



Montana Department of
ENVIRONMENTAL QUALITY

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February 4, 2014

Ross Whelchel
NorthWestern Energy
40 East Broadway Street
Butte, MT 59601

Dear Mr. Whelchel:

Montana Air Quality Permit #2769-10 is deemed final as of February 4, 2014, 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,

Julie Merkel
Air Permitting Supervisor
Air Resources Management Bureau
(406) 444-3626

Rhonda Payne
Environmental Science Specialist
Air Resources Management Bureau
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JM:RP
Enclosure
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #2769-10

NorthWestern Energy
CS 103 Natural Gas Compressor Station
40 East Broadway
Butte, MT 59601

February 4, 2014



MONTANA AIR QUALITY PERMIT

Issued To: NorthWestern Energy
40 East Broadway Street
Butte, MT 59701

MAQP# 2769-10
Administrative Amendment (AA)
Request Received: 12/24/2013
Department Decision on AA: 1/17/2014
Permit Final: 2/4/2014
AFS #005-0006

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

SECTION I: Permitted Facilities

A. Plant Location

NorthWestern owns and operates a natural gas compressor station and associated equipment located in the Southeast ¼ of the Southeast ¼ of Section 8, Township 27 North, Range 19 East in Blaine County, Montana. The facility is known as the Big Sandy Field, Station 103. A complete list of the permitted equipment can be found in the Section I.A of the permit analysis.

B. Current Permit Action

On December 24, 2013 the Department of Environmental Quality – Air Resources Management Bureau (Department) received notification that the Big Sandy Field, Station 103 had been sold from Devon Energy Production Company, L.P to NorthWestern Energy. The current permitting action reflects the change in ownership, as well as updates the permit to current permit language and rule references used by the Department.

SECTION II: Conditions and Limitations

A. Emission Limitations:

1. The maximum rated design capacity of compressor engine #01 shall not exceed 772 horsepower (hp) (ARM 17.8.749).
2. Compressor engine #01 shall be a lean-burn engine fitted with an oxidation catalyst and an electronic air-to-fuel ratio (AFR) controller. Emissions from compressor engine #01 shall not exceed the pounds per hour (lb/hr) emission limits as calculated using the following equation and pollutant-specific grams per brake horsepower hour (g/bhp-hr) emission factors (ARM 17.8.749 & 17.8.752):

Emission Factor Equation:

Lb/hr = emission factor (g/bhp-hr) * maximum rated design capacity of the engine (bhp) * 0.002205 lb/g

Emission Factors:

Nitrogen Oxides (NO _x) ¹	1.75 g/bhp-hr
Carbon Monoxide (CO)	1.80 g/bhp-hr
Volatile Organic Compounds (VOC)	1.25 g/bhp-hr

3. NorthWestern shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
4. NorthWestern shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in 40 CFR 60, Subpart JJJJ (ARM 17.8.340 and 40 CFR 60, Subpart JJJJ).
5. NorthWestern shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in 40 CFR 63, Subpart ZZZZ (ARM 17.8.342 and 40 CFR 63, Subpart KKKK).
6. NorthWestern shall not cause or authorize the use of any street, road, or parking lot, without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
7. NorthWestern shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant, as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.6 (ARM 17.8.749).

B. Testing Requirements:

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

C. Operational Reporting Requirements:

1. NorthWestern 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).

NorthWestern 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,

¹ NO_x reported as NO₂.

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 emissions 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).

2. All records compiled in accordance with this permit must be maintained by NorthWestern as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

D. Notification

NorthWestern shall provide the Department with written notification of the actual installation of any replacement engine for compressor engine #01 (ARM 17.8.745).

SECTION III: General Conditions

- A. Inspection - NorthWestern shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver - The permit and the terms, conditions, and matters stated herein shall be deemed accepted if NorthWestern fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving NorthWestern 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 NorthWestern 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
NorthWestern Energy
MAQP #2769-10

I. Introduction/Process Description

NorthWestern Energy (NorthWestern) owns and operates a natural gas compressor station and associated equipment. The facility is located in the Southeast ¼ of the Southeast ¼ of Section 8, Township 27 North, Range 19 East in Blaine County, Montana. The facility is known as the Big Sandy Field, Station 103.

