June 26, 2020

Michael Cashell
NorthWestern Energy Corporation
11 East Park Street
Butte, MT 59701

Sent Via Email: Michael.Cashell@northwestern.com

Dear Mr. Cashell:

Montana Air Quality Permit #5245-00 is deemed final as of June 26, 2020, 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 A. Merkel
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626

Julie Ackerlund
Air Quality Permitter
Air Quality Bureau
(406) 444-4267

JM:JA
Enclosures

CC: Beth Stimatz, NorthWestern Energy Corp, Beth.Stimatz@northwestern.com

Montana Department of Environmental Quality
Air, Energy & Mining Division

# Montana Air Quality Permit #5245-00

NorthWestern Energy
Belfry Compressor Station
11 East Park Street
Butte, MT 59701

June 26, 2020

# MONTANA AIR QUALITY PERMIT

Issued To:
NorthWestern Energy Corporation
Belfry Compressor Station
11 East Park Street
Butte, MT 59701

MAQP: #5245-00
Application Complete: April 15, 2020
Preliminary Determination Issued: May 14, 2020
Department's Decision Issued: June 10, 2020
Permit Final: June 26, 2020
AFS#: 009-001

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to NorthWestern Energy Corporation (NWE), 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. On April 15, 2020, the Department of Environmental Quality (Department) received an application from NWE proposing to install:

1. three natural gas compressor engines up to 1,380 brake-horsepower (bhp), each;

2. one natural gas-fired emergency generator up to 105 bhp; and

3. multiple natural gas-fired building heaters with a combined heat input of no more than 1.0 million British thermal units per hour (MMBtu/hr).

B. NWE proposed to construct and operates a natural gas compressor station located on a 2.1-acre site approximately 2 miles east of the community of Belfry which is in south central Montana. The legal description of the facility is the NE¼ of the SW¼ of Section 18, Township 8 South, Range 23 East, in Carbon County, Montana. This facility will be known as the Belfry Compressor Station. A complete list of permitted equipment is contained in Section I.A of the permit analysis.

Section II: Conditions and Limitations

A. Limitations

1. NWE shall operate no more than three natural gas compressor engines. The maximum capacity of each compressor engine shall not exceed 1,380 bhp (ARM 17.8.749).

2. The maximum capacity of the emergency generator shall not exceed 105 bhp (ARM 17.8.749).

3. Each natural gas compressor engine is subject to the following:

a. Each compressor engine shall be of a four-stroke lean-burn design utilizing catalytic oxidation and an air-fuel ratio (AFR) controller.
b. The emission limit for each compressor engine shall be determined using the

following equation and emission factors:
Emission Limit (pounds per hour (lb/hr)) = Emission Factor (grams per brake horsepower-hour (g/bhp-hr)) * maximum rated capacity of engine (bhp) * 0.002205 pounds per gram (lb/g)

Emission Factors:

| | |
|---|---|
| NOx | 1.0 g/bhp-hr |
| CO | 0.5 g/bhp-hr |
| VOC | 0.70 g/bhp-hr (ARM 17.8.752) |

4. NWE 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).

5. NWE 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).

6. NWE 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 precaution limitation in Section II.A.5 (ARM 17.8.749).

7. NWE shall comply with all applicable standards and limitation requirements contained in Title 40, Code of Federal Regulations (40 CFR) 60, Subpart JJJJ – *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* (ARM 17.8.340; 40 CFR 60, Subpart JJJJ).

8. NWE shall comply with all applicable standards and limitation requirements contained in 40 CFR 60, Subpart OOOOa – *Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015* (ARM 17.8.749).

9. NWE shall comply with all applicable standards, limitations, reporting, recordkeeping, and notification requirements contained in 40 CFR 63, Subpart ZZZZ – *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines* (ARM 17.8.340 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

1. Each compressor engine shall initially be tested for NOx and CO, concurrently, within 180 days of the initial start-up date of the compressor engine, and the results submitted to the Department in order to demonstrate compliance with the emission limitations contained in Section II.A.3 (ARM 17.8.105, and ARM 17.8.749).

2. After the initial source test, NWE shall test each compressor engine for NOx and CO concurrently, every 8,760 hours or 3 years, whichever comes first or

according to another testing/monitoring schedule as may be approved by the Department (ARM17.8.105 and ARM 17.8.749).

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

4. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. NWE shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

   Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

2. NWE shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit,*** change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

3. All records compiled in accordance with this permit must be maintained by NWE as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request. These records may be stored at a location other than the plant site upon approval by the Department (ARM 17.8.749).

D. Notification

1. NWE shall provide the Department with written notification of the actual start-up date of each engine within 15 days after the actual start-up date. The notification shall include the engine model and maximum rated design capacity (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection – NWE shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment such as Continuous

Emission Monitoring Systems (CEMS) or Continuous Emission Rate Monitoring Systems (CERMS), or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if NWE fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving NWE of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).

D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.

E. Appeals – Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.

G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by NWE may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit Analysis
NorthWestern Energy Corporation
Belfry Compressor Station
MAQP #5245-00

## I. Introduction/Process Description

NorthWestern Energy Corporation (NWE) proposes to construct and operates a natural gas compressor station, and is known as the Belfry Compressor Station. The facility is located east of the town of Belfry, Montana, NE ¼ of the SW ¼ of Section 18, Township 8 South, Range 23 East in Carbon County.

### A. Permitted Equipment

The Belfry Compressor Station consists of three four-stroke lean-burn compressor engines with a maximum rated design capacity of 1,380 brake horsepower (bhp). These engines are each controlled with an oxidation catalyst and an air-to-fuel ratio (AFR) controller. Fugitive emission sources at the facility include equipment leaks of and vehicle traffic. Additionally, there is a natural gas-fired emergency generator of up to 105 bhp that will operate no more than 500 hours per year, and multiple natural gas-fired building heaters of a combined total heat input of no more than 1.0 million British thermal units per hour (MMBtu/hr).

### B. Source Description

The compressor engines will boost the field gas up to the required pressure in the natural gas transmission pipeline.

### C. Response to Public Comments

No public comments were received.

## 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).

   NWE 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. In (2) of this rule, 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. In (1) of this rule, 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. As described in (2) of this rule, no equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

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

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for $PM_{10}$

NWE 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. In (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. As described

in (2) of this rule, NWE 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. In (4) of this rule, 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. In (5) of this rule, 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. NWE will use pipeline quality natural gas for its fuel burning equipment, which will meet this limitation.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. In (3) of this rule, 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). NWE is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

    a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:

    b. 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines contains NSPS requirements that apply to owners or operators of stationary spark ignition (SI) internal combustion engine (ICE) that commence construction, modification, or reconstruction after June 12, 2006, where the stationary ICE is manufactured after July 1, 2007, for engines greater than 500 bhp, or after January 1, 2008, for engines less than 500 bhp. This NSPS will apply if the engine remains, or will remain, at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates three months or more each year. Because the natural gas SI ICE engines were manufactured after July 1, 2007, this NSPS does apply.

    c. Subpart OOOOa – Standards of Performance for Crude Oil and natural gas Facilities for which Construction, Modification or Reconstruction Commenced

After September 18, 2015. This subpart applies to owners or operators of a collection of fugitive emissions components at a compressor station when one or more compressors is installed after September 18, 2015. At the time of permit issuance, the department has not incorporated this rule into the ARM; EPA retains the authority to enforce this rule.

10. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:

    a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a NESHAP Subpart as listed below:

    b. Subpart HHH – National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271. Because the NWE compressor station is not a major source of HAPs, the facility is not subject to the provisions of 40 CFR 63, Subpart HHH.

    c. 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants (HAPs) for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. Based on the information submitted by NWE, the RICE equipment to be used under MAQP #5245-00 is subject to this subpart because the RICE is a stationary engine located at an area source of HAP emissions.

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

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

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

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

    1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper

application fee is paid to the Department. NWE submitted the appropriate permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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

F. ARM 17.8, Subchapter 7 – Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit 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. NWE has a PTE greater than 25 tons per year of nitrogen oxides (NOx) and volatile organic compounds (VOC) therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.

4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. In (1) of this rule, it requires that a permit application be submitted prior to installation, modification, or use of a source. NWE submitted the required permit application for the current permit action. In (7) of this rule, it 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. NWE submitted an affidavit of publication of public notice for the April 23, 2020 issue of the Carbon County News, a newspaper of general circulation in the Town of Belfry in Carbon County, as proof of compliance with the public notice requirements.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain

any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.

8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving NWE of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

11. ARM 17.8.760 Additional Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.

12. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

13. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

14. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

15. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

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

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

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.

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

This facility is not a major stationary source 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).

H. ARM 17.8, Subchapter 9 – Permit Requirements for Major Stationary Sources or Major Modifications Locating Within Nonattainment Areas, including, but not limited to:

This facility is not a major source, nor is this action considered a major modification.

I. ARM 17.8, Subchapter 10 – Preconstruction Permit Requirements for Major Stationary Sources of Modifications Located Within Attainment or Unclassified Areas, including, but not limited to:

ARM 17.8.1004 When Air Quality Preconstruction Permit Required. This current permit action does not constitute a major modification. Therefore, the requirements of this subchapter do not apply.

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:

a. PTE > 100 tons/year of any pollutant;

b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or

c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less ($PM_{10}$) in a serious $PM_{10}$ nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #5245-00 for NWE, the following conclusions were made:

   a. The facility's PTE is less than 100 tons/year for any pollutant.

   b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.

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

   d. This facility is subject to current NSPS (40 CFR 60 Subparts A, JJJJ, and OOOOa).

   e. This facility is subject to current NESHAP (40 CFR 63 Subparts A 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 Belfry Compressor Station would 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, NWE will be required to obtain a Title V Operating Permit for the Belfry Compressor Station.

## III. BACT Determination

A BACT determination is required for each new or modified source. NWE 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 submitted by NWE in permit application for MAQP #5245-00, addressing some available methods of controlling emissions from the source located at the Belfry Compressor Station. The Department reviewed these methods, as well as previous BACT determinations in order to make the following BACT determination.

The control options selected have controls and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

### A. Compressor Engines

The primary criteria pollutants from natural gas-fired reciprocating engines are NOx, carbon monoxide (CO), and volatile organic compounds (VOC). The formation of nitrogen oxides is exponentially related to combustion temperature in the engine cylinder. CO and VOC are primarily the result of incomplete combustion. Particulate matter (PM) emissions include trace amounts of metals, non-combustible inorganic material, and condensable, semi-volatile organics

which result from volatized lubricating oil, engine wear, or from products of incomplete combustion. Natural gas combustion typically results in very little PM emissions. Sulfur oxides (SOx) are very low since sulfur compounds are removed from natural gas at processing plants. However, trace amounts of sulfur containing odorant are added to natural gas for the purpose of leak detection.

Three control techniques are typically assessed for reciprocating engines: parametric controls (timing and operating at a leaner air-to-fuel ratio(AFR)); combustion modifications such as advanced engine design for new sources or major modification to existing sources (clean-burn cylinder head designs and pre-stratified charge combustion for rich-burn engines); and post-combustion catalytic controls installed on the engine exhaust system. Lean burn engines are characterized as clean-burn engines which refers to an engine designed to reduce NOx by operating at a high AFR. The formation of NOx is exponentially related to combustion temperature in the engine cylinder and with higher air-to-fuel ratios, the combustion temperature is lower than in a rich-burn engine. CO and VOC emissions are primarily the result of incomplete combustion. Post-combustion catalytic technologies include selective catalytic reduction (SCR) units for lean-burn engines, NSCR for rich-burn engines, and CO oxidation catalysts for lean-burn engines.

The proposed compressor engines are of a four-stroke lean-burn engine class. NWE proposes to only install engines that meet the New Source Performance Standard (NSPS) of Subpart JJJJ for the NOx, CO and VOC emissions. NWE also proposes to install an oxidation catalyst and electronic AFR controller to these compressor engines with a CO emission rating that is below the Subpart JJJJ limit. The Department determined that a properly operated and maintained 1,380 bhp lean-burn engine with an AFR control and an oxidation catalyst constitutes BACT for NOx, CO, and VOC. The resulting BACT limits will be 1.0 g/bhp-hr, 0.5 g/bhp-hr, and 0.7 g/bhp-hr for NOx, CO, and VOC, respectively. These proposed levels which meet the Subpart JJJJ emission limits for emission control meet the typical BACT requirements the Department has required for other lean-burn engines. Due to the minimal emissions of SO2 and PM emitted by natural gas engines, the Department is not applying a BACT emission limit and will instead rely on good operating practices and compliance with NSPS JJJJ for these pollutants.

B. Emergency Engines

Due to the limited nature of operation for emergency engines, BACT for the proposed natural gas-fired emergency engine of up to 105 bhp shall be good operating practices and compliance with NSPS JJJJ.

C. Building Heaters

NWE proposes the installation of several small natural gas-fired building heaters. The combined total size of these heaters will not exceed 1.0 MMBtu/hr and the emissions of NOx, CO, VOC, SO2, and PM will each be less than 0.5 tons per year (tpy). Addition of any emission control device would be very expensive for the limited level of emissions. The Department considers good operating practices to fulfill BACT for all the heaters.

D. Vehicle Traffic

Limited vehicle activity will occur at this compressor station. BACT control of the potential fugitive particulate emissions of 2.5 tpy shall be the requirement to treat all unpaved portions of the facility roads with water and/or chemical dust suppressant as described in the MAQP #5245-00.

E. Equipment Leaks

VOC emissions from equipment leaks are expected to be less than 0.1 tpy. The Department considers BACT to be good operating practices and compliance with NSPS OOOOa.

