Air Quality Permit

Issued To:	Fulton Fuel Company Compression –Dehydration Plant for a Gas Storage Project 127 Main Street Shelby, MT 59474	Permit #3085-00 Application Complete: 02/04/00 Preliminary Determination: 02/24/00 Department Decision: 03/13/00 Permit Final: 03/29/00 AFS Number: 101-0021

An air quality permit, with conditions, is hereby granted to Fulton Fuel Company Compression – Dehydration Plant for a Gas Storage Project - compressor station, hereinafter referred to as Fulton, pursuant to Sections 75-2-204 and 211, MCA, as amended, and Administrative Rules of Montana (ARM) 17.8.701, et seq., as amended, for the following:

Section I: Permitted Facilities

The Fulton compressor station is located near Whitlash, Montana, approximately 2.5 miles south of the Alberta, Canada/Montana, U.S.A. border. The legal description of the site location is the NE¼ of the NE¼ of the SE¼ of Section 16, Township 37N, Range 3E, in Toole County, Montana. The new compressor station includes three (3) 2225 Hp Caterpillar G3608 gas compressor engines (CAT G3608 gas engines #1, #2, and #3). A complete equipment list is contained in Section I.A of the permit analysis.

SECTION II: Limitations and Conditions

A. Emission Limitations and Control Requirements

1. Emissions from each of the 2225 Hp CAT G3608 gas compressor engines #1, #2, and #3 shall be controlled with the use of a lean-burn engine provided by the manufacturer (Caterpillar). Emissions from each unit shall not exceed the following (ARM 17.8.715):

NOx	8.83 lbs/hr
CO	9.32 lbs/hr
VOC	4.91 lbs/hr

2. Each of the three (3) 2225 Hp CAT G3608 gas compressor engines shall not exceed 6900 hours of operation during any rolling twelve-month time period (ARM 17.8.710).

3. Fulton 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 twenty percent (20%) or greater averaged over six (6) consecutive minutes (ARM 17.8.304).

4. Fulton shall not cause or authorize emissions to be discharged into the atmosphere from haul roads, access roads, parking lots, or the general plant property without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

5. Fulton shall treat all unpaved portions of the access roads, parking lots, and 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 17.8.710).

6. Fulton shall direct emissions, from the two (2) Presson Manufacturing GR-1500 glycol re-boilers, to a drip tank in order to capture liquids. The drip tank shall be equipped with a vent line and shall have a minimum height of 10 feet above ground (ARM 17.8.710).

B. Testing Requirements

1. Each of the three (3) 2225 Hp CAT G3608 gas compressor engines shall be tested for NOx and CO, concurrently, and compliance demonstrated with the emission limitations contained in Section II.A.1 within 180 days of initial start up of each engine and every four years after the initial test. Testing shall continue on an every-four-year basis or another testing/monitoring schedule as may be approved by the Department of Environmental Quality (department) (ARM 17.8.105 and 17.8.710).

2. All source tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

3. The department may require further testing (ARM 17.8.105).

C. Notification

Fulton shall provide the department with the actual start-up date of each of the three (3) 2225 Hp CAT G3608 gas compressor engines within 15 days after the initial start-up date.

D. Operational Reporting Requirements

1. Fulton 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 Section I of 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 units as required by the department.

In addition, Fulton shall submit the following information annually to the department by March 1 of each year. This information is required for the annual emission inventory, as well as to verify compliance with permit conditions (ARM 17.8.505).

a. Fuel consumption for each engine at the facility.

b. Hours of operation for each engine at the facility.

2. Fulton shall notify the department of any construction or improvement project conducted pursuant to ARM 17.8.705(1)(r) 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 emissions 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 17.8.705(1)(r)(iv) (ARM 17.8.705).

3. The records compiled in accordance with this permit shall be maintained by Fulton as a permanent business record for at least five (5) years following the date of the measurement, shall be submitted to the department upon request, and shall be available at the plant site for inspection by the department (ARM 17.8.710).

4. Fulton shall document, by month, the total hours of operation for each of the three (3) CAT G3608 gas compressor engines. By the 25th of each month Fulton shall total the hours of operation for each of the engines during the previous twelve months to verify compliance with the limitation in Section II.A.2. A written report of the compliance verification shall be submitted along with the annual emissions inventory (ARM 17.8.710).

5. Fulton shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted with the annual emission inventory information.

Section III. General Conditions

A. Inspection - The recipient shall allow the department's representatives access to the source at all reasonable times for the purpose of making inspections, 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 all the terms, conditions, and matters stated herein shall be deemed accepted, if the recipient fails to appeal as indicated below.

