



Montana Department of
ENVIRONMENTAL QUALITY

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May 5, 2010

Mr. Ken Prior
Omimex Canada, Ltd.
Cut Bank Field Station 001
4854 West Angling Road
Ludington, MI 49431

Dear Mr. Prior:

Montana Air Quality Permit #2768-08 is deemed final as of May 5, 2010, by the Department of Environmental Quality (Department). This permit is for Omimex Canada, Ltd's Cut Bank Field Station 001 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) 444-9741

Shawn Juers
Environmental Engineer
Air Resources Management Bureau
(406) 444-2049

VW:SJ
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #2768-08

Omimex Canada, Ltd.
Cut Bank Field Station 001
4854 West Angling Road
Ludington, MI 49431

May 5, 2010



MONTANA AIR QUALITY PERMIT

Issued To: Omimex Canada, Ltd.
Cut Bank Field Station 001
4854 West Angling Road
Ludington, MI 49431

MAQP: #2768-08
Application Complete: 3/11/2010
Preliminary Determination Issued: 4/1/2010
Department's Decision Issued: 4/19/2010
Permit Final: 5/5/2010
AFS #: 035-0010

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Omimex Canada, Ltd. (Omimex), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

The Omimex natural gas compressor station is located in the NW¹/₄ of the NW¹/₄ of Section 11, Township 33 North, Range 5 West, in Glacier County, Montana. The facility is known as the Cut Bank Field, Station 001.

B. Current Permit Action

On February 25, 2010, the Department of Environmental Quality (Department) received an application from Aspen Consulting and Engineering, Inc., on behalf of Omimex, to replace the currently installed 600 brake-horsepower (bhp) compressor engine with a different 600-bhp engine. The Department received an affidavit of publication of public notice on March 11, 2010, completing the application. The current permit action updates the permit to reflect the new engine, which includes new emissions limitations derived from a Best Available Control Technology (BACT) determination, and makes the corresponding change to the emissions inventory. This action also updates the emissions inventory to include the volatile organic compounds (VOC) and hazardous air pollutants (HAP) emissions from the triethylene glycol dehydration unit.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Omimex shall not operate or have on-site more than one natural gas compressor engine at any time and the maximum rated design capacity shall be 600-bhp. The engine shall be of a 4-stroke rich-burn engine class, and shall be fired on pipeline quality natural gas (ARM 17.8.749 and ARM 17.8.752).
2. Omimex shall properly operate and maintain the compressor engine and associated control equipment. The engine shall be equipped and operated with an air-to-fuel ratio (AFR) controller and a Non-Selective Catalytic Reduction (NSCR) unit (ARM 17.8.752).
3. The pound per hour (lb/hr) emission limits shall be determined using the following equation and pollutant-specific grams per brake horsepower-hour (g/bhp-hr) emission factors (ARM 17.8.752):

Equation:

Emission Limit (lb/hr) = Emission Factor (g/bhp-hr) * maximum rated design capacity of engine (bhp) * 0.002205 lb/g

Emission Factors:

Oxides of Nitrogen (NO_x): 1.5 g/bhp-hr
Carbon Monoxide (CO): 2.0 g/bhp-hr
Volatile Organic Carbon (VOC): 1.0 g/bhp-hr

4. Omimex shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
5. Omimex 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 (ARM 17.8.308).
6. Omimex shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
7. Omimex shall comply with any applicable standards and limitations, reporting, recordkeeping and notification requirements contained in 40 CFR 63 Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, and 40 CFR 60, Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* (ARM 17.8.340, 40 CFR 63, Subpart ZZZZ and 40 CFR 60, Subpart JJJJ).

B. Testing Requirements

1. The compressor engine shall be tested for NO_x and CO, concurrently, within 180 days of the initial start-up date of the compressor engine (ARM 17.8.105 and ARM 17.8.749).
2. The compressor engine shall be tested for NO_x and CO, concurrently, on an every 4-year basis, or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).
3. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
4. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. Omimex 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 emission inventory contained in the permit analysis.

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

2. Omimex shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, 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. The notice must be submitted to the Department, in writing, 10 days prior to startup 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 17.8.745(l)(d) (ARM 17.8.745).
3. All records compiled in accordance with this permit must be maintained by Omimex 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 17.8.749).

D. Notification

1. Omimex shall provide the Department with written notification of the commencement of installation of the new compressor engine postmarked within 30 days of the installation (ARM 17.8.749).
2. Omimex shall provide the Department with written notification of the actual startup date of the compressor engine postmarked within 15 days after the actual start-up date (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection – Omimex shall allow the Department’s representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (continuous emissions monitoring system (CEMS), continuous emissions rate monitoring system (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if Omimex fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Omimex of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action 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 therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department’s decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department’s decision on the application is final 16 days after the Department’s decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Omimex may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit (MAQP) Analysis
Omimex Canada, Ltd.
Cut Bank Field, Station 001
MAQP #2768-08