## IV. Emission Inventory

**Facility-wide Emissions (tons/yr)**

| Emitting Unit | NOx | CO | VOC | SO2 | PM/PM10/PM2.5 | HAPs | CH4 | CO2 |
|---|---|---|---|---|---|---|---|---|
| 1,380 hp Compressor Engine | 13.33 | 6.66 | 9.33 | 0.03 | 0.43 | 1.54 | 0.10 | 5,837 |
| 1,380 hp Compressor Engine | 13.33 | 6.66 | 9.33 | 0.03 | 0.43 | 1.54 | 0.10 | 5,837 |
| 1,380 hp Compressor Engine | 13.33 | 6.66 | 9.33 | 0.03 | 0.43 | 1.54 | 0.10 | 5,837 |
| 105 hp Emergency Generator | 0.48 | 0.81 | 0.01 | 1.21E-07 | 3.99E-06 | 0.01 | 0.00 | 25 |
| Building Heaters < 1.0 MMBtu/hr (combined) | 0.42 | 0.35 | 0.02 | 0.00 | 0.024 | 0.01 | 0.01 | 499 |
| On-site Vehicle Traffic | | | | | 2.464 | | | |
| Equipment Leaks | | | 0.06 | | | | | |
| **Total** | **40.87** | **21.14** | **28.08** | **7.90E-02** | **3.79** | **4.65** | **0.30** | **18,034** |

** NOx = oxides of nitrogen
CO = carbon monoxide
VOC = volatile organic compounds
$SO_2$ = sulfur dioxide
PM = particulate matter
$PM_{10}$ = particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 microns or less
HAPs = hazardous air pollutants
CH4 = methane
CO2 = carbon dioxide
yr = year

Footnotes:
a. Particulate emissions are the sum of filterable and condensable emissions.
b. The inventory reflects maximum allowable emissions for all pollutants based on year-round operation (8,760 hours) with the exception of the emergency engine operating 500 hr/yr.

**Compressor Engine, 4-stroke lean burn, turbocharged with aftercooler**

Note: Emissions are based on the power output of the engine

| | | | |
|---|---|---|---|
| Operational Capacity of Engine = | 1,380 | bhp | (Applicant) |
| Hours of Operation = | 8,760 | hours/yr | (Applicant Info) |
| Heating Value = | 1,053 | MMBtu/MMscf | (Applicant Info) |
| Max Fuel Combustion Rate = | 9.9 | MMBtu/hr | (Applicant Info) |
| Pounds per gram = | 0.002205 | lb/g | |
| Pounds per kilogram = | 2.2 | lb/kg | |

**NOx Emissions:**

NOx Emission Factor = 1 g/bhp-hr (BACT)
Calculation: (1.0 g/bhp-hr)*(1380 bhp)*(0.002205 lb/g)*(8760 hours/yr)*(ton/2000 lb) = 13.3 tpy (Uncontrolled PTE)

**CO Emissions:**

CO Emission Factor = 0.5 g/bhp-hr (BACT)

Calculation: (0.5 g/bhp-hr)*(1380 bhp)*(0.002205 lb/g)*(8760 hours/yr)*(ton/2000 lb) = 6.7 tpy (Uncontrolled PTE)

**VOC Emissions:**

VOC Emission Factor = 0.7 g/bhp-hr (BACT)

Calculation: (0.7 g/bhp-hr)*(1380 bhp)*(0.002205 lb/g)*(8760 hours/yr)*(ton/2000 lb) = 9.3 tpy (Uncontrolled PTE)

**SO2 Emissions:**

SO2 Emission Factor = 0.000588 lb/MMBtu (AP-42, Table 3.2-2 (07/00))

Calculation: (0.000588 lb/MMBtu)*(9.9 MMBtu/hr)*(8760 hours/yr)*(ton/2000 lb) = 0.03 tpy (Uncontrolled PTE)

**PM/PM10/PM2.5 Emissions:**

PM/PM10/PM2.5 Emission Factor = 0.0000771 lb/MMBtu (AP-42, Table 3.2-2 (07/00))

Calculation: (0.0000771 lb/MMBtu)*(9.9 MMBtu/hr)*(8760 hours/yr)*(ton/2000 lb) = 0.00334 tpy (Uncontrolled PTE)

**PM (condensable) Emissions:**

PM (condensable) Emission Factor = 0.00991 lb/MMBtu (AP-42, Table 3.2-2 (07/00))

Calculation: (0.00991 lb/MMBtu)*(9.9 MMBtu/hr)*(8760 hours/yr)*(ton/2000 lb) = 0.43 tpy (Uncontrolled PTE)

**HAPs Emissions:**

HAPs Emission Factor = 0.035613324879273 lb/MMBtu (AP-42, Table 1.4-1 & 3.2-2, and manufacturer )

Calculation: (0.036 lb/MMBtu)*(9.9 MMBtu/hr)*(8760 hours/yr)*(ton/2000 lb) = 1.54 tpy (Uncontrolled PTE)

**Methane Emissions:**

CH4 Emission Factor = 0.001 kg/MMBtu (Table C-2, 40 CFR 98 Subaprt C)

Calculation: (0.001 kg/MMBtu)*(9.9 MMBtu/hr)*(2.2 lb/kg)*(8760 hours/yr)*(ton/2000 lb) = 0.10 tpy (Uncontrolled PTE)

**CO2 Emissions:**

CO2 Emission Factor = 438 g/bhp-hr (Vendor)

Calculation: (438 g/bhp-hr)*(1,380 bhp)*(0.002205 lb/g)*(8760 hours/yr)*(ton/2000 lb) = 5,837 tpy (Uncontrolled PTE)

**Compressor Engine, 4-stroke lean-burn, turbocharged with aftercooler**

| | | | |
|---|---|---|---|
| Horsepower = | 1380 | bhp | (Applicant) |
| Fuel Heating Value = | 1053 | MMBtu/MMscf | (Applicant) |
| Maximum Fuel Combustion Rate = | 9.9 | MMBtu/hr | (Applicant) |

