

Date of Posting: June 30, 2025

Bo Woods  
A.B. Energy, LLC  
East Kieth Field Station 37  
PO Box 668  
Chester, MT 59522

**RE: Final and Effective Montana Air Quality Permit #2758-10**

Sent via email: [bjwoods@itstriangle.com](mailto:bjwoods@itstriangle.com)

Dear Mr. Woods:

Montana Air Quality Permit (MAQP) #2758-10 for the above-named permittee is deemed final and effective as of June 28, 2025, by the Montana Department of Environmental Quality (DEQ). All conditions of the Decision remain the same. A copy of final MAQP #2758-10 is enclosed.

For DEQ,



Eric Merchant, Supervisor  
Air Quality Permitting Services Section  
Air Quality Bureau  
Air, Energy, and Mining Division  
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**Montana Department of Environmental Quality  
Air, Energy & Mining Division  
Air Quality Bureau**

Montana Air Quality Permit #2758-10

A.B. Energy, LLC  
East Keith Field Station 37  
PO Box 668  
Chester, MT 59522

Final and Effective Date:  
June 28, 2025



## MONTANA AIR QUALITY PERMIT

Issued To: A.B. Energy, LLC  
East Keith Field, Station 037  
PO Box 668  
Chester, MT 59522

MAQP: #2758-10  
Administrative Amendment (AA)  
Request Received: 5/20/2025  
Department Decision on AA: 6/12/2025  
Permit Final: 6/28/2025

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to A.B. Energy, LLC (ABE), - East Keith Field, Station 037, pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and the Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

### SECTION I: Permitted Facilities

#### A. Plant Location

ABE operates a natural gas compressor station and associated equipment located in the SE<sup>1</sup>/<sub>4</sub> of the NE<sup>1</sup>/<sub>4</sub> of Section 22, Township 36 North, Range 6 East, in Liberty County, Montana. This facility is known as the East Keith Field, Station 037. A complete list of the permitted equipment is contained in Section I.A. of the permit analysis.

#### B. Current Permit Action

On May 20, 2025, the Department of Environmental Quality (DEQ) received a letter from A.B. Energy, LLC requesting that DEQ transfer the ownership of MAQP #2758-09 from Three Forks Resources, LLC to A.B. Energy, LLC.

### SECTION II: Conditions and Limitations

#### A. Emission Limitations

1. ABE shall not operate more than two natural gas compressor engines at any given time at the facility and the total combined maximum rated capacity shall not exceed 840 brake horsepower (bhp) (ARM 17.8.749).
2. Emissions from the 400-horsepower (bhp) Waukesha compressor engine or an equivalent rated engine (if the 400 bhp engine were replaced) shall be controlled with lean burn technology. The following gram per bhp emissions limits for the 400 bhp compressor engine shall be met at all operating load conditions (ARM 17.8.752).

#### Emission Factors

Oxides of Nitrogen (NO <sub>x</sub> )	2.0 g/bhp-hr
Carbon Monoxide (CO)	1.30 g/bhp-hr
Volatile Organic Compounds (VOC)	0.27 g/bhp-hr

3. The pounds per hour (lb/hr) emission limits for the 400 bhp compressor engine shall be determined using the following equation and pollutant specific g/bhp-hr emission factors from Section II.A.2 (ARM 17.8.752).

Equation

Emission Limit (lb/hr) = Emission Factor (g/bhp-hr)\* maximum rated design capacity of engine (bhp)\* 0.002205 lb/g

Lb/hr Limits

NO<sub>x</sub> 1.76 lb/hr

CO 1.15 lb/hr

VOC 1.1 lb/hr

4. ABE 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. ABE 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. ABE 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.5 (ARM 17.8.749).
7. If the permitted equipment is used in conjunction with any other equipment owned or operated by ABE, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the DEQ (ARM 17.8.749).
8. ABE shall comply with any applicable standards, limitations, reporting, recordkeeping, and notification requirements contained in Title 40 Code of Federal Regulations (40 CFR) 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (ARM 17.8.340, 40 CFR 63, Subpart ZZZZ).
9. ABE shall comply with any applicable standards, limitations, reporting, recordkeeping, and notification requirements contained in Title 40 Code of Federal Regulations (40 CFR) 60, Subpart JJJJ – National Emission Standards for Hazardous Air Pollutants for Stationary Spark Ignition Internal Combustion Engines (ARM 17.8.340, 40 CFR 60, Subpart JJJJ).
10. ABE shall submit to DEQ within 180 days of final permit issuance, a “maintenance plan” for the 400 hp compressor engine similar to the requirements as called out in 40 CFR 60 Subpart JJJJ 60. 4243 (a)(2) (iii) and keep records of maintenance conducted (ARM 17.8.749 and ARM 17.8.752).