I. Introduction/Process Description

A. Permitted Equipment

Omimex Canada, Ltd. (Omimex) operates a compressor station and associated equipment located in the NW¼ of the NW¼ of Section 11, Township 33 North, Range 5 West, in Glacier County, Montana. The facility is known as Cut Bank Field, Station 001 and includes the following equipment:

- One 600-brake horsepower (bhp) four-stroke rich-burn engine, equipped with air-to-fuel ratio control (AFR) and non-selective catalytic reduction (NSCR) unit
- One BS&B triethylene glycol dehydration unit with associated 250-thousand British thermal units per hour (MBtu)/(hr) reboiler
- One 120-MBtu/hr Hotomatic Heater

B. Source Description

The first compressor engine was installed at the Cut Bank Field, Station 001 in 1983. The complex has two primary purposes. The first purpose is to pump the field gas up to the required pressure in the natural gas transmission system. Compression of the gas is accomplished using the compressor described above. An engine heater provides the heat to the various station facilities.

The second purpose of the complex is to dry the gas as it is being processed. The gas contains some moisture, which must be removed from the system prior to being sent into the transmission system. The moisture is removed with a triethylene glycol based dehydrator.

The gas is treated with a glycol solution, which absorbs the water in the gas stream. The glycol solution is then heated to about 300 degrees Fahrenheit (° F) to drive off the water and return the glycol. The heat necessary for this activity is generated by burning natural gas in the dehydrator reboiler. This unit will have a heat input of approximately 250 MBtu/hr. The reboiler is small by industrial standards, having a size approximately equivalent to a typical natural gas-fired small office heating system.

C. Permit History

Montana Power Company was issued **MAQP #2768-00** on June 22, 1993, for the operation of their compressor station and associated equipment located in NW¼ of the NW¼ of Section 11, Township 33 North, Range 5 West, in Glacier County near Cut Bank, Montana. The station was identified as the Cut Bank Field, Station 001.

A Best Available Control Technology (BACT) determination was required for the 600-horsepower (hp) White Superior 6G825/W62 compressor engine since it was not operating at the same location prior to March 16, 1979. Based on the BACT analysis for the 600-hp White Superior compressor engine, the Department of Environmental Quality (Department) determined that BACT required the installation and operation of a NSCR unit capable of meeting the limitations in Section II.A.1. of MAQP #2768-00.

The BS&B 250-MBtu/hour dehydrator (reboiler) and the 120-MBtu/hour Hotomatic Heater at the Cut Bank Field, Station 001, are minor sources. Based on previous determinations, BACT for these sources was determined to be no control.

As part of **MAQP #2768-01**, the emission limitations were changed from gram per brake horse power-hour (g/bhp-hr) to pounds per hour (lb/hr). This change provided operational flexibility to account for varying parameters such as engine revolutions per minute (rpm), operating load (bhp), ambient air temperature, gas temperature, site elevation, fuel gas quality, AFR, field gas conditions, etc. Also, to clarify nitrogen oxides (NO_x) mass emission calculations, NO_x emission limitations were identified as nitrogen dioxide (NO₂). MAQP #2768-01 replaced MAQP #2768-00. On March 7, 1994, MAQP #2768-01 became final.

MAQP #2768-02 consisted of a name change from Montana Power Company to Montana Power Gas Company. The appropriate references in the permit were changed to reflect the name change. In addition, the permit format was updated. MAQP #2768-02 replaced MAQP #2768-01. On August 8, 1999, MAQP #2768-02 became final.

MAQP #2768-03 was needed to properly identify the compressor engines at the Montana Power Gas Company - Station 001, facility. Section II.A.1 of MAQP #2768-02 inadvertently identified a 360-hp White Superior engine instead of a 600-bhp White Superior engine. However, the permit analysis and the emission inventory referenced the correct 600-hp engine. Section II.A.1. was changed to identify the correct engine and to update the permit format. MAQP #2768-03 replaced MAQP #2768-02. On May 23, 2001, MAQP #2768-03 became final.

On January 22, 2002, the Department received a notice of corporate merger and name change from PanCanadian Energy Resources, Inc. (PanCanadian). The letter also notified the Department that Montana Power Gas Company, Xenon, Inc., and Entech Gas Ventures, Inc. merged into North American Resources Company (NARCO) as of January 1, 2002. The letter also stated that at the same time, NARCO changed its corporate name to PanCanadian. In addition, on April 18, 2002, the Department received a letter from PanCanadian requesting a name change from PanCanadian to EnCana Energy Resources, Inc. (Encana). The permit action transferred the permit from Montana Power Gas Company to EnCana and updated the permit with current permit language and rule references used by the Department. **MAQP #2768-04** replaced MAQP #2768-03. On August 22, 2002, MAQP #2768-04 became final.

On April 30, 2003, the Department received a letter from EnCana requesting that the Department add testing requirements, which were inadvertently removed during the last permitting action (MAQP #2768-04), back into the permit. This permitting action added the testing requirements back into the permit and updated the permit to reflect current permit language and rule references used by the Department. **MAQP #2768-05** replaced MAQP #2768-04. On May 31, 2003, MAQP #2768-05 became final.

