

DEPARTMENT OF ENVIRONMENTAL QUALITY  
Permitting and Compliance Division  
Air Resources Management Bureau  
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DRAFT ENVIRONMENTAL ASSESSMENT (EA)

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JAN 18 2006

LEGISLATIVE ENVIRONMENTAL  
POLICY OFFICE

*Issued To:* Bear Paw Energy, Inc. - North Compressor Station  
1400 16<sup>th</sup> Street, Suite 310  
Denver, CO 80202

*Air Quality Permit Number:* 2982-02

*Preliminary Determination Issued:* 01/18/06

*Department Decision Issued:*

*Permit Final:*

1. *Legal Description of Site:* Bear Paw Energy (BPE)'s North Compressor Station is located in Section 4, Township 9 North, Range 58 East in Fallon County, Montana.
2. *Description of Project:* The North Compressor Station is an existing station built in 1997 that compresses, dehydrates, and transports natural gas from the nearby gas field to the Baker Station located 15 miles south. The natural gas fired compressor engine compresses the gas for transmission through the pipeline. The dehydrator removes the moisture from the natural gas using triethylene glycol. A dehydrator regenerator (also known as a reboiler) distills the used glycol for re-use, and removes the moisture-laden air which contains methane, VOCs & HAPs.

Currently the emissions from the reboiler are controlled by use of a VRU. BPE proposes to remove the VRU, which routinely has maintenance problems, and install a flash tank. BPE also proposed to restrict the hours of operation for the emergency flare to less than 1,800 hours per year, in order to stay below major source thresholds.

3. *Objectives of Project:* The proposed project would allow BPE remove the VRU which has had numerous mechanical failures over the past few years due to corrosion, install a flash tank, and limit the hours of operation of the emergency flare in order to optimize operations at the North Compressor Station and remain under Title V permitting thresholds.
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 Montana Air Quality Permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Bear Paw 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, is included in Permit #2982-02.

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 to 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 Department has prepared the following comments.

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

Emissions from the proposed project may have a minor impact terrestrial and aquatic life and habitats in the proposed project area. However, as stated in Section V and Section VI of the permit analysis and Section 7.F of this EA, any emissions and resulting impacts from the project would be minor due to the low concentration of those pollutants emitted.

Further, the proposed project is within an existing facility and no new construction or ground disturbance to the area would be required. Overall, any impact to the terrestrial and aquatic life and habitats of the proposed project area would be minor.

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

The proposed project would not affect water quantity or distribution in the proposed project area. The proposed project is within an existing facility and no new construction or ground disturbance to the area would be required. Further, the project would not discharge or use water as part of normal operations.

Emissions from the proposed project may have a minor impact on water quality in the proposed project area. However, as detailed in Section V and Section VI of the permit analysis and Section 7.F of this EA, any emissions and resulting deposition impacts from the project would be minor due to the low concentration of those pollutants emitted.

C. Geology and Soil Quality, Stability, and Moisture

The proposed project would not impact the geology, soil quality, stability, and moisture of the proposed project area. The proposed project is within an existing facility and no new construction or ground disturbance to the area would be required.

Further, as described in Section V and Section VI of the permit analysis, and Section 7.F of this EA, the project would result in a minor increase in air pollution emissions to the outside ambient environment. These pollutants may deposit on the soils in the surrounding area. Any impact from deposition of these pollutants would be minor due to dispersion characteristics and the low concentration of those pollutants emitted.

D. Vegetation Cover, Quantity, and Quality

Emissions from the proposed project may have a minor impact on vegetation cover, quantity, and quality in the proposed project area. However, as detailed in Section V and Section VI of the permit analysis and 7.F of this EA, any emissions and resulting impacts from the project would be minor due to dispersion characteristics of pollutants and the atmosphere, and the low concentration and magnitude of those pollutants emitted.

Further, the proposed project is within an existing facility and no new construction or ground disturbance to the area would be required. Overall, any impact to the vegetation cover, quantity, and quality of the proposed project area would be extremely minor.

E. Aesthetics

No impacts would result on the aesthetic value of the area from this project because the facility is an existing facility and the proposed project only allows BPE to switch controls. The aesthetics would remain the same.

F. Air Quality

The air quality of the area would realize minor impacts from the proposed project because the replacement of the VRU with the flash tank could allow an additional 16.6 tons per year of VOC emissions. However, the Department believes that the emissions would exhibit good dispersion characteristics resulting in relatively low deposition impacts. The impacts from deposition of pollutants would be minor due to dispersion characteristics of pollutants (stack height, stack temperature, etc.) and atmosphere (wind speed, wind direction, ambient temperature, etc.). The amount of air concentration of pollutants would be relatively small, and the corresponding deposition of those air pollutants would be minor.

The Department determined that controlled emissions from the source will not cause or contribute to a violation of any ambient air quality standard. Therefore, any impacts to air quality from the proposed project would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique endangered, fragile, or limited environmental resources in the area, the Department contacted the Montana Natural Heritage Program, Natural Resource Information System (NRIS). The NRIS search did not identify any known species of special concern located within the proposed project area. In this case, the project area was defined by the section, township, and range of the proposed location with an additional 1-mile buffer zone.