B. Testing Requirements

1. The proposed Waukesha 400 bhp Compressor Engine shall be initially tested for nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO), concurrently, to demonstrate compliance with emissions limits in Section II.A.2. Testing shall be conducted within 180 days of the initial startup date of the unit (ARM 17.8.105 and ARM 17.8.749).
2. The Waukesha 400 bhp Compressor Engine shall be tested for NO<sub>x</sub> and CO, concurrently, on an every 4-year basis or according to another testing/monitoring schedule as may be approved by DEQ to demonstrate compliance with the emission limitations contained in Section II.A.1. (ARM 17.8.105 and 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. DEQ may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. ABE 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 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. Information shall be in the units as 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. ABE 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 proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
3. All records compiled in accordance with this permit must be maintained by ABE 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 – ABE 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 ABE fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving ABE 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 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 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 source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by ABE 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  
A.B. Energy LLC.  
MAQP #2758-10

I. Introduction/Process Description

A.B. Energy, LLC. (ABE) operates a natural gas compressor station and associated equipment located in the SE<sup>1</sup>/<sub>4</sub> of the NE<sup>1</sup>/<sub>4</sub> of Section 22, Township 36 North, Range 6 East, in Liberty County. The facility is known as the East Keith Field, Station 037. The facility includes the following equipment:

A. Permitted Equipment

The facility consists of the following equipment:

- (1) 1965 440-horsepower (hp) Worthington Compressor Engine
- (1) 400 hp Waukesha Compressor Engine or equivalent engine
- (1) 300-thousand British thermal units per hour (MBtu/hr) Olman Heath Reboiler
- (2) 80-MBtu/hr Little Giant Heaters
- (1) 110-MBtu/hr Little Giant Heater
- (3) 105-MBtu/hr Modine Heaters
- (1) 120-MBtu/hr Moores Heater

B. Source Description

The East Keith Field, Station 037 facility has two primary purposes. The first purpose is to pump the field gas up to the required pressure in the natural gas transmission system. Compression of the gas is accomplished using both the 440-hp Worthington Compressor Engine and the 400-hp Waukesha Compressor Engine. Engine heaters (3), garage heaters (3), and an auxiliary building heater provide heat to the various station facilities.

The second purpose of the East Keith Field, Station 037 facility is to "dry" the gas as it is being processed. The gas contains some moisture, which must be removed from the system prior to being sent into the transmission system. This is accomplished with the dehydrator, also commonly called a reboiler or glycol unit.

The gas is treated with a glycol solution, which absorbs the water in the gas stream. The glycol solution is then heated to about 300 degrees Fahrenheit (°F) to drive off the water and return the glycol. The heat necessary for this activity is generated by burning natural gas in the dehydrator reboiler. This unit will have a heat input of approximately 300 MBtu/hr. The reboiler is small by industrial standards, having a size approximately equivalent to a typical natural gas-fired small office heating system.

C. Permit History

Montana Power Company (Montana Power) was issued **Permit #2758-00** for the operation of their compressor station and associated equipment, located in the Southeast <sup>1</sup>/<sub>4</sub> of the Northeast <sup>1</sup>/<sub>4</sub> of Section 22, Township 36 North, Range 6 East, in

Liberty County near Shelby, Montana. The station was identified as the East Keith Field, Station 037. On June 7, 1993, Permit #2758-00 became final.

The first permit change revised the emission limitation units from grams per brake horsepower-hour (g/bhp-hr) to pounds per hour (lb/hr). The revision provided Montana Power with the operational flexibility to account for varying parameters such as engine revolutions per minute (rpm), operating load (bhp), ambient air temperature, gas temperature, site, elevation, fuel gas quality, air/fuel ratio (AFR), field gas conditions, etc. Also, to clarify nitrogen oxides (NO<sub>x</sub>) mass emission calculations, NO<sub>x</sub> emission limitations were identified as nitrogen dioxide (NO<sub>2</sub>). Furthermore, the White Superior Compressor Engine was removed from service and the permit. **Permit #2758-01** replaced Permit #2758-00. On March 1, 1994, Permit #2758-01 became final.

Montana Power requested a name change to Montana Power Gas Company. The appropriate references in the permit were changed to reflect the name change. Since the source was tested and demonstrated compliance on November 15, 1993, the initial source testing requirements were removed from Permit #2758-01. In addition, the rule references were updated, and the permit was updated to reflect the current format used for writing permits. **Permit #2758-02** replaced Permit #2758-01. On March 17, 1999, Permit #2758-02 became final.