| Pollutant | Emission Factor | Units | Emission Factor Reference | Common EF Units (lb/MMBtu) | |
|---|---|---|---|---|---|
| Acetaldehyde | 8.36E-03 | lb/MMBtu | AP-42 Table 3.2-2 (07/00) | 8.36E-03 | lb/MMBtu |
| Acrolein | 5.14E-03 | lb/MMBtu | | 5.14E-03 | lb/MMBtu |
| Benzene | 4.40E-04 | lb/MMBtu | | 4.40E-04 | lb/MMBtu |
| Biphenyl | 2.12E-04 | lb/MMBtu | | 2.12E-04 | lb/MMBtu |
| 1,3-Butadiene | 2.67E-04 | lb/MMBtu | | 2.67E-04 | lb/MMBtu |
| Carbon Tetrachloride | 3.67E-05 | lb/MMBtu | | 3.67E-05 | lb/MMBtu |
| Chlorobenzene | 3.04E-05 | lb/MMBtu | | 3.04E-05 | lb/MMBtu |
| Chloroform | 2.85E-05 | lb/MMBtu | | 2.85E-05 | lb/MMBtu |
| 1,3-Dichloropropene | 2.64E-05 | lb/MMBtu | | 2.64E-05 | lb/MMBtu |
| Ethylbenzene | 3.97E-05 | lb/MMBtu | | 3.97E-05 | lb/MMBtu |
| Chloroethane | 1.87E-06 | lb/MMBtu | | 1.87E-06 | lb/MMBtu |
| Ethylene Dibromide | 4.43E-05 | lb/MMBtu | | 4.43E-05 | lb/MMBtu |
| 1,2-Dichloroethane | 2.36E-05 | lb/MMBtu | | 2.36E-05 | lb/MMBtu |
| 1,1-Dichloroethane | 2.36E-05 | lb/MMBtu | | 2.36E-05 | lb/MMBtu |
| Formaldehyde | 3.80E-01 | g/bhp-hr | Manufacturer Data w/ 85.2% Control | 1.73E-02 | lb/MMBtu |
| Methanol | 2.50E-03 | lb/MMBtu | AP-42 Table 3.2-2 (07/00) | 2.50E-03 | lb/MMBtu |
| Methylene Chloride | 2.00E-05 | lb/MMBtu | | 2.00E-05 | lb/MMBtu |
| Naphthalene | 7.44E-05 | lb/MMBtu | | 7.44E-05 | lb/MMBtu |
| Phenol | 2.40E-05 | lb/MMBtu | | 2.40E-05 | lb/MMBtu |
| Toluene | 4.08E-04 | lb/MMBtu | | 4.08E-04 | lb/MMBtu |
| Vinyl Chloride | 1.49E-05 | lb/MMBtu | | 1.49E-05 | lb/MMBtu |
| Xylene | 1.84E-04 | lb/MMBtu | | 1.84E-04 | lb/MMBtu |
| 1,2-Dichloropropane | 2.69E-05 | lb/MMBtu | | 2.69E-05 | lb/MMBtu |
| Styrene | 2.36E-05 | lb/MMBtu | | 2.36E-05 | lb/MMBtu |
| 1,1,2,2-Tetrachloroethane | 4.00E-05 | lb/MMBtu | | 4.00E-05 | lb/MMBtu |
| 1,1,2-Trichloroethane | 3.18E-05 | lb/MMBtu | | 3.18E-05 | lb/MMBtu |
| 2,2,4-Trimethylpentane | 2.50E-04 | lb/MMBtu | | 2.50E-04 | lb/MMBtu |
| PAH | 2.69E-05 | lb/MMBtu | | 2.69E-05 | lb/MMBtu |
| Benzo(b)fluoranthene | 1.66E-07 | lb/MMBtu | | 1.66E-07 | lb/MMBtu |
| Chrysene | 6.93E-07 | lb/MMBtu | | 6.93E-07 | lb/MMBtu |
| Acenaphthene | 1.25E-06 | lb/MMBtu | | 1.25E-06 | lb/MMBtu |
| Acenaphthylene | 5.53E-06 | lb/MMBtu | | 5.53E-06 | lb/MMBtu |
| Benzo(g,h,i)perylene | 4.14E-07 | lb/MMBtu | | 4.14E-07 | lb/MMBtu |
| Fluoranthene | 1.11E-06 | lb/MMBtu | | 1.11E-06 | lb/MMBtu |

| | | | | | |
|---|---|---|---|---|---|
| Fluorene | 5.67E-06 | lb/MMBtu | | 5.67E-06 | lb/MMBtu |
| Phenanthrene | 1.04E-05 | lb/MMBtu | | 1.04E-05 | lb/MMBtu |
| Pyrene | 1.36E-06 | lb/MMBtu | | 1.36E-06 | lb/MMBtu |
| **Pollutant** | **Emission Factor** | **Units** | **Emission Factor Reference** | **Common EF Units (lb/MMBtu)** | |
| Arsenic | 2.00E-04 | lb/MMscf | AP-42 Table 1.4-4 (07/98) | 1.90E-07 | lb/MMBtu |
| Beryllium | 1.20E-05 | lb/MMscf | | 1.14E-08 | lb/MMBtu |
| Cadmium | 1.10E-03 | lb/MMscf | | 1.04E-06 | lb/MMBtu |
| Chromium | 1.40E-03 | lb/MMscf | | 1.33E-06 | lb/MMBtu |
| Cobalt | 8.40E-05 | lb/MMscf | | 7.98E-08 | lb/MMBtu |
| Manganese | 3.80E-04 | lb/MMscf | | 3.61E-07 | lb/MMBtu |
| Mercury | 2.60E-04 | lb/MMscf | | 2.47E-07 | lb/MMBtu |
| Nickel | 2.10E-03 | lb/MMscf | | 1.99E-06 | lb/MMBtu |
| Selenium | 2.40E-05 | lb/MMscf | | 2.28E-08 | lb/MMBtu |
| | | | **TOTAL** | **3.56E-02** | **lb/MMBtu** |

## Emergency Generator

Note: Emissions are based on the power output of the engine, AP-42, Table 3.2-3 is for 4-cycle rich burn engines.

| | | | |
|---|---|---|---|
| Operational Capacity of Engine = | 105 | bhp | (Applicant) |
| Hours of Operation = | 500 | hours/yr | (Applicant Info) |
| Heating Value = | 1,053 | MMBtu/MMscf | (Applicant Info) |
| Heat Input | 0.86625 | MMBtu/hr | (Applicant Info) |
| Grams per pound = | 0.002205 | lb/g | |
| Pounds per Kilogram = | 2.2046 | lb/kg | |

**NOx Emissions:**

NOx Emission Factor = 2.21 lb/MMBtu (AP-42, Table 3.2-3)

Calculation: (2.21 lb/MMBtu)*(0.86625 MMBtu/hr)*(500 hours/yr)*(ton/2000 lb) = 0.48 tpy Uncontrolled PTE

**CO Emissions:**

CO Emission Factor = 3.72 lb/MMBtu (AP-42, Table 3.2-3)

Calculation: (3.72 lb/MMBtu)*(0.86625 MMBtu/hr)*(500 hours/yr)*(ton/2000 lb) = 0.81 tpy Uncontrolled PTE

**VOC Emissions:**

VOC Emission Factor = 0.0296 lb/MMBtu (AP-42, Table 3.2-3)

Calculation: (0.0296 lb/MMBtu)*(0.86625 MMBtu/hr)*(500 hours/yr)*(ton/2000 lb) = 0.01 tpy Uncontrolled PTE

**SO2 Emissions:**

SO2 Emission Factor = 0.000588 lb/MMscf (AP-42, Table 3.2-3)

Calculation: (0.000588 lb/MMscf)/(1053 MMBtu/MMscf)*(0.86625 MMBtu/hr)*(500 hours/yr)*(ton/2000 lb) = 0.000000121 tpy Uncontrolled PTE

**PM/PM10/PM2.5 Emissions (filterable + condensable):**

PM/PM10/PM2.5 Emission Factor = 0.01941 lb/MMscf (Applicant)

Calculation: (0.0194 lb/MMscf)/(1053 MMBtu/MMscf)*(0.86625 MMBtu/hr)*(500 hours/yr)*(ton/2000 lb) = 0.0000040 tpy Uncontrolled PTE

