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

PRELIMINARY DETERMINATION
ON PERMIT APPLICATION

Date of Mailing: October 3, 2008

Name of Applicant: Taylor Gas Compression, Inc.

Source: Natural Gas Compressor Station

Proposed Action: The Department of Environmental Quality (Department) proposes to issue a permit, with conditions, to the above-named applicant. The application was assigned Permit Application Number 2843-04.

Proposed Conditions: See attached.

Public Comment: Any member of the public desiring to comment must submit such comments in writing to the Air Resources Management Bureau (Bureau) of the Department at the above address. Comments may address the Department's analysis and determination, or the information submitted in the application. In order to be considered, comments on this Preliminary Determination are due by October 20, 2008. Copies of the application and the Department's analysis may be inspected at the Bureau's office in Helena. For more information, you may contact the Department.

Departmental Action: The Department intends to make a decision on the application after expiration of the Public Comment period described above. A copy of the decision may be obtained at the above address. The permit shall become final on the date stated in the Department's Decision on this permit, unless an appeal is filed with the Board of Environmental Review (Board).

Procedures for Appeal: Any person jointly or severally adversely affected by the final action may request a hearing before the Board. Any appeal must be filed by the date stated in the Department's Decision on this permit. The request for a hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for a hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, MT 59620.

For the Department,

Vickie Walsh

Vickie Walsh
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3490

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VW:JM
Enclosures

MONTANA AIR QUALITY PERMIT

Issued To:	Taylor Gas Compression, Inc. 1756 Cypress Manor Drive Henderson, NV 89012	Permit: #2843-04 Application Complete: 08/26/08 Preliminary Determination Issued: 10/03/08 Department's Decision Issued: Permit Final: AFS #: 101-0014

An air quality permit, with conditions, is hereby granted to Taylor Gas Compression, Inc. (TGC), 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

TGC owns and operates a natural gas compressor station and associated equipment located in the SE¼ of the SE¼ of Section 35, Township 33 North, Range 1 West, in Toole County, Montana. The facility is known as the North Dunkirk Compressor Facility. A complete listing of the permitted equipment is contained in the permit analysis.

B. Current Permit Action

On August 26, 2008, the Department of Environmental Quality (Department) received a complete application from TGC requesting that a 650-horsepower (hp) White Superior compressor engine currently permitted in Permit #3410-00 be moved to Permit #2843-04 where it originally resided. The Department updated the permit, as requested.

SECTION II: Conditions and Limitations

A. Emission Limitations

1. Emissions from the 500-horsepower (hp) Caterpillar G-398-NA compressor engine shall be controlled with a non-selective catalytic reduction (NSCR) unit and shall not exceed the following (ARM 17.8.752):

Nitrous Oxides (NO_X)	2.21 pounds per hour (lb/hr)
Carbon Monoxide (CO)	3.31 lb/hr
Volatile Organic Compounds (VOC)	1.10 lb/hr

2. Emissions from the 650-hp White Superior compressor engine shall be controlled by an NSCR unit and shall not exceed the following (ARM 17.8.752):

NO_X	2.87 lb/hr
CO	4.30 lb/hr
VOC	1.43 lb/hr

3. TGC 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. TGC 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. TGC shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.749).

B. Testing Requirements

1. The 500-hp Caterpillar G-398 compressor engine shall be tested concurrently for NO_X and CO and compliance demonstrated with the conditions contained in Section II.A.1 on an every 5-year basis or another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).

2. The 650-hp White Superior compressor engine shall be tested concurrently for NO_x and CO and compliance demonstrated with the conditions contained in Section II.A.2 on an every 5-year basis or another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105 and ARM 17.8.749).

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

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

C. Operational Reporting Requirements

1. TGC 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. TGC shall notify the Department 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 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 TGC 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 – TGC 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 (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if TGC fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving TGC 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 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, as amended by the 1991 Legislature, failure to pay the annual operation fee by TGC may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

Permit Analysis
Taylor Gas Compression, Inc.
Permit #2843-04

I. Introduction/Process Description

Taylor Gas Compression, Inc. (TGC) owns and operates a natural gas compressor station and associated equipment located in the SE¼ of the SE¼ of Section 35, Township 33 North, Range 1 West, in Toole County, Montana. The facility is known as the North Dunkirk Compressor Facility.

