Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
P. O. Box 200901 Helena, MT 59620-0901 (406) 444-2544 Website: www.deq.mt.gov

February 7, 2012

Mr. Peter Schoonmaker
Summit Gas Resources, Inc.
1 East Alger Street
Sheridan, WY 82801

Dear Mr. Schoonmaker:

Montana Air Quality Permit #3803-01 is deemed final as of February 7, 2012, by the Department of Environmental Quality (Department). This permit is for the Porter 26 Battery located in the SE¼ of Section 26, Township 8 South, Range 41 East, in Big Horn County, Montana. 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,

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-9741

Shawn Juers
Environmental Engineer
Air Resources Management Bureau
(406) 444-2049

VW:SJ
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #3803-01

Summit Gas Resources, Inc.
1 East Alger Street
Sheridan, WY 82801

February 7, 2012

MONTANA AIR QUALITY PERMIT

Issued To: Summit Gas Resources, Inc.
1 East Alger Street
Sheridan, WY 82801

MAQP: #3803-01
Department Decision on AA: 1/20/2012
Permit Final: 02/07/2012
AFS #:003-0034

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Summit Gas Resources, Inc. (Permittee), 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

The facility is located approximately eleven miles northeast of Decker, Montana, in the South East ¼ of Section 26, Township 8 South, Range 41 East, in Big Horn County, Montana.

B. Current Permit Action

On December 15, 2011, the Department of Environmental Quality, Air Resources Management Bureau (Department) received notice of Transfer of Ownership of MAQP #3803-00 from Bitter Creek Pipeline, LLC to Summit Gas Resources, Inc. Pursuant to ARM 17.8.765(3), the transfer was deemed approved on January 16, 2011. Pursuant to ARM 17.8.764, the Department is updating the permit to reflect the change in ownership, to update applicability of New Source Performance Standards and Emissions Standards for Hazardous Air Pollutants, to add the de minimis addition of a heater used on-site, and to update the permit to the current format utilized by the Department.

Section II: Conditions and Limitations

A. Emission Limitations

1. Permittee shall not operate more than four compressor engines at any one time at the Porter 26 Battery (ARM 17.8.749).

2. The maximum rated design capacity of the Porter 26 Battery shall not exceed 1,720 horsepower (hp) and the maximum rated design capacity of any compressor engine shall not exceed 860 hp. The Porter 26 Battery may use only rich-burn Waukesha 3524GSI, rich-burn Caterpillar 3408TA, lean-burn Waukesha F18GL, lean-burn Caterpillar G3508LE, and lean-burn Caterpillar 3512LE compressor engines (ARM 17.8.749).

3. The 840-hp rich-burn Waukesha 3524GSI shall be controlled with a non-selective catalytic reduction (NSCR) unit and an air-to-fuel (AFR) controller. The pound per hour (lb/hr) emission limits for the 840-hp Waukesha 3524GSI shall be (ARM 17.8.752):

Oxides of Nitrogen (NO_X)	1.85 lb/hr
Carbon Monoxide (CO)	3.70 lb/hr
Volatile Organic Compounds (VOC)	1.85 lb/hr

4. The 400-hp rich-burn Caterpillar 3408TA shall be controlled with an NSCR and AFR controller. The lb/hr emission limits for the 400-hp Caterpillar 3408TA shall be (ARM 17.8.752):

NO_X	0.88 lb/hr
CO	1.76 lb/hr
VOC	0.88 lb/hr

5. The 400-hp lean-burn Waukesha F18GL shall be controlled with an oxidation catalyst. The lb/hr emission limits for each of the 400-hp Waukesha F18GL shall be (ARM 17.8.752):

NO_X	0.88 lb/hr
CO	0.44 lb/hr
VOC	0.88 lb/hr

6. The 860-hp lean-burn Caterpillar 3512LE shall be controlled with an oxidation catalyst and an AFR controller. The lb/hr emission limits for each of the 860-hp Caterpillar 3512LE shall be (ARM 17.8.752):