**Permit #2758-03** added the 637-hp Caterpillar Compressor Engine to the permit and removed the 360-hp Ajax Compressor Engine from the permit. Permit #2758-03 replaced Permit #2758-02. On August 8, 1999, Permit #2758-03 became final.

On January 22, 2002, the Department of Environmental Quality (DEQ) received a notice of corporate merger and name change from PanCanadian Energy Resources, Inc. (PanCanadian). The letter notified DEQ that Montana Power Gas Company, Xeno, Inc., and Entech Gas Ventures, Inc. merged into North American Resources Company (NARCO) as of January 1, 2002. The letter also stated that at the same time, NARCO changed its corporate name to PanCanadian. In addition, on April 18, 2002, DEQ received a letter from PanCanadian requesting a name change from PanCanadian to EnCana Energy Resources, Inc. (EnCana). The permit action transferred the permit from Montana Power Gas Company to EnCana. In addition, the permit format and permit language were updated. **Permit #2758-04** replaced Permit #2758-03. On August 23, 2002, Permit #2758-04 became final.

On June 5, 2003, DEQ received a letter from EnCana requesting that DEQ change the corporate name on Permit #2758-04 from EnCana to EnCana Gathering Services (USA), Inc. (EnCana Gathering). This permitting action changed the name from EnCana to EnCana Gathering and updated the permit to reflect current permit language and rule references used by DEQ. **Permit #2758-05** replaced Permit #2758-04.

On March 5, 2004, DEQ received a letter from Omimex Canada Ltd. requesting that DEQ change the corporate name on Permit #2758-05 from EnCana Gathering Services (USA), Inc. (EnCana Gathering) to Omimex Canada, Ltd. (Omimex).



The permitting action changed the corporate name and updated the permit to reflect current permit language and rule references. **Permit #2758-06** replaced Permit #2758-05.

On September 23, 2013, DEQ received a modification request from Omimex requesting that the existing compressor engine be replaced with a newer smaller compressor engine. The permit action provided for a flexible permit to reflect the engine change and updated the permit to permit language and rule references. Montana Air Quality Permit (**MAQP**) **#2758-07** replaced Permit #2758-06.

On November 30, 2016, DEQ received a letter from Omimex requesting that DEQ update the listed mailing address on MAQP #2758-07 to reflect their current mailing address. The current permitting action changes the mailing address on MAQP #2758-07 and updated the permit to reflect current permit language used by DEQ. **MAQP #2758-08** replaced MAQP #2758-07.

On November 25, 2019, DEQ received a letter from Three Forks Resources, LLC requesting that DEQ update the listed owner on MAQP #2758-08 to reflect a change of ownership. The current permitting action changes the ownership from Omimex Canada, Ltd. To Three Forks Resources, LLC (TFR) on MAQP #2758-08 and updates the permit to reflect current permit language used by DEQ. **MAQP #2758-09** replaced MAQP #2758-08.

D. Current Permit Action

On May 20, 2025, DEQ received a letter from A.B. Energy, LLC requesting that DEQ transfer the ownership of MAQP #2758-09 from Three Forks Resources, LLC to A.B. Energy, LLC. **MAQP #2758-10** replaces MAQP 2758-09.

E. Additional Information

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

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from 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. 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 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. ARM 17.8.106 Source Testing Protocol. 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).

ABE shall comply with all 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 DEQ upon request.

4. ARM 17.8.110 Malfunctions. (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 in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

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

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

ABE 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 to an outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, ABE shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
6. ARM 17.8.340 Standards of Performance for New Stationary Sources. The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, New Source Performance Standards (NSPS), shall comply with the standards and provisions of 40 CFR Part 60. The ABE facility, is not an NSPS affected source because it does not meet any of the definitions of a natural gas processing plant, as defined in 40 CFR Part 60, Subpart KKK. 40 CFR Part 60 Subpart JJJJ could become applicable if different engines are used under the de minimis language.
7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR 63, shall comply with the requirements of 40 CFR 63, as listed below:
  - a. 40 CFR 63, Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63, shall comply with the applicable provisions of 40 CFR Part 63, Subpart HH. In order for a natural gas production facility to be subject to 40 CFR Part 63, Subpart HH requirements, certain criteria must be met. First, the facility must be a major source of Hazardous Air Pollutants (HAP) as determined according to paragraphs (a)(1)(i) through (a)(1)(iii) of 40 CFR 63, Subpart HH. Second, a facility that is determined to be major for HAPs must also either process, upgrade, or store hydrocarbon liquids prior to the point of custody transfer, or process,

upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. Third, the facility must also contain an affected source as specified in paragraphs (b)(1) through (b)(4) of 40 CFR Part 63, Subpart HH. Finally, if the first three criteria are met, and the exemptions contained in paragraphs (e)(1) and (e)(2) of 40 CFR Part 63, Subpart HH do not apply, the facility is subject to the applicable provisions of 40 CFR Part 63, Subpart HH. Because the facility is not a major source of HAPs, ABE is not subject to the provisions of 40 CFR Part 63, Subpart HH.

- b. 40 CFR 63, Subpart HHH National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. Owners or operators of natural gas transmission or storage facilities, as defined and applied in 40 CFR Part 63, shall comply with the standards and provisions of 40 CFR Part 63, Subpart HHH. In order for a natural gas transmission and storage facility to be subject to 40 CFR Part 63, Subpart HHH requirements, certain criteria must be met. First, the facility must transport or store natural gas prior to the gas entering the pipeline to a local distribution company or to a final end user if there is no local distribution company. In addition, the facility must be a major source of HAPs as determined using the maximum natural gas throughput as calculated in either paragraphs (a)(1) and (a)(2) or paragraphs (a)(2) and (a)(3) of 40 CFR Part 63, Subpart HHH. Third, a facility must contain an affected source (glycol dehydration unit) as defined in paragraph (b) of 40 CFR Part 63, Subpart HHH. Finally, if the first two criteria are met, and the exemptions contained in paragraph (f) of 40 CFR Part 63, Subpart HHH, do not apply, the facility is subject to the applicable provisions of 40 CFR Part 63, Subpart HHH. Because the facility is not a major source of HAPs, ABE 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 for Stationary Reciprocating Internal Combustion Engines. Owners or operators of reciprocating internal combustion engines (RICE) at a major or area source of HAP emissions shall comply with 40 CFR 63, Subpart ZZZZ except if the stationary RICE is being tested at a stationary RICE test cell/stand. ABE is an area source of HAP emissions that is operating a stationary RICE; therefore, this regulation applies.

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

- 1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to DEQ. ABE was not

required to submit a permit application fee for the current permit action because it is an administrative action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to DEQ by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by DEQ.

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.

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this subchapter, 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. ABE has a PTE greater than 25 tons per year of NO<sub>x</sub> and 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. This rule requires that a permit application be submitted prior to installation, modification or use of a source. ABE was not required to submit an application for the current permit action because the change is considered administrative. (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. 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 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 ABE 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 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. ARM 17.8.760 Additional Review of Permit Applications. This rule describes DEQ'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 DEQ.

F. ARM 17.8, Sub-Chapter 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 sub-chapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not listed and does not have a PTE greater than 250 tons per year (excluding fugitive emissions) of any air pollutant.

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
  - a. PTE > 100 tons/year of any pollutant;
  - b. PTE > 10 tons/year of any one HAP, PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as DEQ may establish by rule; or
  - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) in a serious PM<sub>10</sub> nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. 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 #2758-07 for ABE, the following conclusions were made:
  - a. The facility's PTE is less than 100 tons/year for all criteria pollutants;

- b. The facility's PTE is less than 10 tons/year of any one HAP and less than 25 tons/year of all HAPs;
- c. This source is not located in a serious PM<sub>10</sub> nonattainment area;
- d. This source is not subject to any current NSPS standards but could become applicable to 40 CFR 60 Subpart JJJJ under the de minimis language within the permit;
- e. This facility is subject to a current NESHAP (40 CFR 63, Subpart ZZZZ);
- f. This source is not a Title IV affected source nor a solid waste combustion unit; and
- g. This source is not an EPA designated Title V source.

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

### III. BACT Determination

A BACT determination is required for each new or modified source. ABE 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.

The current permit action is an administrative action that will not increase emissions or add or modify any emitting units; therefore, a BACT analysis is not required.