**HAPs Emissions:**

HAP Emission Factor = 0.0324233601519468 lb/MMBtu (AP-42, Table 1.4-1 & 3.2-2, and manufacturer )
Calculation: (0.0324 lb/MMBtu)*(0.86625 MMBtu/hr)*(500 hours/yr)*(ton/2000 lb) = 0.01 tpy Uncontrolled PTE

**CH4 Emissions:**

CH4 Emission Factor = 0.001 kg/MMBtu (Table C-2, 40 CFR 98.3, Subpart C)

Calculation: (0.001 kg/MMBtu)*(2.2046 lb/kg)*(0.86625 MMBtu/hr)*(500 hours/yr)*(ton/2000 lb) = 0.00 tpy Uncontrolled PTE

**CO2 Emissions:**

CO2 Emission Factor = 53.1 kg/MMBtu (Table C-1, 40 CFR 98.3, Subpart C)

Calculation: (53.1 kg/MMBtu)*(2.2046 lb/kg)*(0.86625 MMBtu/hr)*(500 hours/yr)*(ton/2000 lb) = 25.35 tpy Uncontrolled PTE

**Emergency Generator**

| | | | |
|---|---|---|---|
| Horsepower = | 105 | bhp | (Applicant) |
| Fuel Heating Value = | 1053 | MMBtu/MMscf | (Applicant) |
| Heat Input = | 0.86625 | MMBtu/hr | (Applicant) |

| Pollutant | Emission Factor | Units | Emission Factor Reference | Common EF Units (lb/MMBtu) | |
|---|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | 2.53E-05 | lb/MMBtu | AP-42 Table 3.2-3 | 2.53E-05 | lb/MMBtu |
| 1,1,2-Trichloroethane | 1.53E-05 | lb/MMBtu | | 1.53E-05 | lb/MMBtu |
| 1,3-Butadiene | 6.63E-04 | lb/MMBtu | | 6.63E-04 | lb/MMBtu |
| 1,3-Dichloropropene | 1.27E-05 | lb/MMBtu | | 1.27E-05 | lb/MMBtu |
| Acetaldehyde | 2.79E-03 | lb/MMBtu | | 2.79E-03 | lb/MMBtu |
| Acrolein | 2.63E-03 | lb/MMBtu | | 2.63E-03 | lb/MMBtu |
| Benzene | 1.58E-03 | lb/MMBtu | | 1.58E-03 | lb/MMBtu |
| Carbon Tetrachloride | 1.77E-05 | lb/MMBtu | | 1.77E-05 | lb/MMBtu |
| Chlorobenzene | 1.29E-05 | lb/MMBtu | | 1.29E-05 | lb/MMBtu |
| Chloroform | 1.37E-05 | lb/MMBtu | | 1.37E-05 | lb/MMBtu |
| Ethylbenzene | 2.48E-05 | lb/MMBtu | | 2.48E-05 | lb/MMBtu |
| Ethylene Dibromide | 2.13E-05 | lb/MMBtu | | 2.13E-05 | lb/MMBtu |

| | | | | | |
|---|---|---|---|---|---|
| Formaldehyde | 2.05E-02 | lb/MMBtu | | 2.05E-02 | lb/MMBtu |
| Methanol | 3.06E-03 | lb/MMBtu | | 3.06E-03 | lb/MMBtu |
| **Pollutant** | **Emission Factor** | **Units** | **Emission Factor Reference** | **Common EF Units (lb/MMBtu)** | |
| Methylene Chloride | 4.12E-05 | lb/MMBtu | AP-42 Table 3.2-3 | 4.12E-05 | lb/MMBtu |
| Naphthalene | 9.71E-05 | lb/MMBtu | | 9.71E-05 | lb/MMBtu |
| PAH | 1.41E-04 | lb/MMBtu | | 1.41E-04 | lb/MMBtu |
| Styrene | 1.19E-05 | lb/MMBtu | | 1.19E-05 | lb/MMBtu |
| Toluene | 5.58E-04 | lb/MMBtu | | 5.58E-04 | lb/MMBtu |
| Vinyl Chloride | 7.18E-06 | lb/MMBtu | | 7.18E-06 | lb/MMBtu |
| Xylene | 1.95E-04 | lb/MMBtu | | 1.95E-04 | lb/MMBtu |
| Arsenic | 2.0E-04 | lb/MMscf | AP-42 Table 1.4-4 | 1.9E-07 | lb/MMBtu |
| Beryllium | 1.2E-05 | lb/MMscf | | 1.1E-08 | lb/MMBtu |
| Cadmium | 1.1E-03 | lb/MMscf | | 1.0E-06 | lb/MMBtu |
| Chromium | 1.4E-03 | lb/MMscf | | 1.3E-06 | lb/MMBtu |
| Cobalt | 8.4E-05 | lb/MMscf | | 8.0E-08 | lb/MMBtu |
| Manganese | 3.8E-04 | lb/MMscf | | 3.6E-07 | lb/MMBtu |
| Mercury | 2.6E-04 | lb/MMscf | | 2.5E-07 | lb/MMBtu |
| Nickel | 2.1E-03 | lb/MMscf | | 2.0E-06 | lb/MMBtu |
| Selenium | 2.40E-05 | lb/MMscf | | 2.3E-08 | lb/MMBtu |
| | | | **TOTAL** | **3.24E-02** | **lb/MMBtu** |

**Building Heaters**

The combined heater ratings are < 1.0 MMBtu/hr

| | | | |
|---|---|---|---|
| Heat Input | 1.00 | MMBtu/hr | (Applicant, Max Combined) |
| Heating Value = | 1,053 | MMBtu/MMscf | (Applicant Info) |
| Hours of Operation = | 8,760 | hours/yr | (Applicant Info) |
| Operational Capacity of Heaters = | 8.32 | MMscf/yr | (Applicant, calculated) |
| Pounds per ton = | 2,000 | lb/ton | |

**NOx Emissions:**

NOx Emission Factor = 100 lb/MMscf (AP-42, Table 1.4-1 (07/98))

Calculation: (100 lb/MMscf)*(8.32 MMscf/yr)/(2000 lb/ton) = 0.42 tpy Uncontrolled PTE

**CO Emissions:**

CO Emission Factor = 84 lb/MMScf (AP-42, Table 1.4-1 (07/98))

Calculation: (84 lb/MMScf)*(8.32 MMscf/yr)/(2000 lb/ton) = 0.35 tpy Uncontrolled PTE

**VOC Emissions:**

VOC Emission Factor = 5.5 lb/MMScf (AP-42, Table 1.4-2 (07/98))

Calculation: (5.50 lb/MMScf)*(8.32 MMscf/yr)/(2000 lb/ton) = 0.02 tpy Uncontrolled PTE

**SO2 Emissions:**

SO2 Emission Factor = 0.6 lb/MMScf (AP-42, Table 1.4-2 (07/98))

Calculation: (0.60 lb/MMScf)*(8.32 MMscf/yr)/(2000 lb/ton) = 0.002 tpy Uncontrolled PTE

