

9/19/2022

Patrick Montalbon  
Monte Grande Glacier Gathering, LLC  
Little Rock Compressor Station  
P.O. Box 200  
Cut Bank, MT 59427

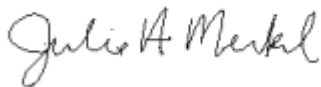
Sent via email: [patrickm@mogo-inc.com](mailto:patrickm@mogo-inc.com)

**RE: Final Permit Issuance for MAQP #2932-04**

Dear Mr. Montalbon:

Montana Air Quality Permit (MAQP) #2932-04 is deemed final as of 9/17/2022, by DEQ. This permit is for the Little Rock Compressor Station, a Natural Gas compressor. All conditions of the Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For DEQ,

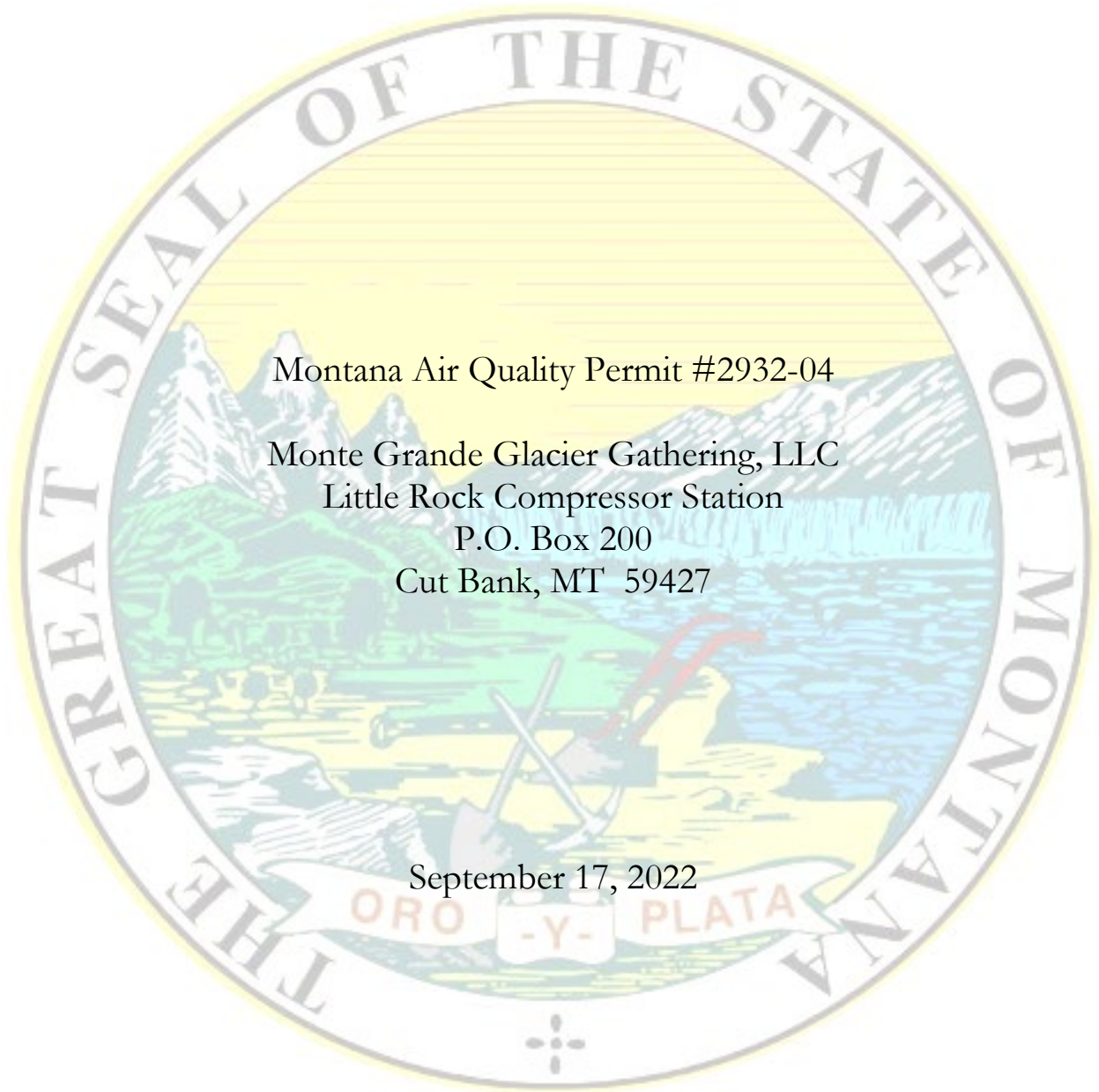


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Montana Department of Environmental Quality  
Air, Energy & Mining Division  
Air Quality Bureau