NO_X	2.85 lb/hr
CO	0.94 lb/hr
VOC	1.90 lb/hr

7. The 633-hp lean-burn Caterpillar G3508LE shall be controlled with an oxidation catalyst. The lb/hr emission limits for each of the 633-hp Caterpillar G3508LE shall be (ARM 17.8.752):

NO_X	2.79 lb/hr
CO	0.70 lb/hr
VOC	1.40 lb/hr

8. Permittee 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 six consecutive minutes (ARM 17.8.304).

9. Permittee 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).

10. Permittee 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).

11. Permittee shall comply with all applicable requirements of 40 CFR 60, Subpart JJJJ, 40 CFR 63, Subpart ZZZZ, and 40 CFR 63 Subpart HH, as applicable (ARM 17.8.340, ARM 17.8.342, 40 CFR 60 Subpart JJJJ, 40 CFR 63 Subparts HH and ZZZZ).

B. Testing Requirements

1. The Waukesha 3524GSI compressor engine(s) shall be initially tested for NO_X and CO, concurrently, to demonstrate compliance with the emission limits contained in Section II.A.3. The initial source testing shall be conducted within 180 days of the initial start up date of the compressor engine(s). After the initial source test, additional testing shall continue on an every four-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. The Caterpillar 3408TA compressor engine(s) shall be initially tested for NO_X and CO, concurrently, to demonstrate compliance with the emission limits contained in Section II.A.4. The initial source testing shall be conducted within 180 days of the initial start up date of the compressor engine(s). After the initial source test, additional testing shall continue on an every four-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).

3. The Waukesha F18GL compressor engine(s) shall be initially tested for NO_X and CO, concurrently, to demonstrate compliance with the emission limits contained in Section II.A.5. The initial source testing shall be conducted within 180 days of the initial start up date of the compressor engine(s). After the initial source test, additional testing shall continue on an every four-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).

4. The Caterpillar 3512LE compressor engine(s) shall be initially tested for NO_X and CO, concurrently, to demonstrate compliance with the emission limits contained in Section II.A.6. The initial source testing shall be conducted within 180 days of the initial start up date of the compressor engine(s). After the initial source test, additional testing shall continue on an every four-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).

5. The Caterpillar G3508LE compressor engine(s) shall be initially tested for NO_X and CO, concurrently, to demonstrate compliance with the emission limits contained in Section II.A.7. The initial source testing shall be conducted within 180 days of the initial start up date of the compressor engine(s). After the initial source test, additional testing shall continue on an every four-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).

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

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

C. Operational Reporting Requirements

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

   Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall

be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

2. Permittee shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation 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 Permittee as a permanent business record for at least five 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 – Permittee 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 Systems, Continuous Emissions Rate Monitoring Systems) 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 Permittee fails to appeal as indicated below.

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

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

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

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

G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Permittee 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
Summit Gas Resources, Inc.
MAQP #3803-01

I. Introduction/Process Description

Summit Gas Resources, Inc. (Permittee) owns and operates the Porter 26 Battery. The facility is a natural gas compressor station located approximately eleven miles northeast of Decker, Montana, in the SE¼ of Section 26, Township 8 South, Range 41 East, in Big Horn County, Montana.

A. Permitted Equipment

The facility consists of not more than four compressor engines with a total maximum rated design capacity of 1,720 horsepower (hp) and the maximum rated design capacity of each individual compressor engine shall not exceed 860 hp. The facility may include any combination of Waukesha 3524GSI, Caterpillar 3408TA, Waukesha F18GL, Caterpillar G3508LE, and Caterpillar 3512LE compressor engines. This permit does not allow the use of other engine models.

B. Source Description

The Porter 26 Battery compresses and transports natural gas from the nearby gas field. The natural gas fired compressor engine compresses the gas for transmission through the pipeline.

C. Permit History

MAQP #3803-00 was issued final on May 24, 2006. On March 13, 2006, the Department of Environmental Quality – Air Resources Management Bureau (Department) determined a complete application from Bitter Creek Pipelines, LLC, was received for the Porter 26 Compressor Station. The facility was to consist of not more than four compressor engines with a total maximum rated design capacity of 1,720 horsepower (hp) with the maximum rated design capacity of each individual compressor engine not exceeding 860 hp. The facility was to include any combination of Waukesha 3524GSI, Caterpillar 3408TA, Waukesha F18GL, Caterpillar G3508LE, and Caterpillar 3512LE compressor engines. This permit did not allow the use of other engine models.