C. Compliance with Statutes and Regulations - Nothing in this subchapter shall be construed as relieving any permittee of the responsibility for complying with any applicable federal or Montana statutes, rule or standard except as specifically provided in ARM 17.8.701, *et seq.* (ARM 17.8.717).

D. Enforcement - Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement 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 fifteen (15) days after the department renders its decision, upon affidavit setting forth the grounds therefor, a hearing before the Board of Environmental Review. A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The department's decision on the application is not final unless fifteen (15) days have elapsed and there is no request for a hearing under this section. The filing of a request for a hearing postpones the effective date of

the department's decision until the conclusion of the hearing and issuance of a final decision by the Board.

F. Permit Inspection - As required by ARM 17.8.716, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by department personnel at the location of the permitted source.

G. Construction Commencement - Construction must begin within three years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked.

H. Permit Fees - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, the continuing validity of this permit is conditional upon the payment by the permittee of an annual operation fee, as required by that Section and rules adopted thereunder by the Board of Environmental Review.

Permit Analysis
Fulton Fuel Company Compression – Dehydration Plant for a Gas Storage Project
Permit #3085-00

I. Introduction

On February 4, 2000, Fulton submitted a complete air quality pre-construction permit application for a compressor station and associated equipment. The compressor station will be located near Whitlash, Montana, approximately 2.5 miles south of the Alberta, Canada/Montana, U.S.A. border. The legal description of the site location is the NE¼ of the NE¼ of the SE¼ of Section 16, Township 37N, Range 3E, in Toole County, Montana. The application has been assigned permit **#3085-00**.

A. Permitted Equipment and Facilities

The Fulton compressor station incorporates three (3) lean-burn 2225 Hp Caterpillar G3608 gas compressor engines (CAT G3608 gas engines #1, #2, and #3); two (2) Presson Manufacturing GR-1500 Glycol Re-boilers (1.5 MMBtu/hr); a Penfabco Dowtherm Heat Transfer Fluid Heater (1.2 MMBtu/hr); a Cummins model GTA-855A natural gas engine generator set (200 kw); an Isuzu model 4JB1PV diesel engine generator set (25 kw); a shop fabricated 8" x 40' high vent stack; two (2) GLM Tank 9'6" diameter x 8' high 100-bbl slop tanks; a Dual Tank Corporation 7' diameter x 6'8" high BTEX 50-bbl condenser tank; and associated equipment.

B. Source Description

The plant will include an assemblage of buildings, major equipment, controls and auxiliaries to implement the required processing for the natural gas stream for storage in a reservoir and its subsequent withdrawal from storage and processing to meet sales gas specifications.

Incoming natural gas for storage in the reservoir is metered and heated through a shell and tube heat exchanger (dowtherm heat transfer fluid heater) prior to injection into existing gas wells for storage in the depleted reservoir. Following the storage process, the gas is withdrawn through gas wells and separation of liquids (i.e., water and traces of hydrocarbons with some sand particles) is accomplished through filters and gravity separators. The main gas stream is metered and compressed through reciprocating compressors driven by the CAT G3608 gas engines. The compressor discharge pressure is approximately 1000 psig, which is sufficient to overcome the pressure drop through the piping and subsequent process and sales line back pressure.

Dehydration of the gas, to minimize the connate moisture content of the gas, is accomplished through two (2) glycol dessicant systems regenerated using two (2) 1.5 MMBtu/hr glycol re-boilers. The dehydrated gas is metered and sent to the sales line.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations which apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) Title

17, Chapter 8 - AIR QUALITY and are available upon request from the department. Upon request, the department will provide references for the location of any applicable rule or regulation and provide copies where appropriate.

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

1. 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. The testing for this facility shall occur according to Section II.B of the permit. The department may require further testing.

2. 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*., MCA.

   Fulton shall comply with all requirements contained in the Montana Source Testing 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 Testing Protocol and Procedures Manual is available from the department upon request.

3. ARM 17.8.110, Malfunctions. The department must be notified promptly by phone 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 four hours.

4. ARM 17.8.111, Circumvention. No person shall cause or permit the installation or use of any device or any means which, without resulting in a reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation. No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

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

1. ARM 17.8.204, Ambient Air Monitoring, & ARM 17.8.206, Methods and Data.
2. ARM 17.8.211, Ambient Air Quality Standards for Nitrogen Dioxide.
3. ARM 17.8.212, Ambient Air Quality Standards for Carbon Monoxide.

Fulton must maintain compliance with the applicable ambient air quality standards.

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

1. ARM 17.8.304, Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over six consecutive minutes.

2. ARM 17.8.308, Particulate Matter, Airborne. Under this section, Fulton 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 section 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 section.

