Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
P. O. Box 200901 Helena, MT 59620-0901 (406) 444-2544 Website: www.deq.mt.gov

PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: June 23, 2008

Name of Applicant: NorthWestern Energy

Source: Natural Gas Compressor Station

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Permit Application Number 2997-08.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by July 23 2008. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

Vickie Walsh

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

Julie A Merkel

Julie Merkel
Air Quality Specialist
Air Resources Management Bureau
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VW:JM
Enclosures

**DEPARTMENT OF ENVIRONMENTAL QUALITY**
Permitting and Compliance Division
Air Resources Management Bureau
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(406) 444-3490, Fax (406) 444-1499

# DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued For: NorthWestern Energy
Main Line #3
40 East Broadway
Butte, Montana 59701

Permit Number: 2997-08

Preliminary Determination Issued: June 23, 2008
Department Decision Issued:
Permit Final:

1. *Legal Description of Site*: Legal Description of Site: NWE – Main Line #3 station is located in Section 8, Township 20 North, Range 4 West, in Lewis and Clark County, Montana.

2. *Description of Project*: This permit is for the operation of a natural gas compressor station that supplies pressure to pipelines that distribute gas to markets in western Montana. The current permit action would reduce the emission rates for the three existing 1,600 hp) Solar Saturn turbine-driven compressors to reflect the updated emission factors from AP-42 for stationary gas turbines, and the manufacturer's guaranteed emission factors. In addition a 1,600 hp Solar Saturn turbine-driven compressor that was previously permitted at NWE's Big Sandy Compressor Station would be installed. The proposed project would increase the total hours of operation of the three existing and one newly proposed Solar Saturn turbine-driven compressors at the facility from 15,000 hours during any rolling 12-month time period to 17,200 hours during any rolling 12-month time period. With the new emission rates, the facility could operate at the additional hours per rolling 12-month time period and remain a Synthetic Minor source by staying below the Title V Operating Permit threshold. The project would increase the total size of the combined miscellaneous building heaters from 0.96 million British thermal units per hour (MMBtu/hr) to 1.33 MMBtu/hr to accommodate the increased size of the building that will house the turbines. The increase in combined heater size would have a negligible increase in emissions and would be reflected in the emission inventory.

3. *Objectives of Project*: Continued business and revenue for the company by increasing the pressure of the received gas to approximately 1,000 psig.

4. *Alternatives Considered*: The "no-action" alternative would consist of not issuing the permit to NWE. This alternative was considered, but dismissed, given that the proposed current permit action would maintain compliance with all applicable rules and regulations as required for permit issuance.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of enforceable conditions, including a BACT analysis, would be contained in Permit #2997-08.

6. *Regulatory Effects on Private Property*: The Department has considered alternatives to the conditions imposed by Permit #2997-08. The Department has determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do 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 | | | √ | | | Yes |
| B | Water Quality, Quantity, and Distribution | | | √ | | | Yes |
| C | Geology and Soil Quality, Stability, and Moisture | | | √ | | | Yes |
| D | Vegetation Cover, Quantity, and Quality | | | √ | | | Yes |
| E | Aesthetics | | | | √ | | Yes |
| F | Air Quality | | | √ | | | Yes |
| G | Unique Endangered, Fragile, or Limited Environmental Resource | | | | √ | | Yes |
| H | Demands on Environmental Resource of Water, Air, and Energy | | | √ | | | Yes |
| I | Historical and Archaeological Sites | | | | √ | | Yes |
| J | Cumulative and Secondary Impacts | | | √ | | | 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
B. Water Quality, Quantity, and Distribution
C. Geology and Soil Quality, Stability, and Moisture
D. Vegetation Cover, Quantity, and Quality

The proposed project would result in minimal increases in emissions but the emissions would have only a minor impact on existing terrestrial, aquatic life, and habitats of the area; water quality, quantity and distribution; geology and soil quality, stability and moisture; and vegetation cover, quantity, and quality. The proposed project would occur at an established compressor station facility. 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 #2997-08.

E. Aesthetics

There would be no additional impacts on aesthetics from the current permit action. The site is an existing compressor station and the addition of the 1600-hp Solar Saturn turbine-driven compressor would not change the appearance of the facility, or surrounding area. Therefore, no impacts from the project would be expected.

F. Air Quality

The installation of a 1600-hp Solar Saturn turbine-driven compressor would result in minor impacts on the air quality because in addition to the new turbine, the emission rates of all the turbines would be estimated more accurately resulting in lower emissions of all of the 1600-hp Solar Saturn compressors. Therefore, the project would result in a minimal increase in pollutants being emitted. Limitations provided in Permit #2997-08 would assure that the

emissions meet ambient standards and impacts from the implementation of the project would be minimal. In addition, the compressor would be required to meet BACT and the project would comply with all applicable rules, regulations, and standards.

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

There would be no additional impacts on unique, endangered, fragile, or limited environmental resources from the current permit action. The site is an existing compressor station and the installation and operation of a 1600-hp Solar Saturn turbine-driven compressor would result in a minimal increase in emissions.

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

No additional demands on local water resources or energy would result from the proposed facility. Demands on air resources would be minor due to slight increases of regulated air pollutants.

I. Historical and Archaeological Sites

No additional impacts on historical and archaeological sites would occur due to the current permit action. The site is an existing compressor station and the installation and operation of the 1600-hp Solar Saturn turbine-driven compressor would occur within the boundaries of the compressor station property. According to previous correspondence with the Montana Historical Society, there is low likelihood of adverse disturbance to any known archaeological or historic sites given the previous industrial disturbance within the given area.

J. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this project would result in minor physical and biological impacts to the immediate environment. Air pollution from the facility would be controlled by Department determined BACT and conditions in Permit #2997-08. The Department believes that the facility would be expected to operate in compliance with all applicable rules and regulations as outlined in Permit #2997-08.

8. *The following table summarizes the potential social and economic effects of the proposed project on the human environment.*

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

SUMMARY OF COMMENTS ON POTENTIAL SOCIAL AND ECONOMIC 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 at an existing compressor station 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 at an existing compressor station and the 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. However, the project would occur at an existing compressor station, and the increase in emissions will be minimal. Therefore, 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. The project would take place at an existing compressor station and 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, at an existing compressor station. 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 #2997-08 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 installation of the compressor station, but this would only be temporary. If any additional compressor engines are added and they have a PTE greater than 15 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 #2997-08. 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 #2997-08. 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: An EIS is not required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The impacts resulting from this project are expected to be minor.

Other groups or agencies contacted or which may have overlapping jurisdiction: None

Individuals or groups contributing to this EA: Montana Department of Environmental Quality-Air Resources Management Bureau, Montana Historical Society

EA prepared by: Julie Merkel
Date: 06/09/08