A. Permitted Equipment

This TGC facility includes the following equipment:

- One 1964, 500-horsepower (hp) Caterpillar G-398-NA compressor engine with a non-selective catalytic reduction (NSCR) unit;
- One 1978, 650- hp White Superior 6G825 compressor engine;
- One 1981 0.750- MMBtu/hr Hycon 81-91 heater
- One 250 thousand British thermal unit per hour (MBtu/hr) NATCO reboiler;
- One 250-barrel (bbl) sealed tank;
- One 1989 MYCM Refrigeration Unit (electric); and
- Various valves, relief valves, and flanges.

B. Source Description

The two primary purposes of this facility are to compress and dry natural gas. At first, approximately 1.7 million cubic feet per day (MMCFD) of sweet natural gas enters the plant. The 500-hp compressor engine and the 650-hp compressor engine compress approximately 0.85 MMCFD natural gas from 1 pound per square inch gauge (psig) to 650 psig.

The second purpose of the complex is to "dry" the gas as it is being processed. The gas contains some moisture, which must be removed from the system prior to being sent into the transmission system. This is accomplished with a 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 350 degrees Fahrenheit 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. After dehydration, approximately 0.13 MMCFD of dry gas is used as fuel by the compressor engines.

C. Permit History

On April 5, 1995, Hadson Gas Gathering & Processing Company (Hadson) was issued **Permit #2843-00** for the operation of their compressor station and associated equipment, located in SE¼ of the SE¼ of Section 35, Township 33 North, Range 1 West, in Toole County, Montana. The facility was permitted to operate four compressor engines, one heater, one tank, and various valves, relief valves, and flanges.

On December 17, 1999, the Department of Environmental Quality (Department) received a complete Montana Air Quality Permit Application from Spectrum Energy, Inc. (Spectrum). Spectrum notified the Department that Spectrum had purchased the facility from Hadson. In addition, Spectrum requested that several pieces of equipment be removed from the permit and

several other pieces of equipment be added to the permit. Specifically, this permit action removed a 230-hp Ajax DPC-230 compressor engine, a 425-hp Caterpillar G-398-NA compressor engine, and a 500-hp Caterpillar G-398 compressor engine from the permit. In addition, a 650-hp White Superior compressor engine, a NATCO reboiler, and an MYCM refrigeration unit were added to the permit. Further, the rule references and permit format were updated. **Permit #2843-01** replaced Permit #2843-00.

On April 7, 2005, the Department received a letter from TGC and Spectrum requesting that Permit #2843-01 be transferred from Spectrum to TGC. The permit action changed the name on the permit from Spectrum to TGC. In addition, the permit was updated to reflect current permit language and rule references used by the Department. **Permit #2843-02** replaced Permit #2843-01.

On July 20, 2005, the Department received a letter from TGC updating the permitted equipment listed in Section I.A of the permit analysis. One 1978, 650- hp White Superior 6G825 compressor engine and one 1981 0.750- MMBtu/hr Hycon 81-91 heater were removed from the facility. **Permit #2843-03** replaced Permit #2843-02.

D. Current Permit Action

On August 26, 2008, the Department received a complete application from TGC requesting that a 650-hp White Superior compressor engine currently permitted in Permit #3410-00 be moved to **Permit #2843-04** where it originally resided. The Department updated the permit, as requested. Permit #2843-04 replaces Permit #2843-03.

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

2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of 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. <u>ARM 17.8.106 Source Testing Protocol</u>. 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).

TGC 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}

TGC 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. (2) Under this rule, TGC 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. (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. TGC will burn pipeline quality natural gas in its fuel burning equipment, which will meet this limitation.

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

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). TGC 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. The MYCM Refrigeration Unit is not capable of fractionating gases.

