

## AIR QUALITY PERMIT

Issued to: Omimex Canada, Ltd.  
Battle Creek Compressor Station  
4854 West Angling Road  
Ludington, Michigan 49431

Permit: #3336-00  
Application Complete: 05/24/04  
Preliminary Determination Issued: 07/02/04  
Department Decision Issued: 07/20/04  
Permit Final: 08/05/04  
AFS # 005-0014

An air quality permit, 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 the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

### Section I: Permitted Facilities

#### A. Permitted Equipment

Permit #3336-00 is issued to Omimex for the operation of the Battle Creek Compressor Station. The facility is a natural gas compressor station. A complete list of permitted equipment is contained in Section I.A of the permit analysis.

#### B. Plant Location

The facility is located on a 480-acre site approximately 20 miles northeast of Chinook. The legal description of the facility is the SW<sup>1</sup>/<sub>4</sub> of the SE<sup>1</sup>/<sub>4</sub> of Section 26, Township 36 North, Range 19 East, in Blaine County, Montana. This facility is located on a 480-acre site approximately 20 miles northeast of Chinook and is known as the Battle Creek Compressor Station. The facility was recently separated because equipment at the facility is owned by two separate entities.

### Section II: Conditions and Limitations

#### A. Emission Limitations

1. Omimex shall operate no more than one natural gas lean burn compressor engine at any given time (ARM 17.8.749).
2. The maximum capacity of the compressor shall not exceed 1600 horsepower (Hp) (ARM 17.8.749).
3. The lean burn engine shall be controlled with an oxidation catalyst. The emission limits for the engine shall be determined as follows (ARM 17.8.749):

Emission Limit (pounds per hour (lb/hr)) = Emission Factor (grams per break horsepower-hour (g/bhp-hr)) \* maximum rated capacity of engine (bhp) \* 0.002205 pounds per gram (lb/g).

4. Unit #01 shall not have a designed horsepower rating greater than 1,600-hp. The emission limit for Unit #01 shall be determined by using the equation in Section II.A.3. in conjunction with the following emission factors (ARM 17.8.749):

NO<sub>x</sub> 1.30 g/bhp-hr  
CO 2.24 g/bhp-hr  
VOC 1.00 g/bhp-hr

5. Omimex 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. 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).
7. 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.6. (ARM 17.8.749).

B. Testing Requirements

1. Omimex shall test Unit #01 for NO<sub>x</sub> and CO, concurrently, to demonstrate compliance with the NO<sub>x</sub> and CO emission limits contained in Section II.A.4. Testing shall continue on an every 2-year basis or according to another testing/monitoring schedule as may be approved by the Department of Environmental Quality (Department) (ARM 17.8.105 and ARM 17.8.749).
2. All compliance source tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
3. 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 Section I.A. of the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date specified 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. 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).
3. Omimex shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745 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 emission 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. This notice must include the information requested in ARM 17.8.745(1)(d) (ARM

17.8.745).

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 (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 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 and/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 conclusion of the hearing and issuance of a final decision by the Board.
- 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 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 Omimex may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

PERMIT ANALYSIS  
Omimex Canada, Ltd.  
Battle Creek Compressor Station  
Permit #3336-00

I. Introduction/Process Description

A. Permitted Description

Omimex Canada, Ltd. (Omimex) is permitted for the operation of equipment located at the Battle Creek Compressor Station. The facility is a natural gas compressor station located near the town of Chinook, Montana. The Omimex facility consists of the following equipment:

Unit #01: 1999 Superior 2408GTL 1,600-hp Lean-Burn Compressor Engine  
Unit #02: Weil-McLain PFG-7 Boiler #1  
Unit #3a: Rushton Gas and Oil Equipment TEG Dehydration Unit  
Unit #3b: Rushton Gas and Oil Equipment Still Vent

B. Source Description

Omimex owns and operates a natural gas compressor station and associated equipment located in the SW<sup>1</sup>/<sub>4</sub> of the SE<sup>1</sup>/<sub>4</sub> of Section 26, Township 36 North, Range 19 East, in Blaine County, Montana. The facility has two primary purposes. The first purpose is to boost the field gas up to the required pressure in the natural gas transmission system.