A. Permitted Equipment

NorthWestern owns and operates the following equipment:

1. (1) 1999 772-horsepower (hp) Superior compressor engine;
2. (1) 230-hp Ajax DPC compressor engine;
3. (1) Enertek tri-ethylene glycol (TEG) dehydrator and an associated 0.125 million British thermal unit per hour (MMBtu/hr) regenerator (reboiler);
4. (1) Pesco TEG dehydrator and an associated 0.20 MMBtu/hr reboiler; and
5. (3) Heaters rated at 0.12 MMBtu/hr, 0.075 MMBtu/hr, and 0.023 MMBtu/hr.

B. Source Description

The facility has two primary purposes. The first purpose is to pump the field gas up to the required pressure in the natural gas transmission system. Compression of the gas is accomplished using both the 772-hp Superior compressor engine and the 230-hp Ajax DPC compressor engine. The three heaters provide heat to the various station facilities.

The second purpose of the complex is to "dry" the gas as it is being processed. The gas contains some moisture, which must be removed from the system prior to being sent into the transmission system. This is accomplished with the dehydrators, also commonly called reboilers or glycol units.

The gas is treated with a glycol solution, which absorbs the water in the gas stream. The glycol solution is then heated to about 300 degrees Fahrenheit (°F) to drive off the water and return the glycol. The heat necessary for this activity is generated by burning natural gas in the dehydrator reboilers. The Enertek dehydration unit reboiler has a heat input of 0.125 MMBtu/hr and the Pesco dehydration unit reboiler has a heat input of 0.20 MMBtu/hr. The reboilers are small by industrial standards, having a heat input capacity equivalent to a typical natural gas-fired small office heating system.

C. Permit History

On June 22, 1993, Montana Power Company (MPC) was issued **MAQP #2769-00** for the operation of their compressor station and associated equipment, located in the Southeast ¼ of the Southeast ¼ of Section 8, Township 27 North, Range 19 East in Blaine County, Montana. The station was identified as the Big Sandy Field, Station 103.

MAQP #2769-01 was issued final to MPC on March 1, 1994. MPC requested the Department of Environmental Quality (Department) to modify MAQP #2769-00 to revise the emission limitation units from grams per brake horsepower-hours (g/bhp-hr) to pounds per hour (lb/hr). The revision was due to varying parameters such as engine

revolutions per minute (RPM), operating load (bhp), ambient air temperature, gas temperature, site elevation, fuel gas quality, air/fuel ratio (AFR), field gas conditions, etc. Rather than limit the engines to a g/bhp-hr limit, an established hourly emission limit (lb/hr) allowed operational flexibility. Also, to clarify NO_x mass emission calculations, NO_x emission limitations were identified as NO₂. **MAQP #2769-01** replaced MAQP #2769-00.

MAQP #2769-02 was issued final on November 1, 1997. The modification transferred the ownership of the Big Sandy Field, Station 103, from MPC to the UMC Petroleum Corporation (UMC). In addition, a 230-hp Ajax DPC compressor engine was added to the facility in accordance with the provisions of the Administrative Rules of Montana (ARM) 17.8.705(1)(r). Further, the rule references were updated in the permit to reflect current Department practices. **MAQP #2769-02** replaced MAQP #2769-01.

On May 7, 1999, the Department received notification that UMC merged with Havre Pipeline Company, LLC (HPC). The modification changed the name on the permit from UMC to HPC. **MAQP #2769-03** replaced MAQP #2769-02 on June 27, 1999.

On October 15, 1999, HPC proposed the installation and operation of a 772-hp Superior compressor engine and a Lakota Dehydrator at the Big Sandy Field, Station 103, in accordance with the provisions of the ARM 17.8.705(1)(r). HPC proposed to remove the existing 600-hp White Superior compressor engine after the above cited proposed equipment was installed. This modification added the 772-hp Superior compressor engine and the Enertek Dehydrator to the permit in accordance with the provisions of ARM 17.8.705(1)(r). In addition, a condition was added to the permit requiring that the 600-hp White Superior compressor engine be removed within 6 months after MAQP #2769-04 became final. **MAQP #2769-04** replaced MAQP #2769-03 on November 7, 1999.

On August 5, 2002, the Department received a letter dated August 1, 2002, from Bison Engineering, Inc. (Bison) on behalf of HPC. HPC proposed to install a Pesco TEG dehydrator and an associated 0.20 MMBtu/hr reboiler. The Department requested additional information from HPC in regard to the dehydration units that are to be operated at the facility. On September 24, 2002, Bison submitted the requested information to the Department on behalf of HPC. In addition, on December 27, 1999, the Department received a letter dated December 22, 1999, from Bison on behalf of HPC, notifying the Department that the 600-hp White Superior compressor engine was removed from the facility, fulfilling the requirement contained in Section II.A.3 of MAQP #2769-04.

