

Department of Environmental Quality  
Permitting and Compliance Division  
Air and Waste Management Bureau  
1520 E. Sixth Avenue  
P.O. Box 200901  
Helena, Montana 59620-0901  
(406) 444-3490 FAX (406) 444-1499

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**ENVIRONMENTAL  
QUALITY COUNCIL**

**DRAFT ENVIRONMENTAL ASSESSMENT**

ISSUED TO: Bear Paw Energy Inc, Clear Lake Compressor Station

PERMIT NUMBER: 1638-04

PRELIMINARY DETERMINATION ON PERMIT ISSUED: 09/03/98

MONTANA ENVIRONMENTAL POLICY ACT (MEPA) COMPLIANCE: An environmental assessment required by the Montana Environmental Policy Act, was completed for this project as follows:

LEGAL DESCRIPTION OF SITE: SE¼, NE¼, Section 17, Township 33N, Range 58E.

DESCRIPTION OF PROJECT: Bear Paw has applied for an alteration to permit #1638-03, this alteration includes replacing the existing engine with a 550 hp Caterpillar compressor engine with a Johnson Matthey Catalytic Converter.

BENEFITS AND PURPOSE OF PROPOSAL: The 550 hp compressor engine is larger than the existing engine and will allow Bear Paw to increase natural gas transmission. The catalytic converter will be used to control emissions from the compressor engine and will perform more efficiently than the existing control equipment.

DESCRIPTION AND ANALYSIS OF REASONABLE ALTERNATIVES WHENEVER ALTERNATIVES ARE REASONABLY AVAILABLE AND PRUDENT TO CONSIDER: No reasonable alternatives are available.

A LISTING AND APPROPRIATE EVALUATION OF MITIGATION, STIPULATIONS AND OTHER CONTROLS ENFORCEABLE BY THE AGENCY OR ANOTHER GOVERNMENT AGENCY: A list of enforceable permit conditions, including a best available control technology analysis, are contained in Air Quality Permit #1638-04.

DESCRIPTION AND ANALYSIS OF REGULATORY IMPACTS ON PRIVATE PROPERTY RIGHTS: The department has considered alternatives to the conditions imposed in this permit as part of the permit development. The department has determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and do not unduly restrict private property rights.

Potential Impact on Physical Environment

|    |  | Major | Moderate | Minor | None | Unknown | Comments Attached |
|----|--|-------|----------|-------|------|---------|-------------------|
| 1  | Terrestrial and Aquatic Life and Habitats                    |       |          |       | X    |         | yes               |
| 2  | Water Quality, Quantity and Distribution                     |       |          |       | X    |         | yes               |
| 3  | Geology and Soil Quality, Stability and Moisture             |       |          |       | X    |         | yes               |
| 4  | Vegetation Cover, Quantity and Quality                       |       |          |       | X    |         | yes               |
| 5  | Aesthetics   |       |          |       | X    |         | yes               |
| 6  | Air Quality  |       |          | X     |      |         | yes               |
| 7  | Unique Endangered, Fragile or Limited Environmental Resource |       |          |       | X    |         | yes               |
| 8  | Demands on Environmental Resource of Water, Air and Energy   |       |          |       | X    |         | yes               |
| 9  | Historical and Archaeological Sites                          |       |          |       | X    |         | yes               |
| 10 | Cumulative and Secondary Impacts                             |       |          | X     |      |         | yes               |

Potential Impact on Human Environment

|    |   | Major | Moderate | Minor | None | Unknown | Comments Attached |
|----|---|-------|----------|-------|------|---------|-------------------|
| 1  | Social Structures and Mores                                     |       |          |       | X    |         | yes               |
| 2  | Cultural Uniqueness and Diversity                               |       |          |       | X    |         | yes               |
| 3  | Local and State Tax Base and Tax Revenue                        |       |          |       | X    |         | yes               |
| 4  | Agricultural or Industrial Production                           |       |          |       | X    |         | yes               |
| 5  | Human Health  |       |          | X     |      |         | yes               |
| 6  | Access to and Quality of Recreational and Wilderness Activities |       |          |       | X    |         | yes               |
| 7  | Quantity and Distribution of Employment                         |       |          |       | X    |         | yes               |
| 8  | Distribution of Population                                      |       |          |       | X    |         | yes               |
| 9  | Demands for Government Services                                 |       |          |       | X    |         | yes               |
| 10 | Industrial and Commercial Activity                              |       |          |       | X    |         | yes               |
| 11 | Locally Adopted Environmental Plans and Goals                   |       |          |       | X    |         | yes               |
| 12 | Cumulative and Secondary Impacts                                |       |          |       | X    |         | yes               |

**SUMMARY OF COMMENTS ON POTENTIAL IMPACTS:** The following comments describe the impacts that would result from the operation of the compressor station.

#### **POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT**

1. Terrestrial and Aquatic Life and Habitats
2. Water Quality, Quantity and Distribution
3. Geology and Soil Quality, Stability and Moisture
4. Vegetation Cover, Quantity and Quality
5. Aesthetics
7. Unique Endangered, Fragile or Limited Environmental Resources
8. Demands on Environmental Resource of Water, Air and Energy
9. Historical and Archaeological Sites

The proposed permit alteration will not have any effect on the above listed issues. The facility is existing and the proposed engine change will not have even minor impacts.

6. Air Quality
10. Cumulative and Secondary Impacts

Air quality impacts will be minor for the engine replacement. The following emissions are cumulative for the site;

PM-10 10.96 Tons/yr  
NOx 10.86 Tons/yr  
VOC 0.855 Tons/yr  
CO 10.79 Tons/yr  
SOx 0.542 Tons/yr

The NOx and VOC emissions resulting from this engine replacement have decreased. The PM-10 and CO emissions have increased slightly but are well below any significant levels. The department believes cumulative and secondary impacts will be minor due to the decrease in NOx and VOC emissions decreases.

#### **POTENTIAL IMPACT ON HUMAN ENVIRONMENT**

1. Social Structures and Mores
2. Cultural Uniqueness and Diversity
3. Local and State Tax Base and Tax Revenue
4. Agricultural or Industrial Production
6. Access to and Quality of Recreational and Wilderness Activities
7. Quantity and Distribution of Employment
8. Distribution of Population
9. Demands of Government Services
10. Industrial and Commercial Activity
11. Locally Adopted Environmental Plans and Goals
12. Cumulative and Secondary Impacts

The proposed permit alteration will not have any effect on the above listed issues. The facility is existing and the proposed engine change and addition will not have even minor impacts.

5. Human Health

The department believes impacts to the human health will actually decrease due to this engine replacement because of the decrease in NOx and VOC emissions.

RECOMMENDATION: An EIS is not required.

IF AN EIS IS NOT REQUIRED, EXPLAIN WHY THE EA IS AN APPROPRIATE LEVEL OF ANALYSIS:

The propose permit alteration will not have a significant impact on the environment.

OTHER GROUPS OR AGENCIES CONTACTED OR WHICH MAY HAVE OVERLAPPING JURISDICTION: None.

INDIVIDUALS OR GROUPS CONTRIBUTING TO THIS EA:

Department of Environmental Quality, Permitting and Compliance Division.

EA PREPARED BY: Lana Hedlund

DATE: 08/26/98