Montana Air Quality Permit #2932-04

Monte Grande Glacier Gathering, LLC  
Little Rock Compressor Station  
P.O. Box 200  
Cut Bank, MT 59427

September 17, 2022

## MONTANA AIR QUALITY PERMIT

Issued To: Monte Grande Glacier Gathering, LLC      MAQP: #2932-04  
Little Rock Compressor Station      Application Complete: 08/10/2022  
P.O. Box 200      Department's Decision Issued: 09/1/2022  
Cut Bank, MT 59427      Permit Final: 9/17/2022  
AFS #: 035-0016

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Monte Grande Glacier Gathering, LLC (Monte Grande), 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

Monte Grande owns and operates a natural gas compressor station and associated equipment located in the Southeast ¼ of Section 13, Township 36 North, Range 6 West, in Glacier County, Montana. The facility is known as the Little Rock Compressor Station. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

#### B. Current Permit Action

On August 10, 2022, the Department of Environmental Quality (DEQ) received an Administrative Amendment request from Monte Grande for an ownership change of the Little Rock Compressor Station permitted under MAQP #2932-03. Monte Grande requested a name change from Croft Petroleum Company to Monte Grande Glacier Gathering, LLC.

### SECTION II: Conditions and Limitations

#### A. Emission Limitations

1. Monte Grande shall not operate more than one natural gas compressor engine at any given time at the Little Rock Compressor Station and the maximum rated design capacity of any compressor engine shall not exceed 304-bhp (ARM 17.8.749).
2. Monte Grande may use only a 4-stroke rich-burn compressor engine with a NSCR and AFR controller. The pound per hour (lb/hr) emission limits for the 304-bhp rich-burn engine shall be determined using the following equation and pollutant specific gram per brake-horsepower-hour (g/bhp-hr) emission factors (ARM 17.8.752):

#### Equation

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

#### Emission Factors

Oxides of Nitrogen (NO <sub>x</sub> ):	1.0 g/bhp-hr
Carbon Monoxide (CO):	1.0 g/bhp-hr
Volatile Organic Compounds (VOC):	0.5 g/bhp-hr

3. Monte Grande shall direct the still column emissions from the tri-ethylene glycol (TEG) dehydration unit through a sloping line to a storage tank. The vent stack on this storage tank shall be a minimum of 10 feet above ground level (ARM 17.8.752).
4. In order to prevent VOC/BTEX emissions from excessive TEG circulation, Monte Grande shall check the moisture content of the sales gas once every 3 months and shall adjust the TEG circulation rate to correspond to the appropriate rate needed to meet sales gas moisture specifications. Monte Grande shall record the date, the findings, and any consequential actions taken for each audit (ARM 17.8.752).
5. Monte Grande shall operate all equipment to provide the maximum air pollution control for which it was designed (ARM 17.8.749).
6. The compressor engine and the TEG dehydrator reboiler shall combust only pipeline quality natural gas (ARM 17.8.752).
7. Monte Grande shall route the dehydration unit flash tank off gas to the dehydration unit/reboiler fuel gas stream (ARM 17.8.749).
8. Monte Grande 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).
9. Monte Grande 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 (PM) (ARM 17.8.308).
10. Monte Grande 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.9 (ARM 17.8.749).

#### B. Testing Requirements

1. Monte Grande shall initially test the compressor engine (maximum design capacity 304-bhp) for NO<sub>x</sub> and CO, concurrently, to demonstrate compliance with the NO<sub>x</sub> and CO emission limits contained in Section II.A.2. The initial source testing shall be conducted within 180 days of the initial start-up date of the compressor engine. After the initial source test, additional 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

1. Monte Grande 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. 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. Monte Grande shall notify DEQ of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to 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 Monte Grande 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).