### IV. Emission Inventory

Emission Source	Emissions Tons/Year [PTE]						
	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	NO <sub>x</sub>	SO <sub>2</sub>	VOC
Natural Gas Compressor Engine (Up to 400 hp)	0.12	0.12	0.12	5.02	7.72	0.01	1.04
Worthington Compressor Engine 440 hp	0.16	0.16	0.16	7.65	63.74	0.01	0.85
Olman Heath Reboiler	0.01	0.01	0.01	0	0.13	0	0.01
Heaters (7) --> Sources 04-10	0.01	0.01	0.01	0.06	0.31	0.002	0.02
<b>TOTAL EMISSIONS &gt;</b>	0.30	0.30	0.30	12.73	71.90	0.02	1.92



a. Emission Inventory reflects enforceable limits on hours of operation

CO, carbon monoxide

PM, particulate matter

PM<sub>10</sub>, particulate matter with an aerodynamic diameter of 10 microns or less

PM<sub>2.5</sub>, particulate matter with an aerodynamic diameter of 2.5 microns or less

SO<sub>2</sub>, oxides of sulfur

VOC, volatile organic compounds

NO<sub>x</sub>, Oxides of nitrogen

## Natural Gas Compressor Engine (up to 400 hp)

Engine Rating: 400 hp Compressor Engine

Operating Hours: 8760 hours per year

### PM Emissions:

PM Emissions: 0.00007 AP-42, 3.2-2, 7/00

Emission Factor 0.00007 lb/hp-hr  
Calculations  $(0.00006993 \text{ lb/hp-hr}) * (400 \text{ hp}) = 0.03 \text{ lbs/hr}$   
 $(0.03 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 0.12 \text{ TPY}$

### PM<sub>10</sub> Emissions:

Emission Factor 0.00007 lb/hp-hr AP-42, 3.2-2, 7/00  
Calculations  $(0.00006993 \text{ lb/hp-hr}) * (400 \text{ hp}) = 0.03 \text{ lbs/hr}$   
 $(0.03 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 0.12 \text{ TPY}$

### PM<sub>2.5</sub> Emissions:

Emission Factor 0.00007 lb/hp-hr AP-42, 3.2-2, 7/00  
Calculations  $(0.00006993 \text{ lb/hp-hr}) * (400 \text{ hp}) = 0.03 \text{ lbs/hr}$   
 $(0.03 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 0.12 \text{ TPY}$

### CO Emissions:

Emission Factor 0.00286 lb/hp-hr Manufacturer  
Calculations  $(0.00286343612334802 \text{ lb/hp-hr}) * (400 \text{ hp}) = 1.15 \text{ lbs/hr}$   
 $(1.15 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 5.02 \text{ TPY}$

### NO<sub>x</sub> Emissions:

Emission Factor 0.004 lb/hp-hr Manufacturer  
Calculations  $(0.00440528634361234 \text{ lb/hp-hr}) * (400 \text{ hp}) = 1.76 \text{ lbs/hr}$   
 $(1.76 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 7.72 \text{ TPY}$

**SO<sub>2</sub> Emissions:** 0.0000041 lb/hp-hr

Emission Factor 0.0000041 lb/hp-hr AP-42, 3.3-2, 6/06  
Calculations  $(0.0000041 \text{ lb/hp-hr}) * (400 \text{ hp}) = 0.002 \text{ lbs/hr}$   
 $(0.002 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 0.01 \text{ TPY}$

**VOC Emissions:**

Emission Factor 0.00059 lb/hp-hr AP-42, 3.2-2, 7/00  
Calculations  $(0.0006 \text{ lb/hp-hr}) * (400 \text{ hp}) = 0.24 \text{ lbs/hr}$   
 $(0.24 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 1.04 \text{ TPY}$

**Worthington Compressor Engine 440 hp**

Engine Rating: 440 hp  
Operating Hours: 8760 hours per year

**PM Emissions:**

Control Efficiency: 0.00%  
Fuel Consumption: 8500.00 Btu/Hp hr {Maximum Design}

Emission Factor 10.00 lb/10<sup>6</sup> ft<sup>3</sup> 2 02 002 02, AFSSCC p 32  
Calculations  $8500.00 \text{ Btu/Hp hr} * 0.001 \text{ ft}^3/\text{Btu} * 440\text{-hp} * 8760 \text{ hrs/yr} = 32762400 \text{ ft}^3/\text{yr}$   
 $32762400 \text{ ft}^3/\text{yr} * 10 \text{ lb}/10^6 \text{ ft}^3 \text{ gas} * 0.0005 \text{ ton/lb} = 0.16 \text{ ton/yr}$

**PM<sub>10</sub> Emissions:**

Control Efficiency: 0.00%  
Fuel Consumption: 8500.00 Btu/Hp hr {Maximum Design}

Emission Factor 10.00 lb/10<sup>6</sup> ft<sup>3</sup>  
Calculations  $8500.00 \text{ Btu/Hp hr} * 0.001 \text{ ft}^3/\text{Btu} * 440\text{-hp} * 8760 \text{ hrs/yr} = 32762400 \text{ ft}^3/\text{yr}$   
 $32762400 \text{ ft}^3/\text{yr} * 10 \text{ lb}/10^6 \text{ ft}^3 \text{ gas} * 0.0005 \text{ ton/lb} = 0.16 \text{ ton/yr}$

