Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
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July 23, 2012

Mr. Geoffrey Sands
ONEOK Rockies Midstream, LLC
Charlie Creek Compressor Station
P.O. Box 871
Tulsa, OK 74102-0871

Dear Mr. Sands:

Montana Air Quality Permit #3330-03 is deemed final as of July 21, 2012, by the Department of Environmental Quality (Department). This permit is for a 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,

Charles Homer
Manager, Air Permitting, Compliance and Registration
Air Resources Management Bureau
(406) 444-5279

Craig Henrikson, P.E.
Environmental Engineer
Air Resources Management Bureau
(406) 444-6711

CH:CPH
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3330-03

ONEOK Rockies Midstream, LLC
Charlie Creek Compressor Station
P.O. Box 871
Tulsa, OK 74102-0871

July 21, 2012

MONTANA AIR QUALITY PERMIT

Issued To: ONEOK Rockies Midstream, LLC
Charlie Creek Compressor Station
PO Box 871
Tulsa, OK 74102-0871

Montana Air Quality Permit #3330-03
Administrative Amendment (AA)
Request Received: 06/18/12
Department Decision on AA: 07/05/12
Permit Final: 7/21/12
AFS: #083-0037

A Montana Air Quality Permit, with conditions, is hereby granted to ONEOK Rockies Midstream, LLC, Charlie Creek Compressor Station (ORM), 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. Location

ORM operates a natural gas compressor station located approximately 20 miles northwest of Sidney, Montana, in the SW¼ of the SE¼ of Section 14, Township 24 North, Range 55 East, in Richland County, Montana. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

The Department of Environmental Quality (Department) received notification on June 18, 2012, from Bear Paw Energy, LLC., requesting an amendment to MAQP #3330-02 to change their name to ONEOK Rockies Midstream, LLC. All permit references to the facility's name with the exception of the permit history have been changed throughout this document.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. ORM shall not operate more than three natural gas compressor engines at any given time (ARM 17.8.749).

2. ORM shall not operate more than one natural gas compressor engine with a maximum rated design capacity of 1340-bhp (ARM 17.8.749).

3. The compressor engine described in Section II.A.2 shall be a lean-burn engine with a catalytic oxidation unit and an air-to-fuel ratio (AFR) controller. The pound per hour (lb/hr) emission limits for the engine shall be determined using the following equation and pollutant specific grams per 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):	0.5 g/bhp-hr
Volatile Organic Compounds (VOC):	0.5 g/bhp-hr

4. ORM shall not operate more than two natural gas compressor engines with a maximum rated design capacity of 1680-bhp per engine (ARM 17.8.749).

5. Each compressor engine described in Section II.A.4 shall be a rich-burn engine with an NSCR unit and an AFR controller. The lb/hr emission limits for each of the engines shall be determined using the following equation and pollutant specific 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

NO_x:	1.0 g/bhp-hr
CO:	2.0 g/bhp-hr
VOC:	0.5 g/bhp-hr

6. ORM 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).

7. ORM 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).

8. ORM 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.7 (ARM 17.8.749).

9. ORM's emergency flare shall be limited to 250 hours of operation during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).

B. Testing Requirements

1. The 1340-bhp capacity lean-burn compressor engine described in Section II.A.2 shall be initially tested for NO_x and CO, concurrently, to demonstrate compliance with the emission limits as calculated in Sections II.A.3. The initial source testing shall be conducted within 180 days of the initial start-up date of the engine. After the initial source test, additional testing shall continue 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).

2. ORM shall test the 1680-bhp capacity compressor engines described in Sections II.A.4 for NO_x and CO, concurrently, to demonstrate compliance with the NO_x and CO emission limits contained in Section II.A.5. Each engine shall be tested on an every 4-year basis or according to another testing/monitoring schedule as 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. ORM 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. ORM 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, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

3. All records compiled in accordance with this permit must be maintained by ORM 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).

4. ORM shall document, by month, the hours of operation of the emergency flare. By the 25^{th} day of each month, ORM shall total the flare operating hours during the previous 12 months to verify compliance with the limitation in Section II.A.9. A written report of the compliance verification shall be submitted along with the annual emission inventory (ARM 17.8.749).

5. ORM shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emission inventory information (ARM 17.8.1204 and ARM 17.8.1207).

SECTION III: General Conditions

A. Inspection – ORM 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 (e.g., Continuous Emission Monitoring System (CEMS), Compliance Emission 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 ORM fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving ORM 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 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 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 ORM 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
ONEOK Rockies Midstream, LLC
Charlie Creek Compressor Station
MAQP #3330-03

I. Introduction/Process Description

ONEOK Rockies Midstream, LLC, Charlie Creek Compressor Station (ORM) is permitted for the operation of a natural gas compressor station located in the Southeast ¼ of the Southwest ¼ of Section 14, Township 24 North, Range 55 East, in Richland County, Montana.

A. Permitted Equipment

The facility consists of the following equipment:

- A Caterpillar G3516LE lean-burn natural gas fired compressor engine with a maximum rated design capacity equal to or less than 1340-brake horsepower (bhp)
- Two Waukesha 7044 GSI rich-burn natural gas fired compressor engines with a maximum rated design capacity equal to or less than 1680-bhp per engine
- A glycol reboiler unit rated at 0.50 million British thermal units per hour (MMBtu/hr) capacity
- A still vent
- Two 0.25 MMBtu/hr heaters (Line and Building Heaters)
- Three 400 barrel (bbl) condensate storage tanks
- An emergency flare

B. Source Description

The Charlie Creek compressor station compresses and transports natural gas from nearby gas fields. The natural gas-fired compressor engines compress the gas for transmission through the pipeline.

C. Permit History

On July 24, 2004, BPE was issued final air quality Permit **#3330-00** for the installation and operation of five Waukesha H24 GL natural gas fired compressor engines with a maximum rated design capacity of 530-bhp per engine, two building heaters, and three condensate storage tanks.

On October 28, 2004, the Montana Department of Environmental Quality (Department) issued a final permit modification to BPE for the addition of two 1680-bhp Waukesha 7044 GSI rich-burn natural gas compressor engines utilizing non-selective catalytic reduction (NSCR) units and air-to-fuel ratio (AFR) controllers and the addition of a 0.50 MMBtu/hr glycol reboiler and still vent. Permit **#3330-01** replaced Permit #3330-00.

On January 25, 2007, the Department received a complete application for permit modification from Bear Paw. Specifically, Bear Paw requested the removal of five permitted 530-bhp capacity Waukesha H24GL lean-burn natural gas compressor engines and the addition of a 1340-bhp Caterpillar G3516LE lean-burn natural gas compressor engine. Permit **#3330-02** replaced Permit #3330-01.

D. Current Permit Action

The Department received notification on June 18, 2012, from Bear Paw Energy, LLC., requesting an amendment to MAQP #3330-02 to change their name to ONEOK Rockies Midstream, LLC. All permit references to the facility's name with the exception of the permit history have been changed throughout this document. **MAQP #3330-03** replaces MAQP #3330-02.

E. 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. 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).

   ORM 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}

ORM 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 (PM). (2) Under this rule, ORM 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. ORM will utilize natural gas in its fuel burning equipment, 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 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR 60.

The Charlie Creek compressor station is not subject to 40 CFR 60, Subpart KKK, because it does not meet the definition of a natural gas processing plant as defined in this subpart. In addition, 40 CFR 60, Subpart LLL is not applicable to the compressor station because the facility does not utilize a sweetening unit to process sour gas.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63, shall comply with standards and provisions of 40 CFR Part 63, Subpart HH. The Charlie Creek Compressor Station is not a National Emission Standards for Hazardous Air Pollutants (NESHAP) affected source because the facility is not a major source of Hazardous Air Pollutants (HAPs).

   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. The Charlie Creek Compressor Station is not a NESHAP affected source because the facility does not have a glycol dehydration unit. In addition, the source is not a major source of HAPs.

   Owners or operators of facilities that utilize reciprocating internal combustion engines (RICE) and that are a major source of HAPs, as defined and applied in 40 CFR Part 63, shall comply with the standards and provisions of 40 CFR Part 63, Subpart ZZZZ. The Charlie Creek Compressor Station is not subject to the provisions of 40 CFR 63, Subpart ZZZZ because the facility is not a major source of HAPs.

D. ARM 17.8, Subchapter 4 – Stack Height and Dispersion Techniques, including, but not limited to:

1. ARM 17.8.401 Definitions. This rule includes a list of definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.402 Requirements. ORM must demonstrate compliance with the ambient air quality standards with a stack height that does not exceed Good Engineering Practices (GEP). The proposed height of the new or altered stacks for the Charlie Creek Compressor Station is below the allowable 65-meter GEP stack height.

E. 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. A fee was not required as this was an administrative amendment.

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.

F. 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 alteration to construct, alter or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. ORM has a PTE greater than 25 tons per year of oxides of nitrogen (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC); 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. ORM was not required to submit an application for the current permit action because the permit action is considered an administrative 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. ORM was not required to notify the public of the current permit action because the current action is considered an administrative action.

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 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 ORM 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 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.

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.

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

H. 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 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_{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 Air Quality Permit #3330-03 for ORM, the following conclusions were made:

   a. The facility's PTE is less than 100 tons/year for any pollutant. Permit #3330-03 includes federally enforceable limits to keep emissions below 100 tons/year.

   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 not subject to any current NSPS.

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

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

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

   h. As allowed by ARM 17.8.1204(3), the Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's potential to emit.

      i. In applying for an exemption under this section, the owner or operator of the source shall certify to the Department that the source's potential to emit, does not require the source to obtain an air quality operating permit.

      ii. Any source that obtains a federally enforceable limit on potential to emit shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

   ORM has taken federally enforceable permit limits to keep potential emissions below major source permitting thresholds. Therefore, the facility is not a major source and, thus a Title V operating permit is not required. The Department determined that the annual reporting requirements contained in the permit are sufficient to satisfy this requirement.

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. ORM shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204 (3)(b). The annual certification shall comply with requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emission inventory information.

   Based on these facts, the Department determined that ORM is a minor source of emissions as defined under Title V.

III. BACT Determination

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

A BACT analysis was not required for the current permit action because the current permit action is considered an administrative amendment.

IV. Emission Inventory – Carried over from MAQP #3330-02.

ton/year					
Source	PM_{10}	NO_x	VOC	CO	SO_x
1340-bhp Caterpillar 3516LE Compressor Engine	0.003	19.41	6.47	6.47	0.02
1680-bhp Waukesha Compressor Engine	0.55	16.22	8.11	32.44	0.03
1680-bhp Waukesha Compressor Engine	0.55	16.22	8.11	32.44	0.03
Glycol Reboiler Unit (0.50 MMBtu/hr)	0.02	0.22	0.18	0.01	0.001
Still Vent	0.00	0.00	25.84	0.00	0.00
0.25 MMBtu/hr Building Heater	0.01	0.09	0.00	0.04	0.00
0.25 MMBtu/hr Line Heater	0.01	0.09	0.00	0.04	0.00
400 bbl Condensate Storage Tank #1	0.00	0.00	3.54	0.00	0.00
400 bbl Condensate Storage Tank #2	0.00	0.00	3.54	0.00	0.00
400 bbl Condensate Storage Tank #3	0.00	0.00	3.54	0.00	0.00
Emergency Flare (including flare pilot emissions)	0.00	3.72	7.66	20.23	0.00
Total	1.14	55.97	66.99	91.67	0.08

1340-bhp Compressor Engine

Brake Horsepower: 1340-bhp
Hours of Operation: 8760 hr/yr

PM_{10} Emissions
Emission Factor: 7.71E-05 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)
Fuel Consumption: 7.55 MMBtu/hr (Maximum Design – Company Information)
Calculations: 7.55 MMBtu/hr * 7.71E-05 lb/MMBtu = 0.00058 lb/hr
0.00058 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.003 ton/yr

NO_x Emissions
Emission factor: 1.50 gram/bhp-hour (BACT Determination)
Calculations: 1.50 gram/bhp-hour * 1340-bhp * 0.002205 lb/gram = 4.43 lb/hr
4.43 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 19.41 ton/yr

VOC Emissions
Emission factor: 0.50 gram/bhp-hour (BACT Determination)
Calculations: 0.50 gram/bhp-hour * 1340-bhp * 0.002205 lb/gram = 1.48 lb/hr
1.48 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 6.47 ton/yr

CO Emissions
Emission factor: 0.50 gram/bhp-hour (BACT Determination)
Calculations: 0.50 gram/bhp-hour * 1340-bhp * 0.002205 lb/gram = 1.48 lb/hr
1.48 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 6.47 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)
Fuel Consumption: 7.55 MMBtu/hr (Maximum Design – Company Information)
Calculations: 7.55 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.004 lb/hr
0.004 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.02 ton/yr