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. This is accomplished with a dehydrator, also commonly called a reboiler or glycol unit. The gas is treated with a glycol solution, which absorbs the water in the gas stream. The glycol is then heated to about 300 degrees Fahrenheit (°F) in order to drive off the water and return the glycol. The water that is driven off is released to the atmosphere in the form of steam. Burning natural gas in the dehydrator reboiler generates the heat necessary for this. The compressed gas is routed to a pipeline for delivery, sale, and use.

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 of Environmental Quality (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, Subchapter 1 - General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this subchapter, 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 all 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 as to create a public nuisance.

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

1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
4. ARM 17.8.213 Ambient Air Quality Standard for Ozone
5. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
6. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
7. ARM 17.8.221 Ambient Air Quality Standard for Visibility
8. ARM 17.8.222 Ambient Air Quality Standard for Lead
9. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

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 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 less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate. (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. 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 meet this limitation by burning pipeline-quality natural gas in the compressor engine and the dehydration unit reboiler(s).
6. ARM 17.8.324(3) Hydrocarbon Emissions--Petroleum Products. 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 Omimex facility because the facility 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. The source, as defined and applied in 40 CFR 63, shall comply with the requirements of 40 CFR 63, as listed below:

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 Part 63, Subpart HH. In order for a natural gas production facility to be subject to 40 CFR Part 63, Subpart HH requirements, certain criteria must be met. First, the facility must be a major 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 HAPs 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)(4) of 40 CFR Part 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 Part 63, Subpart HH do not apply, the facility is subject to the applicable provisions of 40 CFR Part 63, Subpart HH. Because the facility is not a major source of HAPs, Omimex is not subject to the provisions of 40 CFR Part 63, Subpart HH.

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 Part 63, Subpart HHH. In order for a natural gas transmission and storage facility to be subject to 40 CFR Part 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. 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 Part 63, Subpart HHH. Second, a facility must contain an affected source (glycol dehydration unit) as defined in paragraph (b) of 40 CFR Part 63, Subpart HHH. Third, if the first two criteria are met, and the exemptions contained in paragraph (f) of 40 CFR Part 63, Subpart HHH, do not apply, the facility is subject to the applicable provisions of 40 CFR Part 63, Subpart HHH. Because the facility is not a major source of HAPs, Omimex is not subject to the provisions of 40 CFR 63, Subpart HHH.

- 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 pro-rate 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 subchapter, unless indicated otherwise in a specific subchapter.
  2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. Omimex has the PTE greater than 25 tons per year of 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 Permit--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, alteration 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. Omimex submitted an affidavit of publication of public notice for the May 15, 2004, issue of the *Great Falls Tribune*, a newspaper of general circulation in the Town of Great Falls, Montana, 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 17.8.760 Additional Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.
12. 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 altered 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.
13. 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).
14. 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.
15. 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 it is not listed and the facility's PTE is below 250 tons-per-year (excluding fugitive emissions) of any pollutant.

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 stationary source having:
  - a. PTE > 100 tons/year of any pollutant;
  - b. PTE > 10 tons/year of any one HAP, PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
  - c. PTE > 70 tons/year of PM<sub>10</sub> in a serious PM<sub>10</sub> nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. 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 air quality Permit #3336-00 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 single HAP and less than 25 tons/year for all HAPs.
  - c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
  - d. This facility is not subject to any current NSPS.
  - e. This facility is not subject to any current NESHAP.
  - 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 that Omimex would be a minor source of emissions as defined under Title V.