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

   40 CFR 63, Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63, shall comply with the applicable provisions of 40 CFR Part 63, Subpart HH. In order for a natural gas production facility to be subject to 40 CFR Part 63, Subpart HH requirements, certain criteria must be met. First, the facility must be a major source of Hazardous Air Pollutants (HAP) as determined according to paragraphs (a)(1)(i) through (a)(1)(iii) of 40 CFR 63, Subpart HH. Second, a facility that is determined to be major for HAPs must also either process, upgrade, or store hydrocarbon liquids prior to the point of custody transfer, or process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. Third, the facility must also contain an affected source as specified in paragraphs (b)(1) through (b)(4) of 40 CFR Part 63, Subpart HH. Finally, if the first three criteria are met, and the exemptions contained in paragraphs (e)(1) and (e)(2) of 40 CFR Part 63, Subpart HH do not apply, the facility is subject to the applicable provisions of 40 CFR Part 63, Subpart HH. Based on previous information submitted by TGC, the facility is not subject to the provisions of 40 CFR Part 63, Subpart HH because the facility is not a major source of HAPs. In addition, area source provisions also don't apply because no TEG unit is on site.

   40 CFR 63, Subpart HHH National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. Owners or operators of natural gas transmission or storage facilities, as defined and applied in 40 CFR Part 63, shall comply with the standards and provisions of 40 CFR Part 63, Subpart HHH. In order for a natural gas transmission and storage facility to be subject to 40 CFR Part 63, Subpart HHH requirements, certain criteria must be met. First, the facility must transport or store natural gas prior to the gas entering the pipeline to a local distribution company or to a final end user if there is no local distribution company. In addition, the facility must be a major source of HAPs as determined using the maximum natural gas throughput as calculated in either paragraphs (a)(1) and (a)(2) or paragraphs (a)(2) and (a)(3) of 40 CFR Part 63, Subpart HHH. Second, a facility must contain an affected source (glycol dehydration unit) as defined in paragraph (b) of 40 CFR Part 63, Subpart HHH. Finally, if the first two criteria are met, and the exemptions contained in paragraph (f) of 40 CFR Part 63, Subpart HHH, do not apply, the facility is subject to the applicable provisions of 40 CFR Part 63,

Subpart HHH. Based on previous information submitted by TGC, the facility is not subject to the provisions of 40 CFR 63, Subpart HHH because the facility is not a major source of HAPs.

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. TGC submitted the appropriate permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to 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 alteration to construct, alter, or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. TGC has a PTE greater than 25 tons per year of nitrogen oxides (NO_X) and carbon monoxide (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, alteration, or use of a source. TGC 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. TGC submitted an affidavit of publication of public notice for the August 14, 2008, issue of the *Shelby Promoter*, a newspaper of general circulation in the Town of Shelby in Toole County, as proof of compliance with the public notice requirements.

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 BACT analysis is discussed 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 TGC 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 altered 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 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).

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 greater than 100 tons per year of any pollutant;

b. PTE greater than 10 tons per year of any one HAP, PTE greater than 25 tons per year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or

c. PTE greater than 70 tons per 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 Air Quality Permit #2843-04 for TGC, the following conclusions were made:

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

b. The facility's PTE is less than 10 tons per year for any one HAP and less than 25 tons per 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 not subject to any current NESHAP standards.

f. This source is not a Title IV affected source, nor a solid waste combustion unit.

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

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

III. BACT Determination

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

A BACT analysis was submitted by TGC in Permit Application #3410-00 for the 650-hp White Superior compressor engine, when it was installed at the Gus Blasé Compressor Station. This BACT analysis addressed some available methods of controlling emissions from the sources. The Department reviewed these methods, as well as previous BACT determinations in order to make the following BACT determination.

A. Compressor Engine

1. NO_X and CO BACT

The White Superior 6G825 that TGC is proposing to install at the North Dunkirk Compressor Station is already owned and currently permitted at the Gus Blasé Compressor Station, Permit #3410-00. The White Superior 6G825 is presently equipped with non-selective catalytic reduction.

To change the emission limits on the White Superior 6G825, TGC would need to purchase a new catalyst system, or purchase an entirely new engine. The cost analysis was performed assuming only a new catalyst would need to be purchased. Table 1 shows the incremental cost of going from 2.0 grams per brake horsepower-hour (g/bhr-hr) to 1.0 g/bhp-hr NO_X and Table 2 shows the incremental cost of going from 3.0 g/bhp-hr to 2.0 g/bhp-hr CO.

