Air Quality Permit

Issued To: Ocean Energy, Inc.
Havre Pipeline Company, LLC
P.O. Box 2606
Clear Creek Road
Havre, Montana 59501

Permit #2719-04
Modification Request Received: 08/15/01
Department Decision on Modification: 09/11/01
Permit Final: 09/27/01
AFS #005-0003

An air quality permit, with conditions, is hereby granted to Ocean Energy, Inc., Havre Pipeline Company, LLC, (HPC), pursuant to Sections 75-2-204 and 211, Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM), 17.8.701, *et seq*., as amended, for the following:

Section I: Permitted Facilities

A. Plant Location

Permit #2719-04 is issued to HPC for the operation of the Blaine County #3 natural gas compressor station and the associated equipment located in the NE¼ of the SE¼ of Section 7, Township 27 North, Range 19 East, in Blaine County, Montana. The list of equipment can be found in Section I.A of the Permit Analysis.

B. Current Permit Action

The current permit action is a modification of Permit #2719-03. On August 15, 2001, HPC submitted a request for a *de minimis* change at the Blaine County #3 compressor station. HPC proposed to replace a 370,000 Btu/hr tri-ethylene glycol (TEG) dehydrator with a 500,000 Btu/hr TEG dehydrator. The current permit action incorporates the replacement according to the provisions of ARM 17.8.705(1)(r). In addition, the permit format was updated.

Section II: Limitations and Conditions

A. Emission Limitations

1. Source #01, the 750-Hp Waukesha L7042GU natural gas compressor engine, shall be operated with a non-selective catalytic reduction (NSCR) unit and an air/fuel ratio (AFR) controller. The engine shall have a minimum stack height of 20 feet above ground level and the engine speed shall not exceed 950 revolutions per minute (rpm) of continuous duty operation. The engine emissions shall not exceed the following limits (ARM 17.8.715):

NO_x[1]	3.31 lb/hr
CO	4.96 lb/hr
VOC	1.65 lb/hr

2. Source #02, the 400-Hp Waukesha F18GL lean-burn natural gas compressor engine shall be operated with an AFR controller. The engine shall have a minimum stack height of 14 feet above ground level, and the engine speed shall not exceed 1,800 rpm of continuous duty operation. Emissions from this engine shall not exceed the following limits (ARM 17.8.715):

[1] NO_x reported as NO_2.

NO_x[1]	1.76 lb/hr
CO	2.65 lb/hr
VOC	0.88 lb/hr

3. Emissions from source #04, the 1,150-Hp Waukesha 5790GL lean-burn natural gas compressor engine, shall not exceed the following limits (ARM 17.8.715):

NO_x[1]	3.80 lb/hr
CO	6.72 lb/hr
VOC	2.54 lb/hr

4. HPC shall operate all equipment to provide the maximum air pollution control for which it was designed (ARM 17.8.715).

5. HPC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

6. HPC shall not cause or authorize emissions to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

7. HPC shall treat all unpaved portions of the access roads, parking lots, and general plant area with fresh water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.6 of the permit (ARM 17.8.710).

B. Testing Requirements:

1. HPC shall test Source #01, the 750-Hp Waukesha L7042GU natural gas compressor engine for NO_x and CO, concurrently, and demonstrate compliance with the NO_x and CO emission limits contained in Section II.A.1. Source #01 was tested in September of 1997. Further testing for Source #01 shall occur on an every 4-year basis from the date the engine was last tested, or according to another testing/monitoring schedule as may be approved by the Department of Environmental Quality (Department) (ARM 17.8.105 and ARM 17.8.710).

2. HPC shall test Source #02, the 400-Hp Waukesha F18GL natural gas compressor engine for NO_x and CO, concurrently, and demonstrate compliance with the NO_x and CO emission limits contained in Section II.A.2. Source #02 was tested in September of 1997. Further testing for Source #02 shall occur on an every 4-year basis from the date the engine was last tested, or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.710).

3. HPC shall test Source #04, the 1,150-Hp Waukesha 5790GL lean-burn natural gas compressor engine for NO_x and CO, concurrently, and demonstrate compliance with the NO_x and CO emission limits contained in Section II.A.3. Source #04 was tested in May of 2000. Further testing for Source #04 shall occur on an every 4-year basis from the date the engine was last tested, or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.710).

4. All compliance source tests shall be conducted in accordance with the Montana Source

Test Protocol and Procedures Manual (ARM 17.8.106).

5. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements:

1. HPC shall supply the Department with annual production information for all emission points as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified in Section I.A of the permit analysis.

   Production information shall be gathered on a calendar-year basis and be submitted to the Department by the date required in the emission inventory request. Information shall be in units as required by the Department. This information may be used for calculating operation fees based on actual emissions from the facility, and/or to verify compliance with the emission limitations (ARM 17.8.505).