On June 5, 2003, the Department received a letter from EnCana requesting that the Department change the corporate name on MAQP #2768-05 from EnCana Energy Resources, Inc. to EnCana Gathering Services (USA) Inc. This permit action changed the corporate name on MAQP #2768-05 from EnCana Energy Resources, Inc. to EnCana Gathering Services (USA) Inc. **MAQP #2768-06** replaced MAQP #2768-05. MAQP #2768-06 became final on September 5, 2003.

On March 5, 2004, the Department received a letter from Omimex requesting that the Department change the corporate name on MAQP #2768-06 from EnCana Gathering Services (USA), Inc. (EnCana) to Omimex. The permitting action changed the corporate name on MAQP #2768-06. **MAQP #2768-07** replaced MAQP #2768-06.

D. Current Permit Action

On February 25, 2010, the Department received an application from Aspen Consulting and Engineering, Inc., on behalf of Omimex, to replace the currently installed 600-bhp compressor engine with a different 600-bhp engine. The Department received an affidavit of publication of public notice on March 11, 2010, completing the application. The current permit action updates the permit to reflect the new engine, which includes new emissions limitations derived from a BACT determination, and makes the corresponding change to the emissions inventory. This action also updates the emissions inventory to include the volatile organic compounds (VOC) and hazardous air pollutants (HAP) emissions from the triethylene glycol dehydration unit.

E. Additional Information

Additional information, such as applicable rules and regulations, BACT/Reasonably Available Control Technology (RACT) 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 that 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 the location of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including but not limited to:

1. ARM 17.8.101 Definitions. This rule 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 emission 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).

Omimex 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 of 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 as to create a public nuisance.

B. ARM 17.8, Subchapter 2 – Ambient Air Quality, including, but not limited to the following:

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
10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

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

C. ARM 17.8, Subchapter 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 into the 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 less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Omimex 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 rule 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 rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule 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 rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. (4) Commencing July 1, 1972, no person shall burn liquid or solid fuels containing sulfur in excess of 1 pound of sulfur per million Btu fired. (5) 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. Omimex will burn pipeline quality natural gas, which will meet this limitation.
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 tank is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS).
- a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. Owners and operators of stationary spark ignition internal combustion engines (SI ICE) that commence construction after June 12, 2006, where the stationary SI ICE are manufactured on or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP are subject to this Subpart. The currently permitted engine was manufactured before July 1, 2007. Furthermore, there is not an increase in emissions associated with moving this engine. The engine has not been modified as defined in 40 CFR 60.2.

However, should the engine undergo modification or reconstruction, as defined for this Subpart, after June 12, 2006, or Omimex replaces the engine with one manufactured on or after July 1, 2007, this Subpart would become applicable.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:
- a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAP Subpart as listed below:
 - b. 40 CFR 63, Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63, shall comply with the applicable provisions of 40 CFR 63, Subpart HH. In order for a natural gas production facility to be subject to conditions of 40 CFR 63, Subpart HH requirements, certain criteria must be met. First, the facility must be a major or area source of hazardous air pollutants (HAP) as determined according to paragraphs (a)(1)(i) through (a)(1)(iii) of 40 CFR 63, Subpart HH. Second, a facility that is determined to be major for HAP must also either process, upgrade, or store hydrocarbon liquids prior to the point of custody transfer, or process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. Third, the facility must also contain an affected source as specified in paragraphs (b)(1) through (b)(2) of 40 CFR 63, Subpart HH. Finally, if the first three criteria are met, and the exemptions contained in paragraphs (e)(1) and (e)(2) of 40 CFR 63, Subpart HH do not apply, the facility is subject to the applicable provisions of 40 CFR 63, Subpart HH. Based on the information submitted by Omimex, the Cut Bank Field, Station 001 facility is subject to the provisions of 40 CFR 63, Subpart HH because the facility is an area source of HAPs and it contains a triethylene glycol dehydration unit, which is considered an affected source pursuant to paragraph (b)(2) of 40 CFR 63, Subpart HH.
 - c. 40 CFR 63, Subpart HHH - National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. 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 63, Subpart HHH. In order for a natural gas transmission and storage facility to be subject to 40 CFR 63, Subpart HHH requirements, certain criteria must be met. First, the facility must transport or store

natural gas prior to the gas entering the pipeline to a local distribution company or to a final end user if there is no local distribution company. In addition, the facility must be a major source of HAP as determined using the maximum natural gas throughput as calculated in either paragraphs (a)(1) and (a)(2) or paragraphs (a)(2) and (a)(3) of 40 CFR 63, Subpart HHH. Second, a facility must contain an affected source (glycol dehydration unit) as defined in paragraph (b) of 40 CFR 63, Subpart HHH. Finally, if the first two criteria are met, and the exemptions contained in paragraph (f) of 40 CFR 63, Subpart HHH, do not apply, the facility is subject to the applicable provisions of 40 CFR 63, Subpart HHH. Based on the information submitted by Omimex, the Cut Bank Field, Station 001 facility is not subject to the provisions of 40 CFR 63, Subpart HHH because the facility is not a major source of HAP.