Table 1

Source	NO_X Emission Limit (g/hp-hr)	Incremental Annual Fuel and Maintenance Cost ($)	Resulting NO_X Emissions (tpy)	Incremental Cost Effectiveness ($/ton)
White Superior 6G825	1.0	64,540	6.27	
	2.0	0	12.54	
Incremental Cost		**64,540**	**6.27**	**10,293**

Table 2

Source	CO Emission Limit (g/hp-hr)	Incremental Annual Fuel and Maintenance Cost ($)	Resulting NO_X Emissions (tpy)	Incremental Cost Effectiveness ($/ton)
White Superior 6G825	2.0	64,540	12.54	
	3.0	0	18.81	
Incremental Cost		**64,540**	**6.27**	**10,293**

A White Superior 6G825 would cost an additional $10,293 per additional ton of NO_X and CO removed. The Department agrees that lb/hr emission limits equivalent to 2.0 g/bhp-hr NO_X and 3 g/bhp-hr CO using a White Superior 6G825 with an NSCR for control of NO_X and CO emissions is BACT.

2. VOC BACT

The Department determined that no additional controls and burning pipeline quality natural gas to meet a lb/hr emission limit equivalent to 1.0 g/bhp-hr constitute BACT for the proposed compressor engine.

3. PM_{10} and SO_2 BACT

The Department is not aware of any BACT determinations that have required controls for PM_{10} or sulfur dioxide (SO_2) emissions from natural gas fired compressor engines. TGC proposed no additional controls and burning pipeline quality natural gas as BACT for PM_{10} and SO_2 emissions from the proposed compressor engine. Due to the relatively small amount of PM_{10} and SO_2 emissions from the proposed engine and the cost of adding additional control, any add-on controls would be cost prohibitive. Therefore, the Department concurred with TGC's BACT proposal and determined that no additional controls and burning pipeline quality natural gas will constitute BACT for PM_{10} and SO_2 emissions from the compressor engine.

IV. Emission Inventory

Ton/year					
Source	**PM_{10}**	**NO_X**	**VOC**	**CO**	**SO_X**
500-hp Caterpillar G-398	0.22	9.68	4.82	14.50	0.00
NATCO Reboiler	0.01	0.11	0.01	0.02	0.00
650-hp White Superior 6G825	0.21	12.56	6.28	18.83	0.01
750,000-Btu/hr Heater/Regenerator	0.03	0.31	0.02	0.13	0.00
Totals	**0.47**	**22.66**	**11.13**	**33.48**	**0.01**

500-hp Caterpillar G-398

Brake Horsepower: 500 Bhp
Hours of operation: 8,760 hr/yr
Fuel Consumption: 43,800,000 ft^3/yr (Company Information)

TSP Emissions
Emission Factor: 10 lb/$MMft^3$ (2-02-002-02, AFSSCC page 32)
Calculations: 43,800,000 ft^3/yr * 10.0 lb/$MMft^3$ gas * 1yr/8,760 hr = 0.05 lb/hr
0.05 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.22 ton/yr

PM_{10} Emissions
Emission Factor: 10 lb/$MMft^3$ (2-02-002-02, AFSSCC page 32)
Calculations: 43,800,000 ft^3/yr * 10.0 lb/$MMft^3$ gas * 1yr/8,760 hr = 0.05 lb/hr
0.05 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.22 ton/yr

NO_X Emissions
Emission factor: 2.0 gram/bhp-hr (BACT Determination)
Calculations: 2.0 gram/bhp-hr * 500 bhp* 0.002205 lb/gram = 2.21 lb/hr
2.21 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 9.68 ton/yr

VOC Emissions
Emission factor: 1.0 gram/bhp-hr (BACT Determination)
Calculations: 1.0 gram/bhp-hr* 500 bhp* 0.002205 lb/gram = 1.10 lb/hr
1.10 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 4.82 ton/yr

CO Emissions
Emission factor: 3.0 gram/bhp-hr (BACT Determination)
Calculations: 3.0 gram/bhp-hr * 500 bhp* 0.002205 lbs/gram = 3.31 lb/hr
3.31 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 14.50 ton/yr

SO_X Emissions
Emission factor: 0.0020 gram/bhp-hr (AP-42, Table 3.2-1)
Calculations: 0.0020 gram/bhp-hr * 500 bhp * 0.002205 lb/gram = 0.0022 lb/hr
0.0022 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.00 ton/yr

NATCO Reboiler

Hours of operation: 8,760 hr/yr
Fuel Consumption: 250 ft^3/hr (Company Information)

