November 26, 2018

Sent electronically via e-mail to: Russell_riall@omimexgroup.com

Russell Riall
HSE – Regulatory Compliance Coordinator
Omimex Canada, Ltd.
7950 John T. White Rd.
Fort Worth, TX 76120

Dear Mr. Riall:

Montana Air Quality Permit #5215-00 is deemed final as of November 24, 2018, by the Department of Environmental Quality (Department). This permit is for a Natural Gas Compressor Engine. 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,

Julie A. Merkel
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626

John P. Proulx
Air Quality Specialist
Air Quality Bureau
(406) 444-5391

JM:JPP
Enclosure

Montana Department of Environmental Quality
Air, Energy & Mining Division

Montana Air Quality Permit #5215-00

Omimex Canada, Ltd.
7950 John T. White Rd.
Fort Worth, TX 76120

November 24, 2018

MONTANA AIR QUALITY PERMIT

Issued To:	Omimex Canada, Ltd. 7950 John T. White Road Fort Worth, TX 76120	MAQP: #5215-00 Application Complete: 9/28/2018 Preliminary Determination Issued: 10/19/2018 Department's Decision Issued: 11/8/2018 Permit Final: 11/24/2018

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. Permitted Equipment

- 1 – 600 horsepower (hp) natural gas compressor engine
- Associated equipment

B. Plant Location

Omimex proposes to operate a stationary natural gas compressor engine, which will be located at Section 22, Township 33 North, and Range 5 East (48.602950, -112.244151), in Glacier County, Montana.

Section II: Conditions and Limitations

A. Emission Limitations

1. The 600 hp Waukesha F2895GL natural gas compressor engine shall be of four-stroke rich-burn design and operated with a non-selective catalytic reduction (NSCR) unit and an air/fuel ratio (AFR) controller (ARM 17.8.752).

2. The pound per hour (lb/hr) emission limitations for the natural gas compressor engine shall be determined using the following equation and pollutant-specific grams per brake horsepower-hour (g/bhp-hr) emission factors (ARM 17.8.752):

Emission Factors:	
Oxides of Nitrogen (NO_X)	1.5 g/bhp-hr (.003307 lb/bhp-hr)
Carbon Monoxide (CO)	2.0 g/bhp-hr (.004400 lb/bhp-hr)
Volatile Organic Compounds (VOC)	0.5 g/bhp-hr (.001103 lb/bhp-hr)

3. 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).

4. 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).

5. 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.4 (ARM 17.8.749).

6. Omimex shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in 40 CFR 60, Subpart JJJJ and 40 CFR 60, Subpart OOOO (ARM 17.8.340, 40 CFR 60, Subpart JJJJ and 40 CFR60, Subpart OOOO).

7. Omimex shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 63, Subpart ZZZZ (ARM 17.8.340 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. The compressor engine shall be initially tested for NO_X and CO concurrently. The initial source testing shall be conducted within 180 days of the initial start-up date of the compressor engine. The compressor engine shall be tested on an every 4-year basis, or according to another testing/monitoring schedule as may be approved by the department, for NO_X and CO (ARM 17.8.105 and ARM 17.8.749).

2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

3. The Department of Environmental Quality (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).

Omimex shall submit the following information annually to the Department by March 1 of each year; the information may be submitted along with the annual emission inventory (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. These records may be stored at a location other than the plant site upon approval by the Department (ARM 17.8.749).

D. Notification

Omimex shall provide the Department with notification of the actual start-up date of the natural gas compressor engine within 15 days of the actual startup 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 such as Continuous Emission Monitoring Systems (CEMS) or Continuous Emission Rate Monitoring Systems (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 Analysis
Omimex Canada, Ltd.
MAQP #5215-00

I. Introduction/Process Description

Omimex Canada, Ltd. (Omimex) owns and operates a natural gas compressor engine. The facility is located in Section 22, Township 33 North, and Range 5 East (48.602950, -112.244151), in Glacier County, Montana, and is known as the Bainville Compressor Station.

A. Permitted Equipment

- 1 – 600 brake horsepower (bhp) four-stroke rich-burn Waukesha F2895GL natural gas compressor engine with nonselective catalytic reduction (NSCR) unit and air/fuel ratio (AFR) controller.

- Associated Equipment

B. Source Description

The facility boosts field gas through the gas transmission system to a gas plant for processing.

C. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (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 of Environmental Quality (Department). Upon request, the Department will provide references for 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 PM_{10}
11. ARM 17.8.230 Fluoride in Forage

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 17.8.316 Incinerators. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any incinerator, particulate matter in excess of 0.10 grains per standard cubic foot of dry flue gas, adjusted to 12% carbon dioxide and calculated as if no auxiliary fuel had been used. Further, no person shall cause or authorize to be discharged into the outdoor atmosphere from any incinerator emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes.

6. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.

7. 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.

8. 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). Omimex is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

   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 (CI ICE). Owners or operators of stationary spark ignition (SI) internal combustion engine (ICE) that commence construction, modification, or reconstruction after June 12, 2006, where the stationary ICE is manufactured after July 1, 2007, for engines greater than 500 bhp, or after January 1, 2008, for engines less than 500 bhp. This NSPS will apply if the engine remains, or will remain, at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source.

A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates three months or more each year. Because the natural gas SI ICE engines were modified after July 1, 2007, this NSPS does apply.

c. 40 CFR 60, Subpart OOOO – Crude Oil and Natural Gas Production, Transmission, and Distribution. Any owner or operation of a reciprocating compressor which is a single reciprocation compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment may be subject to this part. Based on information provided by Omimex, the natural gas compressor engine is subject to this subpart because it is a reciprocation engine located between the wellhead and custody transfer.

10. 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 an NESHAP Subpart as listed below:

b. 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. Based on the information submitted by Omimex, the RICE equipment to be used under MAQP #5215-00 is subject to this subpart because the RICE is a stationary engine located at an area source of HAP emissions.

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 Oxides of Nitrogen (NO_X); 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. Omimex submitted an affidavit of publication of public notice for the August 15, 2018 issue of *The Cut Bank Pioneer Press*, a newspaper of general circulation in the Town of Cut Bank in Glacier 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 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.

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.

16. ARM 17.8.770 Additional Requirements for Incinerators. This rule specifies the additional information that must be submitted to the Department for incineration facilities subject to 75-2-215, Montana Code Annotated (MCA).

17. ARM 17.8.771 Mercury Emission Standards for Mercury-Emitting Generating Units. This rule identifies mercury emission limitation requirements, mercury control strategy requirements, and application requirements for mercury-emitting generating units.

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 HAPs, 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 (PM_{10}) in a serious PM_{10} 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 #5215-00 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 one HAP and less than 25 tons/year for all HAPs.

c. This source is not located in a serious PM_{10} nonattainment area.

d. This facility is subject to NSPS (40 CFR 60, Subpart A, Subpart JJJJ, and Subpart OOOO).

e. This facility is subject to NESHAP standards (40 CFR 63, Subpart A and Subpart ZZZZ).

f. This source is not a Title IV affected source, or a solid waste combustion unit.

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

The Department determined that the annual reporting requirements contained in the permit are sufficient to satisfy this requirement.

Based on these facts, the Department determined that Omimex will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Omimex will be required to obtain a Title V Operating Permit.

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.

The primary criteria pollutants from natural gas-fired reciprocating engines are oxides of nitrogen (NO_X), carbon monoxide (CO), and volatile organic compounds (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 volatized 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 pre-stratified 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, non-selective catalytic reduction (NSCR) for rich-burn engines, and CO oxidation catalysts for lean-burn engines.

The proposed compressor engine is 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 an air-fuel ratio (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 NSCR, hydrocarbons and CO are oxidized by oxygen (O_2) 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 (H_2O) and carbon dioxide (CO_2), while reducing NO_X to N_2. 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 2.65 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 beyond the proper operations and maintenance of the NO_X and CO control equipment and engine constitutes BACT for VOC emissions.

As proposed, the BACT limit will be 0.5 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.

A BACT analysis was submitted by Omimex in permit application #5215-00, addressing some available methods of controlling emissions from the compressor engine. The Department reviewed these methods, as well as previous BACT determinations and have determined that Air/Fuel Ratio Controller (AFR) and Oxidation Catalytic Reduction (OCR) proposed by Omimex constitute BACT.

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.