D. Current Permit Action

MAQP #3803-01 replaces MAQP #3803-00 as a result of an administrative amendment. On December 15, 2011, the Department received notice of Transfer of Ownership of MAQP #3803-01 from Bitter Creek Pipeline, LLC to Summit Gas Resources, Inc. Pursuant to ARM 17.8.765(3), the transfer was deemed approved on January 16, 2011. Pursuant to ARM 17.8.764, the Department is updating the permit to reflect the change in ownership, to update applicability of New Source Performance Standards and Emissions Standards for Hazardous Air Pollutants, to add the de minimis addition of a heater used on-site, and to update the permit to the current format utilized by the Department.

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).

   Permittee 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}

Permittee 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 six 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, Permittee 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 rule.

6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS).

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

   b. 40 CFR 60, Subpart JJJJ—Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI ICE)

      At the time of permit issuance, this subpart, as it applies to owners and operators, applies to:

      - Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:
        - On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 hp (except lean burn engines with a maximum engine power greater than or equal to 500 hp and less than 1,350 hp);
        - On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 hp and less than 1,350 hp;

- On or after July 1, 2008, for engines with a maximum engine power less than 500 hp

- Owners and operators of stationary SI ICE that are modified or reconstructed after June 12, 2006, and any person that modifies or reconstructs any stationary SI ICE after June 12, 2006.

- All owners and operators of stationary SI ICE that commence construction (engine ordered) after June 12, 2006.

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

   a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to an New Emissions Standard for Hazardous Air Pollutants Subpart.

   b. 40 CFR 63 Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities

      At the time of permit issuance, this subpart is applicable to:

      - *Facilities* (as defined in 40 CFR 63, Subpart HH) that are major or area sources of hazardous air pollutants (HAP) AND meets one or both of the following:

      - Facilities that process, upgrade, or store hydrocarbon liquids prior to the point of *custody transfer* (as defined in 40 CFR 63, Subpart HH) , OR,

      - Facilities that 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. For the purposes of this subpart, natural gas enters the natural gas transmission and storage source category after the natural gas processing plant, when present. If no natural gas processing plant is present, natural gas enters the natural gas transmission and storage source category after the point of *custody transfer* (as defined in 40 CFR 63, Subpart HH).

   c. 40 CFR 63, Subpart HHH

      At the time of permit issuance, this subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of HAP emissions as defined in §63.1271.

   d. 40 CFR 63 Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)

      At the time of permit issuance, this subpart is applicable to an owner or operator of a stationary RICE at a major or area source of HAP emissions. Therefore, this subpart 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 the Department. No permit application fee was required as the current action is administrative.

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.

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 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. Permittee has a PTE greater than 25 tons per year of carbon monoxide; 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. Permittee submitted the required permit application for the current permit action. (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 this permitting action as the action is administrative.

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

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

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

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

9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Permittee 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 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 the Department.

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

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

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

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

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 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 particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #3803-01 for Permittee, 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 current NESHAP standards.

   f. This source is not a Title IV affected source, or a solid waste combustion unit.

   g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that Permittee will be a minor source of emissions as defined under Title V.

III. Best Available Control Technology (BACT) Determination

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

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

IV. Emission Inventory

Ton/year					
Source	**$PM_{10}/PM_{2.5}$**	**NO_X**	**VOC**	**CO**	**SO_X**
860-hp Caterpillar 3512LE	0.27	12.46	8.31	4.15	0.02
840-hp Waukesha 3524GSI	0.27	8.11	8.11	16.23	0.02
633-hp Caterpillar G3508LE	0.20	12.17	6.08	3.06	0.01
400-hp Caterpillar G3408TA	0.13	3.86	3.86	7.73	0.01
400-hp Waukesha F18GL	0.13	3.86	3.86	1.93	0.01
1 MMBtu/hr Diesel Heater	0.10	0.63	0.01	0.16	0.23
Hypothetical Maximum					
1,720-hp Engine + Diesel Heater	0.65	33.85	16.62	33.38	0.26

bhp = brake horsepower
CO = carbon monoxide
gal = gallon
hp = horsepower
hr = hour
lb = pound
MMBtu = million british thermal units
NO_X = oxides of nitrogen
PM_{10} = particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$ = particulate matter with an aerodynamic diameter of 2.5 microns or less
SO_X = oxides of sulfur
VOC = volatile organic compounds
yr = year