4. ARM 17.8.310, Particulate Matter, Industrial Process. This section 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 section.

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. Fulton shall 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. Fulton submitted the proper application fee with the current air quality permit application.

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. This operation fee is based on the actual or estimated 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, as 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 which pro-rate 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 17.8.704, General Procedures for Air Quality Preconstruction Permitting. An air quality preconstruction permit shall contain requirements and conditions applicable to both construction and subsequent use.

2. ARM 17.8.705, When Permit Required--Exclusions. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter, or use an air contaminant source which has the potential to emit more than 25 tons per year of any pollutant. Fulton has the potential to emit more than 25 tons per year of NOx, VOC's and CO; therefore, a permit is required.

3. ARM 17.8.706, New or Altered Sources and Stacks, Permit Application Requirements. This rule requires that an application for an air quality permit be

submitted for a new or altered source or stack. Fulton has submitted an application for the current permit action.

4. ARM 17.8.707, Waivers. ARM 17.8.706 requires the permit application to be submitted 180 days before construction begins. This section allows the department to waive this time limit. The department hereby waives this limit.

5. ARM 17.8.710, Conditions for Issuance of Permit. This rule requires that the source demonstrate compliance with applicable rules and standards before a permit can be issued. Also, a permit may be issued with such conditions as are necessary to assure compliance with all applicable rules and standards. Fulton has demonstrated compliance with applicable rules and standards as required for permit issuance.

6. ARM 17.8.715, Emission Control Requirements. Fulton is required to install on a new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that a Best Available Control Technology (BACT) shall be utilized. A BACT review was conducted for the current permit action and is discussed in Section III of the permit analysis.

7. ARM 17.8.716, 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.

8. ARM 17.8.717, Compliance with Other Statutes and Rules. This rule states that nothing in the permit shall be construed as relieving Fulton of the responsibility for complying with any applicable federal and Montana statutes, rules and standards, except as specifically provided in ARM 17.8.101, *et seq*.

9. ARM 17.8.720, Public Review of Permit Applications. This rule requires that Fulton notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Fulton submitted an affidavit of publication from the *Shelby Promoter* for the current permit application.

10. ARM 17.8.731, 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 one year after the permit is issued.

11. ARM 17.8.733, Modification of Permit. An air quality permit may be modified for changes in any applicable rules and standards adopted by the Board of Environmental Review or changed conditions of operation at a source or stack which do not result in an increase in emissions because of those changed conditions. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.

F. 17.8, Sub-Chapter 8, Prevention of Significant Deterioration (PSD), including, but not limited to:

1. ARM 17.8.801, Definitions. This rule is a list of applicable definitions used in this sub-chapter.

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

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

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

1. ARM 17.8.1201, Definitions. (23) Major Source under Section 7412 of the Federal Clean Air Act (FCAA) is defined as any stationary source having:

   a. Potential To Emit (PTE) > 10 tons/year of any one hazardous air pollutant (HAP), or PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the department may establish by rule.

   b. PTE > 100 tons/year of any pollutant.

   c. Sources with the PTE > 70 tons/year of PM-10 in a serious PM-10 non-attainment area.

2. ARM 17.8.1204, Air Quality Operating Permit Program Applicability.
   Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3085-00 for Fulton the following conclusions were made:

   a. The facility's PTE is less than 100 tons/year for all criteria pollutants.

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

   c. This source is not located in a serious PM-10 non-attainment area.

   d. This facility is not subject to any current NESHAP standards.

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

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

   g. (2) The department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable

limitations which limit that source's potential to emit...

i. In applying for an exemption under this section the owner or operator of the source shall certify to the department that the source's potential to emit..., does not require the source to obtain an air quality operating permit.

ii. Any source that obtains a federally enforceable limit on potential to emit shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

Fulton (permit #3085-00) has taken federally enforceable permit limits to keep potential emissions below major source permitting thresholds. Therefore, the facility is not a major source and, thus, a Title V operating permit is not required.

The department has determined that the annual reporting requirements contained in the permit are sufficient to satisfy this requirement.

3. ARM 17.8.1207, Certification of Truth, Accuracy, and Completeness

The compliance certification submittal required by 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. BACT Determination

A Best Available Control Technology (BACT) determination is required for each new or altered source. Fulton 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 for controlling NOx, CO and VOC emissions from the 2225 Hp compressor engines (CAT G3608 gas engines #1, #2 and #3) was submitted by Fulton and has been reviewed by the department. The department has reviewed previous BACT determinations for compressor engines before making the following BACT determination. The BACT analysis addressed four alternatives for controlling NOx, CO and VOC emissions.