TSP Emissions
Emission Factor: 5 lb/MMft^3 (AP-42, 1.4-1)
Calculations: 250.0 ft^3/hr * 8,760 hr/yr * 5 lb/MM ft^3 * 0.0005 ton/lb = 0.01 ton/yr

PM_{10} Emissions
Emission Factor: 5 lb/MMft^3 (AP-42, 1.4-1)
Calculations: 250.0 ft^3/hr * 8,760 hr/yr * 5 lb/MM ft^3 * 0.0005 ton/lb = 0.01 ton/yr

NO_X Emissions
Emission Factor: 100 lb/MMft^3 (AP-42, 1.4-1)
Calculations: 250.0 ft^3/hr * 8,760 hr/yr * 100 lb/MM ft^3 * 0.0005 ton/lb = 0.11 ton/yr

VOC Emissions
Emission Factor: 8 lb/MMft^3 (AP-42, 1.4-1)
Calculations: 250.0 ft^3/hr * 8,760 hr/yr * 8 lb/MM ft^3 * 0.0005 ton/lb = 0.01 ton/yr

CO Emissions
Emission Factor: 20 lb/MMft^3 (AP-42, 1.4-1)
Calculations: 250.0 ft^3/hr * 8,760 hr/yr * 20 lb/MM ft^3 * 0.0005 ton/lb = 0.02 ton/yr

SO_X Emissions
Emission Factor: 0.6 lb/MMft^3 (AP-42, 1.4-1)
Calculations: 250.0 ft^3/hr * 8,760 hr/yr * 0.6 lb/MM ft^3 * 0.0005 ton/lb = 0.00 ton/yr

650-hp White Superior 6G825Compressor Engine

Brake Horsepower: 650 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: 5.07 MMBtu/hr (Maximum Design)
Calculations: 5.07 MMBtu/hr * 9.50E-03 lb/MMBtu = 0.05 lb/hr
0.05 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.21 ton/yr

NO_X Emissions
Emission factor: 2.0 g/bhp-hour (BACT Determination)
Calculations: 2.0 g/bhp-hour * 650 bhp * 0.002205 lb/gram = 2.87 lb/hr
2.87 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 12.56 ton/yr

VOC Emissions
Emission factor: 1.00 g/bhp-hour (BACT Determination)
Calculations: 1.00 g/bhp-hour * 650 bhp * 0.002205 lb/gram = 1.43 lb/hr
1.43 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 6.28 ton/yr

CO Emissions
Emission factor: 3.0 g/bhp-hour (BACT Determination)
Calculations: 3.0 g/bhp-hour * 650 bhp * 0.002205 lb/gram = 4.30 lb/hr
4.30 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 18.83 ton/yr

SO_2 Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 5.07 MMBtu/hr (Maximum Design)
Calculations: 5.07 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.00 lb/hr
0.00 lb/hr * 8,760 hr/hr * 0.0005 ton/lb = 0.01 ton/yr

750,000-Btu/hr Heater/Regenerator

Fuel Consumption: 0.75 MMBtu/hr (Maximum Rated Design Capacity)
Fuel Usage: 0.001 MMscf/MMBtu * 0.75 MMBtu/hr * 8760 hr/yr = 6.57 MMScf/yr

PM Emissions
Emission Factor: 7.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)
Calculations: 6.57 MMscf/yr * ((7.6 lb/MMscf * 1000 Btu/scf) / 1000 Btu/scf) * 1 ton/2000 lb = 0.03 ton/yr

NO_X Emissions
Emission Factor: 94.0 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)
Calculations: 6.57 MMscf/yr * ((94.0 lb/MMscf * 1000 Btu/scf) / 1000 Btu/scf) * 1 ton/2000 lb = 0.31 ton/yr

CO Emissions
Emission Factor: 40 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)
Calculations: 6.57 MMscf/yr * ((40 lb/MMscf * 1000 Btu/scf) / 1000 Btu/scf) * 1 ton/2000 lb = 0.13 ton/yr

VOC Emissions
Emission Factor: 5.5 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)
Calculations: 6.57 MMscf/yr * ((5.5 lb/MMscf * 1000 Btu/scf) / 1000 Btu/scf) * 1 ton/2000 lb = 0.02 ton/yr

SO_2 Emissions
Emission Factor: 0.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)
Calculations: 6.57 MMscf/yr * ((0.6 lb/MMscf * 1000 Btu/scf) / 1000 Btu/scf) * 1 ton/2000 lb = 0.002 ton/yr

MYCM Refrigeration Unit

Emissions from the MYCM refrigeration unit and its corresponding storage tank are considered negligible because the operation is a closed system and is contained under pressure. The fugitive VOC emissions from the transfer of the condensed product from this facility are also considered to be negligible because the transfer lines are also pressurized. The flanges and connections of this unit are state-of-the-art, further preventing any loss of product, which would also reduce emissions.

