



Montana Department of  
**ENVIRONMENTAL QUALITY**

Brian Schweitzer, Governor

P.O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • www.deq.mt.gov

January 30, 2008

Mike Farrens  
Highline Exploration, Inc.  
P.O. Box 20057  
Tuscaloosa, AL 35402

**RECEIVED**

JAN 31 2008

LEGISLATIVE ENVIRONMENTAL  
POLICY OFFICE

Dear Mr. Farrens:

Air Quality Permit #4161-00 is deemed final as of January 30, 2008, by the Department of Environmental Quality (Department). This permit is for the construction and operation of the Hardin natural gas compressor station. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Vickie Walsh  
Air Permitting Program Supervisor  
Air Resources Management Bureau  
(406) 444-3490

VW:TG:ob  
Enclosure

**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Permitting and Compliance Division**  
**Air Resources Management Bureau**  
**P.O. Box 200901, Helena, Montana 59620**  
**(406) 444-3490**

**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

*Issued To:* Highline Exploration, Inc.  
Hardin Compressor Station  
P.O. Box 20057  
Tuscaloosa, AL 35402

*Air Quality Permit Number:* 4161-00

*Preliminary Determination Issued:* 12/27/07

*Department Decision Issued:* 1/14/08

*Permit Final:* 1/30/08

1. *Legal Description of Site:* Highline proposes to construct and operate a natural gas compressor engine located in the SW $\frac{1}{4}$  of the NW $\frac{1}{4}$  of Section 17, Township 1 South, Range 33 East in Big Horn County, Montana. The facility would be known as the Hardin Compressor Station.
2. *Description of Project:* Montana Air Quality Permit (MAQP) #4161-00 would be issued to Highline for the construction and operation of the Hardin Compressor Station. The facility would be a natural gas compressor station incorporating two 1340 bhp capacity lean-burn natural gas compressor engines with NSCR unit and an AFR and would be equipped with two triethylene glycol (TEG) dehydrator reboiler units for the dehydration of field gas to meet pipeline specifications.
3. *Objectives of Project:* Highline proposes to operate two natural gas compressor engines and a TEG dehydration unit at the above mentioned site. The purpose would be to increase the pressure of the gas entering the facility and to remove moisture from the gas stream.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the “no-action” alternative. The “no-action” alternative would deny issuance of the MAQP to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because Highline demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no-action” alternative was eliminated from further consideration.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be included in MAQP #4161-00.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and would not unduly restrict private property rights.

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts			X			Yes

**SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS:** The following comments have been prepared by the Department.

**A. Terrestrial and Aquatic Life and Habitats**

Minor NO<sub>x</sub>, CO, and VOC emissions would be expected in this project area, but the emissions would have only a minor impact on existing terrestrial, aquatic life, and habitats of the area. The proposed project is located in a remote area where the land use is agricultural-grazing. The Department has determined that any impacts from emissions or deposition of pollutants would be minor due to dispersion characteristics of the pollutants, the atmosphere, and the conditions that would be placed in MAQP #4161-00.

**B. Water Quality, Quantity, and Distribution**

This permitting action would have little or no effect on the water quality, water quantity, and distribution, as there would be no discharge to groundwater or surface water associated with this project. The proposed project would not require surface or groundwater use and there would be no change in drainage patterns. However, there could be minor pollutant deposition on surface waters near the project area. Therefore, the project would have minor, if any, impacts to water quality, quantity or distribution in the area.

**C. Geology and Soil Quality, Stability, and Moisture**

This permitting action would have a minor effect on geology and soil properties with the total land disturbance being very minimal. Some minor disturbance would occur during construction of the compressor station, but after construction, the only disturbance would be for occasional maintenance and general operation of the compressor engine. NO<sub>x</sub>, CO, and VOC emissions from this project may have a minor effect on the soil quality; however, the air quality permit associated with this project would contain limitations and conditions to minimize the effect of the emissions on the surrounding environment. The Department determined that any impacts from deposition would be minor due to dispersion characteristics of pollutants, the atmosphere, and conditions that would be placed in MAQP #4161-00 (see Section 7.F of this EA).

