

ADMINISTRATIVE AMENDMENT OF PERMIT APPLICATION MAQP #3281-03

Date of Posting: March 24, 2025

Name of Permittee: Ridge Energy, LLC.

Source: Natural Gas Compressor Engine(s)

Location: Section 20, Township 5 North, Range 61 East

<u>Proposed Action</u>: DEQ proposes to issue an Administrative Amendment, with conditions, to the above-named permittee. The permit will be assigned Montana Air Quality Permit (MAQP) #3281-03. The permittee may appeal the Decision to the Board of Environmental Review (Board). A request for hearing must be filed by April 8, 2025. This permit shall become final on April 9, 2025, unless the Board orders a stay on the permit.

<u>Proposed Conditions</u>: See the attached Decision on application for MAQP #3281-03.

<u>Procedures for Appeal</u>: The permittee may request a hearing before the Board. The appeal must be filed before the final date stated above. The request for a hearing must contain an affidavit setting forth the grounds for the request. The hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for hearing to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, Montana 59620, or the Board Secretary: DEQBERSecretary@mt.gov.

For DEQ,

Eric Merchant Permitting Services Section Supervisor Air Quality Bureau

(406) 444-3626

John P. Proulx Air Quality Engineer Air Quality Bureau (406) 444-5391

for Part Park

MONTANA AIR QUALITY PERMIT

Issued To: Ridge Energy, LLC. MAQP: #3281-03

South Baker Compressor Station Administrative Amendment (AA)

16633 Dallas Parkway, Unit 290 Received: 03/03/2025

Addison, TX 75001 Department Decision: 03/24/2025

Permit Final:

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

SECTION I: Permitted Facilities

A. Plant Location

Ridge owns and operates a natural gas compressor station known as the South Baker Compressor Station and associated equipment. The site is located approximately 16 miles southeast of Baker, Montana, in Section 20, Township 5 North, Range 61 East, in Fallon County, Montana.

B. Current Permit Action

On March 3, 2025, the Department of Environmental Quality (DEQ) received a change of ownership notice from Ridge for the South Baker Compressor Station. The current permit action transfers ownership of the MAQP from Scout Energy Management, LLC., to Ridge in accordance with ARM 17.8.764 and ARM 17.8.765(2).

SECTION II. Conditions and Limitations

A. Emission Limitations

1. Ridge shall not operate more than three natural gas compressor engines at any given time. The rich-burn compressor engines shall be fitted with a non-selective catalytic reduction (NSCR) unit and an air to fuel ratio (AFR) controller. The emission limits for each of the engines shall be determined as follows (ARM 17.8.752 and ARM 17.8.749).

Emission Limit (pounds per hour (lb/hr)) = Emission Factor (grams per break horsepower-hour (g/bhp-hr)) * maximum rated capacity of engine (bhp) * 0.002205 pounds per gram (lb/g)

2. Each compressor engine shall not have a designed horsepower rating greater than 1,680-horsepower (hp). The emission limit for each engine shall be determined by using the equation in Section II.A.1. in conjunction with the following emission factors (ARM 17.8.749):

 NO_x^1 1.00 g/bhp-hr CO 2.00 g/bhp-hr VOC 0.50 g/bhp-hr

- 3. Ridge shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- 4. Ridge shall not cause or authorize the use of any street, road, parking lot, or the general plant property without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
- Ridge shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.749).
- 6. Ridge shall comply with all applicable standards and limitations, and the reporting, record keeping, and notification requirements contained in 40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for any applicable natural gas engine (ARM 17.8.340 and 40 CFR 60, Subpart JJJJ and ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

- 1. Each of the three compressor engines shall be initially tested for nitrogen oxides (NO_x) and carbon monoxide (CO), concurrently, to demonstrate compliance with the emission limits established according to Section II.A.1, within 180 days of the initial start up date of the compressor engines. Further testing shall continue on an every-4-year basis or according to another testing/monitoring schedule as may be approved by DEQ (ARM 17.8.105 and ARM 17.8.749).
- 2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 3. DEQ may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

 Ridge shall supply DEQ with annual production information for all emission points, as required by DEQ 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 DEQ by the date required in the emission inventory request.

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¹ NO_x reported as NO₂.