**PM<sub>2.5</sub> Emissions:**

Control Efficiency: 0.00%  
Fuel Consumption: 8500.00 Btu/Hp hr {Maximum Design}

Emission Factor 10.00 lb/10<sup>6</sup> ft<sup>3</sup>  
Calculations  $8500.00 \text{ Btu/Hp hr} * 0.001 \text{ ft}^3/\text{Btu} * 440\text{-hp} * 8760 \text{ hrs/yr} = 32762400 \text{ ft}^3/\text{yr}$   
 $32762400 \text{ ft}^3/\text{yr} * 10 \text{ lb}/10^6 \text{ ft}^3 \text{ gas} * 0.0005 \text{ ton/lb} = 0.16 \text{ ton/yr}$

**CO Emissions:**

Emission Factor 1.80 gram/Hp hr Manufacturer  
Calculations  $1.80 \text{ gram/Hp hr} * 440\text{-hp} * 0.002205 \text{ lb/gram} = 1.75 \text{ lb/hr}$   
 $1.75 \text{ lb/hr} * 8760 \text{ hr/yr} * 1 \text{ ton/2000 lb} = 7.65 \text{ ton/yr}$

**NO<sub>x</sub> Emissions:**

Emission Factor 15.00 gram/Hp hr Manufacturer  
Calculations  $15.00 \text{ gram/Hp hr} * 440\text{-hp} * 0.002205 \text{ lb/gram} = 14.55 \text{ lb/hr}$   
 $14.55 \text{ lb/hr} * 8760 \text{ hr/yr} * 1 \text{ ton/2000lb} = 63.74 \text{ ton/yr}$

**SO<sub>2</sub> Emissions:**

Emission Factor 0.0020 gram/Hp hr AP 42, Table 3.2 1, 9/85  
Calculations  $0.0020 \text{ gram/Hp hr} * 440\text{-hp} * 0.002205 \text{ lb/gram} = 0.0019 \text{ lb/hr}$   
 $0.0019 \text{ lb/hr} * 8760 \text{ hr/yr} * 1 \text{ ton/2000 lb} = 0.01 \text{ ton/yr}$

**VOC Emissions:**

Emission Factor 0.2000 gram/Hp hr Manufacturer  
Calculations  $0.2000 \text{ gram/Hp hr} * 440\text{-hp} * 0.002205 \text{ lb/gram} = 0.1940 \text{ lb/hr}$   
 $0.1940 \text{ lb/hr} * 8760 \text{ hr/yr} * 1 \text{ ton/2000 lb} = 0.85 \text{ ton/yr}$

**Olman Heath Reboiler****PM Emissions**

Emission Factor: 5.00 lb/10<sup>6</sup> ft<sup>3</sup> AP 42, 1.4 1  
Control Efficiency: 0.00%  
Fuel Consumption: 300.00 MBtu/hr  
Calculations:  $300.00 \text{ MBtu/hr} * 1000 \text{ Btu/MBtu} * 0.001 \text{ ft}^3 \text{ gas/Btu} * 8760$   
 $\text{hr/yr} = 2.6\text{MMft}^3/\text{yr}$   
 $2628000 \text{ ft}^3/\text{yr} * 5 \text{ lb/10}^6 \text{ ft}^3 * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

**PM<sub>10</sub> Emissions:**

Emission Factor: 5.00 lb/10<sup>6</sup> ft<sup>3</sup> AP 42, 1.4 1  
Control Efficiency: 0.00%  
Fuel Consumption: 300.00 MBtu/hr  
Calculations:  $300.00 \text{ MBtu/hr} * 1000 \text{ Btu/MBtu} * 0.001 \text{ ft}^3 \text{ gas/Btu} * 8760$   
 $\text{hr/yr} = 2.6\text{MMft}^3/\text{yr}$   
 $2628000 \text{ ft}^3/\text{yr} * 5 \text{ lb/10}^6 \text{ ft}^3 * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

**PM<sub>2.5</sub> Emissions:**

Emission Factor: 5.00 lb/10<sup>6</sup> ft<sup>3</sup> AP 42, 1.4 1  
Control Efficiency: 0.00%  
Fuel Consumption: 300.00 MBtu/hr