#### D. Vegetation Cover, Quantity, and Quality

This permitting action would have minor effects on the surrounding vegetation because the footprint of the proposed compressor station is minimal. Other than the area encompassed by the compressor station, no additional vegetation at the site would be disturbed for the project. The NO<sub>x</sub>, CO, and VOC emissions in the area from this project may have a minor effect on the surrounding vegetation; however, the air quality permit associated with this project would contain limitations to minimize the effect of the emissions on the surrounding environment. Overall, this project would have minor effects on the vegetation cover, quantity and quality.

#### E. Aesthetics

Construction of the compressor station will have minor impacts on the surrounding property from both the visual perspective, as well as noise pollution. However, most of the disturbance will be temporary, and once construction is complete, the natural landscaping and aesthetic value of the property will be restored. With the exception of some minimal noise from the operation of the compressor engine and the corresponding small compressor building, the Department determined only minor changes in the aesthetic value of the site will be experienced.

#### F. Air Quality

The Department has determined that the compressor engine would emit small amounts of NO<sub>x</sub>, CO, VOC and very small amounts of HAPs, PM<sub>10</sub>, and SO<sub>2</sub>. However, air emissions from the facility would be minimized by conditions that would be placed in MAQP #4161-00. The applicant would be required to install the maximum air pollution control capability that is technically and economically feasible, except that BACT would be utilized. The permit would also include conditions requiring Highline to use reasonable precautions to control fugitive dust emissions.

The Department believes controlled emissions from the source would not cause or contribute to a violation of any ambient air quality standard. Although deposition of pollutants would occur as a result of operating the facility, the Department determined that the impacts from deposition of pollutants would be minor due to dispersion characteristics of pollutants (stack height, stack temperature, etc.) and atmospheric conditions (wind speed, wind direction, ambient temperature, etc.). Therefore, any impacts to air quality from the proposed facility would be minor.

#### G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department, in an effort to assess any potential impacts to any unique endangered, fragile, or limited environmental resources in the proposed area of operation (SW<sup>1</sup>/<sub>4</sub> of the NW<sup>1</sup>/<sub>4</sub> of Section 17, Township 1 South, Range 33 East in Big Horn County, Montana) contacted the Montana Natural Heritage Program (MNHP). Species of concern located in the area include the *Centrocercus urophasianus* (Greater Sage-grouse), *Sorex preblei* (Preble's Shrew), *Heterodon nasicus* (Western Hog-nosed Snake), *Lampropeltis triangulum* (Milksnake), and *Sorex merriami* (Merriam's Shrew). Because the compressor engine is relatively small with minor emissions, and there will be minimal disturbance of the property and the surroundings, the Department has determined that there will be a minor disturbance (if any) to unique, endangered, fragile, or limited environmental resources in the area.

H. Demands on Environmental Resource of Water, Air, and Energy

Highline proposed to add two compressor engines near the existing gas line to increase the pressure of the gas entering the facility. As proposed, there would be no impact to water because the project would not use surface water or groundwater, nor would the project require any discharge to surface or groundwater. The proposed compressor engines would require energy to operate, and operation of the engine would cause emissions in the area, including: NO<sub>x</sub>, CO, VOC, HAPs, PM<sub>10</sub>, and SO<sub>2</sub>. However, given the characteristics and concentration of pollutants emitted, the impacts on the water, air, and energy resources in the proposed project area would be minor due to the dispersion characteristics of pollutants (see Section 7.F of this EA). Finally, because the project would be small by industrial standards, the Department determined that impacts to the environmental resources would be minor.

I. Historical and Archaeological Sites

The Department contacted the Montana Historical Society, State Historical Preservation Office (SHPO), in an effort to identify any historical and archaeological sites that may be present in the proposed area of construction and operation. Search results concluded that there are no previously recorded historical or archaeological resources of concern within the proposed area. According to the SHPO, there would be a low likelihood of adverse disturbance to any known archaeological or historic site. Therefore, no impacts upon historical or archaeological sites would be expected as a result of installing compressor engines at the Hardin Facility.

J. Cumulative and Secondary Impacts

The proposed project would cause minor effects on the physical and biological aspects of the human environment because the project would cause a slight increase in emissions of NO<sub>x</sub>, CO, and VOC in the proposed area. However, conditions placed in MAQP #4161-00 ensure that only minor air quality impacts would occur. Limitations would be established in the permit to minimize air pollution. Overall, any impacts to the physical and biological environment would be minor.

8. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				X		Yes
B	Cultural Uniqueness and Diversity				X		Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			X			Yes
G	Quantity and Distribution of Employment			X			Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals			X			Yes
L	Cumulative and Secondary Impacts			X			Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores

The proposed project would not cause disruption to any native or traditional lifestyles or communities (social structures or mores) in the area because the proposed project is located in a remote area. The proposed project would not change the predominant use of the surrounding area and the facility would be relatively small by industrial standards.

B. Cultural Uniqueness and Diversity

The cultural uniqueness and diversity of the area would remain unchanged from the proposed project (no impact) because the project would take place in a remote location, where the footprint of the project will be minor, and predominant use of the area would remain the same. The applicant and the SHPO both reported that there are no known cultural resources located on or near the property. Therefore, the cultural uniqueness and diversity of the area would not be affected. The proposed project would not change the predominant use of the surrounding area and the facility would be relatively small by industrial standards.

C. Local and State Tax Base and Tax Revenue

The proposed project would result in minor, if any, impacts to the local and state tax base and tax revenue because the proposed project would not require any new permanent employees to be hired. In addition, only minor amounts of construction would be needed to complete the project.

D. Agricultural or Industrial Production

The past land use of the area was predominantly agricultural and grazing. Due to the nature of the project and the history of oil and gas wells in the area, the area may see an increase in industrial production but will most likely remain a minor source of pollution. Overall, impacts to agricultural or industrial production would be minor.

E. Human Health

The proposed project would result in minor, if any, impacts to human health because of the relatively small quantity of potential emissions. As explained in Section 7.F of this EA, deposition of pollutants would occur. However, the Department determined that the proposed project would comply with all applicable air quality rules, regulations, and standards. These rules, regulations, and standards are designed to protect human health. Therefore, any impacts to human health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed project would result in minor, if any, impacts on access to recreational and wilderness activities. Although the compressor building would be visible and produce some noise, it would be located in a remote location where the impacts to the surroundings would be minor. In addition, it is unlikely that the proposed project would deny access to recreational and wilderness activities in the area.

#### G. Quantity and Distribution of Employment

The proposed project would not affect the quantity and distribution of employment because no permanent employees would be hired as a result of the proposed project. However, temporary construction-related positions could result from this project. Any impacts to the quantity and distribution of employment would be minor due to the relatively small size of the facility.

#### H. Distribution of Population

The proposed project would not affect distribution of population in the area because the facility would be located in a relatively remote location. The proposed project would not create any new permanent employment that would cause an increase or decrease in population.

#### I. Demands for Government Services

There would be minor impacts on demands of government services because additional time would be required by government agencies to issue MAQP #4161-00 and to monitor compliance with applicable rules and standards. In addition, the roads in the area may realize a minor increase in vehicle traffic. However, any impacts on government services to regulate would be minor due to the relatively small size of the operation.

#### J. Industrial and Commercial Activity

Only minor impacts would be expected from industrial and commercial activity because the proposed project is located in a remote location, and the compressor engine will occupy a small area. There may be a slight increase in activity during construction of the compressor station, but this would only be temporary. If any additional compressor engines are added and they have a PTE greater than 25 tons per year of any regulated air pollutant, then the Department would require a MAQP. At that time, the Department would evaluate additional impacts to industrial and commercial activity for each proposed project.

#### K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals affected by issuing MAQP #4161-00. This permit would contain limits for protecting air quality and keeping facility emissions in compliance with any applicable ambient air quality standards. Because the project is small, any impacts from the facility would be minor.

#### L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from the proposed project would result in minor impacts to the economic and social aspects of the human environment in the immediate area. Due to the relatively small size of the project, industrial production, employment, and tax revenue (etc.) would not be significantly impacted by the proposed project. The Department would not expect other industries to be impacted by the proposed project, and the Department would require that the facility operate in compliance with all applicable rules and regulations as outlined in MAQP #4161-00. In addition, cumulative impacts may result from other companies actively drilling in the natural gas field, but the companies would likely apply for air quality permits for additional facilities.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the construction and operation of a small booster compressor (natural-gas fired engine). MAQP #4161-00 would include conditions and limitations to ensure the facility would operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau.

EA prepared by: Trista Glazier

Date: December 14, 2007