- d. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). A stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand, is subject to this subpart. An area source of HAP emissions is a source that is not a major source. Therefore, Omimex's compressor engine will be subject to this subpart as an area source. For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if construction or reconstruction of the stationary RICE is commenced before June 12, 2006. A stationary RICE located at an area source of HAP emissions is new if construction of the stationary RICE is commenced on or after June 12, 2006. This engine was previously installed at a prior location, and as stated by the applicant, no capital expenditure exceeding 50% of the cost required to purchase or construct a new engine will occur. Because this engine does not meet the definition of new or reconstructed, and the facility is a minor source of HAP, the engine does not have any currently effective requirements associated with this subpart.

D. ARM 17.8, Subchapter 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. This rule requires that an applicant 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. Omimex submitted the appropriate permit application fee for the current permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, 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. The air quality operation fee is based on the actual or estimated actual 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, described above, 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 that prorate the required fee amount.

- E. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. Omimex has a PTE greater than 25 tons per year of NO_x and carbon monoxide (CO); therefore, an air quality permit is required.
 3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. Omimex submitted the required permit application for the current permit action. (7) 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. Aspen Consulting and Engineering, Inc., on behalf of Omimex, submitted an affidavit of publication of public notice for the February 18, 2010, issue of the *Great Falls Tribune*, a newspaper of general circulation in the Town of Great Falls in Cascade County, as proof of compliance with the public notice requirements.
 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
 8. ARM 17.8.755 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.
 9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Omimex of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
 10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.762 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 modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
 12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended 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 of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
 14. ARM 17.8.765 Transfer of Permit. This rule states that 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, Subchapter 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 FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because this facility is not a listed source and the facility's PTE is below 250 tons per year of any pollutant (excluding fugitive emissions).

- G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:
1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAP, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2768-08 for Omimex, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAP.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is not subject to any current NSPS.
 - e. This facility is subject to area source provisions of current NESHAP standards (40 CFR 63, Subpart HH and 40 CFR 63, Subpart ZZZZ, with no conditions currently applying pursuant to Subpart ZZZZ).
 - 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, Omimex is a minor source of emissions with respect to the Title V Operating Permit Program, and therefore, not subject.

III. BACT Determination

A BACT determination is required for each new or modified source. Omimex shall install on the new or modified source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized.

A BACT analysis was submitted by Aspen Consulting and Engineering, Inc., on behalf of Omimex in permit application #2768-08, addressing some available methods of controlling NO_x and CO emissions from the compressor engine. The Department reviewed these methods, as well as previous BACT determinations. The following control options have been reviewed by the Department in order to make the following BACT determination.

The primary criteria pollutants from natural gas-fired reciprocating engines are NO_x, CO, and VOC. CO and VOC species are primarily the result of incomplete combustion. Particulate matter (PM) emissions include trace amounts of metals, non-combustible inorganic material, and condensable, semi-volatile organics which result from volatilized lubricating oil, engine wear, or from products of incomplete combustion. Sulfur oxides (SO_x) are very low since sulfur compounds are removed from natural gas at processing plants. However, trace amounts of sulfur containing odorant are added to natural gas for the purpose of leak detection.

Three generic control techniques have been developed for reciprocating engines: parametric controls (timing and operating at a leaner air-to-fuel ratio); combustion modifications such as advanced engine design (clean-burn cylinder head designs and prestratified charge combustion for rich-burn engines); and post combustion catalytic controls installed on the engine exhaust system. Post-combustion catalytic technologies include selective catalytic reduction (SCR) for lean-burn engines, NSCR for rich-burn engines, and CO oxidation catalysts for lean-burn engines.

The proposed compressor engine is of a 4-stroke rich-burn engine class. These engines may be either naturally aspirated, using the suction from the piston to entrain the air charge, or turbocharged, using an exhaust-driven turbine to pressurize the charge. Rich-burn engines operate near the stoichiometric air-to-fuel ratio with exhaust excess oxygen levels less than 4 percent (typically closer to 1 percent).

NO_x and CO BACT:

The only technically feasible option for control of NO_x and CO for the rich-burn 4-stroke compressor engine is NSCR with AFR Control. Selective catalytic reduction and oxidation catalysts require the stoichiometry of a lean-burn engine.

NSCR with AFR

This technique uses the residual hydrocarbons and CO in the rich-burn engine exhaust as a reducing agent for NO_x. In an NSCR, hydrocarbons and CO are oxidized by oxygen (O₂) and NO_x. The excess hydrocarbons, CO, and NO_x pass over a catalyst (usually a noble metal such as platinum, rhodium, or palladium) that oxidizes the excess hydrocarbons and CO to water (H₂O) and carbon dioxide (CO₂), while reducing NO_x to N₂. NO_x reduction efficiencies are usually greater than 90 percent, while CO reduction efficiencies are approximately 90 percent. The NSCR technique is effectively limited to engines with normal exhaust oxygen levels of 4 percent or less. This includes 4-stroke rich-burn naturally aspirated engines and some 4-stroke rich-burn turbocharged engines. Engines operating with NSCR require tight air-to-fuel ratio control to maintain high reduction effectiveness without high hydrocarbon emissions. To achieve effective NO_x reduction performance, the engine may need to be run with a richer fuel adjustment than normal. Therefore, because NSCR requires tight air-to-fuel ratio control to maintain high reduction effectiveness, AFR control is usually required for optimized NSCR operation.