2. All records compiled in accordance with this permit must be maintained by HPC as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.710).

3. HPC shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.705(1)(r) that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emissions unit. The notice must be submitted to the Department in writing 10 days prior to start up or use of the proposed *de minimis* change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the *de minimis* change, and must include the information requested in ARM 17.8.705(1)(r)(iv) (ARM 17.8.705).

SECTION III: General Conditions

A. Inspection - HPC shall allow the Department representatives access to the source at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if HPC fails to appeal as indicated below.

C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving HPC of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided in ARM 17.8.701, *et seq.* (ARM 17.8.717).

D. Enforcement - Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement as specified in Section 75-2-401, *et seq*., MCA.

E. Appeals - Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section. The filing of a request for a hearing postpones the effective date of the Department's decision until the conclusion of the hearing and issuance of a final decision by the Board.

F. Permit Inspection - As required by ARM 17.8.716, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.

G. Permit Fees - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by HPC may be grounds for revocation of this permit, as required, by that Section and rules adopted thereunder by the Board.

Permit Analysis
Ocean Energy, Inc.
Havre Pipeline Company, LLC
Permit #2719-04

I. Introduction/Process Description

A. Permitted Equipment

The Ocean Energy, Inc., Havre Pipeline Company, LLC (HPC) Blaine County #3 facility consists of the following equipment:

- Source #01: one 750-Hp Waukesha L7042GU natural gas compressor engine with a non-selective catalytic reduction (NSCR) unit and an air/fuel ratio (AFR) controller;
- Source #02: one 400-Hp Waukesha F18GL lean-burn natural gas engine;
- Source #03: one 500-MBtu/hr tri-ethylene glycol (TEG) natural gas dehydration unit;
- Source #04: one 1,150-Hp Waukesha 5790GL lean-burn natural gas engine;
- two 100-MBtu/hr space heaters;
- one 200-gallon condensate tank; and
- one 500-gallon lube oil tank.

There are no fired treaters, boilers, line heaters, or flares at the Blaine County #3 compressor station.

B. Source Description

The HPC Blaine County #3 compressor station is located in the NE¼ of the SE¼ of Section 7, Township 27 North, Range 19 East, in Blaine County, Montana.

C. Permit History

On May 20, 1992, Permit **#2719-00** was issued to Northern Natural Gas Company (NNGC). The permit was issued for the Blaine County #3 compressor station which consisted of one 750-Hp Waukesha L7042GU compressor engine with a three-way catalyst on the engine exhaust, one RAMA glycol dehydrator rated at 380,000 Btu/hr, one meter building, one compressor building, and a EFM/SCADA building.

HPC acquired the Blaine County #3 compressor station from NNGC on September 30, 1995.

On December 29, 1996, Permit **#2719-01** was issued to HPC. The permit acknowledged the change of ownership of the Blaine County #3 compressor station and added one 400-Hp Waukesha F18GL lean-burn natural gas compressor engine and one 100-MBtu/hr space heater to the permit.

Since the new engine would serve as the primary booster at the facility, the load on the existing 750-Hp Waukesha L7042GU compressor engine was expected to fluctuate and run less efficiently. Because the Department of Environmental Quality (Department) and HPC expected that emission rates could exceed the current emission limits during worst case operating conditions, the emission limitations for this unit were slightly increased to allow HPC to operate in compliance during this scenario. The increased emission limits were established

consistently with the limits at other similar HPC facilities. Permit #2719-01 replaced Permit #2719-00.
On May 7, 1999, the Department received notification that UMC Petroleum Corp was merged with Ocean Energy, Inc. The HPC Blaine County #3 compressor station now operates as a subsidiary of Ocean Energy, Inc. The Department updated the permit to reflect the name change. On June 27, 1999, Permit **#2719-02** replaced Permit #2719-01.

On September 22, 1999, the Department received a request from HPC to alter Permit #2719-02 for the addition of a 1,150-Hp Waukesha natural gas compressor engine. The Department made the suggested changes to the permit. On November 17, 1999, Permit **#2719-03** replaced Permit #2719-02.

D. Current Permitting Action

The current permit action is a modification of Permit #2719-03. On August 15, 2001, HPC submitted a request for a *de minimis* change at the Blaine County #3 compressor station. HPC proposed to replace a 370,000 Btu/hr TEG dehydrator with a 500,000 Btu/hr TEG dehydrator. The current permit action incorporates the replacement according to the provisions of ARM 17.8.705(1)(r). In addition, the permit format was updated. Permit **#2719-04** replaces Permit #2719-03.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations which apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available upon request from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Sub-Chapter 1 - General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This section includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emissions of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment, including instruments and sensing devices and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

HPC shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and

supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

B. ARM 17.8, Sub-Chapter 2 - Ambient Air Quality, including, but not limited to:

1. ARM 17.8.204 Ambient Air Monitoring;
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide ;
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide;
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide;
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone;
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide;
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter;
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility;
9. ARM 17.8.222 Ambient Air Quality Standard for Lead; and,
10. ARM 17.8.223 Ambient Air Quality Standard for PM_{10}.

