

## Air Quality Permit

Issued To: NorthWestern Corporation  
Telstad Field Station  
40 East Broadway  
Butte, MT 59701

Permit # 2782-05  
Administrative Amendment (AA)  
Request Received: 10/30/03  
Department Decision on AA: 12/05/03  
Permit Final: 12/23/03  
AFS #101-0008

An air quality permit, with conditions, is hereby granted to NorthWestern Corporation (NorthWestern) pursuant to Sections 75-2-204 and 211, 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

NorthWestern operates a natural gas processing plant and associated equipment located in the NE $\frac{1}{4}$  of the NE $\frac{1}{4}$  of Section 34, Township 32 North, Range 1 East, Toole County, Montana. The facility is known as the Telstad Field Station. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

#### B. Current Permit Action

On October 30, 2003, the Department of Environmental Quality (Department) received an administrative amendment request from NorthWestern for Permit #2782-04. NorthWestern requested that the every 4 year testing requirements for each of the two 1,100-horsepower (Hp) Solar Saturn turbines be removed from the permit because NorthWestern's Title V Operating Permit OP2782-03, as issued as final on August 25, 2003, requires semi-annual testing on each of the turbines.

The current permit action removes the every 4-year testing requirements for each of the turbines from the permit. In addition, the permit format, language, and rule references were updated to reflect the Department's current permit format, language, and rule references.

### Section II: Limitations and Conditions

#### A. Emission Limitations

1. Emissions from each of the two 600-Hp Ajax DPC-600 compressor engines (unit #4 and unit #5) shall not exceed the following (ARM 17.8.752):

Oxides of Nitrogen (NO <sub>x</sub> ) <sup>1</sup>	20.5 Pounds per hour (lb/hr)
Carbon Monoxide (CO)	1.46 lb/hr
Volatile Organic Compounds (VOC)	0.66 lb/hr

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<sup>1</sup> NO<sub>x</sub> reported as NO<sub>2</sub>.

2. Emissions from the 160-Hp Ajax DPC-160 compressor engine (unit #6) shall not exceed the following (ARM 17.8.752):

NO <sub>x1</sub>	3.88 lb/hr
CO	3.88 lb/hr
VOC	0.28 lb/hr

3. Emissions from each of the two 1100-Hp Solar Saturn compressor turbines (unit #10 and unit #11) shall not exceed the following (ARM 17.8.749):

NO <sub>x1</sub>	7.11 lb/hr
CO	11.57 lb/hr
VOC	1.66 lb/hr

4. The total combined hours of operation of the two 1100-Hp Solar Saturn compressor turbines shall be limited to 10,400 hours during any rolling 12-month period (ARM 17.8.749).
5. NorthWestern shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
6. 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).
7. NorthWestern shall not cause or authorize emissions to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
8. NorthWestern shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.7 (ARM 17.8.749).

B. Testing Requirements

1. All compliance source tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
2. The Department may require testing (ARM 17.8.105).

C. Operational Reporting Requirement:

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 Section I.A of the Permit Analysis. Production information shall be gathered on a calendar-year basis and shall be

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<sup>1</sup> NO<sub>x</sub> reported as NO<sub>2</sub>

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 is required for the annual emission inventory and to verify compliance with permit limitations (ARM 17.8.505).

2. NorthWestern shall document, by month, the total hours of operation of the two 1,100-Hp Solar Saturn turbines. By the 25<sup>th</sup> day of each month, NorthWestern shall total the combined hours of operation for the two 1,100-Hp Solar Saturn compressor turbines during the previous 12 months to verify compliance with the limitation in Section II.A.4. A written report of the compliance verification shall be submitted to the Department annually. A written report of the compliance verification must be submitted along with the annual emission inventory (ARM 17.8.749).
3. NorthWestern shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745 that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).
4. 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 for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

### 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 all 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 the permit holder 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 as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals - Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The Department's decision on the application is

not final unless 15 days have elapsed and there is no request for a hearing under this section. The filing of a request for a hearing postpones the effective date of the Department's decision until the conclusion of the hearing and issuance of a final decision by the Board.

- F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the source.
- G. Construction Commencement - Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.
- H. Permit Fees - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, the continuing validity of this permit is conditional upon the payment by the permit holder of an annual operation fee, as required by that section and rules adopted thereunder by the Board.