The Pesco TEG dehydrator and the associated 0.20 MMBtu/hr reboiler were added to the permit in accordance with the provisions of ARM 17.8.705(1)(r). In addition, the make, manufacturer, and size of the dehydration units to be operated at the facility were identified and the 600-hp White Superior compressor engine was removed from the permit. Further, the permit was updated to reflect current Department permit format and permit language. **MAQP #2769-05** replaced MAQP #2769-04 on December 17, 2002.

The Department received a letter dated August 19, 2004, from Devon-Louisiana Corporation to change the corporate name on MAQP #2769-05 from Ocean Energy, Inc., Havre Pipeline Company to Devon-Louisiana Corporation. The Department transferred ownership of MAQP #2769-05 to Devon-Louisiana Corporation. **MAQP #2769-06** replaced MAQP #2769-05.

On March 13, 2006, the Department received a request to change the company name on MAQP #2769-06 from Devon-Louisiana Corporation, to Devon Energy Production Company, L.P. (Devon). This permit action changed the company name on MAQP #2769-07 as requested. **MAQP #2769-07** replaced MAQP #2769-06.

On May 9, 2006, the Department received a request to amend MAQP #2769-07 to make the permit “de minimis friendly.” This would allow Devon to more quickly replace the permitted engine, if necessary, with equivalent or better engines. **MAQP #2769-08** replaced MAQP #2769-07.

On July 30, 2010, the Department received notification that Compressor Engine #01 had been overhauled. The letter also included a request to amend MAQP #2769-08 to correctly identify compressor engine #01 as a lean-burn engine fitted with an oxidation catalyst. In addition to correcting the engine description, the permit action updated the permit to reflect current permit language and rule references used by the Department. **MAQP #2769-09** replaced MAQP #2769-08.

D. Current Permit Action

On December 24, 2013, the Department received notification that the Big Sandy Field, Station 103 had been sold from Devon to NorthWestern. MAQP #2769-10 reflects the change in ownership as well as updates the permit to current permit language and rule references used by the Department. **MAQP #2769-10** replaces #2769-09.

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 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).

NorthWestern shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

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

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide;
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter;
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀
11. ARM 17.8.230 Fluoride in Forage

NorthWestern 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, NorthWestern 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. NorthWestern will consume pipeline quality natural gas in the compressor engines and the two dehydration unit reboilers, which will meet this limitation.
6. 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). NorthWestern's Big Sandy Field, Station 103, may potentially be considered an NSPS affected facility under 40 CFR Part 60, and may become subject to the requirements of the following subparts:
 - a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines applies to owners and operators of stationary spark ignition internal combustion engines that commence modification or reconstruction after June 12, 2006. Although the 772-hp compressor engine #01 is not an affected unit under this regulation, it must operate in compliance with it in accordance with 40 CFR 63, Subpart ZZZZ. Because this permit would allow the operation of other engines, 40 CFR 60, Subpart JJJJ may apply directly to those future units.
7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:
 - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to an NESHAP Subpart as listed below:
 - b. 40 CFR 63, Subpart HH – National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63, shall comply with the applicable provisions of 40 CFR 63, Subpart HH. In order for a natural gas production facility to be subject to 40 CFR 63, Subpart HH requirements, certain criteria must be met. First, a facility must either process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category, or is delivered to a final end user. Second, the facility must also contain an affected source as specified in paragraphs (b)(1) through (b)(4) of 40 CFR Part 63, Subpart HH. Finally if the criteria are met, and the exemptions contained in paragraphs (e)(1) and (e)(2) of 40 CFR Part 63, Subpart HH do not apply, the facility is subject to the applicable provisions of 40 CFR Part 63, Subpart HH. The facility can be either a major or area source

of HAPs. For area sources, the affected source includes each TEG dehydration unit. Therefore, because NorthWestern's Big Sandy Field, Station 103 includes an affected source, it would be subject to 40 CFR 63, Subpart HH.