Due to the minor amount of construction that would be required and the fact that the project is limited to the existing facility, and due to the relatively low levels of pollutants that would be emitted, the Department determined that it would be unlikely that the proposed project would impact any species of special concern and that any potential impacts would be minor.

#### H. Demands on Environmental Resources of Water, Air, and Energy

The proposed project would have minor impacts on the demands for the environmental resources of air, because the glycol dehydrator would have a minor increase in the potential to emit air pollutants.

The proposed project would not be expected to have any impacts on the demand for the environmental resource of energy. Overall, the impacts for the demands on the environmental resources of water, air, and energy would be minor.

#### I. Historical and Archaeological Sites

In an effort to identify any historical and archaeological sites near the proposed project area, the Department contacted the Montana Historical Society, State Historic Preservation Office (SHPO). According to SHPO records, there have not been any previously recorded historic or archaeological sites within the proposed area. In addition, SHPO records indicated that no previous cultural resource inventories have been conducted in the area. SHPO recommended that a cultural resource inventory be conducted to determine if cultural or historic sites exist and if they would be impacted. However, neither the Department nor SHPO has the authority to require BPE to conduct a cultural resource inventory. The Department determined that since this project is confined to the existing facility's site, there is no potential impact on historical or archaeological sites.

#### J. Cumulative and Secondary Impacts

Overall, the cumulative and secondary impacts on the physical and biological aspects of the human environment in the immediate area would be minor due to the relatively small size of the project. The Department believes that the facility can be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #2982-02.

Additional facilities (compressor stations, gas plants, etc.) could locate in the area to withdraw natural gas from the nearby area and/or to separate the components of natural gas. However, any future facility would be required to apply for and receive the appropriate permits from the appropriate regulating authority. Environmental impacts from any future facilities would be assessed through the appropriate permitting process.

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 Department has prepared the following comments.

- A. Social Structures and Mores
- B. Cultural Uniqueness and Diversity

The proposed project would not be expected to cause any impact to the social and cultural resources in the area because the proposed project is a modification that would take place in a relatively remote location at an existing facility. There would not be any impact on social or cultural resources in the area.

- C. Local and State Tax Base and Tax Revenue

The proposed project would not result in any impact to the local and state tax base and tax revenue because no new employees would be expected as a result of this project. Further, the proposed project would necessitate negligible installation activities and typically would not require an extended period of time for completion. Therefore, any installation related jobs would be temporary and not have any foreseeable corresponding impacts on the tax base/revenue.

- D. Agricultural or Industrial Production

The proposed project would not impact Agricultural or industrial production because the proposed project would simply allow a change of control equipment at an existing facility.

E. Human Health

The proposed project would result in minor, if any, impacts to human health. Deposition of pollutants would occur; however, the amount is small and 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 be protective of human health. Overall any impacts to human health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed project would have no impact on access to recreational and wilderness activities because the project effects only the existing facility.

G. Quantity and Distribution of Employment

H. Distribution of Population

The proposed project would have no impact on the employment and population because it consists of a modification at an existing facility. Any installation-related employment would be temporary due to the short time period that would be required for installing the flash tank.

I. Demands for Government Services

There would be minor impacts on the demands for government services because additional time would be required by government agencies to issue the appropriate permits for the proposed modifications and to assure compliance with applicable rules, standards, and conditions that would be contained in those permits. Overall, any demands for government services to regulate the project and activities associated with the synthetic minor status would be minimal.

J. Industrial and Commercial Activity

Only minor impacts would be expected on the local industrial and commercial activity because the proposed project only represents a minor increase in industrial activity, for a short period of time, at an existing facility.

K. Locally Adopted Environmental Plans and Goals

The Department is unaware of any locally adopted environmental plans or goals. The permit would ensure compliance with state standards and goals. The state standards would protect the proposed site and the environment surrounding the site.

L. Cumulative and Secondary Impacts

Cumulative and secondary impacts from this project would not impact the economic and social aspects of the human environment in the immediate area. Due to the relatively small size of the project, there would be no foreseeable change in the industrial production, employment, and tax revenue (etc.) impacts resulting from the proposed project. In addition, the Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #2982-02.

*Recommendation:* An EIS is not required.

*If an EIS is not required, explain why the EA is an appropriate level of analysis:* There are no significant impacts resulting from the project; therefore, an EIS is not required.

*Other groups or agencies contacted or which may have overlapping jurisdiction:* Department of Environmental Quality - Permitting and Compliance Division (Air and Waste Management Bureau and Industrial and Energy Minerals Bureau); Montana Natural Heritage Program; and the State Historic Preservation Office (Montana Historical Society).

*Individuals or groups contributing to this EA:* Department of Environmental Quality (Air and Waste Management Bureau and Industrial and Energy Minerals Bureau), Montana Natural Heritage Program, and State Historic Preservation Office (Montana Historical Society).

EA prepared by: Christine Weaver  
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