V. Existing Air Quality

The facility is located the SE¼ of the SE¼ of Section 35, Township 33 North, Range 1 West, in Toole 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 any air impacts from the TGC facility will be minor. The Department 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, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the pubic generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

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

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

DRAFT ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Taylor Gas Compression, Inc.

Air Quality Permit Number: 2843-04

Preliminary Determination Issued: October 3, 2008
Department Decision Issued:
Permit Final:

1. *Legal Description of Site*: TGC owns and operates a natural gas compressor station located in the SE¼ of Section 35, Township 33 North, Range 1 West in Toole County, Montana.

2. *Description of Project*: The project would be to move a compressor engine permitted under Permit #3401-00, to this location where it was originally permitted.

3. *Objectives of Project*: The purpose of the project would be to operate the compressor station in a location that it is needed.

4. *Alternatives Considered*: In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because TGC demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of enforceable conditions, including a BACT analysis, would be included in Permit #2843-04.

6. *Regulatory Effects on Private Property*: The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

7. *The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources				X		Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites				X		Yes
J	Cumulative and Secondary Impacts				X		Yes

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS: The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

Minor impacts to terrestrial and aquatic life and habitats would be expected from the proposed project because deer, antelope, coyotes, geese, ducks, and other terrestrials would potentially use the area around the additional engine and because the additional engine would be a source of air pollutants. The additional engine would emit air pollutants and corresponding deposition of pollutants would occur; however, as described in Section 7.F. of this EA, the Department determined that any impacts from deposition would be minor. In addition, minor land disturbance would occur through additional engine construction activities. Any impacts from the additional engine construction would be minor due to the relatively small size of the project and the relatively short period of time required for construction. Overall, any impacts to terrestrial and aquatic life and habitats would be minor.

B. Water Quality, Quantity, and Distribution

Minor impacts would be expected on water quality, quantity, and distribution from the proposed project because the facility would be a source of pollutants. The facility would have no direct discharges into surface water. However, minor amounts of water may be required to control fugitive dust emissions from the access roads and the general facility property. In addition, the facility would emit air pollutants and corresponding deposition of pollutants would occur. However, the Department determined because of the relative size of the facility that any impact resulting from the deposition of pollutants on water quality, quantity, and distribution would be minor.

In addition, water quality, quantity, and distribution would not be impacted from the addition of the engine because there is no surface water at or relatively close to the site. Furthermore, no direct discharges into surface water would occur and no use of surface water would be expected for facility construction. Therefore, no impacts to water quality, quantity, and distribution would be expected from facility construction. Overall, any impacts to water quality, quantity, and distribution would be minor.

C. Geology and Soil Quality, Stability, and Moisture

Minor impacts would occur on the geology and soil quality, stability, and moisture from the proposed project because minor construction would be required to develop the additional engine. No discharges, other than air emissions, would occur at the facility. Any impacts to the geology and soil quality, stability and moisture from the additional engine construction would be minor due to the relatively small size of the project.

Further, deposition of pollutants would occur; however, as described in Section 7.F of this EA, the Department determined that any impacts resulting from the deposition of pollutants on the soils surrounding the site would be minor. Overall, any impacts to the geology and soil quality, stability, and moisture would be minor.

D. Vegetation Cover, Quantity, and Quality

Minor impacts would occur on vegetation cover, quantity, and quality of the work associated with installing the additional engine. In addition, no discharges, other than air emissions, would occur at the facility. Any impacts to the vegetation cover, quantity, and quality from facility construction would be minor due to the relatively small size of the project.

The engine would be a source of air pollutants and corresponding deposition of pollutants would occur. However, the Department determined that any impacts resulting from the deposition of pollutants on the existing vegetation cover, quantity, and quality would be minor. Overall, any impacts to vegetation cover, quantity, and quality would be minor because of deposition of pollutants.