HPC must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Sub-Chapter 3 - Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.

2. ARM 17.8.308 Particulate Matter Airborne. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate. (2) Under this section, HPC shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter Fuel Burning Equipment. This section requires that no person shall cause, allow, or permit to be discharged into the atmosphere, particulate matter caused by the combustion of fuel in excess of the amount determined by this section.

4. ARM 17.8.310 Particulate Matter Industrial Process. This section requires that no person shall cause, allow, or permit to be discharged into the atmosphere, particulate matter in excess of the amount set forth in this section.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. Commencing July 1, 1971, no

person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. To comply with this requirement, HPC will consume pipeline quality natural gas in each of the compressor engines, space heaters, and the dehydration unit reboiler.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such a tank is equipped with a vapor loss control device as described in (1) of this rule, or is a pressure tank as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources. The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, shall comply with the standards and provisions of 40 CFR Part 60.

   40 CFR 60 Subpart KKK Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants. Owners or operators of onshore natural gas processing plants, as defined and applied in 40 CFR Part 60, shall comply with standards and provisions of 40 CFR Part 60, Subpart KKK. This subpart does not apply to the Blaine County #3 compressor station because it does not meet the definition of a natural gas processing plant as defined in 40 CFR Part 60, Subpart KKK.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63, shall comply with the standards and provisions of 40 CFR Part 63, Subpart HH. Through comparison of other permitted compressor stations of equal or greater design capacity, the Department determined that Subpart HH does not apply to the facility because the Blaine County #3 compressor station would not meet the definition of a major source of Hazardous Air Pollutants (HAPs) as defined in 40 CFR Part 63, Subpart HH.

   Owners or operators of natural gas transmission or storage facilities, as defined and applied in 40 CFR Part 63, shall comply with the standards and provisions of 40 CFR Part 63, Subpart HHH. Through a comparison of other permitted compressor stations of equal or greater design capacity, the Department determined that Subpart HHH does not apply to the facility because the Blaine County #3 compressor station would not meet the definition of a major source of HAPs as defined in 40 CFR Part 63, Subpart HHH.

D. ARM 17.8, Sub-Chapter 5 - Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. HPC shall submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. HPC was not required to submit a permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. As a condition of continued operation, an annual air quality operation fee must be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit issued by the Department. This operation fee is based on the actual or estimated amount of air pollutants emitted during the previous calendar year.

   An air quality operation fee is separate and distinct from an air quality permit application

fee. The annual assessment and collection of the air quality operation fee shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions which pro-rate the required fee amount.

E. ARM 17.8, Sub-Chapter 7 - Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.701 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.704 General Procedures for Air Quality Preconstruction Permitting. An air quality preconstruction permit shall contain requirements and conditions applicable to both construction and subsequent use of the permitted equipment.

3. ARM 17.8.705 When Permit Required Exclusions. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter, or use an air contaminant source which has the potential to emit more than 25 tons per year of any pollutant. HPC has the potential to emit more than 25 tons per year of NO_x, CO, and VOC; therefore, a permit is required.

4. ARM 17.8.706 New or Altered Sources and Stacks Permit Application Requirements. This rule requires that an application for an air quality permit be submitted for a new or altered source or stack. HPC was not required to complete an application for the current permit action, but rather submit a letter requesting that Permit #2719-03 be modified to reflect the *de minimis* change as required by ARM 17.8.705(1)(r).

5. ARM 17.8.710 Conditions for Issuance of Permit. This section requires that HPC demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards. HPC demonstrated compliance with applicable rules and standards as required for permit issuance.

6. ARM 17.8.715 Emission Control Requirements. This section requires a source to install the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized. However, a BACT analysis is not required for the current permit action because it is a *de minimis* change as specified in ARM 17.8.705(1)(r).

7. ARM 17.8.716 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source. HPC requested that the permit for the unmanned Blaine County #3 compressor station be kept on file at the HPC office at the Blaine County #1 compressor station. The Department hereby grants this request.

8. ARM 17.8.717 Compliance with Other Statutes and Rules. This rule states that nothing in the permit shall be construed as relieving HPC of the responsibility for complying with any applicable federal or Montana statute, rule or standard, except as specifically provided in ARM 17.8.701, *et seq*.

9. ARM 17.8.720 Public Review of Permit Applications. This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. An affidavit of

publication of public notice was not required for the current permit action.

10. ARM 17.8.731 Duration of Permit. An air quality permit shall be valid until revoked or modified as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, that in no event may be less than 1-year after the permit is issued.