- Information shall be in the units required by DEQ. 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. Ridge shall notify DEQ 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 or the addition of a new emission unit. The notice must be submitted to DEQ, in writing, 10 days prior to start up or use of the de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
- 3. All records compiled in accordance with this permit must be maintained by Ridge 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 DEQ, and must be submitted to DEQ upon request (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection Ridge shall allow DEQ's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and the terms, conditions, and matters stated herein shall be deemed accepted if Ridge fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Ridge 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 DEQ's decision may request, within 15 days after DEQ renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay DEQ'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 DEQ'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, DEQ's decision on the application is final 16 days after DEQ'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 DEQ at the location of the permitted source.
- G. Permit Fee Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Ridge may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit (MAQP) Analysis Ridge Energy, LLC South Baker Compressor Station MAQP #3281-03

I. Introduction/Process Description

Ridge Energy, LLC (Ridge) is permitted for the operation of the South Baker Compressor Station. The facility is a natural gas compressor station located approximately 16 miles southeast of Baker, Montana, in Section 20, Township 5 North, Range 61 East, in Fallon County, Montana.

A. Permitted Equipment

The facility consists of the following equipment:

- 1. (3) Natural gas compressor engines with a maximum design capacity of 1,680-horsepower (hp) per engine.
- 2. (1) Glycol dehydration unit up to 0.75 million British thermal units (MMBtu) per hour
- 3. Miscellaneous support equipment and materials including, but not limited to, tanks, tank heaters, etc.

B. Source Description

The purpose of the South Baker Compressor Station is to dehydrate and compress natural gas for transmission through the natural gas pipeline. The compression of the gas is accomplished with the compressor engines listed in Section I.A of the permit analysis. The gas is "dried" with a dehydrator, also 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°F to drive off the water and return the glycol. Burning natural gas in the dehydrator reboilers generates the heat necessary for this activity.

C. Permit History

MAQP #3281-00 was issued on July 25, 2003 to Williston Basin Interstate Pipeline Company for construction and operation of the South Baker Compressor Station.

On December 10, 2012, the Montana Department of Environmental Quality (DEQ) received an Administrative Amendment (AA) request from WBI to change the official name of the company from Williston Basin Interstate Pipeline Company to WBI Energy Transmission, Inc. **MAQP #3281-01** replaced MAQP #3281-00.

On April 21, 2020, DEQ received an AA request from WBI to transfer ownership of the permitted facility from WBI Energy Transmission, Inc. to Scout Energy Management, LLC. **MAQP #3281-02** replaced MAQP #3281-01.

D. Current Permit Action

On March 3, 2025, DEQ received a change of ownership notice from Ridge for the South Baker Compressor Station. The current permit action transfers ownership of the MAQP from Scout Energy Management, LLC., to Ridge in accordance with ARM 17.8.764 and ARM 17.8.765(2). **MAQP #3281-03** replaces MAQP #3281-02.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the DEQ. Upon request, DEQ 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. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of DEQ, 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 DEQ.
 - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by DEQ, 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).
 - Ridge shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from DEQ upon request.
 - 4. <u>ARM 17.8.110 Malfunctions</u>. (2) DEQ must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

- 5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to the following:
 - 1. ARM 17.8.204 Ambient Air Monitoring
 - 2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
 - 6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
 - 7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
 - 9. ARM 17.8.222 Ambient Air Quality Standard for Lead
 - 10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Ridge must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. 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. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Ridge 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. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. 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. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. (4) Commencing July 1, 1972, no person shall burn liquid or solid fuels containing sulfur in excess of 1 pound of sulfur per million Btu fired.

- (5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. Ridge will burn natural gas in all fuel burning equipment, which will meet this limitation.
- 6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.
- 7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS).
 - a. <u>40 CFR 60, Subpart A General Provisions</u> 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. The South Baker Compressor Station
 is not subject to this subpart as the engines were manufactured and installed
 before the applicability dates outlined in the subpart. However, future engine
 installations, replacements, or reconstructions may be subject to 40 CFR 60
 Subpart JJJJ.
 - c. <u>CFR Part 60. Subpart KKK, Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants</u>, is not applicable to this facility because the facility does not meet the definition of a natural gas processing plant.
- 8. <u>ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories</u>. The source, as defined and applied in 40 CFR 63, shall comply with the requirements of 40 CFR 63, as listed below:
 - a. 40 CFR 63, Subpart A General Provisions apply to all equipment or facilities subject to an NESHAP Subpart as listed below:
 - b. 40 CFR 63, Subpart HH National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63, shall comply with standards and provisions of 40 CFR 63, Subpart HH. Based on previous information provided by Scout, the South Baker Compressor Station facility is considered an area source of HAPs that is subject to 40 CFR 63, Subpart HH. For area sources, the affected source includes each TEG glycol dehydration unit.