D. Monitoring and Record Keeping Requirements

1. Monte Grande shall record the quarterly evaluation and optimization of the TEG circulation rate of the dehydration unit as required in Section II.A.4 (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection – Monte Grande 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, 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 Monte Grande fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Monte Grande 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 source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Monte Grande may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement – Construction must begin within three years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).

Montana Air Quality Permit Analysis  
Monte Grande Glacier Gathering, LLC  
Little Rock Compressor Station  
MAQP #2932-04

I. Introduction/Process Description

Monte Grande Glacier Gathering, LLC (Monte Grande) owns and operates a natural gas compressor station. The facility is located in the Southeast ¼ of Section 13, Township 36 North, Range 6 West, in Glacier County, Montana. The facility is known as the Little Rock Compressor Station.

A. Permitted Equipment

The facility consists of the following equipment:

- (1) 304-brake-horsepower (bhp) rich-burn compressor engine equipped with a non-selective catalytic reduction (NSCR) and air-to-fuel ratio (AFR) controller
- (1) 1 million standard cubic feet (mmscf) per day triethylene glycol (TEG) dehydration unit with a 0.06 million British thermal units (MMBtu) per hour TEG reboiler
- Associated equipment

B. Source Description

The facility has two primary purposes. The first is to pump the field gas up to the required pressure in the natural gas transmission system. Compression of the gas is accomplished using the natural gas fired compressor described above.

The second purpose of the facility is to "dry" the gas as it is being processed. The gas contains 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 water that is driven off is released to the atmosphere. The heat necessary for this activity is generated by burning natural gas in the dehydrator reboiler. 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

On October 25, 1996, the Department of Environmental Quality (DEQ) issued Montana Air Quality Permit (MAQP) #2932-00 to Northland Royalty Company (Northland) for the operation of one 275-Hp Climax V-125 natural gas compressor engine and one 45-MBtu/hr TEG natural gas dehydration unit at the Little Rock Compressor Station. Northland was required to achieve the NO<sub>x</sub> and CO emissions limits set forth in Section II.A.1 of MAQP #2932-00 by operating the compressor engine at the crossover point -- where oxides of nitrogen (NO<sub>x</sub>) and carbon monoxide (CO) emissions are equal. Installation and operation of an electronic air/fuel ratio (AFR) controller was required on the compressor engine to maintain the air/fuel mixture within the range where crossover occurs. Northland was required to control volatile organic compounds (VOC) and benzene, toluene, ethylbenzene, and xylene (BTEX) emissions from the TEG dehydration unit by properly managing the TEG circulation rate and by routing still vent emissions through a sloping line to a storage tank.

On July 17, 1997, Northland requested a name change from Northland to NRC Pipeline Company, LLC (NRC). On August 28, 1998, MAQP #2932-01 became final, changing the name on the permit from Northland to NRC. MAQP #2932-01 replaced MAQP #2932-00.

On September 16, 2002, DEQ received a letter, including an attachment, dated September 12, 2002, from Croft requesting that MAQP #2932-01 be transferred from NRC to Croft. The attachment was an assignment and bill of sale for the compressor stations that Croft purchased from NRC in May 2002. The current permit action transfers MAQP #2933-01 from NRC to Croft. In addition, the permit was updated to reflect current DEQ permit format and permit language. **MAQP #2932-02** replaced MAQP #2932-01.

On November 6, 2006, DEQ received a complete application from Croft for the modification of MAQP #2932-02. Croft requested to replace the existing Climax V-125 275-bhp compressor engine with a rich-burn compressor engine with a maximum rated design capacity equal to or less than 304-bhp equipped with a NSCR and AFR controller. **MAQP #2932-03** replaced MAQP #2932-02.

#### D. Current Permit Action

On August 10, 2022, DEQ received an Administrative Amendment request from Monte Grande for an ownership change of the Little Rock Compressor Station permitted under MAQP #2932-03. Monte Grande requested a name change from Croft Petroleum Company to Monte Grande Glacier Gathering, LLC. **MAQP #2932-04** replaces MAQP #2932-03.

