lean burn engine, which will be used as a backup generator.

No permits have been issued to Curryville Compressor Station from the Air Pollution Control Program.

EMISSIONS/CONTROLS EVALUATION

The emission factors and control efficiencies for NO_x, VOCs, carbon monoxide (CO) and formaldehyde (H₂CO) used in this analysis were submitted by the applicant and obtained from manufacturer's specifications. Emission rates calculated from the NO_x emission factor and control efficiencies will be verified through testing. The emission factors for particulate matter less than ten (10) microns in aerodynamic diameter (PM₁₀) and sulfur oxides (SO_x) were obtained from the Environmental Protection Agency (EPA) document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition, Section 3.2 *Natural Gas-fired Reciprocating Engines*, Supplement F, August 2000. The PM₁₀ emission factor is filterable PM₁₀ plus the condensable particulate matter. A gas heat of combustion value of 905.52 British thermal units (Btu) per cubic feet (ft³) of gas was used to convert the emission factors from pounds of pollutant per Btu to pounds of pollutant per ft³ of natural gas. Potential emissions of the application represent the emissions from the four compressor engines operating 8760 hours per year and the emergency generator operating 500 hours per year. The following table provides an emissions summary for this project.

Table 1: Emissions Summary (tons per year)

Pollutant	Regulatory De Minimis Levels	Existing Potential Emissions	Existing Actual Emissions	Potential Emissions of the Application	New Installation Conditioned Potential
PM ₁₀	15.0	N/A	N/A	1.99	N/A
SO _x	40.0	N/A	N/A	0.11	N/A
NO _x	40.0	N/A	N/A	88.44	N/A
VOC	40.0	N/A	N/A	44.33	N/A
CO	100.0	N/A	N/A	59.42	N/A
HAPs	10.0/25.0	N/A	N/A	2.45	N/A

N/A = Not Applicable

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (6) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of NO_x and VOCs are above de minimis levels.

APPLICABLE REQUIREMENTS

Curryville Compressor Station shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
The emission fee is the amount established by the Missouri Air Conservation Commission annually under Missouri Air Law 643.079(1). Submission of an Emissions Inventory Questionnaire (EIQ) is required April 1 for the previous year's emissions.
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-3.090

SPECIFIC REQUIREMENTS

- *Restriction of Emission of Sulfur Compounds, 10 CSR 10-6.260*

AMBIENT AIR QUALITY IMPACT ANALYSIS

Ambient air quality modeling was performed to determine the ambient impact of NO_x. Table 2 lists the results of the analysis and more details can be found in the memo "Ambient Air Quality Impact Analysis (AAQIA) for MoGas Pipeline, LLC-Curryville Compressor Station.

Table 2: Air Quality Analysis

Pollutant	Modeled Impact	NAAQS	Time Period
NO _x	30.56 µg/m ³	100 µg/m ³	Annual

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (6), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Michael Mittermeyer
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated 10/15/2007, received 10/17/2007, designating MoGas Pipeline L.L.C. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Northeast Regional Office Site Survey, dated 10/30/2007.
- Ambient Air Quality Impact Analysis (AAQIA) for MoGas Pipeline, LLC-Curryville Compressor Station.

Mr. David J. Ries
President
Curryville Compressor Station
110 Algana Court
St. Peters, MO 63376

RE: New Source Review Permit - Project Number: 2007-10-064

Dear Mr. Ries:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files.

Operation in accordance with these conditions, your new source review permit application and with your operating permit is necessary for continued compliance.

The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact me at the departments' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Kendall B. Hale
New Source Review Unit Chief

KBH:mml

Enclosures

c: Northeast Regional Office
PAMS File 2007-10-064
Permit Number: