



Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor

P. O. Box 200901

Helena, MT 59620-0901

(406) 444-2544

Website: www.deq.mt.gov

September 24, 2012

Geoffrey Sands
ONEOK Rockies Midstream, LLC
P.O. Box 871
Tulsa, OK 74102-0871

Dear Mr. Sands:

Montana Air Quality Permit #4631-01 is deemed final as of September 22, 2012, by the Department of Environmental Quality (Department). This permit is for a Natural Gas Liquid Storage and Transfer Facility. 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 #4631-01

ONEOK Rockies Midstream, LLC
P.O. Box 871
Tulsa, OK 74102-0871

September 22, 2012



MONTANA AIR QUALITY PERMIT

Issued To: ONEOK Rockies Midstream, LLC
P.O. Box 871
Tulsa, OK 74102-0871

MAQP: # 4631-01
Application Complete: 07/18/2012
Preliminary Determination Issued: 08/06/2012
Department Decision Issued: 09/06/2012
Permit Final: 09/22/2012
AFS #: 083-0815

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to ONEOK Rockies Midstream, LLC (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. Plant Location

This facility is located in the East ½, Northwest ¼, Section 17 and Southeast ¼, Southwest ¼, Section 8, Township 22 North, Range 59 East, in Richland County. The physical address of the facility is 34958 County Road 122, Sidney, MT 59270.

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 #4631-00 to change their name to ONEOK Rockies Midstream, LLC. (ORM). A second request was received by the Department on July 2, 2012, to remove a propane blanket as an emission source and add an emergency generator. The two permit requests have been combined into a single permit action. 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 limit the loading of product into railcar tanks to 153,300,000 gallons per rolling 12-month period (ARM 17.8.749).
2. ORM shall limit the loading of Y-grade into railcar tanks to 689,860,000 gallons per rolling 12-month period (ARM 17.8.749).
3. ORM shall limit the transfer of isobutane from tank trucks into railcar tanks to 16,425,000 gallons per rolling 12-month period (ARM 17.8.749).
4. ORM shall maintain and operate a closed system during all loading, transfer, and storage operations. Loading lines shall be equipped and maintained with vapor tight valves. Each transfer line shall be equipped and operated so as to utilize a pump to pull vapors from cargo tanks back into the storage tank system (ARM 17.8.752).
5. All loading of product, Y-Grade, and Isobutane into cargo tanks shall be accomplished utilizing submerged fill methods. Cargo tanks loaded shall be specifically designed for the transportation of natural gas liquids/liquefied petroleum gases (ARM 17.8.752).

6. ORM shall maintain all equipment and operations, including loading pipe connections and loading operations, in dimensions, design parameters, and loading methods as presented in MAQP application #4631-00 (ARM 17.8.749 and ARM 17.8.752).
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 not operate the emergency generator for more than 100 hours per year for the purposes of maintenance checks and readiness testing per 40 CFR part 60 subpart JJJJ (ARM 17.8.749).
9. ORM shall have a non-resettable hour meter on the emergency generator to record hours of operation (ARM 17.8.749).

B. Inspection and Maintenance Requirements

1. Once within every calendar month, all inspectable tanks, valves, flanges, connectors, compressor seals, relief valves, pump seals, loading lines and loading valves, and open-ended lines shall be inspected for wear and/or excessive leaks. For purposes of this requirement, leak detection methods incorporating sight, sound, or smell are acceptable (ARM 17.8.105 and ARM 17.8.752).
2. ORM shall (ARM 17.8.105 and ARM 17.8.752):
 - a. Take reasonable actions to mitigate any leaks found during the inspection as soon as possible.
 - b. Make a first attempt at repair of the cause of any leak or any defective parts found as soon as possible, but no later than 5 calendar days after the leak or defective part is detected, except as provided in Section II.B.3; and
 - c. Completely repair any source of leaks or defective parts found as soon as possible, but no later than 15 calendar days after the leak or defective part is detected, except as provided in Section II.B.3.
3. Delay of repair of equipment would be allowed if repair as required by Section II.B.2 is deemed infeasible for technical or safety related reasons. ORM shall limit, to the extent possible, emissions from any such equipment, and such equipment shall be repaired as soon as reasonably possible (ARM 17.8.752).

C. Recordkeeping Requirements

1. ORM shall document the monthly inspections, indicating the date and time of the inspection, the results, and the method(s), date, and completion time for any mitigation efforts and repairs made (ARM 17.8.749).
2. For any repair delayed under the exception of II.B.3 above, the duration of any leak, a general description of the repair required, and the reasons justifying the delay, shall be recorded and maintained with the records required in Section II.C.1 (ARM 17.8.749).
3. ORM shall record the hours of emergency generator operation and the purpose for which the generator was operated (ARM 17.8.749).

D. Testing Requirements

1. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
2. The Department may require testing (ARM 17.8.105).

E. 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 estimated actual emissions from the facility, and/or to verify compliance with permit limitations. ORM shall include a brief summary of the log required by Section II.C. if any inspections for the reporting period note leaks (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 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(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 gallons of product loaded to cargo tanks. By the 25th day of each month, ORM shall total the gallons of product loading for the previous month, and calculate and record the rolling 12-month sum. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.1. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
5. ORM shall document, by month, the gallons of Y-grade loaded to cargo tanks. By the 25th day of each month, ORM shall total the gallons of Y-grade loading for the previous month, and calculate and record the rolling 12-month sum. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.2. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
6. ORM shall document, by month, the gallons of isobutane loaded between cargo tanks. By the 25th day of each month, ORM shall total the gallons of isobutane loading for the previous month, and calculate and record the rolling 12-month sum. The monthly

information will be used to verify compliance with the rolling 12-month limitation in Section II.A.3. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

7. ORM shall submit with the annual emission inventory the number of hours that the emergency generator was operated for the purpose of maintenance and readiness checks (ARM 17.8.749).
8. ORM shall annually certify that its 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 emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

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 (continuous emissions monitoring system (CEMS), continuous emissions rate monitoring system (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if 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 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 MAQP 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 – Riverview Facility
MAQP #4631-01

I. Introduction/Process Description

ONEOK Rockies Midstream, LLC (ORM) owns and operates a Natural Gas Liquids Storage and Transfer facility. This facility is located in the East ½, Northwest ¼, Section 17 and Southeast ¼, Southwest ¼, Section 8, Township 22 North, Range 59 East, in Richland County and is known as the Riverview Terminal.

A. Permitted Equipment

The facility consists of, but is not limited to, the following equipment:

- Six (6) 90,000 gallon (gal) pressurized mix of primarily propane, butane, and natural gasoline (Y-Grade) storage tanks
- Four (4) 30,000 gal pressurized propane or butane product tanks
- Two (2) 60,000 gal pressurized product tanks
- One (1) 30,000 gal methanol tank
- Isobutane loading from tank trucks directly to railcar tanks
- Ten (10) loading spots for loading of product from storage tanks to cargo tanks
- Fifteen (15) loading spots for loading of Y-grade from storage tanks to railcar tanks
- A 107 brake horsepower diesel-fired emergency generator
- Associated equipment

B. Source Description

The facility stores, transfers, and loads natural gas liquids transported from surrounding gas plants via pipeline and truck. Spec grade products are piped into horizontal pressure tanks where they are stored for loading into cargo tanks. Isobutane is transferred on-site from tank trucks directly to railcars. Y-grade product, consisting primarily of unseparated propane, butane, and natural gasoline, is also received and stored on-site for loading to cargo tanks. Methanol is stored on-site for freeze protection.

All transfer, storage, and loading operations are maintained under pressure. Transfers and loading are maintained as a pressurized, submerged fill, closed vapor collection system. The pressurized tank loading lines have a vapor tight valve at the ends so any vapors are contained within a closed system. Vapor displacement resulting from load out operations is located at the end of each transfer line and a pump is used to pull vapors in the system back into the product tank(s). Submerged fill loading minimizes the creation of vapors during the loading process.

Truck loading of isobutane to railcars is accomplished with a similar system, utilizing submerged fill and a closed vapor collection system. A vapor return line is used to return any vapors in the connecting lines back to the truck vessel. Only vapors contained in the two hoses between the connections would escape to atmosphere.

Fugitive emissions from leaks of components in both liquid and gas service are minimized through inspection, leak detection, and proper operations and maintenance, to minimize emissions and fire and/or explosion hazards.

C. Permit History

Bear Paw Energy proposed to construct and operate an expansion of the Riverview Terminal. The facility has been operating since 1982 storing and loading natural gas liquids transported from surrounding gas plants via pipeline and truck. Relatively pure propane or butane (product) is piped into horizontal pressurized tanks where they are stored for loading. Bear Paw Energy proposed an expansion that would increase the facility's potential volatile organic compound (VOC) emissions to more than the permitting threshold of 25 tons per year; therefore, an MAQP was required. **MAQP #4631-00** was issued final on May 5, 2011.

D. Current Permit Action

The Department of Environmental Quality (Department) received notification on June 18, 2012, from Bear Paw Energy, LLC requesting an administrative amendment (AA) to change their name to ONEOK Rockies Midstream, LLC (ORM). A second request was received by the Department on July 2, 2012, to remove a propane blanket as an emission source and add an emergency generator as an insignificant source. The two permit actions are being combined into a single permit revision. All permit references with the exception of the permit history have been changed throughout this document. **MAQP #4631-01** replaces MAQP #4631-00.

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).

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 Particulate Matter with an aerodynamic diameter of 10 microns or less (PM₁₀)

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

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). This facility is an NSPS affected source because it meets the definition of an area source under 40 CFR Part 60 subpart JJJJ.
8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. This facility is a NESHAP-affected source because it meets the definition of an area source under 40 CFR Part 63 subpart ZZZZ.

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 MAQP application fee concurrent with the submittal of an MAQP application. A permit application is incomplete until the proper application fee is paid to the Department. ORM 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 MAQP (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 MAQP 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 MAQP 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. ORM has a PTE greater than 25 tons per year of Volatile Organic Compounds (VOC); therefore, an MAQP is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the MAQP 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 MAQP 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 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. ORM submitted an affidavit of publication of public notice for the July 29, 2012, issue of the *Sidney Herald*, a newspaper of general circulation in the Town of Sidney in Richland 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 MAQPs 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 MAQP shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An MAQP 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 MAQP 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 MAQP may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 – Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

G. ARM 17.8, Subchapter 12 – Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #4631-01 for ORM, 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 PM₁₀ nonattainment area.
 - d. This facility is subject to NSPS 40 CFR 60 subpart JJJJ.
 - e. This facility is subject to NESHAP 40 CFR 63 subpart ZZZZ.
 - f. This source is not a Title IV affected source
 - g. This source is not a solid waste combustion unit.
 - h. This source is not an EPA designated Title V source.

- i. 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 facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on PTE 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 limitations 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 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 will be a minor source of emissions as defined under Title V based on a requested federally enforceable permit limit.

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.

ORM proposes to use a GENERAC 2012 EPA Certified Commercial Model GT060 with EPA Engine Family CGNXB02.42NL which is fired with liquid petroleum gas. This model engine is a spark-ignited engine generator for emergency applications. This engine model meets 40 CFR part 60 subpart JJJJ. Therefore, since the proposed engine meets the EPA requirements it is considered to be BACT and no additional controls are required on the engine as they would be considered cost prohibitive.

IV. Emission Inventory

The Department compared various methods for calculating the potential emissions from pressurized, closed vapor recovery natural gas liquids storage and loading operations. No appropriate correlations are available to estimate vapor losses from pressure tanks, as confirmed by AP-42 documentation, 7.1-3 (11/2006); therefore, the Department calculated fugitive emission leaks from equipment components as appropriate. The Department also considered AP-42 Section 5.2 for losses associated with loading of the natural gas liquids into cargo tanks. However, limited information is available as to the applicability of this method to this scenario. At ORM's request, loading loss calculations were made assuming vapor losses associated with the volume of loading lines and the number of railcars loaded. This calculation method was determined more conservative (higher calculated emissions) than the AP-42 Section 5.2 approach. For more details on the design of the system, see Section I.B. of the Permit Analysis. For MAQP #4631-01, propane losses associated

with the methanol tank were removed from the emission inventory due to their re-evaluation by ORM and the information contained in the permit modification application. The new emergency generator was also evaluated for emissions using a maximum of 500 hours of operation per year. The highest emissions are from CO at a total of 8.2 tons/year.

ONEOK Rockies Midstream-Riverview Terminal

MAQP 4631-01

Potential to Emit in Tons Per Year (TPY)

<u>Source</u>	VOC	CO	NO _x
Equipment Component Emissions:	42.22		
Product Loading Emissions:	7.27		
Y-Grade Loading Emissions:	27.95		
Isobutane Transfers:	2.25		
Emergency Generator		8.2	0.13
TOTAL:	79.69	8.2	0.13

CO, carbon monoxide

NO_x, oxides of nitrogen

PM, particulate matter

SO₂, oxides of sulfur

TPY, tons per year

VOC, volatile organic compounds

** Inventory reflects enforceable limits on throughput to keep allowable emissions below the Title V threshold

ft = foot
gal = gallons
h = height
hr = hour
in = inches
kg = kilogram
lb = pound
NGL = natural gas liquids

SG = specific gravity
TPY = tons per year
V = volume
Pi = 3.14
R = radius
yr = year
wt% = weight percent

Fugitive Component Emissions

Light Liquid Service*						
Component Description	Number of components	Emissions Factor (kg/hr/source)	Emissions Factor (lb/hr/source)	VOC wt%	lb/hr	ton/yr
Valves	580	0.0025	0.0055	100%	3.19	13.97
Flanges	340	0.00011	0.000242	100%	0.08	0.36
Connectors	308	0.00021	0.000462	100%	0.14	0.62
Open Ended Lines	116	0.0014	0.00308	100%	0.36	1.56
Compressor Seals	0	0.0075	0.0165	100%	0.00	0.00
Relief Valves	80	0.0075	0.0165	100%	1.32	5.78
Pump Seals	40	0.013	0.0286	100%	1.14	5.01
TOTAL:						27.31

Gas Service*						
Component Description	Number of components	Emissions Factor (kg/hr/source)	Emissions Factor (lb/hr/source)	VOC wt%	lb/hr	ton/yr
Valves	156	0.0045	0.0099	100%	1.54	6.76
Flanges	340	0.00039	0.000858	100%	0.29	1.28
Connectors	264	0.0002	0.00044	100%	0.12	0.51
Open Ended Lines	92	0.002	0.0044	100%	0.40	1.77
Compressor Seals	0	0.0088	0.01936	100%	0.00	0.00
Relief Valves	54	0.0088	0.01936	100%	1.05	4.58
TOTAL:						14.90

**Emissions factor from *Protocol for Equipment Leak Emissions Estimates*, EPA Document 453/R-95-017, 11/1995

Total Light liquid + Gas **42.22 ton/yr**

Product Loading Emissions Calculations

Loss = Density * Volume * # of disconnections

Pipe Connection Dimensions (each pipe)

Diameter (in)	2	
Length (in)	20	
Volume (in ³)	62.8	$V = \pi * r^2 * h$
Volume (ft ³)	0.036	

NGL Component	SG	Density (lb/ft ³)
Butane	0.585	36.52
Propane	0.501	31.28
Isobutane	0.563	35.15

Max Allowable Loading: 420,000 gal/day
 Max Allowable Loading: 56,146 ft³/day
 Volume of Tanker Car: 28,000 gallons
 Number of Tanker Cars Loaded per day: 15 = 420,000/28,000

Loss = 39.82 lb/day = 36.52lb/ft³*0.0363ft³*2pipes
 14533.18 lb/yr
7.27 ton/yr

Y-Grade Loading Emissions Calculations

Max Allowable Loading:	1,890,000	gal/day	
Max Allowable Loading:	56,146	ft ³ /day	
Volume of Tanker Car:	28,000	gallons	
Number of Tanker Cars Loaded per day:	67.5	1890000gal/day/28000gallons	
Y-Grade Density:	31.22	lb/ft ³	(See application)
Loss =	153.17	lb/day	
	55908.19	lb/yr	
	27.95	ton/yr	

Isobutane Transfers

Max Allowable Loading:	45,000	gal/day	
Max Allowable Loading:	56,146	ft ³ /day	
Volume of Tanker Car:	28,000	gallons	
Number of Tanker Cars Loaded per day:	1.61	45000gal/day/28000gallons	
Isobutane Density:	35.15	lb/ft ³	(See application)
Loss =	12.32	lb/day	(2 pipes, 3 disconnects per truck)
	4496.14	lb/yr	
	2.25	ton/yr	

Diesel Generator

Engine Rating: 107 Enter Maximum engine bhp
500 hours/year

NOx Emissions:

Emission Factor	2.17 gr/hp-hr	[GENERAC Product Sheet]	107 hp
Calculations	$(2.17 \text{ gr/hp-hr}) * (107 \text{ hp}) * (1 \text{ lb}/454 \text{ gr}) =$		0.51 lbs/hr
	$(0.51 \text{ lbs/hr}) * (500 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		0.13 TPY

CO Emissions:

Emission Factor	138.95 gr/hp-hr	[GENERAC Product Sheet]	107 hp
Calculations	$(138.95 \text{ gr/hp-hr}) * (107 \text{ hp}) * (1 \text{ lb}/454 \text{ gr}) =$		32.75 lbs/hr
	$(32.75 \text{ lbs/hr}) * (500 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		8.19 TPY

THC Emissions: (VOC)

Emission Factor	0.92 gr/hp-hr	[GENERAC Product Sheet]	107 hp
Calculations	$(0.92 \text{ gr/hp-hr}) * (107 \text{ hp}) * (1 \text{ lb}/454 \text{ gr}) =$		0.22 lbs/hr
	$(0.22 \text{ lbs/hr}) * (500 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) =$		0.05 TPY

PM and SO2 emissions are negligible for this generator.

V. Existing Air Quality

The location of the current facility location is designated as attainment/unclassifiable for all criteria pollutants.

VI. Ambient Air Impact Analysis

The Department determined that there are no impacts from this minor permitting action. 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.

Analysis Prepared by: C. Henrikson

Date: June 21, 2012

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: ONEOK Rockies Midstream, LLC. (ORM)- Riverview Terminal

Montana Air Quality Permit Number: 4631-01

Preliminary Determination Issued: August 6, 2012

Department Decision Issued: September 6, 2012

Permit Final: September 22, 2012

1. *Legal Description of Site:* East ½, Northwest ¼, Section 17 and Southeast ¼, Southwest ¼, Section 8, Township 22 North, Range 59 East, in Richland County.
2. *Description of Project:* ORM proposes to install a new propane-fired emergency generator at the Riverview Terminal. The facility has been operating since 1982 storing and loading natural gas liquids transported from surrounding gas plants via pipeline and truck. Spec grade liquids (propane and butane) are piped into horizontal pressurized tanks where they are stored for loading. ORM is proposing a modification that would increase the facility's potential VOC emissions approximately 8.2 tons per year (TPY) for a 107 brake horsepower emergency generator assuming a maximum operating time of 500 hours per year. Also proposed is to correct the emission calculations associated with the propane blanket on the methanol tank resulting in a decrease in estimated VOC emissions of 1.85 TPY.
3. *Objectives of Project:* To add an emergency generator at the Riverview Terminal and update the emission inventory relative to the propane blanket on the methanol tank.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit at the facility. However, the Department does not consider the "no-action" alternative to be appropriate because ORM demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be included in MAQP #4631-01.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats				X		Yes
B	Water Quality, Quantity, and Distribution				X		Yes
C	Geology and Soil Quality, Stability and Moisture				X		Yes
D	Vegetation Cover, Quantity, and Quality				X		Yes
E	Aesthetics				X		Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy				X		Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts			X			Yes

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

A. Terrestrial and Aquatic Life and Habitats

Terrestrials may be present in the surrounding area. Issuance of MAQP #4631-01 would permit a small increase in emissions including NO_x, CO, and VOC with negligible increase in SO₂ and PM with the addition of an emergency generator. Conditions and limitations in the permit would limit the allowable emissions. With the small increase in emissions no effects to terrestrial and aquatic life and habitats would be expected.

B. Water Quality, Quantity and Distribution

The proposed project would not result in a direct discharge to surface waters. No change in water usage at the facility would occur as a result of the proposed change. The Department would not expect any impacts to water quality, quantity and distribution as a result of the small emission increase.

C. Geology and Soil Quality, Stability and Moisture

No impacts to geology, and soil quality, stability and moisture would be expected to occur as the proposed modification would occur within the existing facility footprint.

D. Vegetation Cover, Quantity, and Quality

No impacts to vegetation cover, quantity and quality would be expected to occur as the proposed modification would occur within the existing facility print.

E. Aesthetics

The proposed project would not be expected to cause any change in aesthetics as the addition of the emergency generator would be within the existing facility and the emergency generator would be a minor change at the facility.

