DEQ
Montana Department of Environmental Quality

Air, Energy & Mining Division

May 26, 2020

Scott Gladden
Scout Energy Management
Big Gumbo Compressor Station
4901 Lyndon B Johnson Fwy
Suite 300
Dallas, TX 75244

Dear Mr. Gladden:

Montana Air Quality Permit #4061-02 is deemed final as of May 23, 2020, by the Department of Environmental Quality (Department). This permit is for a natural gas compressor station. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Julie A. Merkel
Air Permitting Supervisor
Air Resources Management Bureau
(406) 444-3626

Troy Burrows
Air Quality Scientist
Air Quality Bureau – Permitting Section
(406) 444-1452

JM:TMB
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #4061-02

Scout Energy Management, LLC
Big Gumbo Compressor Station
4901 Lyndon B Johnson Fwy
Suite 300
Dallas, TX 75244

May 23, 2020

MONTANA AIR QUALITY PERMIT

Issued To:	Scout Energy Management, LLC Big Gumbo Compressor Station 4901 Lyndon B Johnson Fwy Suite 300 Dallas, TX 75244	MAQP: #4061-02 Administrative Amendment (AA) Request Received: 4/21/2020 Department Decision on AA: 5/7/2020 Permit Final: 5/23/2020

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Scout Energy Management (Scout), 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

Scout owns and operates the Big Gumbo Compressor Station. The Big Gumbo station is located approximately 20 miles southeast of Baker, Montana, in the SW¼ of the SE¼ of Section 6, Township 4 North, Range 62 East in Fallon County, Montana. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On April 21, 2020, the Montana Department of Environmental Quality (Department) received an Administrative Amendment (AA) request from WBI Energy Transmission, Inc. to transfer ownership of the permitted facility from WBI Energy Transmission, Inc. to Scout Energy Management, LLC.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Scout shall not operate more than two natural gas compressor engines at any given time, and the engines may be any combination of the following:

- rich-burn compressor engine(s) with a maximum rated design capacity of 1680 brake-horsepower (bhp) equipped with a non-selective catalytic reduction (NSCR) unit and an air-to-fuel ratio (AFR) controller; and/or
- lean-burn compressor engine(s) with maximum rated design capacity of 1775 bhp equipped with an oxidation catalyst and an AFR controller (ARM 17.8.749).

2. The pound per hour (lb/hr) emission limits for each engine shall be determined using the following equations and pollutant specific grams 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/g

Rich-Burn Emission Factors (1680 bhp)

Nitrogen Oxides (NO_X)	1.0 g/bhp-hr
Carbon Monoxide (CO)	2.0 g/bhp-hr
Volatile Organic Compounds (VOC)	1.0 g/bhp-hr

Lean-Burn Emission Factors (1675 bhp)

NO_X	0.7 g/bhp-hr
CO	1.0 g/bhp-hr
VOC	1.0 g/bhp-hr

Lean-Burn Emission Factors (1775 bhp)

NO_X	1.0 g/bhp-hr
CO	0.5 g/bhp-hr
VOC	0.5 g/bhp-hr

3. Scout 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. Scout 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).

5. Scout 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.3 (ARM 17.8.749).

6. Scout 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).

B. Testing Requirements

1. Both compressor engines shall be initially tested for NO_X and CO, concurrently, and the results submitted to the Department of Environmental Quality (Department) in order to demonstrate compliance with the emission limitations contained in Section II.A.2 within 180 days of startup. 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 the Department (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. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

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

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

2. Scout shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include the addition of a new emissions unit, a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

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

SECTION III: General Conditions

A. Inspection – Scout shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (Continuous Emissions Monitoring System (CEMS), Continuous Emission Rate Monitoring System (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 Scout fails to appeal as indicated below.

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

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

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

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

G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Scout 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
Scout Energy Management, LLC
Big Gumbo Compressor Station
MAQP #4061-02

I. Introduction/Process Description

Scout Energy Management, LLC (Scout) owns and operates the Big Gumbo Compressor Station. The facility is a natural gas station) located approximately 20 miles southeast of Baker, Montana, in the SW¼ of the SE¼ of Section 6, Township 4 North, Range 62 East in Fallon County, Montana.

A. Permitted Equipment

The facility consists of the following equipment:

- Two of any of the following combinations of natural gas fired, 4-cycle, compressor engines;
    - Rich-burn, 4-cycle, compressor engine(s) with a maximum rated design capacity of 1680 brake-horsepower (bhp), equipped with an air-fuel ratio (AFR) controller, and a non-selective catalytic reduction (NSCR) unit
    - Lean-burn, 4-cycle, compressor engine(s) with oxidation catalyst and a maximum rated design capacity of 1675 bhp
    - Lean-burn, 4-cycle, compressor engine(s) with oxidation catalyst and a maximum rated design capacity of 1775 bhp
- Glycol dehydration reboiler unit (up to 0.75 million British thermal units (MMBtu)) per hour; and
- Miscellaneous support equipment and materials.