860-hp Caterpillar 3512LE Compressor Engine

Brake Horsepower: 860 hp
Hours of operation: 8,760 hr/yr

PM_{10} Emissions
Emission Factor: 9.50E-03 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 6.42 MMBtu/hr (Maximum Design)
Calculations: 6.42 MMBtu/hr * 9.50E-03 lb/MMBtu = 0.06 lb/hr
0.06 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.27 ton/yr

NO_X Emissions
Emission factor: 1.50 gram/bhp-hour (BACT Determination)
Calculations: 1.50 gram/bhp-hour * 860 hp * 0.002205 lb/gram = 2.85 lb/hr
2.85 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 12.46 ton/yr

VOC Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 860 hp * 0.002205 lb/gram = 1.90 lb/hr
1.90 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 8.31 ton/yr

CO Emissions
Emission factor: 0.50 gram/bhp-hour (BACT Determination)
Calculations: 0.50 gram/bhp-hour * 860 hp * 0.002205 lb/gram = 0.95 lb/hr
0.95 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 4.15 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 6.42 MMBtu/hr (Maximum Design)
Calculations: 6.42 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.00 lb/hr
0.00 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.02 ton/yr

840-hp Waukesha 3524GSI Compressor Engine

Brake Horsepower: 840 hp
Hours of operation: 8,760 hr/yr

PM_{10} Emissions
Emission Factor: 9.50E-03 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 6.57 MMBtu/hr (Maximum Design)
Calculations: 6.57 MMBtu/hr * 9.50E-03 lb/MMBtu = 0.06 lb/hr
0.06 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.27 ton/yr

NO_X Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 840 hp * 0.002205 lb/gram = 1.85 lb/hr
1.85 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 8.11 ton/yr

VOC Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 840 hp * 0.002205 lb/gram = 1.85 lb/hr
1.85 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 8.11 ton/yr

CO Emissions
Emission factor: 2.00 gram/bhp-hour (BACT Determination)
Calculations: 2.00 gram/bhp-hour * 840 hp * 0.002205 lb/gram = 3.70 lb/hr
3.70 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 16.23 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 6.57 MMBtu/hr (Maximum Design)
Calculations: 6.57 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.00 lb/hr
0.00 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.02 ton/yr

633-hp Caterpillar G3508LE Compressor Engine

Brake Horsepower: 633 hp
Hours of operation: 8,760 hr/yr

PM_{10} Emissions
Emission Factor: 9.50E-03 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 4.80 MMBtu/hr (Maximum Design)
Calculations: 4.80 MMBtu/hr * 9.50E-03 lb/MMBtu = 0.05 lb/hr
0.05 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.20 ton/yr

NO_X Emissions
Emission factor: 2.00 gram/bhp-hour (BACT Determination)
Calculations: 2.00 gram/bhp-hour * 633 hp * 0.002205 lb/gram = 2.79 lb/hr
2.79 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 8.11 ton/yr

VOC Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 633 hp * 0.002205 lb/gram = 1.40 lb/hr
1.40 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 6.11 ton/yr

CO Emissions
Emission factor: 0.50 gram/bhp-hour (BACT Determination)
Calculations: 0.50 gram/bhp-hour * 633 hp * 0.002205 lb/gram = 0.70 lb/hr
0.70 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 16.23 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 4.80 MMBtu/hr (Maximum Design)
Calculations: 4.80 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.00 lb/hr
0.00 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.02 ton/yr