## 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).

Monte Grande 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 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 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 PM<sub>10</sub>

Monte Grande must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 – Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter (PM). (2) Under this rule, Monte Grande shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne PM.
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 PM 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 PM in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. (4) Commencing July 1, 1972, no person shall burn liquid or solid fuels containing sulfur in excess of 1 pound of sulfur per million Btu fired. (5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. Monte Grande burns natural gas in the compressor engine and dehydration unit, which meets 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 60, Standards of Performance for New Stationary Sources (NSPS).

Monte Grande is not an NSPS affected source because it does not meet the definition of a natural gas processing plant defined in 40 CFR 60, Subpart KKK or the definition of any other NSPS subpart as defined in 40 CFR Part 60.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. A major Hazardous Air Pollutant (HAP) source, as defined and applied in 40 CFR 63, shall comply with the requirements of 40 CFR 63, as applicable, including the following subparts:

- 40 CFR 63, Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities. The Little Rock Compressor Station is not subject to the provisions of this subpart because the facility is not a major source of HAPs.
- 40 CFR 63, Subpart HHH National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. The Little Rock Compressor Station is not subject to the provisions of this subpart because the facility is not a major source of HAPs.
- 40 CFR 63, Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. The Little Rock Compressor Station is subject to the provisions of this subpart because there are stationary reciprocating internal combustion engines operating at the facility.

- 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. Monte Grande 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 stacks for Monte Grande 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. An Administrative Amendment does not require an application fee to be paid to DEQ.
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. 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. 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. Monte Grande has a PTE greater than 25 tons per year of NO<sub>x</sub> and CO; therefore, an air quality permit is required.
  3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
  4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
  5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. 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. 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 Best Available Control Technology (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 Monte Grande 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 17.8.762 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.
  12. 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).
  13. 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.
  14. 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.
- 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 since 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 12 – Operating Permit Program Applicability, including, but not limited to:
1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
    - a. PTE > 100 tons/year of any pollutant;

- b. PTE > 10 tons/year of any one HAP, PTE > 25 tons/year of a combination of all HAPs, or 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. (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 #2932-04 for Monte Grande, 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<sub>10</sub> nonattainment area;
  - d. This facility is not subject to any current NSPS;
  - e. This facility is subject to a current National Emission Standards for Hazardous Air Pollutants (NESHAP) – 40 CFR 63, Subpart ZZZZ;
  - f. This source is neither a Title IV affected source, nor a solid waste combustion unit; and
  - g. This source is not an Environmental Protection Agency (EPA) designated Title V source.

Based on these facts, DEQ determined that Monte Grande will be a minor source of emissions as defined under Title V.

### III. BACT Determination

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

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

### IV. Emission Inventory

Source	Ton/year				
	PM <sub>10</sub>	NO <sub>x</sub>	VOC	CO	SO <sub>x</sub>
Compressor Engine 304-hp	0.13	2.93	1.49	2.93	0.01
Dehydration Unit Reboiler	0.00	0.02	0.00	0.00	0.0001
Dehydration Unit Still Vent	---	---	9.32	---	---
Total	0.13	2.95	10.81	2.93	0.01

#### **304-bhp capacity 4-Stroke Rich-Burn Compressor Engine**

Fuel Heating Value: 1,000 MMBtu/MMScf (Company Information)  
 Fuel Consumption Rate: 2.74 MMBtu/hr (Company Information)

PM<sub>10</sub> Emissions

Emission Factor: 9.91E-03 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)  
Calculations: 2.74 MMBtu/hr \* 9.91E-03 lb/MMBtu = 0.03 lb/hr  
0.03 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 0.13 ton/yr

NO<sub>x</sub> Emissions

Emission factor: 1.00 gram/hp-hour (BACT Determination)  
Calculations: 1.00 gram/hp-hour \* 304 hp \* 0.002205 lbs/gram = 0.67 lb/hr  
0.67 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 2.93 ton/yr

VOC Emissions

Emission factor: 0.5 gram/hp-hour (BACT Determination)  
Calculations: 0.5 gram/hp-hour \* 304 hp \* 0.002205 lbs/gram = 0.34 lb/hr  
0.34 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 1.49 ton/yr

CO Emissions

Emission factor: 1.00 gram/hp-hour (BACT Determination)  
Calculations: 1.00 gram/hp-hour \* 304 hp \* 0.002205 lbs/gram = 0.67 lb/hr  
0.67 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 2.93 ton/yr