As proposed, the Department determined that properly operated and maintained NSCR and AFR constitutes BACT for NO_x and CO. The resulting BACT limit will be 1.5 g/bhp-hr (based on 90% control efficiency) and 2.0 g/bhp-hr (based on prior BACT determinations) for NO_x and CO respectively. These limits are comparable to other recently permitted sources.

The control options selected have controls and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

VOC BACT

The Department is not aware of any BACT determinations that have required controls for VOC emissions alone from compressor engines. The uncontrolled potential to emit of VOC emissions is relatively small and any add-on controls specifically installed for VOC emissions would be cost prohibitive.

However, the NSCR technology selected as BACT for NO_x and CO also reduces VOC emissions. The Department determined that no additional controls for control of VOC emissions, with proper operations and maintenance of the control equipment and engine, constitutes BACT for VOC emissions.

As proposed, the BACT limit will be 1.0 g/bhp-hr for VOC. This limit is comparable to other recently permitted sources.

PM and SO_x BACT

The Department is not aware of any BACT determinations that have required controls for PM or SO_x emissions from natural gas fired compressor engines. The uncontrolled potential to emit of PM and SO_x emissions are relatively small and any add-on controls installed for PM or SO_x emissions only would be cost prohibitive. The Department has determined that the burning of Pipeline Quality Natural Gas constitutes BACT for PM and SO_x.

III. Emission Inventory*

Omimex Canada, Ltd. Cut Bank Field Station 001 Potential to Emit in Tons Per Year							
Source	NO _x	CO	VOC	SO _x	PM ₁₀	PM _{2.5}	HAP
600-bhp White Superior Engine	8.69	11.59	5.79	0.01	0.43	0.43	0.44
Glycol Dehydration Reboiler	0.11	0.09	0.01	0.00	0.01	0.01	0.00
Glycol Dehydration Vent	N/A	N/A	20.12	N/A	ND	ND	11.04
Hotomatic Heater	0.05	0.04	0.00	0.00	0.00	0.00	0.00
TOTAL:	8.85	11.72	25.92	0.01	0.45	0.45	11.48

Some emissions may show zero due to rounding. See calculations following

*Emissions Inventory and Calculation Notes:

PM₁₀ = particulate matter with an aerodynamic diameter of 10 microns or less

PM_{2.5} = particulate matter with an aerodynamic diameter of 2.5 microns or less

HAP = hazardous air pollutant

SO_x = oxides of sulfur

SO₂ = sulfur dioxide

bhp = brake horsepower

Btu = british thermal unit

hr = hour

lb = pound

MM denotes 10⁶, M denotes 10³

N/A = not applicable

ND = no data available

scf = standard cubic feet

VMT = vehicle miles traveled

CH₂O = formaldehyde

600-bhp White Superior Engine

Rated bhp: 600 bhp (MAQP #2768-08 Application)

Hours of Operation: 8760 hr/yr

Heat Input 8500 Btu/hp-hr (MAQP #2768-08 Application)

NO_x Emissions - controlled

Emissions Factor: 1.5 g/bhp-hr (BACT - MAQP 2768-08)

Calculations: 1.5 g/bhp-hr * 600 bhp * 8760 hr/yr * 0.002205 lb/g = 17384.22 lb/yr
8.69 ton/yr

CO Emissions - controlled

Emissions Factor: 2.0 g/bhp-hr (BACT - MAQP 2768-08)

Calculations: 2 g/bhp-hr * 600 bhp * 8760 hr/yr * 0.002205 lb/g = 23178.96 lb/yr
11.59 ton/yr

VOC Emissions - controlled

Emissions Factor: 1.0 g/bhp-hr (BACT - MAQP 2768-08)

Calculations: 1 g/bhp-hr * 600 bhp * 8760 hr/yr * 0.002205 lb/g = 11589.48 lb/yr
5.79 ton/yr

HAP Emissions

Emissions Factor: 0.011918 lb/MMBtu AP-42 Table 3.2-2 (07/2000) except formaldehyde
 Formaldehyde (Manufacturer specs - MAQP #2768-08
 Emissions Factor: 0.075 g/hp-hr App)
 Max Fuel Rate: 8500 Btu/bhp-hr (MAQP #2768-08 Application)
 Calculations: $0.011918 \text{ lb/MMBtu} * 8500 \text{ Btu/bhp-hr} * 10^6 \text{ MMBtu/Btu} * 8760 \text{ hr/yr} =$ 0.8874 lb/yr HAP minus CH2O
 $0.075 \text{ g/hp-hr} * 600 \text{ bhp} * 8760 \text{ hr/yr} * 0.002205 \text{ lb/g} =$ 869.21 lb/yr CH2O
0.44 ton/yr