E. Aesthetics

Minor impacts would result on the aesthetic values of the area because the facility would include an additional compressor engine. However, any visual aesthetic impacts would be minor because the natural gas gathering plant is a relatively small industrial facility.

The facility would also create additional noise in the area. However, any auditory aesthetic impacts would be minor because the compressor engine would generally operate indoors with catalyst emission controls. Catalyst emission controls are typically designed to be installed in mufflers to achieve the appropriate temperature for proper operation. Overall, any aesthetic impacts would be minor.

F. Air Quality

The air quality of the area would realize minor impacts from the proposed project because the additional compressor engine would emit very small amounts of PM, PM_{10}, HAPs, NO_X, CO, SO_X, and VOC. Air emissions from the compressor engine would be minimized by conditions that would be placed in Permit #2843-04. Conditions would include, but would not be limited to, lb/hr limitations and a 20% opacity limitation for the facility. Permit #2843-04 would also include conditions requiring TGC to use reasonable precautions to control fugitive dust emissions.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique endangered, fragile, or limited environmental resources in the area, the Department contacted the Montana Natural Heritage Program, Natural Resource Information System (NRIS). The NRIS search did not identify any species of special concern in the vicinity of the project area. In this case, the project area was defined by the section, township, and range of the proposed location with an additional 1-mile buffer zone. Due to the

minor amounts of construction that would be required, the relatively low levels of pollutants that would be emitted, and because the controlled emissions from the additional engine will not cause or contribute to a violation of any ambient air quality standard, the Department determined that it would be unlikely that the proposed project would impact any species of special concern and that any potential impacts would be minor.

H. Demands on Environmental Resources of Water, Air, and Energy

The proposed project would have minor impacts on the demands for the environmental resources of air because the addition of the compressor engine would result in a minor increase in air pollutants. Demands for water would be minor because the facility would continue to use water for dust suppression. Deposition of pollutants would occur as a result of operating the additional engine; however, the Department determined that any impacts from deposition of pollutants would be minor.

The proposed project would be expected to have minor impacts on the demand for the environmental resource of energy because additional power would be required at the site. The impact on the demand for the non-renewable environmental resource of energy would be minor because the project would be relatively small by industrial standards. Overall, the impacts for the demands on the environmental resources of water, air, and energy would be minor.

I. Historical and Archaeological Sites

In an effort to identify any historical and archaeological sites near the proposed project area, the Department contacted the Montana Historical Society, State Historic Preservation Office (SHPO). According to SHPO records, there have not been any previously recorded historic or archaeological sites within the proposed area. In addition, SHPO records indicated that no previous cultural resource inventories have been conducted in the area. SHPO recommended that a cultural resource inventory be conducted to determine if cultural or historic sites exist and if they would be impacted. However, neither the Department nor SHPO has the authority to require TGC to conduct a cultural resource inventory. The Department determined that due to the previous disturbance in the area and the small amount of land disturbance that would be required to install the additional engine, the chance of the project impacting any cultural or historic sites would be minor.

J. Cumulative and Secondary Impacts

Overall, the cumulative and secondary impacts on the physical and biological aspects of the human environment in the immediate area would be minor due to the relatively small size of the project and negligible construction activities associated with the installation of the additional engine. The Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #2843-04.

Additional facilities (compressor stations, gas plants, etc.) could locate in the area to withdraw natural gas from the nearby area and/or to separate the components of natural gas. However, any future facility would be required to apply for and receive the appropriate permits from the appropriate regulating authority. Environmental impacts from any future facilities would be assessed through the appropriate permitting process.

8. *The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores			X			Yes
B	Cultural Uniqueness and Diversity			X			Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			X			Yes
G	Quantity and Distribution of Employment				X		Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals				X		Yes
L	Cumulative and Secondary Impacts				X		Yes

SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS: The following comments have been prepared by the Department.

A. Social Structures and Mores
B. Cultural Uniqueness and Diversity

The proposed project would cause minor, if any, impacts to the above social and economic resources in the area because the proposed project would take place at an established facility. Further, the operation of a gas gathering plant of this type necessitates one half-time employee for normal operations and would likely not result in any, or very little, immigration of new people to the area for employment purposes; thereby, having little, if any, impact on the above social and economic resources of the area. Overall, any impacts to the above social and economic resources in the area would be minor.