Permit Analysis  
NorthWestern Corporation  
Permit #2782-05

I. Introduction/Process Description

A. Permitted Equipment

NorthWestern Corporation (NorthWestern) owns and operates a natural gas compressor station and associated equipment located in the NE<sup>1</sup>/<sub>4</sub> of the NE<sup>1</sup>/<sub>4</sub> of Section 34, Township 32 North, Range 1 East, Toole County, Montana. The facility is known as the Telstad Field Station and includes, but is not limited to, the following equipment:

1. (2) 300-horsepower (Hp) Ingersoll Rand compressor engines;
2. (1) 800-Hp Clark compressor engine;
3. (2) 600-Hp Ajax compressor engines;
4. (1) 160-Hp Ajax compressor engine;
5. (1) 400 thousand British thermal unit per hour (Mbtu/hr) Reboiler;
6. (2) 1,100-Hp Solar Saturn compressor turbines;
7. (1) 750 Mbtu/hr Reboiler; and
8. Miscellaneous heaters.

B. Source Description

The purpose of the facility is to boost the field gas to the natural gas transmission system. This initial compression of the gas is accomplished with the compressor engines and turbines described in Section I.A of the Permit Analysis. The heaters provide heat to the various station facilities.

Another purpose of the complex is to "dry" the gas as it is being processed. The gas contains some moisture that must be removed from the system prior to being sent into the transmission system. The gas is "dried" with a dehydrator, also commonly called a reboiler or glycol unit. The gas is treated with a glycol solution that 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 reboiler.

C. Permit History

The 300-Hp Ingersoll Rand XVG compressor engines were installed at the Montana Power Company (MPC) Telstad compressor station in 1948, the Clark RA-8 compressor engine was installed in 1967, the 600-Hp Ajax DPC-600 compressor engines were installed in 1977, and the 160-Hp Ajax DPC-160 compressor engine was installed in July 1979.

On September 23, 1993, MPC was issued **Permit #2782-00** for the operation of their natural gas processing plant and associated equipment. The 160-Hp Ajax DPC-160 compressor engine was installed in July 1979. Therefore, a Best Available Control Technology (BACT) analysis was required for the 160-Hp Ajax DPC-160 compressor engine. Based on the BACT analysis, the Department of Environmental Quality (Department) determined BACT to be the proper operation of the 160-Hp Ajax DPC - 160 compressor engine to maintain compliance with the NO<sub>x</sub>, CO, and VOC emission limitations. The heaters and the reboilers at the Telstad Field are considered minor sources. Based on previous determinations, BACT for these sources was determined to be no control.

On May 16, 1994, **Permit #2782-01** was issued for an alteration that was requested by MPC -Telstad. This alteration was requested because the Department revised the emission limitation units from gram per brake horsepower-hour (g/bhp-hr) to pound 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 hourly emission limit was allowed for operational flexibility.

In addition, MPC requested an alteration to their initial permit for the 160-Hp Ajax DPC-160. MPC requested to change the oxides of nitrogen (NO<sub>x</sub>) emission limit from a 3.0 g/bhp-hr basis to 11.0 g/bhp-hr basis. In addition, MPC requested to change the carbon monoxide (CO) emission limit from 2.5 g/bhp-hr basis to 11.0 g/bhp-hr basis. A test conducted October 12, 1993, showed that MPC could not meet the initial NO<sub>x</sub> and CO limitations. The Department agreed with MPC's request to increase the allowable emissions. The initial limitation was based on erroneous manufacturer data.

Also, as part of the permit alteration for Permit #2782-01, the NO<sub>x</sub> emission limitations were identified as NO<sub>2</sub>, and the heaters were calculated at the next 1 MMBtu/hr increment.

On September 30, 1998, MPC requested a permit modification to Permit #2782-01. The request involved removing the testing requirement for the 160-Hp Ajax DPC-160 compressor engine (unit #6). Based on the emissions and past testing results from this source, the Department agreed that an every 4-year testing schedule was not necessary for this engine at this time; however, the limit remained and testing may be required in the future. This permit modification was consistent with other compressor stations and the Department's testing guidance. Rule references were also updated. Permit **#2782-02** replaced Permit #2782-01.

On October 4, 2001, **Permit #2782-03** was issued to MPC. MPC requested that Permit #2782-02 be altered to facilitate the installation and operation of two 1,100-Hp Solar Saturn turbine compressors and one 750 Mbtu/hr heating boiler. In addition, MPC requested the removal of the 3000 Mbtu/hr Sweetening Plant Reboiler, the 250 Mbtu/hr Reclaimer Reboiler, the Sweetening Plant Flare, and the Sweetening Plant Dehydrator. The permit included a restriction on the hours of operation for the two Solar Saturn turbines to a combined 10,400 hours per year. The limit allowed the facility to remain below the Prevention of Significant Deterioration (PSD) significance threshold value for NO<sub>x</sub>. Permit **#2782-03** replaced Permit #2782-02.