PM₁₀ and PM_{2.5} Emissions

Emissions Factor: 0.01941 lb/MMBtu (AP-42 Table 3.2-3 (07/2000) - condensible + filterable)
 Max Fuel Rate: 8500 Btu/bhp-hr (MAQP #2768-08 Application)
 Calculations: $0.01941 \text{ lb/MMBtu} * 8500 \text{ Btu/bhp-hr} * 10^6 \text{ MMBtu/Btu} * 8760 \text{ hr/yr} =$ 867.1612 lb/yr
0.43 ton/yr

SO₂ Emissions

Emissions Factor: 0.000588 lb/MMBtu (AP-42 Table 3.2-3 (07/2000))
 Max Fuel Rate: 8500 Btu/bhp-hr (MAQP #2768-08 Application)
 Calculations: $0.000588 \text{ lb/MMBtu} * 8500 \text{ Btu/bhp-hr} * 10^6 \text{ MMBtu/Btu} * 8760 \text{ hr/yr} =$ 26.2695 lb/yr
0.01 ton/yr

Glycol Dehydration Reboiler

Max Heat Input: 0.25 MMBtu/hr
 Hours of Operation: 8760 hr/yr

PM₁₀ and PM_{2.5} Emissions:

Emissions Factor: 7.6 lb/MMSCF (AP-42 Table 1.4-2 (07/1998))
 Calculations: $7.6 \text{ lb/MMSCF} / 1020 * 0.25 \text{ MMBtu/hr} =$ 0.001863 lb/hr
0.01 ton/yr

SO_x Emissions:

Emissions Factor: 0.6 lb/MMSCF (AP-42 Table 1.4-2 (07/1998))
 Calculations: $0.6 \text{ lb/MMSCF} / 1020 * 0.25 \text{ MMBtu/hr} =$ 0.000147 lb/hr
0.001 ton/yr

VOC Emissions:

Emissions Factor: 5.5 lb/MMSCF (AP-42 Table 1.4-2 (07/1998))
 Calculations: $5.5 \text{ lb/MMSCF} / 1020 * 0.25 \text{ MMBtu/hr} =$ 0.001348 lb/hr
0.01 ton/yr

CO Emissions:

Emissions Factor: 84 lb/MMSCF (AP-42 Table 1.4-1 (07/1998))
Calculations: $84\text{lb/MMSCF}/1020*0.25\text{MMBtu/hr} = 0.020588 \text{ lb/hr}$
0.09 ton/yr

NO_x Emissions:

Emissions Factor: 100 lb/MMSCF (AP-42 Table 1.4-1 (07/1998))
Calculations: $100\text{lb/MMSCF}/1020*0.25\text{MMBtu/hr} = 0.02451 \text{ lb/hr}$
0.11 ton/yr

HAP Emissions:

Emissions Factor: 1.887958 lb/MMSCF (AP-42 Table 1.4-3 and 1.4-4, 07/1998)
Calculations: $1.887958\text{lb/MMSCF}/1020*0.25\text{MMBtu/hr} = 0.000463 \text{ lb/hr}$
0.00203 ton/yr

Hotomatic Heater

Max Heat Input: 0.12 MMBtu/hr
Hours of Operation: 8760 hr/yr

PM₁₀ and PM_{2.5} Emissions:

Emissions Factor: 7.6 lb/MMSCF (AP-42 Table 1.4-2 (07/1998))
Calculations: $7.6\text{lb/MMSCF}/1020*0.12\text{MMBtu/hr} = 0.000894 \text{ lb/hr}$
0.00 ton/yr

SO_x Emissions:

Emissions Factor: 0.6 lb/MMSCF (AP-42 Table 1.4-2 (07/1998))
Calculations: $0.6\text{lb/MMSCF}/1020*0.12\text{MMBtu/hr} = 7.06\text{E-}05 \text{ lb/hr}$
0.00 ton/yr

VOC Emissions:

Emissions Factor: 5.5 lb/MMSCF (AP-42 Table 1.4-2 (07/1998))
Calculations: $5.5\text{lb/MMSCF}/1020*0.12\text{MMBtu/hr} = 0.000647 \text{ lb/hr}$
0.00 ton/yr

CO Emissions:

Emissions Factor: 84 lb/MMSCF
Calculations: $84\text{lb/MMSCF}/1020*0.12\text{MMBtu/hr} = 0.009882 \text{ lb/hr}$
0.04 ton/yr

NO_x Emissions:

Emissions Factor: 100 lb/MMSCF
Calculations: $100\text{lb/MMSCF}/1020*0.12\text{MMBtu/hr} = 0.011765 \text{ lb/hr}$
0.05 ton/yr

HAP Emissions:

Emissions Factor: 1.887958 lb/MMSCF (AP-42 Table 1.4-3 and 1.4-4, 07/1998)
Calculations: 1.8879582lb/MMSCF/1020*0.12MMBtu/hr= 0.000222 lb/hr
0.00097 ton/yr

Dehydration VOC and HAP Emissions:

A description of sample point, the sample analyses, and the GlyCalc input and emissions summary reports are on file with the application.