SO<sub>x</sub> Emission

Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)  
Calculations: 2.74 MMBtu/hr \* 5.88E-04 lb/MMBtu = 0.002 lb/hr  
0.002 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 0.01 ton/yr

HAP Emissions (HAP emissions include formaldehyde):

Emission Factor: 0.0324 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)  
Calculations: 0.0324 lb/MMBtu \* 2.74 MMBtu/hr = 0.09 lb/hr  
0.09 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 0.39 ton/yr

**Dehydration Unit Reboiler**

Max Fuel Combustion Rate: 0.045 MMBtu/hr  
Hours of Operation: 8,760 hr/yr  
Fuel Heating Value: 1,000 Btu/SCF or 0.0010 MMSCF/MMBtu (Natural Gas)

PM<sub>10</sub> Emissions

Emission Factor: 3.00 lb/MMSCF {FIRE, PC Version 1/95, 1-05-001-06}  
Calculations: 3.00 lb/MMSCF \* 0.001 MMSCF/MMBtu \* 0.045 MMBtu/hr = 0.0001 lb/hr  
0.0001 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 0.0006 ton/yr

NO<sub>x</sub> Emissions

Emission Factor: 100 lb/MMSCF {FIRE, PC Version 1/95, 1-05-001-06}  
Calculations: 100 lb/MMSCF \* 0.001 MMSCF/MMBtu \* 0.045 MMBtu/hr = 0.0045 lb/hr  
0.0045 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 0.0197 ton/yr

CO Emissions

Emission Factor: 20.0 lb/MMSCF {FIRE, PC Version 1/95, 1-05-001-06}  
Calculations: 20.0 lb/MMSCF \* 0.001 MMSCF/MMBtu \* 0.045 MMBtu/hr = 0.0009 lb/hr  
0.0009 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 0.004 ton/yr

VOC Emissions

Emission Factor: 5.3 lb/MMSCF {FIRE, PC Version 1/95, 1-05-001-06}  
Calculations: 5.3 lb/MMSCF \* 0.001 MMSCF/MMBtu \* 0.045 MMBtu/hr = 0.0002 lb/hr  
0.0002 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 0.001 ton/yr

SO<sub>x</sub> Emissions

Emission Factor: 0.60 lb/MMSCF {FIRE, PC Version 1/95, 1-05-001-06}  
Calculations: 0.60 lb/MMSCF \* 0.001 MMSCF/MMBtu \* 0.045 MMBtu/hr = 0.00003 lb/hr  
0.00003 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 0.0001 ton/yr

**Dehydration Unit Still Vent**

Glycol Type: Tri-ethylene Glycol (TEG)  
 Dry Gas Flow Rate: 1.5 MMSCF/day  
 Hours of Operation: 8,760 hr/yr  
 Fuel Heating Value: 1,000 Btu/SCF or 0.0010 MMSCF/MMBtu (Natural Gas)  
 Control Device: storage tank Control Efficiency: 30% Flash Separator: none

Uncontrolled VOC Emissions

Emission Factor: 3.04 lb/hr {GRI-GlyCALC Program}  
 Calculations: 3.04 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 13.32 ton/yr

Controlled VOC Emissions

Emission Factor: 3.04 lb/hr \* (100% - 30%) = 2.13 lb/hr  
 Calculations: 2.13 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 9.32 ton/yr

Uncontrolled HAP Emissions

Emission Factor: 0.514 lb/hr {GRI-GlyCALC Program}  
 Calculations: 0.514 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 2.25 ton/yr

Controlled HAP Emissions

Emission Factor: 0.514 lb/hr \* (100% - 30%) = 0.36 lb/hr  
 Calculations: 0.36 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 1.58 ton/yr

V. Existing Air Quality

The surrounding area is listed as attainment/unclassified for the Montana and National Ambient Air Quality Standards (MAAQS and NAAQS).

VI. Ambient Air Impact Analysis

DEQ determined, based on the relatively small size of the facility and the corresponding emissions, that the impacts from this permitting action will be minor. DEQ 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, DEQ conducted the following private property taking and damaging assessment and determined there are no taking or damaging implications.

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)

YES	NO	
	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)

### VIII. Environmental Assessment

An environmental assessment is not required by the Montana Environmental Policy Act for this Administrative Amendment.

Analysis Prepared By: Troy Burrows

Date: 9/1/2022