- c. 40 CFR 63, Subpart HHH – National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. Owners or operators of natural gas transmission or storage facilities, as defined and applied in 40 CFR Part 63, shall comply with the standards and provisions of 40 CFR 63, Subpart HHH. In order for a natural gas transmission and storage facility to be subject to 40 CFR 63, Subpart HHH requirements, certain criteria must be met. First, the facility must transport or store natural gas prior to the gas entering the pipeline to a local distribution company or to a final end user if there is no local distribution company. In addition, the facility must be a major source of HAPs as determined using the maximum natural gas throughput as calculated in either paragraphs (a)(1) and (a)(2) or paragraphs (a)(2) and (a)(3) of 40 CFR 63, Subpart HHH. Second, a facility must contain an affected source (glycol dehydration unit) as defined in paragraph (b) of 40 CFR 63, Subpart HHH. Finally, if the first two criteria are met, and the exemptions contained in paragraph (f) of 40 CFR 63, Subpart HHH, do not apply, the facility is subject to the applicable provisions of 40 CFR 63, Subpart HHH. Based on the information submitted by NorthWestern, the Big Sandy Field, Station 103 facility is not subject to the provisions of 40 CFR 63, Subpart HHH because the facility is not a major source of HAPs.
- d. 40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. Subpart ZZZZ applies to owners and operators of stationary internal combustion engines at major and area sources of HAPs. While the 772-hp compressor engine #01 is an affected unit under this regulation, it demonstrates compliance with it by operating in compliance with 40 CFR 60, Subpart JJJJ. No other requirements of 40 CFR 63, Subparts A or ZZZZ apply directly to the 772-hp compressor engine #01, with the possible exception of the Initial Notification requirement. Because this permit would allow the operation of other engines, 40 CFR 63, Subpart ZZZZ may apply directly to those future units.

D. ARM 17.8, Subchapter 5 - Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

- 1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. NorthWestern was not required to submit an application fee for the current permit action because the current permit action is an administrative action.
- 2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

- E. ARM 17.8, Subchapter 7 - Permit, Construction and Operation of Air Contaminant Sources, including, but not limited to:
1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. NorthWestern's Big Sandy Field, Station 103 has a PTE greater than 25 tons per year of NO_x therefore, an air quality permit is required.
 3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. NorthWestern was not required to submit an application for the current permit action because the current permit action is an administrative 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. NorthWestern was not required to submit an affidavit of publication of public notice because the current permit action is 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 required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving NorthWestern of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.760 Additional Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.
12. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
13. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
14. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
15. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

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 potential to emit is below 250 tons per year of any air 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 HAP, PTE > 25 tons/year of a combination of all HAPs, or a lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #2769-10 for the NorthWestern facility, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutants.
 - 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 indirectly subject to a current NSPS (40 CFR 60, Subpart JJJ).
 - e. This facility is subject to a current NESHAP standard (40 CFR 63, Subparts HH and ZZZZ).
 - f. This source is not a Title IV affected source or a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

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

III. BACT Determination

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

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

IV. Emission Inventory

Source	Tons/Year				
	PM ₁₀	NO _x	CO	VOC	SO _x
Superior (772 Hp)	0.54	13.05	13.42	9.32	0.03
Ajax DPC (230 Hp)	0.22	6.66	2.44	6.00	0.01
Enertek Dehydrator	0.01	0.13	0.01	0.03	0.00
-Still Vent	0.00	0.00	0.00	4.91	0.00
Pesco Dehydrator	0.01	0.16	0.14	0.01	0.00
-Still Vent	0.00	0.00	0.00	3.02	0.00
Heaters (3)	0.00	0.10	0.00	0.01	0.00
Total	0.78	20.10	16.01	23.30	0.04

* A complete emission inventory is on file with the Department.

V. Existing Air Quality

The existing air quality of the area is expected to be in compliance with all state and federal requirements. Ambient air quality modeling was conducted in the past for all compressor stations in and near Glacier, Toole, Liberty, and Pondera Counties using two EPA guideline models, ISC2 and COMPLEX. The meteorological data used was taken from the Great Falls Airport National Weather Service station. The modeling submitted for Big Sandy Field, Station 103, assumed approximately 89.2 tons per year of NO_x and 89.2 tons per year of CO. The modeling did not show violations of the annual or hourly ambient standards. Since the allowable emissions in this permit are less than the modeled levels and the modeling analyses demonstrates that this facility will not cause a violation or exceedance of any state or federal ambient standard, the facility emissions will still not cause or contribute to a violation of the hourly or annual ambient standards.

VI. 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.

VII. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an Environmental Assessment is not required.

Permit Analysis prepared by: Rhonda Payne
Date: 1/17/2014