**PM/PM10/PM2.5 Emissions (filterable + condensible):**

PM/PM10/PM2.5 Emission Factor = 7.6 lb/MMScf (AP-42, Table 1.4-2 (07/98))

Calculation: (0.00 )*(8,760 hours/yr)/(2000 lb/ton) = 0.03 tpy Uncontrolled PTE

**PM/PM10/PM2.5 Emissions (condensible):**

PM/PM10/PM2.5 Emission Factor = 5.7 lb/MMScf (AP-42, Table 1.4-2 (07/98))

Calculation: (5.70 lb/MMScf)*(8.32 MMscf/yr)/(2000 lb/ton) = 0.0237 tpy Uncontrolled PTE

**HAPs Emissions:**

HAP Emission Factor = 1.887957 lb/MMscf (AP-42, Table 1.4-1 & 3.2-2, and manufacturer )

Calculation: (1.89 lb/MMscf)*(8.32 MMscf/yr)/(2000 lb/ton) = 0.0079 tpy Uncontrolled PTE

**CH4 Emissions:**

CH4 Emission Factor = 2.3 lb/MMscf (AP-42, Table 1.4-2, (07/98))

Calculation: (2.30 lb/MMscf)*(8.32 MMscf/yr)/(2000 lb/ton) = 0.01 tpy Uncontrolled PTE

**CO2 Emissions:**

HAP Emission Factor = 120000 lb/MMscf (AP-42, Table 1.4-2, (07/98))

Calculation: (120,000 lb/MMscf)*(8.32 MMscf/yr)/(2000 lb/ton) = 499 tpy Uncontrolled PTE

**Building Heaters**

| | | | |
|---|---|---|---|
| Size = | 1.00 | MMBtu/hr | (Applicant) |
| Fuel Heating Value = | 1053 | MMBtu/MMscf | (Applicant) |
| Maximum Fuel Combustion Rate: | 9.9 | MMBtu/hr | (Applicant) |

| Pollutant | Emission Factor (lb/MMscf) | Emission Factor Reference |
|---|---|---|
| 2-Methylnaphthalene | 2.4E-05 | AP-42 Table 1.4-3 (07/98) |
| 3-Methylchloranthrene | 1.8E-06 | |
| 7,12-Dimethylbenz(a)anthracene | 1.6E-05 | |
| Acenaphthene | 1.8E-06 | |
| Acenaphthylene | 1.8E-06 | |
| Anthracene | 2.4E-06 | |
| Benz(a)anthracene | 1.8E-06 | |
| Benzene | 2.1E-03 | |
| Benzo(a)pyrene | 1.2E-06 | |

| Pollutant | Emission Factor (lb/MMscf) | Emission Factor Reference |
|---|---|---|
| Benzo(b)fluoranthene | 1.8E-06 | |
| Benzo(g,h,i)perylene | 1.2E-06 | AP-42 Table 1.4-3 (07/98) |
| Benzo(k)fluoranthene | 1.8E-06 | |
| Chrysene | 1.8E-06 | |
| Dibenzo(a,h)anthracene | 1.2E-06 | |
| Dichlorobenzene | 1.2E-03 | |
| Fluoranthene | 3.0E-06 | |
| Fluorene | 2.8E-06 | |
| Formaldehyde | 7.5E-02 | |
| Hexane | 1.8E+00 | |
| Indeno(1,2,3-cd)pyrene | 1.8E-06 | |
| Naphthalene | 6.1E-04 | |
| Phenanathrene | 1.7E-05 | |
| Pyrene | 5.0E-06 | |
| Toluene | 3.4E-03 | |
| Arsenic | 2.0E-04 | AP-42 Table 1.4-4 (07/98) |
| Beryllium | 1.2E-05 | |
| Cadmium | 1.1E-03 | |
| Chromium | 1.4E-03 | |
| Cobalt | 8.4E-05 | |
| Manganese | 3.8E-04 | |
| Mercury | 2.6E-04 | |
| Nickel | 2.1E-03 | |
| Selenium | 2.4E-05 | |
| **TOTAL** | **1.89** | **lb/MMscf** |

## On-site Vehicle Traffic

| | | | |
|---|---|---|---|
| On-site Traffic | 5 | VMT/day | (Applicant) |
| Yearly Operations | 365 | day/yr | (Applicant) |
| Yearly Traffic | 1,825 | VMT/yr | (calculated) |
| Pounds per ton = | 2,000 | lb/ton | |

**PM/PM10/PM2.5 Emissions:**

| | | | |
|---|---|---|---|
| PM/PM10/PM2.5 Emission Factor = 2.7 lb/VMT MDEQ Emission Factor | 2.70 | lb/VMT | MDEQ - Instructions for Registering, Updating, or Deregistering an Oil or Gas Well Facility, (May 2011) |
| Calculation: (2.70 lb/VMT)*(0.00 )/(2000 lb/ton) = 2.46 tpy Uncontrolled PTE | **2.46** | **tpy** | Uncontrolled PTE |

## Equipment Leaks

| | | | |
|---|---|---|---|
| VOC Content = | 1.18 | % VOC | (Applicant) |
| Methane Content = | 92 | % CH4 | (Applicant) |
| Yearly Operation | 8,760 | hours/yr | (calculated) |
| Pounds per ton = | 2,000 | lb/ton | |
| Pounds per kilogram = | 2.2 | lb/kg | |

**Valve VOC Emissions:**

Valve Count:

Valve VOC Emission Factor = 0.0045 kg/hr/source (Table 2-4, Protocol for Equipment Leak Emissions Estimates (EPA-453/R-95-017), November 1995)

Calculation: (0.0045 kg/hr/source)*(56 sources)*(8760 hours/yr)*(2.2 lb/kg)/(2000 lb/ton)*(1.18 % VOC) = 0.029 tpy Uncontrolled PTE

**Flanges VOC Emissions:**

Flanges Count:

Flange VOC Emission Factor = 0.00039 kg/hr/source (Table 2-4, Protocol for Equipment Leak Emissions Estimates (EPA-453/R-95-017), November 1995)

Calculation: (0.00039 kg/hr/source)*(56 sources)*(8760 hours/yr)*(2.2 lb/kg)/(2000 lb/ton)*(1.18 % VOC) = 0.00355 tpy Uncontrolled PTE

**Other VOC Emissions:**

(The "other" equipment factor is for compressors, diaphragms, drains, dump arms, hatches, instruments, meters, PRVs, polished rods, relief valves and vents)

Other Count:

Other VOC Emission Factor = 0.0088 kg/hr/source (Table 2-4, Protocol for Equipment Leak Emissions Estimates (EPA-453/R-95-017), November 1995)

Calculation: (0.0088 kg/hr/source)*(56 sources)*(8760 hours/yr)*(2.2 lb/kg)/(2000 lb/ton)*(1.18 % VOC) = 0.032 tpy Uncontrolled PTE

V. Existing Air Quality

NWE's proposed facility would operate about 2 miles east of Belfry, Montana in the northeast quarter of the southwest quarter of Section 18, Township 8 South, Range 23 East, in Carbon County. The proposed units will be located at an existing facility that has typical natural gas transmission and production distribution activities on site. The proposed units will mainly have combustion emissions of NOx, CO, VOC and HAP emissions alon with increased truck traffic fugitive particulate matter emissions. This area is classified as attainment or unclassified for all pollutants. The limitations and condition in MAQP #5245-00 ensure the facility would not cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS) or the Montana Ambient Air Quality Standards (MAAQS).