B. Source Description

The Scout facility is a natural gas booster compressor station. Production field facilities withdraw the natural gas from the surrounding production fields and send the natural gas to the Scout station to be dehydrated and compressed for transmission through long-haul pipelines for transport to natural gas markets. The glycol dehydration unit is used to remove moisture from the gas, and the compressor engines are used to boost pipeline pressure for transmitting the natural gas through the pipeline. The Scout station is not a production field facility; rather, the station dehydrates and compresses natural gas that is received from surrounding production field facilities.

C. Permit History

On May 12, 2007, the Montana Department of Environmental Quality (Department) issued Montana Air Quality Permit (**MAQP**) **#4061-00** to WBI for the construction and

operation of the Big Gumbo Compressor Station. The facility is a natural gas compressor station incorporating any two of the following: a 1680 bhp capacity rich-burn natural gas compressor engine with NSCR unit and an AFR, 1675 bhp capacity lean-burn natural gas compressor engine with oxidation catalyst and AFR; and/or 1775 bhp capacity lean-burn natural gas compressor engine with oxidation catalyst and AFR. In addition, the Big Gumbo Compressor Station is equipped with a glycol dehydrator reboiler unit for the dehydration of field gas to meet pipeline specifications.

On December 10, 2012, the Department 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 #4061-01** replaced MAQP #4061-00.

D. Current Permit Action

On April 21, 2020, the Department received an Administrative Amendment (AA) request from WBI to transfer ownership of the permitted facility from WBI Energy Transmission, Inc. to Scout Energy Management, LLC. **MAQP #4061-02** replaced MAQP #4061-01.

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 Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

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

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Scout shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly, by telephone, whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction 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_{10}

Scout 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 20% for all fugitive emission sources and that reasonable precautions are taken to control emissions of airborne particulate matter (PM). (2) Under this rule, Scout 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. Scout will burn pipeline-quality natural gas in their compressor engines, 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 60, Standards of Performance for New Stationary Sources (NSPS). In this case, Scout 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, nor does it process sweet gas as regulated by Subpart LLL.

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 A – General Provisions apply to all equipment or facilities subject to a New Emissions Standard for Hazardous Air Pollutants (NESHAP) Subpart as listed below:

   - 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, Scout is subject to this subpart.

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. Scout 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 Scout is below the allowable 65-meter GEP stack height.

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

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. Scout was not required to submit a fee as the action is an administrative amendment.

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

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

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

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

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a facility to obtain an air quality permit or permit modification if they construct, modify or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. Scout has the PTE more than 25 tons per year of Oxides of Nitrogen (NO_x), Carbon Monoxide (CO) and Volatile Organic Carbon (VOC); therefore, an air quality permit is required.

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

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) (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 the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that 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 the Department at the location of the source.

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

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

11. ARM 17.8.762 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 does 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 the Department.

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 the Department may establish by rule; or

c. PTE > 70 tons/year of PM with an Aerodynamic Diameter of 10 Microns or Less (PM_{10}) in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #4061-02 for Scout, the following conclusions were made:

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

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

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

d. This facility is not subject to any current NSPS.

e. This facility is subject to NESHAP standard (40 CFR 63, Subpart ZZZZ).

f. This source is not a Title IV affected source.

g. This source is not a solid waste combustion unit.

h. This source is not an Environmental Protection Agency (EPA) designated Title V source.

Based on these facts, the Department determined that the Scout facility 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. Scout 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 used.

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

IV. Emission Inventory

Emissions (tons/year)					
Source	**PM_{10}**	**NO_x**	**VOC**	**CO**	**SO_x**
1680-bhp Natural Gas-Fired Rich-burn Engine	0.55	16.22	16.22	32.45	0.03
1675-bhp Natural Gas-Fired, Lean-burn Engine	0.49	16.17	16.17	8.09	0.03
1775-bhp Natural Gas-Fired, Lean-burn Engine	0.49	11.99	17.14	8.57	0.03
Glycol Dehydrator Reboiler	0.024	0.32	0.02	0.062	0.002
Total*	**1.12**	**32.77**	**34.30**	**64.97**	**0.062**

***Total emissions were based on the worst-case scenario, using two rich-burn engines, or two lean-burn engines**

1,680-bhp Natural Gas-Fired Rich-burn Engine

Brake Horsepower: 1680 bhp
Fuel Consumption: 13.23 MMBtu/hr
Hours of operation: 8760 hr/yr

PM_{10} Emissions
Emission Factor: 0.0095 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Calculations: 13.23 MMBtu/hr * 0.0095 lb/MMBtu = 0.12 lb/hr
0.12 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.55 ton/yr

NO_x Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 1680 bhp * 0.002205 lbs/gram = 3.70 lb/hr
3.70 0lb/hr * 8760 hr/yr * 0.0005 ton/lb = 16.22 ton/yr