400-hp Caterpillar G3408TA Compressor Engine

Brake Horsepower: 400 hp
Hours of operation: 8,760 hr/yr

PM_{10} Emissions
Emission Factor: 9.50E-03 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 3.02 MMBtu/hr (Maximum Design)
Calculations: 3.02 MMBtu/hr * 9.50E-03 lb/MMBtu = 0.03 lb/hr
0.03 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.13 ton/yr

NO_X Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 400 hp * 0.002205 lb/gram = 0.88 lb/hr
0.88 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 3.86 ton/yr

VOC Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 400 hp * 0.002205 lb/gram = 0.88 lb/hr
0.88 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 3.86 ton/yr

CO Emissions
Emission factor: 2.00 gram/bhp-hour (BACT Determination)
Calculations: 2.00 gram/bhp-hour * 400 hp * 0.002205 lb/gram = 1.76 lb/hr
1.76 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 7.73 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 3.02 MMBtu/hr (Maximum Design)
Calculations: 3.02 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.00 lb/hr
0.00 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.01 ton/yr

400-hp Waukesha F18GL Compressor Engine

Brake Horsepower: 400 hp
Hours of operation: 8,760 hr/yr

PM_{10} Emissions
Emission Factor: 9.50E-03 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 2.86 MMBtu/hr (Maximum Design)
Calculations: 2.86 MMBtu/hr * 9.50E-03 lb/MMBtu = 0.03 lb/hr
0.03 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.13 ton/yr

NO_X Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 400 hp * 0.002205 lb/gram = 0.88 lb/hr
0.88 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 3.86 ton/yr

VOC Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 400 hp * 0.002205 lb/gram = 0.88 lb/hr
0.88 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 3.86 ton/yr

CO Emissions
Emission factor: 0.50 gram/bhp-hour (BACT Determination)
Calculations: 0.50 gram/bhp-hour * 400 hp * 0.002205 lb/gram = 0.44 lb/hr
0.44 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 1.93 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 2.86 MMBtu/hr (Maximum Design)
Calculations: 2.86 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.00 lb/hr
0.00 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.01 ton/yr

OR Worst Case (Hypothetical)

1,720-hp Compressor Engine

Brake Horsepower: 1,720 hp
Hours of operation: 8,760 hr/yr

PM_{10} Emissions
Emission Factor: 9.50E-03 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 13.14 MMBtu/hr (Maximum Design)
Calculations: 13.14 MMBtu/hr * 9.50E-03 lb/MMBtu = 0.13 lb/hr
.00.13 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.55 ton/yr

NO_X Emissions
Emission factor: 2.00 gram/bhp-hour (BACT Determination)
Calculations: 2.00 gram/bhp-hour * 1,720 hp * 0.002205 lb/gram = 7.59 lb/hr
7.59 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 33.22 ton/yr

VOC Emissions
Emission factor: 1.00 gram/bhp-hour (BACT Determination)
Calculations: 1.00 gram/bhp-hour * 1,720 hp * 0.002205 lb/gram = 3.79 lb/hr
3.79 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 16.61 ton/yr

CO Emissions
Emission factor: 2.00 gram/bhp-hour (BACT Determination)
Calculations: 2.0 gram/bhp-hour * 1,720 hp * 0.002205 lb/gram = 7.59 lb/hr
7.59 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 33.22 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 13.14 MMBtu/hr (Maximum Design)
Calculations: 13.14 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.01 lb/hr
0.01 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.03 ton/yr

V. Existing Air Quality

The facility is located approximately eleven miles northeast of Decker, Montana, in the SE¼ of Section 6, Township 8 South, Range 41 East, in Big Horn County, Montana. The air quality of this area is classified as either better than National Standards or unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for criteria pollutants.

VI. Ambient Air Impact Analysis

The Department determined that the impacts from this permitting action will be minor. No change in permitted emissions is resulting from the current permit action.

VII. Taking or Damaging Implication Analysis

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

YES	NO	
XX		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	XX	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	XX	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	XX	4. Does the action deprive the owner of all economically viable uses of the property?
	XX	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?
	XX	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	XX	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?
	XX	7a. Is the impact of government action direct, peculiar, and significant?
	XX	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	XX	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?
	XX	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

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

VIII. Environmental Assessment

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: Shawn Juers
Date: 1/20/2012