Calculations:  $300.00 \text{ MBtu/hr} * 1000 \text{ Btu/MBtu} * 0.001 \text{ ft}^3 \text{ gas/Btu} * 8760 \text{ hr/yr} = 2.6 \text{ MMft}^3/\text{yr}$   
 $2628000 \text{ ft}^3/\text{yr} * 5 \text{ lb}/10^6 \text{ ft}^3 * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

#### **NO<sub>x</sub> Emissions:**

Emission Factor:  $100.00 \text{ lb}/10^6 \text{ ft}^3$  AP 42, 1.4 1  
Control Efficiency: 0.00%  
Fuel Consumption:  $300.00 \text{ MBtu/hr}$   
Calculations:  $300.00 \text{ MBtu/hr} * 1000 \text{ Btu/MBtu} * 0.001 \text{ ft}^3 \text{ gas/Btu} * 8760 \text{ hr/yr} = 2.6 \text{ MMft}^3/\text{yr}$   
 $2,628,000 \text{ ft}^3/\text{yr} * 100 \text{ lb}/10^6 \text{ ft}^3 * 0.0005 \text{ ton/lb} = 0.13 \text{ ton/yr}$

#### **VOC Emissions**

Emission Factor:  $8.00 \text{ lb}/10^6 \text{ ft}^3$  AP 42, 1.4 1  
Control Efficiency: 0.00%  
Fuel Consumption:  $300.00 \text{ MBtu/hr}$   
Calculations:  $300.00 \text{ MBtu/hr} * 1000 \text{ Btu/MBtu} * 0.001 \text{ ft}^3 \text{ gas/Btu} * 8760 \text{ hr/yr} = 2.6 \text{ MMft}^3/\text{yr}$   
 $2,628,000 \text{ ft}^3/\text{yr} * 8 \text{ lb}/10^6 \text{ ft}^3 * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

#### **CO Emissions**

Emission Factor:  $20.00 \text{ lb}/10^6 \text{ ft}^3$  AP 42, 1.4 1  
Control Efficiency: 0.00%  
Fuel Consumption:  $300.00 \text{ MBtu/hr}$   
Calculations:  $300.00 \text{ MBtu/hr} * 1000 \text{ Btu/MBtu} * 0.001 \text{ ft}^3 \text{ gas/Btu} * 8760 \text{ hr/yr} = 2.6 \text{ MMft}^3/\text{yr}$   
 $2,628,000 \text{ ft}^3/\text{yr} * 20 \text{ lb}/10^6 \text{ ft}^3 * 0.0005 \text{ ton/lb} = 0.03 \text{ ton/yr}$

#### **SO<sub>2</sub> Emissions:**

Emission Factor:  $0.60 \text{ lb}/10^6 \text{ ft}^3$  AP 42, 1.4 1  
Control Efficiency: 0.00%  
Fuel Consumption:  $300.00 \text{ MBtu/hr}$   
Calculations:  $300.00 \text{ MBtu/hr} * 1000 \text{ Btu/MBtu} * 0.001 \text{ ft}^3 \text{ gas/Btu} * 8760 \text{ hr/yr} = 2.6 \text{ MMft}^3/\text{yr}$   
 $2,628,000 \text{ ft}^3/\text{yr} * 0.6 \text{ lb}/10^6 \text{ ft}^3 * 0.0005 \text{ ton/lb} = 0.00 \text{ ton/yr}$

#### **Heaters (7) --> Sources 04-10**

#### **PM Emissions**

Emission Factor:  $5.00 \text{ lb}/10^6 \text{ ft}^3$  AP 42, 1.4 1  
Control Efficiency: 0.00%  
Fuel Consumption:  $705.00 \text{ MBtu/hr}$   
Calculations:  $705.00 \text{ MBtu/hr} * 1000 \text{ Btu/MBtu} * 0.001 \text{ ft}^3 \text{ gas/Btu} * 8760 \text{ hr/yr} = 6.2 \text{ MMft}^3/\text{yr}$   
 $6,175,000 \text{ ft}^3/\text{yr} * 5 \text{ lb}/10^6 \text{ ft}^3 * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

### **PM<sub>10</sub> Emissions**

Emission Factor: 5.00 lb/10<sup>6</sup> ft<sup>3</sup> AP 42, 1.4 1  
Control Efficiency: 0.00%  
Fuel Consumption: 705.00 MBtu/hr  
Calculations: 705.00 MBtu/hr \* 1000 Btu/MBtu \* 0.001 ft<sup>3</sup> gas/Btu \* 8760  
hr/yr = 6.2 MMft<sup>3</sup>/yr  
6,175,000 ft<sup>3</sup>/yr \* 5 lb/10<sup>6</sup> ft<sup>3</sup> \* 0.0005 ton/lb = 0.01 ton/yr