### III. BACT Determination

A BACT determination is required for each new or altered source. Omimex shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized. A BACT analysis for controlling NO<sub>x</sub>, CO and VOC emissions from the 1600-hp Superior 2408GTL compressor engine (Unit #1) was conducted when it was originally permitted in Permit #3025-03. The current permitting action includes equipment located at the Battle Creek Compressor Station being divided between two separate entities. However, all of the equipment is operating in the same location under the same operating conditions. Therefore, the Superior 2408GTL compressor engine has not undergone a change in location or a change in operation. Under ARM 17.8.752, emitting units become subject to BACT when any modification to the emitting unit requires a Montana Air Quality Permit. Because the need for a permit is based on the change in ownership of the unit, and because no modification to the location or operation of the unit occurred, a BACT analysis was not required.

IV. Emission Inventory

Air Pollutants (tons/year)

#	Emission Units	PM <sub>10</sub>	NO <sub>x</sub>	CO	VOC	SO <sub>x</sub>
01	1600-hp Superior 2408GTL Compressor Engine	0.004	20.09	34.60	15.45	0.027
02	Weil-McLain EGH 125-P1 Boiler	0.067	0.88	0.74	0.48	0.0053
03a	Rushton Gas & Oil Equipment Dehydrator Reboiler	0.0015	0.088	0.074	0.005	0.0053
03b	Rushton Gas & Oil Equipment Dehydrator Still Vent	0.00	0.00	0.00	0.0197	0.00
<b>Total Emissions</b>		<b>0.077</b>	<b>21.05</b>	<b>35.42</b>	<b>15.53</b>	<b>0.033</b>

**UNIT #01: 1999 Superior 2408GTL Compressor Engine**

Brake Horsepower: 1600 bhp  
 Hours of Operation: 8,760 hr/yr  
 Max Fuel Combustion Rate: 11.04 MMBtu/hr  
 Fuel Heating Value: 1,000 Btu/SCF or 0.0010 MMSCF/MMBtu

PM<sub>10</sub> Emissions

Emission Factor: 0.080 lb/MMSCF {AP-42, Chapter 3, Table 3.2-2, 7/00}  
 Calculations: 0.080 lb/MMSCF \* 0.001 MMSCF/MMBtu \* 11.04 MMBtu/hr = 0.0009 lb/hr  
 0.001 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 0.004 ton/yr

NO<sub>x</sub> Emissions

Emission factor: 1.30 g/bhp-hr {Manufacturer's Estimates}  
 Calculations: 1.30 g/bhp-hr \* 1600 bhp \* 0.002205 lb/g = 4.59 lb/hr  
 4.59 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 20.09 ton/yr

VOC Emissions

Emission factor: 1.00 g/bhp-hr {Manufacturer's Estimates}  
 Calculations: 1.00 g/bhp-hr \* 1600 bhp \* 0.002205 lb/g = 3.53 lb/hr  
 3.53 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 15.45 ton/yr

CO Emissions

Emission factor: 2.24 g/bhp-hr {Requested by Company-based on testing results}  
 Calculations: 2.24 g/bhp-hr \* 1600 bhp \* 0.002205 lb/g = 7.90 lb/hr  
 7.90 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 34.60 ton/yr

SO<sub>x</sub> Emissions

Emission factor: 0.5600 lb/MMSCF {AP-42, Chapter 3, Table 3.2-2, 7/00}  
 Calculations: 0.5600 lb/MMSCF \* 0.001 MMSCF/MMBtu \* 11.04 MMBtu/hr = 0.0062 lb/hr  
 0.0062 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 0.027 ton/yr

**SOURCE #05: Weil-McLain EGH 125-P1 Boiler**

Max Fuel Combustion Rate: <2.0 MMBtu/hr  
 Hours of Operation: 8,760 hr/yr  
 Fuel Heating Value: 1,000 Btu/SCF or 0.0010 MMSCF/MMBtu  
 Fuel Consumption: 2.0 MMBtu/hr \* 0.001 MMScf/MMBtu \* 8760 hr/yr = 17.52