V. Existing Air Quality

The area in which the compressor engine is to be located is currently designated as attainment/unclassifiable for the National Ambient Air Quality Standards for all criteria pollutants.

VI. Ambient Air Impact Analysis

Previously, ambient air quality modeling was conducted for all compressor stations in and near Glacier, Toole, Liberty, and Pondera Counties using two EPA guideline models, ISC2, and COMPLEX. The meteorological data used was taken from the Great Falls Airport National Weather Service station. The modeling submitted for the Cut Bank Field, Station 001 assumed approximately 88.5 tons per year of NO_x and 88.5 tons per year of CO. This modeling did not show violations of the annual or hourly ambient standards. The modeling results (based on 88.5 tons per year of CO and NO_x) demonstrated that this facility would not cause a violation or exceedance of any state or federal ambient standard.

The potential CO and NO_x emissions from this facility are much lower than 88.5 tons per year. Furthermore, the current permit action replaces an existing engine with a replacement engine. Through the BACT process, the engine was permitted with more strict (lower) emissions standards. Therefore, this permitting action results in a reduction of allowable NO_x, CO, and VOC emissions, as depicted in the following table:

	Pollutant in tons per year		
	NO _x	CO	VOC
MAQP #2768-08 Engine Emissions:	8.69	11.59	5.79
MAQP #2768-07 Engine Emissions:	<u>11.59</u>	<u>17.38</u>	<u>5.79</u>
Net Change in Emissions:	-2.90	-5.79	0.00

Therefore, the Department believes that the amount of controlled emissions generated by this facility will not exceed any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
XX		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	XX	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	XX	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	XX	4. Does the action deprive the owner of all economically viable uses of the property?
	XX	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	XX	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	XX	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	XX	7a. Is the impact of government action direct, peculiar, and significant?
	XX	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	XX	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	XX	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

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: Omimex Canada, Ltd.
Cut Bank Field Station 001
4854 West Angling Road
Ludington, Michigan 49431

Montana Air Quality Permit Number: 2768-08

Preliminary Determination Issued: 4/1/2010

Department Decision Issued: 4/19/2010

Permit Final: 5/5/2010

1. *Legal Description of Site:* NW¼ of the NW¼ of Section 11, Township 33 North, Range 5 West, in Glacier County, Montana
2. *Description of Project:* Omimex proposes to remove an existing permitted engine and replace it with an engine of equal horsepower previously permitted at Omimex's Station 002.
3. *Objectives of Project:* The objective of the project is to remove an existing compressor engine and replace it with a different compressor engine. The permitting action updates the emissions limits from that engine with limits based on Best Available Control Technology.
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 air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Omimex 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 #2768-08.
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 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			XX			Yes
B	Water Quality, Quantity, and Distribution			XX			Yes
C	Geology and Soil Quality, Stability and Moisture			XX			Yes
D	Vegetation Cover, Quantity, and Quality			XX			Yes
E	Aesthetics			XX			Yes
F	Air Quality			XX			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			XX			Yes
H	Demands on Environmental Resource of Water, Air and Energy			XX			Yes
I	Historical and Archaeological Sites			XX			Yes
J	Cumulative and Secondary Impacts			XX			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

As shown in the Emissions Inventory of the MAQP Analysis, allowable emissions as a result of conditions that would be placed in MAQP #2768-08 would be small on an industrial scale. Furthermore, as described in the Ambient Air Impact Analysis, the conditions which would be placed in MAQP #2768-08 would ensure a decrease in allowable emissions of NO_x and CO. Any impacts to terrestrial and aquatic life and habitats would be expected to be minor.

B. Water Quality, Quantity and Distribution

The proposed project would not result in water usage as a part of normal operations of the compressor engine. Small amounts of water may be required for fugitive dust control of the access roads and the general facility property. Increased activity during installation may require more water usage than normal; however, any impacts to the water quality, quantity, and distribution in the area would be expected to be minor.

C. Geology and Soil Quality, Stability and Moisture

The proposed project would take place at an already existing site, to remove an existing engine and replace the engine. Small amounts of water may be required for fugitive dust control of the access roads and the general facility property. Deposition of pollutants would be expected to be minor due to the small amount of emissions as a result of the control requirements that would be in MAQP #2768-08 and the dispersion of those emissions. A net decrease in allowable emissions of NO_x and CO would result from the issuance of MAQP #2768-08. Impacts to geology and soil quality, stability, and moisture would be expected to be minor.

D. Vegetation Cover, Quantity, and Quality

Deposition of pollutants would be expected to be minor due to the small amount of emissions as a result of the control requirements that would be in MAQP #2768-08. Furthermore, a net decrease in allowable emissions of NO_x and CO would result. Fugitive dust control would be required of the access roads and the general facility property. Therefore, any impacts to vegetation cover, quantity, and quality would be expected to be minor.