On October 18, 2002, the Department received a request to administratively amend Permit #2782-03 to incorporate a name change from MPC to NorthWestern. Permit **#2782-04** incorporated the name change into the permit. Permit #2782-04 replaced Permit #2782-03.

#### D. Current Permit Action

On October 30, 2003, the Department received an administrative amendment request from NorthWestern for Permit #2782-04. NorthWestern requested that the every 4 year testing requirements for each of the two 1,100-Hp Solar Saturn turbines be removed from the permit because NorthWestern's Title V Operating Permit OP2782-03, as issued as final on August 25, 2003, requires semi-annual testing on each of the turbines.

The current permit action removes the every 4-year testing requirements for each of the turbines from the permit. In addition, the permit format, language, and rule references were updated to reflect the Department's current permit format, language, and rule references. Permit #2782-05 will replace Permit #2782-04.

E. Additional Information

Additional information, such as applicable rules and regulations, BACT determinations, air quality impacts, and environmental assessments, are included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available upon request from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 - General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule 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 emissions 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 in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in

such a manner that a public nuisance is created.

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

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 and
10. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

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. (1) This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes. (2) This rule requires that no person may cause or authorize emissions to be discharged to 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. 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. 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 reboilers, which will meet this limitation.
6. ARM 17.8.324(3) Hydrocarbon Emissions--Petroleum Products. No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such a tank is equipped with a vapor loss control device as described in (1) of this rule, or is a pressure tank as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). The NorthWestern - Telstad compressor station, is not an NSPS affected source because it does not meet the definition of a natural gas processing plant as defined in 40 CFR Part 60, Subpart KKK.
8. ARM 17.8.342 ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR 63, shall comply with the requirements of 40 CFR 63, as listed below:

40 CFR 63, Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63, shall comply with the applicable provisions of 40 CFR Part 63, Subpart HH. In order for a natural gas production facility to be subject to 40 CFR Part 63, Subpart HH requirements, certain criteria must be met. First, the facility must be a major source of Hazardous Air Pollutants (HAP) as determined according to paragraphs (a)(1)(i) through (a)(1)(iii) of 40 CFR 63, Subpart HH. Second, a facility that is determined to be major for HAPs must also either process, upgrade, or store hydrocarbon liquids prior to the point of custody transfer, or process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. Third, the facility must also contain an affected source as specified in paragraphs (b)(1) through (b)(4) of 40 CFR Part 63, Subpart HH. Finally, if the first three criteria are met, and the exemptions contained in paragraphs (e)(1) and (e)(2) of 40 CFR Part 63, Subpart HH do not apply, the facility is subject to the applicable provisions of 40 CFR Part 63, Subpart HH.

In determining whether the Telstad Field facility is a major source of HAPs, the Department researched its files. As part of Permit Application #OP2782-00, NorthWestern provided a HAP emission inventory for the facility. At that time, the facility had the potential to emit 9.16 tons per year of total HAPs with toluene being the highest HAP emitted (3.19 tons per year). Since that time, NorthWestern has added two 1,100-Hp Solar Saturn turbines to the facility and removed the 3000 Mbtu/hr Sweetening Plant Reboiler, the 250 Mbtu/hr Reclaimer Reboiler, the Sweetening Plant Flare, and the Sweetening Plant Dehydrator. Because the facility was well below the HAP threshold prior to adding the two 1,100-Hp turbines and because several emitting units that were included in the original HAP emission inventory have been removed from the site, the Department determined that NorthWestern is not a major source of HAPs and 40 CFR 63, Subpart HH does not apply to the facility.

40 CFR 63, Subpart HHH National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. Owners or operators of natural gas transmission or storage facilities, as defined and applied in 40 CFR Part 63, shall comply with the standards and provisions of 40 CFR Part 63, Subpart HHH. In order for a natural gas transmission and storage facility to be subject to 40 CFR Part 63, Subpart HHH requirements, certain criteria must be met. First, the facility must transport or store natural gas prior to the gas entering the pipeline to a local distribution company or to a final end user if there is no local distribution company. 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 Part 63, Subpart HHH. Second, a facility must contain an affected source (glycol dehydration unit) as defined in paragraph (b) of 40 CFR Part 63, Subpart HHH. Finally, if the first two criteria are met, and the exemptions contained in paragraph (f) of 40 CFR Part 63, Subpart HHH, do not apply, the facility is subject to the applicable provisions of 40 CFR Part 63, Subpart HHH.