However, because the glycol dehydration unit emits less than 0.9 megagrams (1 ton per year (TPY)) of benzene, it is exempt from the control requirements listed in 40 CFR 63, Subpart HH. Records of the determinations applicable to this exemption must be maintained as required in 40 CFR 63.774(d)(1).

- c. 40 CFR 63, Subpart HHH National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. In order for a natural gas transmission and storage facility to be subject to 40 CFR 63, Subpart HHH requirements, the facility must be a major source of Hazardous Air Pollutants (HAPs) as determined using the maximum natural gas throughput as calculated in either paragraphs (a)(1) and (a)(2) or paragraphs (a)(2) and (a)(3) of 40 CFR 63, Subpart HHH. Based on the information submitted by Scout, the South Baker facility is not subject to the provisions of 40 CFR 63, Subpart HHH because the facility is not a major source of HAPs.
- d. 40 CFR 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary RICE at a major or area source of HAP emissions is subject to this subpart, except if the stationary RICE is being tested at a stationary RICE test cell/stand. Therefore, Ridge is subject to this subpart.
- D. ARM 17.8, Subchapter 4 Stack Height and Dispersion Techniques, including, but not limited to:
 - 1. <u>ARM 17.8.401 Definitions</u>. This rule includes a list of definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.402 Requirements</u>. Ridge 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 Ridge 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 DEQ. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.
 - 2. <u>ARM 17.8.505 When Permit Required--Exclusions</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to DEQ by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by DEQ. 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. DEQ 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. <u>ARM 17.8.740 Definitions</u>. 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. Ridge has the potential to emit more than 25 tons per year of nitrogen oxides (NO_x), carbon monoxide (CO) and volatile organic compounds (VOC); therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 - 4. <u>ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 - 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. (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. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.
 - 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by DEQ 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. <u>ARM 17.8.752 Emission Control Requirements</u>. 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. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by DEQ 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 Ridge 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. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes DEQ'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. <u>ARM 17.8.760 Additional Review of Permit Applications</u>. This rule describes DEQ's responsibilities for processing permit applications and making permit decisions on those applications that require an environmental impact statement.
- 12. <u>ARM 17.8.762 Duration of Permit</u>. 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. <u>ARM 17.8.763 Revocation of Permit</u>. 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. <u>ARM 17.8.765 Transfer of Permit</u>. 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 DEQ.
- G. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.

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

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

- H. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (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 DEQ may establish by rule; or
 - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.
 - 2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 require that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #3281-03 for Ridge, 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 and one HAP and less than 25 tons/year for all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility may become subject to current NSPS 40 CFR 60, Subpart JJJ.
 - e. This facility is subject to area source provisions of a current NESHAP (40 CFR 63, Subparts A, HH, and ZZZZ).
 - 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, DEQ determined that Ridge is 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, Ridge will be required to obtain a Title V Operating Permit.

III. BACT Determination

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

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

IV. Emission Inventory

Ton/year							
Source	PM_{10}	NO_x	VOC	CO	SO_x		
1,680-hp Compressor Engine (EU1)	0.61	16.21	8.10	32.46	0.04		
1,680-hp Compressor Engine (EU2)	0.61	16.21	8.10	32.46	0.04		
1,680-hp Compressor Engine (EU3)	0.61	16.21	8.10	32.46	0.04		
0.75 MMBtu/hr Dehydrator #1	0.03	0.44	0.02	0.37	0.00		
Miscellaneous Tanks (21)	0.00	0.00	8.00	0.00	0.00		
Total	1.86	49.07	32.32	97.75	0.12		

1,680-hp Compressor Engines (3 Engines)

Brake Horsepower: 1680 bhp Hours of operation: 8760 hr/yr

PM₁₀ Emissions

Emission Factor: 9.50E-03 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)