A. Non-Selective Catalytic Reduction Unit with an Air/Fuel Ratio Controller

An NSCR unit controls NOx emissions by using the CO and the residual hydrocarbons in the exhaust of a rich-burn engine as a reducing agent for NOx. In the presence of oxygen, the hydrocarbons will be oxidized instead of reacting with NOx. As the excess hydrocarbon and NOx pass over a honeycomb or monolithic catalyst (usually a combination of noble metals such as platinum, palladium, and/or rhodium) the reactants are reduced to N_2, H_2O, and CO_2. The noble metal catalyst usually operates between 800^o and $1{,}200^o$ F; therefore, the unit would normally be mounted near the engine exhaust to maintain a high enough temperature to allow the various reactions to occur. In order to achieve maximum performance (80 to 90% NOx reduction) the engine needs to burn a rich-fuel mixture -- causing the engine to run less efficiently.

In order to provide for the most effective use of the catalyst, it is necessary to install an

electronic AFR controller. This device maintains the proper air/fuel ratio, which will optimize the degree of reducing agents to provide maximum emission reduction while minimizing agents that can poison the catalyst.

Because Fulton has proposed the use of a clean-burn (lean-burn) engine provided by the manufacturer of the engine (Caterpillar) and because the department recognizes the clean-burn (lean-burn) engine as an effective means of NOx, VOC, and CO emissions control, the department does not consider NSCR/AFR control BACT for this source.

B. Clean-Burn Engine

The clean-burn (a.k.a., “lean-burn” or “lean-emissions”) engine uses a precombustion chamber to enclose a rich mixture of air and fuel -- the mixture is then ignited in this chamber. The resulting ignition front then fires into the larger main cylinder, which contains a much leaner fuel mixture. Staging the combustion and burning a leaner fuel mixture keeps peak flame temperatures lower. Because the combustion temperature is cooler, the NOx concentration in the exhaust gas stream is lower; however, excess air in the fuel mixture can produce increased CO emissions.

Because Fulton has proposed the use of a clean-burn (lean-burn) engine provided by the manufacturer of the engine (Caterpillar) and because the department recognizes the clean-burn (lean-burn) engine as an effective means of NOx and CO emissions control the department will consider the clean-burn (lean-burn) engine BACT for this source.

C. NOx Control at the Crossover Point using an Air/Fuel Ratio Controller

In this process, the proper air/fuel ratio is obtained by adjusting the engine to operate at the crossover point -- where NOx and CO emissions are equal. At the crossover point, the engine operates neither too lean nor too rich. Excess hydrocarbon in a rich-fuel mixture causes incomplete combustion, thus lowering the exhaust temperature to a point where NOx formation is less likely to occur, but CO formation is higher. Combustion of a lean-fuel mixture occurs at higher temperatures where NOx formation is greater and CO formation decreases. Operating at the crossover point can keep both NOx and CO emissions at reasonable levels for lower horsepower engines.

Because Fulton has proposed the use of a clean-burn (lean-burn) engine provided by the manufacturer of the engine (Caterpillar) and because the department recognizes the clean-burn (lean-engine) as an effective means of NOx and CO emissions control the department does not consider NOx control at the crossover point using an AFR controller BACT for this source. Further, the size of the proposed engines make this option less capable of adequately controlling NOx and CO emissions.

D. No Additional Controls

This practice has no energy or economic impacts on Fulton, but it does have negative impacts on the air quality due to the actual and potential emissions from the sources. Therefore, the department has determined that this option will not constitute BACT in this case.

The control options that have been selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

Emission Inventory--Permit #3085-00

	Emissions in Tons/Year				
Source	PM-10	NOx	CO	VOC	SOx
CAT G3608 Gas Engine #1 (2225 HP)	0.523	30.467	32.160	16.926	0.031
CAT G3408 Gas Engine #2 (2225 HP)	0.523	30.467	32.160	16.926	0.031
CAT G3408 Gas Engine #3 (2225 HP)	0.523	30.467	32.160	16.926	0.032
Diesel Generator Set (25 kw)	0.323	4.552	0.981	0.363	0.301
Natural Gas Generator Set (200 kw)	0.0002	0.003	0.003	0.0002	0.00002
Glycol Re-Boiler #1 (1.5 MMBtu/hr)	0.050	0.657	0.552	0.036	0.004
Glycol Re-Boiler #2 (1.5 MMBtu/hr)	0.050	0.657	0.552	0.036	0.004
Dow-Therm Heat Transfer Heater (1.2 MMBtu/hr)	0.040	0.526	0.442	0.029	0.003
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Totals	2.031	97.796	99.008	51.242	0.406

- A Complete Emission Inventory for permit #3085-00 is on file with the department.