VI. Ambient Air Impact Analysis

The Department determined, that based on the proposed emission sources and controls, that the impacts from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

| YES | NO | |
|---|---|---|
| X | | 1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights? |
| | X | 2. Does the action result in either a permanent or indefinite physical occupation of private property? |
| | X | 3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property) |
| | X | 4. Does the action deprive the owner of all economically viable uses of the property? |
| | X | 5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)]. |
| | | 5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests? |
| | | 5b. Is the government requirement roughly proportional to the impact of the proposed use of the property? |
| | X | 6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action) |
| | X | 7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? |
| | X | 7a. Is the impact of government action direct, peculiar, and significant? |
| | X | 7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded? |
| | X | 7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question? |
| | X | Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas) |

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

**DEPARTMENT OF ENVIRONMENTAL QUALITY**
**Air, Energy & Mining Division**
**Air Quality Bureau**
**P.O. Box 200901, Helena, Montana 59620**
**(406) 444-3490**

# ENVIRONMENTAL ASSESSMENT (EA)

*Issued To:* NorthWestern Energy
11 East Park Street
Butte, MT 59701

*Montana Air Quality Permit number (MAQP): #5245-00*

*EA Draft:* May 14, 2020
*EA Final:* June 10, 2020
*Permit Final:* June 26, 2020

1. *Legal Description of Site:* NorthWestern Energy (NWE) proposes to construct and operate three natural gas compressors two miles east of Belfry, Montana on a 2.1-acre parcel of land. The legal description of the facility location is the northeast quarter of the southwest quarter of Section 18, Township 8 South, Range 23 East in Carbon County.

   The natural gas compressors are proposed for an existing natural gas transmission and product distribution site. There is already some existing industrial activity on site associated with the transmissions and product distribution facility. The facility location is approximately two miles east of Belfry, Montana and the closest home or structure is in the town of Belfry. The surrounding area is primarily agricultural and rangeland.

2. *Description of Project:* NWE proposes to construct and operate three natural gas compressor engines to maintain the necessary pressure in the natural gas pipeline. Two compressor engines are planned for installation in the third quarter of 2020 and expect to be operating before the end of 2020. The third compressor engine is planned for installation no later than 2021-2022. A complete list of the permitted equipment is included in Section I.A. of the permit analysis.

3. *Objectives of Project:* The intent of this project is to provide compression capabilities to the Belfry Compressor Station.

4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny the issuance of the Montana Air Quality Permit (MAQP) to the facility. NWE would lack the ability to maintain the required natural gas pipeline pressure. The Department does not consider the "no action" alternative to be appropriate because NWE has 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, are included in MAQP #5245-00.

As required under the Sage Grouse Executive Order, the proposed project information was submitted to, and reviewed by the Montana Sage Grouse Oversight Team (MSGOT). The results of the MSGOT review were submitted to the Department with application materials for the proposed project. Reference Section 7.H for details.

6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

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

   A. *Terrestrial and Aquatic Life and Habitats*

   The proposed project would result in increases in nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOC), hazard air pollutants (HAP), and small amounts of sulfur oxides (SOx) and particulate matter (PM), particulate matter of 10 microns or less in diameter (PM10), and particulate matter of 2.5 microns or less in diameter (PM2.5) emissions. Conditions requiring control mechanisms have been placed within MAQP #5245-00 to ensure that only minor air quality impacts would occur. Overall, any adverse impact on terrestrial and aquatic life and habitats is anticipated to be minor.

   As required under the Sage Grouse Executive Order, the proposed project information was submitted to, and reviewed by the Montana Sage Grouse Oversight Team (MSGOT). The results of the MSGOT review were submitted to the Department with application materials for the proposed project. Reference Section 7.H for details.

   B. *Water Quality, Quantity and Distribution*

   There are no proposed discharges into surface water or onto the proposed project site. No other permits would be required for this project. Therefore, the project would have minor impacts to water quality, quantity or distribution in the area.

   C. *Geology and Soil Quality, Stability and Moisture*

   This permitting action would have a minor effect on geology and soil properties with land disturbances associated with construction of the facility. Approximately 2.1 acres would be disturbed during construction of the facility. Combustion emissions from this project may have a minor effect on the soil quality; however, the air quality permit associated with this project would contain limitations and conditions to minimize the effect of the emissions on the surrounding environment. The Department determined that any impacts from deposition would be minor due to dispersion characteristics of pollutants, the atmosphere, and conditions that would be placed in MAQP #5245-00.

D. *Vegetation Cover, Quantity, and Quality*

The proposed project would have minor impacts on the surrounding vegetation because of construction of the facility. The property and surrounding land are currently agricultural of undeveloped in nature. The combustion emissions from this project may have a minor effect on the surrounding vegetation; however, the air quality permit associated with this project would contain limitations to minimize the effect of the emissions on the surrounding environment. Overall, this project would have minor effects on the vegetation cover, quantity and quality.

E. *Aesthetics*

Construction of the compressor engines would have minor impacts on the surrounding property from both the visual perspective, as well as noise pollution. The nearest resident would be several miles east of the proposed facility. The proposed facility would be constructed within an area that is predominately of agricultural or undeveloped land use. The Department determined minor changes in the aesthetic value of the site would be experience as the land use would be altered.

F. *Air Quality*

The air quality of the area would realize minor impacts from the proposed project because the facility would emit combustion emissions from the engines and particulate matter from vehicle traffic. These emissions would be minimized by limitations and conditions that would be included in MAQP #5245-00. While deposition of pollutants would occur as a result of operating the facility, the Department determined that the impacts from deposition of pollutants would be minor due to dispersion characteristics of pollutants, the atmosphere (wind speed, wind direction, ambient temperature, etc.), and conditions that would be placed in MAQP #5245-00. The air concentration of pollutants would be relatively small, and the corresponding deposition of those air pollutants would be minor

G. *Unique Endangered, Fragile, or Limited Environmental Resources*

In an effort to identify any unique endangered, fragile, or limited environmental resources in the area, the Department contacted the Montana Natural Heritage Program, Natural Resource Information System (NRIS) on the original permit application. The area was defined by the section, township, and range of the proposed location with an additional 1-mile buffer zone. The Species of Concern Data Report include Pinyon Jay, Pallid Bat, Golden Eagle, Bald Eagle, Greater Sage-Grouse, Great Blue Heron, and Grizzly Bear. Because emission increases are minor, and disturbance would be at an undeveloped property, the Department has determined that there would be a minor disturbance to unidentified unique, endangered, fragile, or limited environmental resources in the area.

As required under the Sage Grouse Executive Order, the proposed project information was submitted to, and reviewed by the Montana Sage Grouse Oversight Team (MSGOT). The results of the MSGOT review were submitted to the Department with application materials for the proposed project. Reference Section 7.H for details.