C. Local and State Tax Base and Tax Revenue

The proposed project would result in minor impacts to the local and state tax base and tax revenue because no new employees would be expected as a result of the addition of a compressor engine at the facility. Further, the proposed project would necessitate negligible construction activities and typically would not require an extended period of time for completion. Therefore, any construction related jobs would be temporary and any corresponding impacts on the tax base/revenue in the area would be minor. Overall, any impacts to the local and state tax base would be minor.

D. Agricultural or Industrial Production

The compressor engine would be installed at an established facility. The proposed project would have minor impacts to industrial production because it would result in a slightly larger facility. However, because the facility would be relatively small by industrial standards, the project would likely not result in additional industrial sources.

Additional facilities (compressor stations, gas plants, etc.) could locate in the area to withdraw natural gas from the nearby area and/or to separate the components of natural gas. However, any future facility would be required to apply for and receive the appropriate permits from the appropriate regulating authority. Environmental impacts from any future facilities would be assessed through the appropriate permitting process. The Department is not aware of plans for any additional facilities at this time. Overall, any impacts to agricultural or industrial production of the area would be minor.

E. Human Health

The proposed project would result in minor, if any, impacts to human health. Deposition of pollutants would occur; however, the Department determined that the proposed project would comply with all applicable air quality rules, regulations, and standards. These rules, regulations, and standards are designed to be protective of human health. Overall any impacts to public health would be minor.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed project would have minor, if any, impacts on access to recreational and wilderness activities because the compressor engine would be installed and operated at an established facility that is relatively small by industrial standards. The proposed project would have minor impacts on the quality of recreational and wilderness activities in the area because the addition of the compressor engine would slightly increase the size of the facility and would produce additional noise. Overall any impacts to the access and quality of recreational and wilderness activities in the area would be minor.

G. Quantity and Distribution of Employment
H. Distribution of Population

The proposed project would have no impacts on the employment and population because no employees would be required for operating the additional engine. Any impacts to the quantity and distribution of employment from construction related employment would be minor due to the relatively small size of the project and the relatively short time period that would be required for installing the compressor engine. Overall, any impacts to the above social and economic resources in the area would be minor.

I. Demands for Government Services

There would be minor impacts on the demands for government services because additional time would be required by government agencies to issue the appropriate permits for the project and to assure compliance with applicable rules, standards, and conditions that would be contained in those permits. Therefore, vehicle traffic would be relatively minor due to the relatively short time period that would be required to install the additional engine and the day-to-day over-site of the plant by permanent employees. Overall, any demands for government services to regulate the facility or activities associated with the facility would be minor due to the relatively small size of the facility.

J. Industrial and Commercial Activity

Only minor impacts would be expected on the local industrial and commercial activity because the proposed project would represent only a minor increase in the industrial and commercial activity in the area. The proposed project would be relatively small and would take place at a relatively remote location.

Additional facilities (compressor stations, gas plants, etc.) could locate in the area to withdraw natural gas from the nearby area and/or to separate the components of natural gas. However, any future facility would be required to apply for and receive the appropriate permits from the appropriate regulating authority. Environmental impacts from any future facilities would be assessed through the appropriate permitting process. Overall, any impacts to the local industrial and commercial activity of the area would be minor.

K. Locally Adopted Environmental Plans and Goals

The Department is unaware of any locally adopted environmental plans or goals. The permit would ensure compliance with state standards and goals. The state standards would protect the proposed site and the environment surrounding the site.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this project would result in minor impacts to the economic and social aspects of the human environment in the immediate area. Due to the relatively small size of the project, the industrial production, employment, and tax revenue (etc.) impacts resulting from the proposed project would be minor. In addition, the Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in Permit #2843-04.

Additional facilities (compressor stations, gas plants, etc.) could locate in the area to withdraw natural gas from the nearby area and/or to separate the components of natural gas. However, any future facility would be required to apply for and receive the appropriate permits from the appropriate regulating authority. Environmental impacts from any future facilities would be assessed through the appropriate permitting process.

Recommendation: No Environmental Impact Statement (EIS) is required.

The current permitting action is for the addition of a compressor engine at an existing natural gas compressor station. Permit #2843-04 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: Julie Merkel
Date: August 8, 2008