F. Air Quality

Issuance of MAQP #4631-01 would permit an increase in emissions at the facility. The application, and conditions and limitations which would be placed in the permit, would require the facility to be constructed and operated in a manner which would minimize these emissions. The facility would remain a minor source of emissions. Minor effects to air quality would be expected as a result of issuing MAQP #4631-01.

G. Unique Endangered, Fragile, or Limited Environmental Resources

The Department reviewed the previous information prepared by the the Montana Natural Heritage Program utilizing the Natural Resources Information System to identify any species of special concern in the general area in which the facility operates. Thirteen species of special concern were identified. The Department reviewed the previous conclusions located in MAQP #4631-00 and determined that due to the small increase in emissions proposed with the emergency generator, any impacts to the existing thirteen species of special concern would be minor. For a full reference to the thirteen species, see the Environmental Assessment in MAQP 4631-00.

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

No additional demands on water, air and energy are expected due to the small increase in emissions from the proposed project.

I. Historical and Archaeological Sites

Construction activities would be within the previously identified 19.25 acres of land that is owned and/or leased by ORM at the facility. Previously no sites were believed to be impacted by the facility expansion and the addition of an emergency generator would not cause an impact on historical or archaeological resources.

J. Cumulative and Secondary Impacts

The Department has determined there to be minor impacts to the individual physical and biological considerations above. The project takes place on land already owned by ORM, and impacts directly associated with issuance of MAQP #4631-01 are primarily air emissions outside the property boundaries but are expected to be minor. Cumulatively, the Department would expect minor impacts to physical and biological considerations. Secondary impacts would be expected to be minor.

8. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.

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

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

A. Social Structures and Mores

MAQP #4631-01 would permit a small increase in emissions including NO_x, CO, and VOC with negligible increase in SO₂ and PM with the addition of an emergency generator. An increase in the number of employees at the site would not be expected to occur. No impacts would be expected to Social Structures and Mores.

B. Cultural Uniqueness and Diversity

MAQP #4631-01 would permit a small increase in emissions including NO_x, CO, and VOC with negligible increase in SO₂ and PM with the addition of an emergency generator. An increase in the number of employees at the site would not be expected to occur. No impacts would be expected to Cultural Uniqueness and Diversity.

C. Local and State Tax Base and Tax Revenue

No impacts to local and state tax base and tax revenue would be expected with the small scale of the proposed project.

D. Agricultural or Industrial Production

MAQP #4631-01 would permit a minor modification at the existing facility. The proposed project would take place within the existing facility footprint. No impacts to agricultural or industrial production would be expected as a result of issuance of MAQP #4631-01.

E. Human Health

MAQP #4631-01 would contain limitations and conditions derived from rules designed to protect human health. Given the small increase in emissions that would occur under the proposed increase no impact would be expected to occur to human health.

F. Access to and Quality of Recreational and Wilderness Activities

MAQP #4631-00 would permit the addition of an emergency generator at the existing facility. The project would take place within the existing facility footprint. No impacts of access to and quality of recreational and wilderness activities would be expected.

G. Quantity and Distribution of Employment

The proposed project would not add permanent employees to the facility and therefore no impacts to the quantity and distribution of employment would be expected.

H. Distribution of Population

The proposed project would not result in any increase in permanent employees. A temporary increase in population in the area may result from construction related activities. The Department would not expect any impacts to the distribution of population.

I. Demands for Government Services

Demands for government services would not be expected to occur as a result of the proposed addition of the emergency generator.

J. Industrial and Commercial Activity

A temporary increase in industrial and commercial activity would not be expected during the construction phase of the project given the scope of the proposed project. Any impacts would be expected to be relatively minor and short-lived. An increase in general industrial activity as a result of increased capacity of the facility would not occur. Therefore, no impact to industrial and commercial activity is expected to occur.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals for which issuance of MAQP #4631-01 would affect. The permit conditions and limitations would be derived from rules designed to protect public health.

L. Cumulative and Secondary Impacts

The Department would not expect any impacts to the individual economic and social considerations above. Cumulatively, the Department would not expect any impacts. Secondary impacts would not be expected to occur.

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 addition of an emergency generator at an existing natural gas liquids storage, transfer, and loading facility. MAQP #4631-01 includes conditions and limitations to ensure the facility would operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies who provided information used in this analysis or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Craig Henrikson

Date: 7/20/2012