IV. Emission Inventory

Emissions:

CONTROLLED	**tons/year**						
Emission Source	**PM**	**PM_{10}**	**$PM_{2.5}$**	**NO_X**	**CO**	**VOC**	**SO_2**
600 bhp Compressor Engine	0.003	0.003	0.003	8.69	15.35	2.90	0.02
Total Emissions	**0.003**	**0.003**	**0.003**	**8.69**	**15.35**	**2.90**	**0.02**

Calculations:

Compressor Engine

Note: Emissions are based on the power output of the engine (600 hp).		
Operational Capacity of Engine = 600 bhp	600	**bhp**
Hours of Operation = 8,760.00 hours	8760	**hours**
BTU per MMscf = 0 btu/MMscf	0.001145	**btu/MMscf**
BTU per SCF = 6,917 scf/hr	6916.7	**scf/hr**
Grams per Pound = 0.002205 g/lb	0.002205	**g/lb**
PM Emissions:		
PM Emissions = 0.003 ton/yr (Assume all PM < 1.0 um)	0.003	**ton/yr**
PM_{10} Emissions:		
Emission Factor = 0.0000771 lbs/mmBtu (AP-42, Sec. 2.3, Table 2.3-3, 10/96)	7.71E-05	**lbs/mmBtu**
Calculation: (6,916.7 scf/hr) * (0.001145 btu/MMscf) * (0.0000771 lbs/mmBtu) * (8,760 hours) * (ton/2000 lb) = 0.003 ton/yr	0.003	**ton/yr**
$PM_{2.5}$ Emissions		
Emission Factor = 0.0000771 lbs/mmBtu (AP-42, Sec. 2.3, Table 2.3-3, 10/96)	7.71E-05	**lbs/mmBtu**
Calculation: (6,916.7 scf/hr) * (0.001145 btu/MMscf) * (0.0000771 lbs/mmBtu) * (8,760 hours) * (ton/2000 lb) = 0.003 ton/yr	0.003	**ton/yr**
NOx Emissions:		
Emission Factor = 1.5 g/bhp*hr (BACT)	1.5	**g/bhp*hr**
Calculation: (1.5 g/bhp*hr) * (600 hp) * (8,760 hours) * (0.002205 g/lb) * (ton/2000 lb) = 8.69 ton/yr	8.69	**ton/yr**
CO Emissions:		
Emission Factor = 2.65 g/bhp*hr (BACT)	2.65	**g/bhp*hr**
Calculation: (2.7 g/bhp*hr) * (600 hp) * (8,760 hours) * (0.002205 g/lb) * (ton/2000 lb) = 15.35 ton/yr	15.35	**ton/yr**
VOC Emissions:		
Emission Factor = 0.5 g/bhp*hr (BACT)	0.50000	**g/bhp*hr**
Calculation: (0.5 g/bhp*hr) * (600 hp) * (8,760 hours) * (0.002205 g/lb) * (ton/2000 lb) = 2.90 ton/yr	2.90	**ton/yr**
SO_X Emissions:		
Emission Factor = 0.000588 lbs/mmBtu (AP-42, Sec. 3.3, Table 3.3-1, 10/96)	5.88E-04	**lbs/mmBtu**
Calculation: (6,916.7 scf/hr) * (0.001145 btu/MMscf) * (0.0005880 lbs/mmBtu) * (8,760 hours) * (ton/2000 lb) = 0.020 ton/yr	0.02	**ton/yr**

V. Existing Air Quality

The permit is for a stationary facility located in Section 22, Township 33 North, and Range 5 East (48.602950, -112.244151), Glacier County, Montana. Glacier County has been designated as unclassified/attainment with ambient air quality standards, and where there are no major air pollution sources in the surrounding areas.

VI. Ambient Air Impact Analysis

The Department has determined that the impacts from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of 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	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	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?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	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?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	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?
	X	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
Air, Energy & Mining Division
Air Quality Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Omimex Canada Ltd.

Montana Air Quality Permit number (MAQP): 5215-00

EA Draft: October 19, 2018
EA Final: November 8, 2018
Permit Final: November 24, 2018

1. *Legal Description of Site:* The facility is located Section 22, Township 33 North, and Range 5 East (48.602950, -112.244151), in Glacier County, Montana.

2. *Description of Project:* Omimex Canada Ltd. (Omimex) proposes to install and operate one (1) 600-horsepower natural gas compressor engine in an already existing natural gas transmission facility.

3. *Objectives of Project:* Install and operate the natural gas compressor engine to boost natural gas pressures in the natural gas transmission line.

4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the "no-action" alternative. If no-action wee to be taken on the current permit action, Omimex would not have the required pressure to inject natural gas into the transmission line which would incur additional costs by requiring Omimex to utilize outside resources to process their natural gas, possibly incurring unnecessary debt. 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 #5215-00.

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 demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. *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

      The proposed permitting action would have no impact on terrestrial and aquatic life and habitats because the proposed engine would be installed in an already existing facility and would replace in existing emitting unit of comparable size.

B. Water Quality, Quantity and Distribution

The proposed permitting action would have no impact on water quality, quantity, and distribution because the proposed engine would be installed in an already existing facility and would replace in existing emitting unit of comparable size.