The Department determined that NorthWestern is not a major source of HAPs, as described above (40 CFR Part 63, Subpart HH section); therefore, 40 CFR 63, Subpart HHH does not apply to the facility.

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. The current permit action is considered an administrative action; therefore, a permit application fee was not required.
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; and 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, as 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 which 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 alteration to construct, alter or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. NorthWestern has the PTE more than 25 tons per year of NO<sub>x</sub> and CO; therefore, a 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, alteration or use of a source. NorthWestern was not required to submit a permit application for the current permit action because new sources are not being added to the facility and emissions from the facility are not being increased. (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 notify the public of the current permit action because new sources are not being added to the facility and emissions from the facility are not being increased.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The BACT analysis is discussed 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 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
11. 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 requirements 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).
12. 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.

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 Modification -- 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 listed source, but emissions are greater than 250 tons/year; therefore, the facility is considered a major stationary source. The current permit action will not result in emissions that are greater than the significance levels; therefore, a PSD review is not necessary. The current permit action is considered administrative.

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
  - a. Potential to Emit (PTE) >100 tons/year of any pollutant.
  - b. PTE >10 tons/year of any one HAP, PTE >25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
  - c. PTE >70 tons/year of PM<sub>10</sub> in a serious PM<sub>10</sub> nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2782-05 for NorthWestern, the following conclusions were made.
  - a. The facility's PTE is greater than 100 tons/year of NO<sub>x</sub> and CO.
  - b. The facility's PTE is less than 10 tons/year of any individual HAP and less than 25 tons/year of a combination of all HAPs.
  - c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
  - d. This facility is not subject to any current NSPS.
  - e. This facility is not subject to any current NESHAP standards.

- f. This source is not a Title IV affected source, nor a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that NorthWestern is subject to the Title V Operating Permit Program. NorthWestern's Title V Operating Permit OP2782-03 was issued final and effective on August 25, 2003.

### III. BACT Determination

A BACT determination is required for each new or altered source. A BACT analysis was not required for the current permit action because the permit action is considered administrative and no new or altered sources are being added.

### IV. Emission Inventory

	Tons/Year					
	TSP	PM <sub>10</sub>	SO <sub>x</sub>	NO <sub>x</sub>	VOC	CO
300 Ingersoll Rand XVG	0.11	0.11	0.01	31.87	12.75	4.06
300 Ingersoll Rand XVG	0.11	0.11	0.01	31.87	12.75	4.06
800 Clark RA-8	0.30	0.30	0.02	84.97	33.99	10.82
600 Ajax DPC – 600	0.22	0.22	0.01	89.90	2.90	6.37
600 Ajax DPC – 600	0.22	0.22	0.01	89.90	2.90	6.37
160 Ajax DPC – 160	0.06	0.06	0.00	17.00	1.24	17.00
Olman Heath Reboiler	0.01	0.01	0.00	0.18	0.01	0.04
Solar Saturn – 1100	0.19	0.19	0.10	18.48	4.31	30.08
Solar Saturn – 1100	0.19	0.19	0.10	18.48	4.31	30.08
Heaters	0.02	0.02	0.00	0.44	0.04	0.09
<b>TOTAL</b>	<b>1.43</b>	<b>1.43</b>	<b>.26</b>	<b>383.09</b>	<b>75.20</b>	<b>108.97</b>

\* A complete emission inventory is on file with the Department and is available upon request.

### V. Existing Air Quality and Monitoring Requirements

The existing air quality of the area is expected to be in compliance with all state and federal requirements. NorthWestern (as MPC) previously conducted ambient air quality modeling for all compressor stations in and near Glacier, Toole, Liberty, and Pondera Counties using two EPA guideline models, ISC2 and COMPLEX. The meteorological data that was used was taken from the Great Falls Airport National Weather Service station. The modeling that was submitted conservatively assumed that approximately 455.0 tons per year of NO<sub>x</sub> and 455.0 tons per year of CO would be emitted. This modeling did not show violations of the annual or hourly ambient standards. The modeling analysis demonstrated that this facility would not cause a violation or exceedance of any state or federal ambient standard. In addition, because the current NO<sub>x</sub> and CO emissions are below the NO<sub>x</sub> and CO emissions assumed for the modeling, the Department expects the facility to continue to operate in compliance with all applicable ambient air quality standards.

### VI. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

## VII. Environmental Assessment

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

Analysis Prepared By: Dave Aguirre

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