PM-10 Emissions

Emission Factor: 7.6 lb/MMSCF {AP-42 Chapter 1, Table 1.4-2, 3/98}  
 Calculations: 7.6 lb/MMSCF \* 17.52 MMscf/yr \* 0.0005 ton/lb = 0.067 ton/yr

NO<sub>x</sub> Emissions

Emission factor: 100 lb/MMSCF {AP-42 Chapter 1, Table 1.4-2, 3/98}  
 Calculations: 100 lb/MMSCF \* 17.52 MMscf/yr \* 0.0005 ton/lb = 0.88 ton/yr

VOC Emissions

Emission factor: 5.5 lb/MMSCF {AP-42 Chapter 1, Table 1.4-2, 3/98}  
 Calculations: 5.5 lb/MMSCF \* 17.52 MMscf/yr \* 0.0005 ton/lb = 0.048 ton/yr

CO Emissions

Emission factor: 84 lb/MMSCF {AP-42 Chapter 1, Table 1.4-2, 3/98}  
Calculations: 84 lb/MMSCF \* 17.52 MMscf/yr \* 0.0005 ton/lb = 0.74 ton/yr

SO<sub>x</sub> Emissions

Emission factor: 0.60 lb/MMSCF {FIRE, Version 6.1, 2-01-002-02}  
Calculations: 0.60 lb/MMSCF \* 17.52 MMscf/yr \* 0.0005 ton/lb = 0.0053 ton/yr

**UNIT #3a: Rushton Gas and Oil Equipment Dehydrator Reboiler**

Max Fuel Combustion Rate: 0.20 MMBtu/hr  
Hours of Operation: 8,760 hr/yr  
Fuel Heating Value: 1,000 Btu/SCF or 0.0010 MMSCF/MMBtu  
Fuel Consumption: 0.20 \* 0.001 MMScf/MMBtu \* 8760 hr/yr = 1.75 MMScf/yr

PM<sub>10</sub> Emissions

Emission Factor: 7.60 lb/MMSCF {AP-42, Chapter 1, Table 1.4-2, 7/98}  
Calculations: 7.60 lb/MMScf \* 1.75 MMScf/yr \* 0.0005 ton/lb = 0.0067 ton/yr

NO<sub>x</sub> Emissions

Emission Factor: 100.0 lb/MMSCF {AP-42, Chapter 1, Table 1.4-1, 7/98}  
Calculations: 100.0 lb/MMScf \* 1.75 MMScf/yr \* 0.0005 ton/lb = 0.0875 ton/yr

VOC Emissions

Emission Factor: 5.50 lb/MMSCF {AP-42, Chapter 1, Table 1.4-2, 7/98}  
Calculations: 5.50 lb/MMScf \* 1.75 MMScf/yr \* 0.0005 ton/lb = 0.0048 ton/yr

CO Emissions

Emission Factor: 84.0 lb/MMSCF {AP-42, Chapter 1, Table 1.4-1, 7/98}  
Calculations: 84.0 lb/MMScf \* 1.75 MMScf/yr \* 0.0005 ton/lb = 0.0735 ton/yr

SO<sub>x</sub> Emissions

Emission Factor: 0.60 lb/MMSCF {AP-42, Chapter 1, Table 1.4-2, 7/98}  
Calculations: 0.60 lb/MMScf \* 1.75 MMScf/yr \* 0.0005 ton/lb = 0.0005 ton/yr

**UNIT #3b: Rushton Gas and Oil Equipment Dehydrator Still Vent**

Hours of Operation: 8760 hr/yr

VOC Emissions

Emission Factor: 0.0045 lb/hr (GRI-GLYcalc, EPA Approved Still Vent Emission Estimation Program)  
Calculations: 0.0045 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 0.0197 ton/yr

V. Air Quality Impacts

The facility is located in the SW¼ of the SE¼ of Section 26, Township 36 North, Range 19 East in Blaine County, Montana. The air quality of this area is classified as either Better than National Standards or unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. In the view of the Department, the amount of controlled emissions from this facility will not cause an exceedance of any ambient air quality standard.