VOC Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 1680 bhp * 0.002205 lbs/gram = 3.70 lb/hr
3.70 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 16.22 ton/yr

CO Emissions
Emission factor: 2.00 gram/bhp-hour (BACT Determination)
Calculations: 2.00 gram/bhp-hour * 1680 bhp * 0.002205 lbs/gram = 7.48 lb/hr
7.48 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 32.45 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Calculations: 13.23 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.00778 lb/hr
0.00778 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.03407 ton/yr

1,675-bhp Natural Gas-Fired, Lean-burn Engine
Brake Horsepower: 1675 bhp
Fuel Consumption: 11.84 MMBtu/hr
Hours of operation: 8760 hr/yr

PM_{10} Emissions
Emission Factor: 0.0095 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Calculations: 11.84 MMBtu/hr * 0.0095 lb/MMBtu = 0.112 lb/hr
0.112 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.49 ton/yr

NO_x Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 1675 bhp * 0.002205 lbs/gram = 3.69 lb/hr
3.69 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 16.17 ton/yr

VOC Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 1675 bhp * 0.002205 lbs/gram = 3.69 lb/hr
3.69 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 16.17 ton/yr

CO Emissions
Emission factor: 0.5 gram/bhp-hour (BACT Determination)
Calculations: 0.5 gram/bhp-hour * 1675 bhp * 0.002205 lbs/gram = 1.84 lb/hr
1.84 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 8.09 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Calculations: 11.84 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.00696 lb/hr
0.00696 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.03049 ton/yr

1,775-bhp Natural Gas-Fired, Lean-burn Engine

Brake Horsepower: 1775 bhp
Fuel Consumption: 11.75 MMBtu/hr
Hours of operation: 8760 hr/yr

PM_{10} Emissions
Emission Factor: 0.0095 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Calculations: 11.75 MMBtu/hr * 0.0095 lb/MMBtu = 0.11 lb/hr
0.11 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.49 ton/yr

NO_x Emissions
Emission factor: 0.70 gram/bhp-hour (BACT Determination)
Calculations: 0.70 gram/bhp-hour * 1775 bhp * 0.002205 lbs/gram = 2.73 lb/hr
2.73 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 11.99 ton/yr

VOC Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 1775 bhp * 0.002205 lbs/gram = 3.91 lb/hr
3.91 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 17.14 ton/yr

CO Emissions
Emission factor: 0.50 gram/bhp-hour (BACT Determination)
Calculations: 0.50 gram/bhp-hour * 1775 bhp * 0.002205 lbs/gram = 1.95 lb/hr
1.95 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 8.57 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Calculations: 11.75 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.00691 lb/hr
0.00691 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.03026 ton/yr

Dehydrator Reboiler

Fuel Heating Value: 1,020 MMBtu/MMScf (AP-42, Table 1.4-1)
Fuel Consumption Rate: 0.75 MMBtu/hr (Company Information)

NO_x Emissions:
Emission Factor: 100 lb/MMscf (AP-42, Table 1.4-1, 7/98)
Calculations: 100 lb/MMscf * 0.00098 MMscf/MMBtu * 0.75 MMBtu/hr = 0.0735 lb/hr
0.0735 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.32 ton/yr

CO Emissions:
Emission Factor: 84 lb/MMscf (AP-42, Table 1.4-1, 7/98)
Calculations: 84 lb/MMscf * 0.00098 MMscf/MMBtu * 0.75 MMBtu/hr = 0.062 lb/hr
0.062 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.27 ton/yr

VOC Emissions:
Emission Factor: 5.5 lb/MMscf (AP-42, Table 1.4-2, 7/98)
Calculations: 5.5 lb/MMscf * 0.00098 MMscf/MMBtu * 0.75 MMBtu/hr = 0.004 lb/hr
0.004 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.02 ton/yr

SO_2 Emissions:
Emission Factor: 0.6 lb/MMscf (AP-42, Table 1.4-2, 7/98)
Calculations: 0.6 lb/MMscf * 0.00098 MMscf/MMBtu * 0.75 MMBtu/hr = 0.00044 lb/hr
0.00044 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.002 ton/yr

PM_{10} Emissions:
Emission Factor: 7.6 lb/MMscf (AP-42, Table 1.4-2, 7/98)
Calculations: 7.6 lb/MMscf * 0.00098 MMscf/MMBtu * 0.75 MMBtu/hr = 0.0056 lb/hr
0.0056 lb/hr * 8760 hr/yr * 0.0005 ton/lb = 0.024 ton/yr

V. Existing Air Quality

The Big Gumbo Compressor Station is located in the SW¼ of the SE¼ of Section 6, Township 4 North, Range 62 East in Fallon County, Montana. The air quality of this area is classified as better than National Standards or unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for criteria pollutants.

VI. Ambient Air Impact Analysis

Because the emissions from this facility are controlled and should exhibit good dispersion characteristics, the Department believes that controlled emissions from the source will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted a 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)
	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

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: Troy Burrows
Date: April 29, 2020