C. Geology and Soil Quality, Stability and Moisture

The proposed permitting action would have no impact on geology, soil quality, soil stability, and soil moisture because the proposed engine would be installed in an already existing facility and would replace in existing emitting unit of comparable size.

D. Vegetation Cover, Quantity, and Quality

The proposed permitting action would have no impact on vegetative cover, vegetative quantity, or vegetative quality because the proposed engine would be installed in an already existing facility and would replace in existing emitting unit of comparable size.

E. Aesthetics

The proposed permitting action would have a minor temporary impact on the aesthetics due to heavy equipment being used to install the proposed engine at the facility.

F. Air Quality

The proposed permitting action would have a minor impact on air quality. The proposed engine would be a minor source of Oxides of Nitrogen (NO_X), Carbon Monoxide (CO), Volatile Organic Compounds (VOC), Sulfur Oxide (SO_X), and Particulate Matter with an aerodynamic diameter of 10 microns and less (PM, PM_{10}, and $PM_{2.5}$).

MAQP #5215-00 would incorporate conditions to ensure that the facility would operate in compliance with all applicable air quality rules and standards.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department contacted the Montana Natural Heritage Program (MNHP) in an effort to identify any species of concern that may be found in the area where the proposed engine would occur. Search results have concluded there are two (2) animal species of concern in the area. Area, in this case, would be defined by the township and range of the proposed site, with an additional 1-mile buffer. The known animal species of concern are the Burrowing Owl and Long-billed Curlew. Specific effects of operating the proposed engine in this area would be minor since the proposed engine would have minor emissions related to its operation. Therefore, the Department determined that any effects upon these species would likely be minor.

H. Sage Grouse Executive Order

The Department recognizes that the project site is not within the Greater Sage Grouse habitat as defined by Executive Order No. 12-2015.

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

The proposed permitting action would have minor effects on environmental resources of water, air, and energy. The proposed engine would use pipeline quality natural gas from the transmission line as fuel. As discussed in part F of this assessment, there would be minor effects on air. Water resources would be needed for dust suppression in and around the facility.

J. Historical and Archaeological Sites

The proposed permitting action would have no effects on historical and archaeological sites because any construction associated with the project would occur within an existing industrial site. However, if cultural materials are discovered during this project, the Montana Historical Society should be contacted.

K. Cumulative and Secondary Impacts

The installation and operation of the proposed natural gas compressor engine would likely cause minor cumulative and secondary impacts to the physical and biological aspects because the facility is a minor source of emissions.

8. *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 permitting action would have no effects on social structure or mores because the proposed engine would be installed in an already existing site.

B. Cultural Uniqueness and Diversity

The proposed permitting action would have no effects on cultural uniqueness and diversity because the proposed engine would be installed in an already existing site.

C. Local and State Tax Base and Tax Revenue

The operation of the facility would likely have little, if any, impact on the local and state tax base and tax revenue because the facility would be a minor industrial source of emissions.

D. Agricultural or Industrial Production

The proposed permitting action would have no effects on agricultural or industrial production because the proposed engine would be installed in an already existing facility.

E. Human Health

MAQP #5215-00 would incorporate conditions to ensure that the facility would operate in compliance with all applicable air quality rules and standards.

F. Access to and Quality of Recreational and Wilderness Activities

The permitting action would have no effects on the access to and quality of recreational and wilderness activities because the current permitting action is located on an already existing site.

G. Quantity and Distribution of Employment

The permitting action would have minor effects on the quantity and distribution of employment because the operation of the proposed engine would require additional employees or require current employees to relocate.

H. Distribution of Population

The proposed natural gas compressor engine would only require a limited number of employees. No individuals would be expected to permanently relocate to this area as a result of installation. Therefore, the natural gas processing facility would not likely impact the normal population distribution in the area of operation.

I. Demands for Government Services

Government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be expected to be minor.

J. Industrial and Commercial Activity

The operation of the new engine would represent only a minor increase in the industrial activity in the proposed area of operation because the source would be a relatively small industrial source.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals this project may impact. The State standards would be protective of the proposed project area.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this project would result in minor impacts to the economic and social environment in the immediate area due to the relatively small size of the operation. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #5215-00.

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 installation and operation of a natural gas compressor engine in an already existing site. MAQP #5215-00 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: Natural Resource Information System – Montana Natural Heritage Program – Montana Sage Grouse Conservation Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Quality Bureau, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: John P. Proulx
Date: 10/4/2018