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 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.

Air Quality Permit Number: 3336-00

Preliminary Determination Issued: 07/02/04

Department Decision Issued: 07/20/04

Permit Final: 08/05/04

1. Legal Description of Site: Omimex would operate a natural gas compression facility located approximately 20 miles northeast of Chinook, Montana. The legal description of the facility is the Southwest ¼ of the Southeast ¼ of Section 26, Township 36 North, Range 19 East, in Blaine County, Montana.
2. Description of Project: The current permit action would separate existing equipment (1,600 hp Superior 2408 GTL compressor engine, one <2 Million British Thermal Units/hour Weil McLain PFG – 7 Boiler, and one 0.20 MMBtu/hr Rushton Gas and Oil Equipment TEG Dehydration Reboiler and Still Vent) from an existing facility. The remaining equipment would be permitted under Permit #3025-09 under separate ownership.
3. Objectives of Project: Omimex purchased some of the equipment at the Battle Creek Compressor Station to operate a natural gas compression facility. The Battle Creek Compressor Station would have the capability to compress natural gas for delivery through pipelines.
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 would be included in Permit #3336-00.
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 to 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				X		Yes
B	Water Quality, Quantity, and Distribution				X		Yes
C	Geology and Soil Quality, Stability and Moisture				X		Yes
D	Vegetation Cover, Quantity, and Quality				X		Yes
E	Aesthetics				X		Yes
F	Air Quality				X		Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources				X		Yes
H	Demands on Environmental Resource of Water, Air and Energy				X		Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts				X		Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

- A. Terrestrial and Aquatic Life and Habitats
- B. Water Quality, Quantity and Distribution
- C. Geology and Soil Quality, Stability and Moisture
- D. Vegetation Cover, Quantity, and Quality
- E. Aesthetics
- F. Air Quality
- G. Unique Endangered, Fragile, or Limited Environmental Resources
- H. Demands on Environmental Resource of Water, Air and Energy
- I. Historical and Archaeological Sites
- J. Cumulative and Secondary Impacts

The current permit action would have no physical or biological effects on the human environment because the proposed action does not add an emission unit nor impact the actual emissions of the facility. The equipment Omimex would operate is currently permitted under Permit #3025-08 and is currently operating. Once final, Permit #3336-00 would cover the Omimex equipment.

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

the human environment. The “no-action” alternative was discussed previously.

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

**SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS:** The following comments have been prepared by the Department.

- A. Social Structures and Mores
- B. Cultural Uniqueness and Diversity
- C. Local and State Tax Base and Tax Revenue
- D. Agricultural or Industrial Production
- E. Human Health
- F. Access to and Quality of Recreational and Wilderness Activities
- G. Quantity and Distribution of Employment
- H. Distribution of Population
- I. Demands for Government Services
- J. Industrial and Commercial Activity
- K. Locally Adopted Environmental Plans and Goals
- L. Cumulative and Secondary Impacts

The current permit action would have no economic or social effects on the human environment because the proposed action does not make any physical or operational changes to the facility nor does the action affect the actual emissions of the facility. The equipment Omimex would operate is permitted under Permit #3025-08 and is currently operating. Once final, Permit #3336-00 would cover the Omimex equipment.

Recommendation: No EIS is required.

The current permitting action is for the separation of the Battle Creek Compressor Station equipment into two permits under separate ownership. The proposed action does not make any physical or operational changes to the Omimex facility, the action does not effect the actual emissions of the facility, and there is no significant impacts associated with this action. Furthermore, Permit #3336-00 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations.

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, Montana Historical Society – State Historic Preservation Office, Natural  
Resource Information System – Montana Natural Heritage Program

EA prepared by: Julie Merkel

Date: June 28, 2004