1680-Hp Compressor Engines (2 Engines)

Brake Horsepower: 1680-bhp
Hours of Operation: 8760 hr/yr

PM_{10} Emissions
Emission Factor: 9.50E-03 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)
Fuel Consumption: 13.23 MMBtu/hr (Maximum Design – Company Information)
Calculations: 13.23 MMBtu/hr 9.5E-03 lb/MMBtu = 0.13 lb/hr
0.13 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.55 ton/yr

NO_x Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 1680-bhp * 0.002205 lb/gram = 3.70 lb/hr
3.70 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 16.22 ton/yr

VOC Emissions
Emission factor: 0.50 gram/bhp-hour (BACT Determination)
Calculations: 0.50 gram/bhp-hour * 1680-bhp * 0.002205 lb/gram = 1.85 lb/hr
1.85 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 8.11 ton/yr

CO Emissions
Emission factor: 2.0 gram/bhp-hour (BACT Determination)
Calculations: 2.0 gram/bhp-hour * 1680-bhp * 0.002205 lb/gram = 7.41 lb/hr
7.41 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 32.44 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)
Fuel Consumption: 13.23 MMBtu/hr (Maximum Design – Company Information)
Calculations: 13.23 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.008 lb/hr
0.008 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.3 ton/yr

Glycol Reboiler

Reboiler Heat Out-Put: 0.50 MMBtu/hr
Hours of Operation: 8760 hr/yr
Fuel Heating Value: 0.001 MMScf/MMBtu
Fuel Consumption: 0.5 MMBtu/hr * 0.001 MMScf/MMBtu * 8760 hr/yr = 4.38 MMScf/yr

PM_{10} Emissions

Emission Factor: 7.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 03/98)
Calculations: 7.6 lb/MMScf * 4.38 MMScf/yr * 0.0005 ton/lb = 0.017 ton/yr

NOx Emissions
Emission Factor: 100 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 03/98)
Calculations: 100 lb/MMScf * 4.38 MMScf/yr * 0.0005 ton/lb = 0.219 ton/yr

VOC Emissions
Emission Factor: 5.5 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 03/98)
Calculations: 5.5 lb/MMScf * 4.38 MMScf/yr * 0.0005 ton/lb = 0.012 ton/yr

CO Emissions
Emission Factor: 84 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 03/98)
Calculations: 84 lb/MMScf * 4.38 MMScf/yr * 0.0005 ton/lb = 0.184 ton/yr

SOx Emissions
Emission Factor: 0.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 03/98)
Calculations: 0.6 lb/MMScf * 4.38 MMScf/yr * 0.0005 ton/lb = 0.001 ton/yr

Dehydrator Still Vent

Hours of Operation: 8760 hr/yr
Emission Factor: 5.90 lb/hr (GRI-GLYcalc, EPA Approved Still Vent Emission Estimation Program)
Calculations: 5.90 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 25.84 ton/yr

0.25 MMBtu/hr Heaters (2 Heaters)
Maximum Capacity: 0.25 MMBtu/hr
Hours of Operation: 8760 hr/yr
Max Fuel Usage: 0.25 MMBtu/hr * 0.001 MMScf/1 MMBtu = 0.00025 MMScf/hr

PM_{10} Emissions
Emission Factor: 7.60 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)
Calculations: 7.60 lb/MMScf * 0.00025 MMScf/hr = 0.002 lb/hr
0.002 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.01 ton/yr

NO_x Emissions
Emission factor: 94 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)

Calculations: 94 lb/MMScf * 0.00025 MMScf/hr = 0.02 lb/hr
0.02 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.09 ton/yr

VOC Emissions
Emission factor: 5.5 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)
Calculations: 5.5 lb/MMScf * 0.00025 MMScf/hr = 0.001 lb/hr
0.001 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.00 ton/yr

CO Emissions
Emission factor: 40 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)
Calculations: 40 lb/MMScf * 0.00025 MMScf/hr = 0.01 lb/hr
0.01 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.04 ton/yr

SO_2 Emission
Emission factor: 0.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)
Calculations: 0.6 lb/MMScf * 0.00025 MMScf/hr = 0.0002 lb/hr
0.0002 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.00 ton/yr