H. *Sage Grouse Executive Order*

**Core Area Habitat**

The Department recognizes that the site location is within a Core Area of habitat for the Greater Sage Grouse as defined by Executive Order No. 12-2015. As the application for this project was received after the Executive Order effective date of 1/1/2016, this project is subject to review under the Executive Order. As required under the Executive Order, the proposed project was reviewed by the Montana Sage Grouse Oversight Team (MSGOT) and that information was submitted by the applicant with their application materials. Mitigation stipulations are designed to maintain existing levels of suitable sage grouse habitat by managing uses and activities in sage grouse habitat. The stipulations ensure the maintenance of sage grouse abundance and distribution in Montana. Development should be designed and managed to maintain populations and sage grouse habitats. The following mitigating stipulations were identified by MSGOT:

- Reclamation should re-establish native grasses, forbs, and shrubs during interim and final reclamation. The goal of reclamation is to achieve cover, species composition, and life form diversity commensurate with the surrounding plant community or desired ecological condition to the benefit of sage grouse and replace or enhance sage grouse habitat to the degree that environmental conditions allow.
- Weed management is required within a Core Area for sage grouse. Reclamation of disturbed areas must include control of noxious weeds and invasive plant species, including cheatgrass (Bromus tectorum) and Japanese brome (Bromus japonicas).
- Implementation of the Mitigation Plan is binding, and it shall be attached to any permit the state issues. It is the Montana Sage Grouse Habitat Conservation Program's and MSGOT's expectation that the Mitigation Plan will be an integral part of any associated project permit.

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

The proposed project would have minor impacts on the demands for the environmental resources of air and water because the facility would be a source of air pollutants. Deposition of pollutants would occur as a result of operating the facility; however, as explained in Section 7.F of this EA, the Department determined that any impacts on air and water resources from the pollutants (including deposition) would be minor. The Department determined that controlled emissions from the source would not cause or contribute to a violation of any ambient air quality standard. Therefore, any impacts to air quality from the proposed facility would be minor.

The proposed project would be expected to have minor impacts on the demand for the environmental resource of energy because power for increasing the pipeline pressure would be generated by the engines proposed for the site. The impact on the demand for the environmental resource of energy would be minor because the facility would be relatively small by industrial standards. Overall, the impacts for the demands on the environmental resources of water, air, and energy would be minor.

J. *Historical and Archaeological Sites*

In an effort to identify any historical and archaeological sites located near the proposed project areas, the Department contacted the Montana Historical Society, State Historical

Preservation Office (SHPO). According to SHPO records, four previously recorded sites were noted in the vicinity the project. These sites include two historic dug-outs, a historic road/trail and a historic trash dump associated with a historic cattle camp. The property is in natural gas transmission operation, so any impacts to these historical sites has already occurred and the addition of the proposed compressor engines would be minor.

K. *Cumulative and Secondary Impacts*

The proposed project would cause minor effects on the physical and biological aspects of the human environment because the project would cause a slight increase in combustion emissions and fugitive dust from vehicle traffic in the proposed area. However, conditions have been placed in MAQP #5245-00 to ensure that only minor air quality impacts would occur. Limitations would be established in the permit to minimize air pollution. Overall, any impacts to the physical and biological environment would be minor.

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

A. *Social Structures and Mores*

The proposed project would not cause disruption to any native or traditional lifestyles or communities (social structures or mores) in the area because the proposed project is being constructed in an area with existing industrial development.

B. *Cultural Uniqueness and Diversity*

Only minor impacts to the cultural uniqueness and diversity of the area would be anticipated as the location already has a natural gas pipeline transmission development. Operation of the compressor engines would not be expected to impact the cultural uniqueness and diversity. In addition, based on the SHPO cultural resource inventory for the area, there is a low likelihood that cultural properties would be impacted as there are no records for the area. Therefore, the cultural uniqueness and diversity of the area would not likely be affected.

C. *Local and State Tax Base and Tax Revenue*

The proposed project would result in minor impacts to the local and state tax base and tax revenue as a result of the proposed project. However, the proposed project would necessitate construction activities and that would occur over an extended period of time for completion. However, any construction related jobs would be temporary and any corresponding impacts on the tax base/revenue in the area would be minor. Overall, any impacts to the local and state tax base and tax revenue would be minor.

D. *Agricultural or Industrial Production*

The land at the proposed location is currently owned by the Bureau of Land Management and outside the natural gas pipeline transmission development, the land is undeveloped.

E. *Human Health*

The proposed project would result in minor, if any, impacts to human health. As explained in Section 7.F of this EA, deposition of pollutants would occur; however, the Department determined that the proposed project would comply with all applicable air quality rules, regulations, and standards. These rules, regulations, and standards are designed to be protective of human health. Overall, any impacts to public health would be minor.

F. *Access to and Quality of Recreational and Wilderness Activities*

The proposed project would be implemented within an undeveloped area. No impacts to access and quality of recreational and wilderness activities in the project area are anticipated.

G. *Quantity and Distribution of Employment*

Employment needs would not change as a result of this project. Temporary construction-related positions could result from this project.

H. *Distribution of Population*

The proposed project would be expected to have no impact on employment and population in the areas.

I. *Demands for Government Services*

There would be minor impacts on the demands for government services because additional time would be required by government agencies to issue MAQP #5245-00 and, in the future, to assure compliance with applicable rules, standards, and conditions that would be contained in MAQP #5245-00. Overall, any demands for government services to regulate the facility or activities associated with the facility would be minor due to the relatively small size of the facility.

J. *Industrial and Commercial Activity*

Only minor additional impacts would be expected in the area because the facility already has natural gas pipeline distribution activity and these new engines would require minimal additional activity. The proposed project would be relatively small and would take place at a moderately remote location.

K. *Locally Adopted Environmental Plans and Goals*

The Department is not aware of any locally adopted environmental plans and goals affected by issuing MAQP #5245-00. This permit would contain limits for protecting air quality and keeping facility emissions in compliance with any applicable ambient air quality standards. Because the project is small, any impacts from the facility would be minor.

As required under the Sage Grouse Executive Order, the proposed project information was submitted to, and reviewed by the Montana Sage Grouse Oversight Team (MSGOT). The

results of the MSGOT review were submitted to the Department with application materials for the proposed project. Reference Section 7.H for details.

L. *Cumulative and Secondary Impacts*

Overall, cumulative and secondary impacts from this project would result in minor impacts to the economic and social aspects of the human environment in the immediate area. Due to the relatively small size of the project, the industrial production, employment, and tax revenue (etc.) impacts resulting from the proposed project would be minor. In addition, the Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #5245-00.

Recommendation: No Environmental Impact Statement (EIS) is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis:
The current permitting action is for the construction and operation of three natural gas compressor engines. MAQP #5245-00 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 contacted or which may have overlapping jurisdiction:
Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program – Montana Sage Grouse Conservation Program

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

EA prepared by: J. Ackerlund
Date: May 14, 2020