E. Aesthetics

The proposed project is to install a compressor engine in an already existing site. Therefore, only a minor impact to aesthetics would be expected. A temporary increase in activity at the site would be expected during the installation of the replacement engine and removal of the old engine.

F. Air Quality

MAQP #2768-08 would require AFR and NSCR controls. These controls would greatly reduce the potential emissions from this source. Conditions and limitations that would be placed in MAQP #2768-08 would ensure all allowable emissions are small on an industrial scale. Therefore, impacts to the air quality would be expected to be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

As described in Section 7.F above, conditions and limitations that would be placed in MAQP #2768-08 would require controls and would result in allowable emissions that are small on an industrial scale.

The net emissions change from MAQP #2768-07 to #2768-08 would mostly be a reduction of emissions, with emissions of NO_x and CO decreasing, and less than a 0.3 ton per year increase in particulate matter. Any affect to endangered, fragile, or limited environmental resources would be expected to be minor.

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

The project is to install a natural gas compressor engine. This engine would be fired on Natural Gas. However, the engine would be used to ensure proper distribution of natural gas through the pipeline.

As described in Section 7.B above, the proposed project would not result in water usage or onsite wastewater discharge as a part of normal operations of the compressor engine. However, small amounts of water may be required for fugitive dust control of the access roads and the general facility property.

As described in Section 7.F above, impacts to the air quality would be expected to be minor.

Overall, the demands on the environmental resources of water, air and energy would be expected to be minor.

I. Historical and Archaeological Sites

The proposed project would take place at an already existing site, to remove an existing engine and replace the engine. Therefore, with installation proposed to occur at an already developed site, any impacts to historical or archaeological sites would be expected to be minor, if any.

J. Cumulative and Secondary Impacts

Potential physical and biological effects of any individual considerations above would be expected to be minor. Collectively, the potential cumulative and secondary impacts would be expected to 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			XX			Yes
B	Cultural Uniqueness and Diversity			XX			Yes
C	Local and State Tax Base and Tax Revenue			XX			Yes
D	Agricultural or Industrial Production			XX			Yes
E	Human Health			XX			Yes
F	Access to and Quality of Recreational and Wilderness Activities			XX			Yes
G	Quantity and Distribution of Employment			XX			Yes
H	Distribution of Population			XX			Yes
I	Demands for Government Services			XX			Yes
J	Industrial and Commercial Activity			XX			Yes
K	Locally Adopted Environmental Plans and Goals					XX	Yes
L	Cumulative and Secondary Impacts			XX			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 be expected to cause disruption to any social structures or mores in the area. The project would not be expected to change the predominate use of the land in the surrounding area and the project is replacing a compressor engine at an already existing site. Impacts to social structures and mores, if any, would be expected to be minor.

B. Cultural Uniqueness and Diversity

The predominant use of the area would be expected to remain the same. No significant employment would be expected as a result of this project. The cultural uniqueness and diversity of the area would be expected to have only minor, if any, affects imparted by this project.

C. Local and State Tax Base and Tax Revenue

The proposed project would require temporary construction activities. Overall, any impacts to the local and state tax base and tax revenue would be expected to be minor.

D. Agricultural or Industrial Production

Potential emissions would be small on an industrial scale. Furthermore, MAQP #2768-08 would require control of fugitive dust emissions from the general facility area. The project is replacing an engine at an already established site, and results in a net reduction of allowable emissions of NO_x and CO, with less than a 0.3 ton per year increase in particulate matter. Any agricultural or industrial impacts would be expected to be minor.

E. Human Health

MAQP #2768-08 would contain limitations and conditions derived from rules designed to protect human health. Overall, any impacts to human health would be expected to be minor.

F. Access to and Quality of Recreational and Wilderness Activities

This project is replacing a compressor engine at an already existing site. Therefore, any impacts to the access and quality of recreational and wilderness activities would be expected to be minor.

G. Quantity and Distribution of Employment

No change to the quantity and distribution of employment would be expected to result from this project. No other factors affecting distribution of population is apparent. Impacts, if any, would be expected to be minor.

H. Distribution of Population

No change to the quantity and distribution of employment would be expected to result from this project. No other factors affecting distribution of population is apparent. Impacts, if any, would be expected to be minor.

I. Demands for Government Services

It would be expected that there would be demand for government services associated with compliance activities and acquiring the proper permits related to this project. Overall, demands for government services would be minor due to the size/classification of this facility.

J. Industrial and Commercial Activity

The compressor engine would replace an already existing engine at an established site. There may be a slight increase in activity during installation of the compressor station; however, this would be temporary.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals affected by issuing MAQP #2768-08. The MAQP would contain limits for protecting air quality and keeping facility emissions in compliance with air quality standards.

L. Cumulative and Secondary Impacts

Potential economic and social effects of any individual considerations above would be expected to be minor. The Department has determined that collectively, the potential cumulative and secondary impacts would be expected to be minor.

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 compressor engine. MAQP #2768-08 includes conditions and limitations to ensure the facility will 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: Shawn Juers

Date: 3/25/2010