Fuel Consumption:14.28 MMBtu/hr (Maximum Design) Calculations: 14.28 MMBtu/hr * 9.50E-03 lb/MMBtu = 0.14 lb/hr

0.14 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.61 ton/yr

NO_x Emissions

Emission factor: 1.00 gram/bhp-hour (BACT Determination) Calculations:

1.00 gram/bhp-hour * 1680 bhp * 0.002205 lb/gram = 3.70 lb/hr

3.70 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 16.21 ton/yr

VOC Emissions

Emission factor: 0.5 gram/bhp-hour (BACT Determination)

0.5 gram/bhp-hour * 1680 bhp * 0.002205 lb/gram = 1.85 lb/hrCalculations:

1.85 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 8.10 ton/yr

CO Emissions

Emission factor: 2.00 gram/bhp-hour (BACT Determination)

Calculations: 2.00 gram/bhp-hour * 1680 bhp * 0.002205 lb/gram = 7.41 lb/hr

7.41 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 32.46 ton/yr

SO₂ Emission

Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3,

7/00)

Fuel Consumption:14.28 MMBtu/hr (Maximum Design) Calculations: 14.28 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.01 lb/hr 0.01 lb/hr * 8760 hr/hr * 0.0005 ton/lb = 0.04 ton/yr

Up to 0.75 MMBtu/hr Dehydration Unit (1 unit)

Heat Output: 0.75 MMBtu/hr (Maximum Design)

Hours of Operation: 8760 hr/yr

Fuel Heating Value: 0.001 MMScf/MMBtu

Fuel Consumption: 0.75 MMBtu/hr * 0.001 MMScf/MMBtu * 8760 hr/yr = 6.57 MMScf/yr

PM₁₀ Emissions

Emission Factor: 6.57 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98) Calculations: 6.57 lb/MMScf * 8.76 MMScf/yr * 0.0005 ton/lb = 0.03 ton/yr

NO_x Emissions

Emission factor: 100 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98) Calculations: 100 lb/MMScf * 8.76 MMScf/yr * 0.0005 ton/lb = 0.44 ton/yr

VOC Emissions

Emission factor: 5.5 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98) Calculations: 5.5 lb/MMScf * 8.76 MMScf/yr * 0.0005 ton/lb = 0.02 ton/yr

CO Emissions

Emission factor: 84 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98) Calculations: 84 lb/MMScf * 8.76 MMScf/yr * 0.0005 ton/lb = 0.37 ton/yr

SO₂ Emission

Emission factor: 0.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98) Calculations: 0.6 lb/MMScf * 8.76 MMScf/yr * 0.0005 ton/lb = 0.00 ton/yr

Miscellaneous (water, oil, & triethylene glycol) Tanks (21 units)

VOC Emissions

Tanks Emissions Calculations: (3) 50 gal Engine Jacket Water Tanks (EG/Water) < 1 ton/yr(Company Estimate) (3) 500 gal Ethylene Glycol Tanks (EG/Water makeup) < 1 ton/yr(Company Estimate) (3) 120 gal Compressor Crankcase Oil Tanks < 1 ton/vr(Company Estimate) (3) 230 gal Engine Crankcase Oil Tanks < 1 ton/yr(Company Estimate) (3) 350 gal Compressor Lubricator Oil Tanks < 1 ton/yr(Company Estimate)

(3) 500 gal Waste Oil Tanks	< 1 ton/yr
(Company Estimate)	
(1) 1,000 gal Triethylene Glycol Tanks	< 1 ton/yr
(Company Estimate)	
(1) Slop Oil Tank	< 1 ton/yr
(Company Estimate)	
Tank Total	< 8 ton/vr

• Tank emissions are conservative because the tanks store oil, water, and glycol, which are relatively non-volatile liquids.

V. Existing Air Quality

The air quality of this area is classified as unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for all criteria pollutants.

VI. Ambient Air Impact Analysis

The current permit action is an administrative permit action; therefore, DEQ did not conduct an ambient air impact analysis.

VII. Taking and Damaging Implication Analysis

As required by 2-10-105, MCA, DEQ 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?

YES	NO	
	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, DEQ determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

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

Analysis Prepared By: John P. Proulx

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