400 bbl Condensate Storage Tanks (3 Tanks)

VOC Emissions
Emission Factor: 7074.94 lb/yr (EPA Tanks, Version 4.0)
Calculations: 7074.94 lb/yr * 0.0005 ton/lb = 3.54 ton/yr

Emergency Flare
Operating Hours: 250 hr/yr (Permit Limit)

PM_{10} Emissions (Soot)
Emission Factor: 0.00 lb/MMBtu (AP-42, Chapter 13, Table 13.5-1)
Calculations: 0.00 lb/MMBtu * 1050 MMBtu/MMScf * 10 MMScf/day * 1 day/24 hr = 0.00 lb/hr
0.00 lb/hr * 250 hr/yr * 0.0005 ton/lb = 0.00 ton/yr

NO_x Emissions
Emission Factor: 0.068 lb/MMBtu (AP-42, Chapter 13, Table 13.5-1)
Calculations: 0.068 lb/MMBtu * 1050 MMBtu/MMScf * 10 MMScf/day * 1 day/24 hr = 29.75 lb/hr
29.75 lb/hr * 250 hr/yr * 0.0005 ton/lb = 3.72 ton/yr

VOC Emissions
Emission Factor: 0.14 lb/MMBtu (AP-42, Chapter 13, Table 13.5-1)
Calculations: 0.14 lb/MMBtu * 1050 MMBtu/MMScf * 10 MMScf/day * 1 day/24 hr = 61.25 lb/hr
61.25 lb/hr * 250 hr/yr * 0.0005 ton/lb = 7.66 ton/yr

CO Emissions
Emission Factor: 0.37 lb/MMBtu (AP-42, Chapter 13, Table 13.5-1)
Calculations: 0.37 lb/MMBtu * 1050 MMBtu/MMScf * 10 MMScf/day * 1 day/24 hr = 161.88lb/hr
161.88 lb/hr * 250 hr/yr * 0.0005 ton/lb = 20.23 ton/yr

Emergency Flare (Pilot)

PM_{10} Emissions
Emission Factor: 7.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)
Fuel Consumption: 0.000044 MMScf/hr (Similar Source Determination)
Calculations: 7.6 lb/MMScf * 0.000044 MMScf/hr * 8760 hr/yr * 0.0005 ton/lb = 0.001 ton/yr

NO_x Emissions
Emission Factor: 94 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)
Fuel Consumption: 0.000044 MMScf/hr (Similar Source Determination)
Calculations: 94 lb/MMScf * 0.000044 MMScf/hr * 8760 hr/yr * 0.0005 ton/lb = 0.02 ton/yr

VOC Emissions
Emission Factor: 5.5 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)
Fuel Consumption: 0.000044 MMScf/hr (Similar Source Determination)
Calculations: 5.5 lb/MMScf * 0.000044 MMScf/hr * 8760 hr/yr * 0.0005 ton/lb = 0.001 ton/yr

CO Emissions
Emission Factor: 40 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)
Fuel Consumption: 0.000044 MMScf/hr (Similar Source Determination)
Calculations: 40 lb/MMScf * 0.000044 MMScf/hr * 8760 hr/yr * 0.0005 ton/lb = 0.01 ton/yr

SO_x Emissions

Emission Factor:	0.6 lb/MMScf	(AP-42, Chapter 1, Table 1.4-2, 7/98)
Fuel Consumption:	0.000044 MMScf/hr	(Similar Source Determination)
Calculations:	7.6 lb/MMScf * 0.000044 MMScf/hr * 8760 hr/yr * 0.0005 ton/lb = 0.0001 ton/yr	

V. Existing Air Quality

The compressor station is located in the SW¼ of the SE¼ of Section 14, Township 24 North, Range 55 East, in Richland 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).

VI. Ambient Air Impact Analysis

The Department determined that the impact from this permitting action is minor. The Department believes the facility, operating under the limits and conditions included in this permit, will not cause or contribute to a violation of any applicable ambient air quality standard.

VII. Taking or Damaging Implication Analysis

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

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. Montana Environmental Policy Act

This permit action is considered an administrative action; therefore, an Environmental assessment is not required.

MAQP Analysis Prepared by: C. Henrikson
June 27, 2012