### **PM<sub>2.5</sub> Emissions:**

Emission Factor: 5.00 lb/10<sup>6</sup> ft<sup>3</sup> AP 42, 1.4 1  
Control Efficiency: 0.00%  
Fuel Consumption: 705.00 MBtu/hr  
Calculations: 705.00 MBtu/hr \* 1000 Btu/MBtu \* 0.001 ft<sup>3</sup> gas/Btu \* 8760  
hr/yr = 6.2 MMft<sup>3</sup>/yr  
6,175,000 ft<sup>3</sup>/yr \* 5 lb/10<sup>6</sup> ft<sup>3</sup> \* 0.0005 ton/lb = 0.01 ton/yr

### **NO<sub>x</sub> Emissions:**

Emission Factor: 100.00 lb/10<sup>6</sup> ft<sup>3</sup> AP 42, 1.4 1  
Control Efficiency: 0.00%  
Fuel Consumption: 705.00 MBtu/hr  
Calculations: 705.00 MBtu/hr \* 1000 Btu/MBtu \* 0.001 ft<sup>3</sup> gas/Btu \*  
8760hr/yr = 6.2 MMft<sup>3</sup>/yr  
6,175,000 ft<sup>3</sup>/yr \* 100 lb/10<sup>6</sup> ft<sup>3</sup> \* 0.0005 ton/lb=0.31  
ton/yr

### **VOC Emissions:**

Emission Factor: 8.00 lb/10<sup>6</sup> ft<sup>3</sup> AP 42, 1.4 1  
Control Efficiency: 0.00%  
Fuel Consumption: 705.00 MBtu/hr  
Calculations: 705.00 MBtu/hr \* 1000 Btu/MBtu \* 0.001 ft<sup>3</sup> gas/Btu \* 8760  
hr/yr = 6.2 MMft<sup>3</sup>/yr  
6,175,000 ft<sup>3</sup>/yr \* 8 lb/10<sup>6</sup> ft<sup>3</sup> \* 0.0005 ton/lb = 0.02 ton/yr

### **CO Emissions:**

Emission Factor: 20.00 lb/10<sup>6</sup> ft<sup>3</sup> AP 42, 1.4 1  
Control Efficiency: 0.00%  
Fuel Consumption: 705.00 MBtu/hr  
Calculations: 705.00 MBtu/hr \* 1000 Btu/MBtu \* 0.001 ft<sup>3</sup> gas/Btu \* 8760  
hr/yr = 6.2 MMft<sup>3</sup>/yr  
6,175,000 ft<sup>3</sup>/yr \* 20 lb/10<sup>6</sup> ft<sup>3</sup> \* 0.0005 ton/lb=0.06 ton/yr

### **SO<sub>2</sub> Emissions:**

Emission Factor: 0.60 lb/10<sup>6</sup> ft<sup>3</sup> AP 42, 1.4 1  
Control Efficiency: 0.00%

Fuel Consumption: 705.00 MBtu/hr  
 Calculations:  $705.00 \text{ MBtu/hr} * 1000 \text{ Btu/MBtu} * 0.001 \text{ ft}^3 \text{ gas/Btu} * 8760 \text{ hr/yr} = 6.2 \text{ MMft}^3/\text{yr}$   
 $6,175,000 \text{ ft}^3/\text{yr} * 0.6 \text{ lb}/10^6 \text{ ft}^3 * 0.0005 \text{ ton/lb} = 0.002 \text{ ton/yr}$

V. Existing Air Quality

The current permit action is an administrative permit change that does not increase permitted emissions. Therefore, no impacts would occur. The affected area is designated unclassifiable/attainment for all ambient air quality standards.

VI. Air Quality Impacts

The current permit action is an administrative permit change that does not increase permitted emissions. Therefore, no impacts would occur and the action will not cause or contribute to a violation of any ambient air quality standard.

VII. Ambient Air Impact Analysis

The current permit action is an administrative permit change that does not increase permitted emissions. Therefore, no impacts would occur, and an ambient air quality impacts analysis is not required.

VIII. Taking or 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?
	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.

#### IX. Environmental Assessment

The current permit action is an administrative permit change that does not increase permitted emissions. Therefore, an Environmental Assessment was not required.

Permit Analysis Prepared By: Troy Burrows

Date: June 10, 2025