11. ARM 17.8.733 Modification of Permit. An air quality permit may be modified for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase in emissions because of those changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.

12. ARM 17.8.734 Transfer of Permit. This section states an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Sub-Chapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the Federal Clean Air Act (FCAA) that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not listed and does not have the potential to emit more than 250 tons per year (excluding fugitive emissions) of any air pollutant.

G. ARM 17.8, Sub-Chapter 12 - Operating Permit Program, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under section 7412 of the FCAA is defined as any stationary source having:

a. Potential To Emit (PTE) greater than 100 ton/year of any pollutant.

b. PTE greater than 10 tons/year of any one HAP, PTE greater than 25 ton/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule.

c. Sources with the PTE greater than 70 ton/year of PM-10 in a serious PM-10 nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. Title V of the FCAA of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2719-04 for the HPC Blaine County #3 compressor station, the following conclusions were made:

   a. The facility's PTE is less than 100 ton/year for any pollutant.

   b. The facility's PTE is less than 10 ton/year of any one HAP, and less than 25 ton/year of a combination of all HAPs.

   c. This source is not located in a serious PM-10 nonattainment area.

   d. This facility is not subject to any current NSPS.

   e. This facility is not subject to any current NESHAP standards.

   f. This source is not a Title IV affected source nor a solid waste combustion unit.

   g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined the HPC Blaine County #3 compressor station is a minor source of emissions as defined under Title V.

III. BACT Determination

A BACT determination is required for each new or altered source. HPC shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that best available control technology shall be utilized. However, a BACT analysis is not required for the current permit action because it is a *de minimis* change as specified in ARM 17.8.705(1)(r).

IV. Emission Inventory

Source	ton/year PM-10	NO_x	VOC	CO	SOx
#01 750 hp Waukesha L7042 GU Compressor Engine	0.26	14.49	7.24	21.73	0.02
#02 400 hp Waukesha F18GL Compressor Engine	0.16	7.73	3.86	11.59	0.01
#03 TEG Dehydration Unit	0.02	0.22	1.68	0.18	0.00
#04 1,150 hp Waukesha 5790GL Compressor Engine	0.39	16.66	11.10	29.43	0.02
-- Natural Gas Fired Space Heaters	0.00	0.09	0.02	0.01	0.00
-- Miscellaneous VOC Sources	-----	-----	5.21	-----	-----
Total	0.83	39.19	29.11	62.94	0.05

* A complete emission inventory is on file with the Department.

V. Air Quality Impacts

HPC did not meet the modeling threshold for the current permitting action; however, HPC did perform modeling for Permit #2719-01. Following are the results of that modeling.

HPC performed two separate Screen3 Model runs, one on each compressor engine stack at this facility. The results for each run were then added to reveal the total impact on ambient air quality.

Each model was run at a stability class of four and receptors were placed at a 50-meter spacing. Each modeling run took into account the rural surroundings and elevated terrain at the site, along with the down-wash effects from each respective compressor building. A background NO_2 concentration of

75 micrograms per cubic meter was added to the sum of the two runs. The modeling indicated that the maximum one-hour concentration of NO_x, including background, would be 1,352 micrograms per cubic meter, which is greater than the Montana one-hour NO_2 Ambient Air Quality Standard of 564 micrograms per cubic meter. Since compliance with the standard cannot be assumed, HPC used the alternative procedure of the "Ozone Limiting Method" to determine whether or not Blaine County #3 could demonstrate compliance.

The method assumes that only 10% of NO_x is immediately converted to NO_2. Using this method yielded a maximum one-hour concentration of 278 micrograms per cubic meter. This concentration is well below Montana's one-hour Ambient Air Quality Standard for NO_2 of 564 micrograms per cubic meter. Since the Blaine County #3 compressor station is located in a valley, HPC stated that emissions from their other sources would not significantly contribute to the ambient air quality at this facility; therefore, HPC did not add in these concentrations.

HPC ran the Screen 3 model of CO for each compressor engine and added the results to yield a maximum one-hour CO concentration of 1,476 micrograms per cubic meter, which is well below the Montana one-hour limit of 26,450 micrograms per cubic meter for CO.

HPC demonstrated that the addition of the 400-Hp compressor engine at the Blaine County #3 compressor station would not violate the Montana one-hour Ambient Air Quality Standard for NO_2, as stated in ARM 17.8.211; or the Montana one-hour Ambient Air Quality Standard for CO, as stated in ARM 17.8.212. Because the current permit action qualifies as a *de minimis* action, no further refined air quality modeling or monitoring will be required at this time.

VI. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was not required for the current permit action because it is a *de minimis* change as specified in 17.8.705(1)(r), which is an administrative action.

Permit Analysis Prepared by: David P. Aguirre
Date: August 31, 2001