V. Ambient Air Quality Impacts

The plant site is located near Whitlash, Montana, approximately 2.5 miles south of the Alberta, Canada/Montana, U.S.A. border. The legal description of the site location is the NE¼ of the NE¼ of the SE¼ of Section 16, Township 37N, Range 3E, in Toole County, Montana. The air quality of this area is classified as either Better than National Standards or unclassifiable/attainment of the National Ambient Air Quality Standards (NAAQS) for criteria pollutants. In the view of the department, the amount of controlled emissions from this facility will not cause an exceedance of any ambient air quality standard.

VI. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the department has conducted a private property taking and damaging assessment and has determined there are no taking or damaging implications.

VII. 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 and Waste Management Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued For: Fulton Fuel Company Compression –Dehydration plant for a Gas Storage Project
127 Main Street
Shelby, MT 59474

Air Quality Permit Number: 3085-00

Preliminary Determination Issued: 02/24/00
Department Decision Issued: 03/13/00
Final Permit Issued: 03/29/00

Montana Environmental Policy Act (MEPA) Compliance: An environmental assessment, required by the MEPA, was completed for this project as follows.

Legal Description of Site: The Fulton Compressor Station is located in the NE¼ of the NE¼ of the SE¼ of Section 16, Township 37N, Range 3E, in Toole County, Montana.

Description of Project: This permit is for the construction and operation of a natural gas compressor station that supplies pressure to pipelines, which distribute gas to markets in Montana. The current project involves the installation of three (3) 2225-bhp CAT G3608 gas compressor engines, and associated equipment, at a new facility.

Benefits and Purpose of Proposal: Increased business and revenue for the company. Supply natural gas to customers. This facility is designed to compress and transport pipeline quality natural gas. Emissions from the facility's sources will be kept at reasonable limits by installation and operation of BACT controls and incorporation of emission limits.

Description and analysis of reasonable alternatives whenever alternatives are reasonably available and prudent to consider: No reasonable alternatives available.

A listing and appropriate evaluation of mitigation, stipulations and other controls enforceable by the agency or another government agency: A list of enforceable conditions, including a best available control technology analysis, are contained in permit #3085-00.

Description and analysis of regulatory impacts on private property rights: The department has considered alternatives to the conditions imposed in this permit as part of the permit development. The department has 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.

Potential Impact on Physical Environment							
		Major	Moderate	Minor	None	Unknown	Comments Included
1	Terrestrial and Aquatic Life and Habitats			X			yes
2	Water Quality, Quantity and Distribution				X		yes
3	Geology and Soil Quality, Stability and Moisture			X			yes
4	Vegetation Cover, Quantity and Quality			X			yes
5	Aesthetics			X			yes
6	Air Quality			X			yes
7	Unique Endangered, Fragile or Limited Environmental Resource			X			yes
8	Demands on Environmental Resource of Water, Air and Energy			X			yes
9	Historical and Archaeological Sites				X		yes
10	Cumulative and Secondary Impacts			X			yes

Potential Impact on Human Environment							
		Major	Moderate	Minor	None	Unknown	Comments Included
1	Social Structures and Mores				X		yes
2	Cultural Uniqueness and Diversity				X		yes
3	Local and State Tax Base and Tax Revenue			X			yes
4	Agricultural or Industrial Production			X			yes
5	Human Health			X			yes
6	Access to and Quality of Recreational and Wilderness Activities			X			yes
7	Quantity and Distribution of Employment				X		yes
8	Distribution of Population				X		yes
9	Demands for Government Services			X			yes
10	Industrial and Commercial Activity			X			yes
11	Locally Adopted Environmental Plans and Goals				X		yes
12	Cumulative and Secondary Impacts			X			yes

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

1. Terrestrial and Aquatic Life and Habitats

There will be minor impacts to the terrestrial and aquatic life and habitats in the immediate area of the proposed project. However, the facility is not expected to have an adverse impact on any of the terrestrial life or habitats. The area around the site is expected to maintain the same terrestrial life it supported before the project. No impacts are expected on the aquatic life and habitats in the area.

2. Water Quality, Quantity, and Distribution

Water may be used as a dust suppressant, as necessary to maintain compliance with the opacity requirements. If water is used as a dust suppressant, only small quantities will be required. No surface water runoff problems will result from using water as a dust suppressant. No further water quality, quantity and distribution impacts are expected as a result of this project. Any accidental spills or leaks from equipment will be handled according to the appropriate environmental regulations in an effort to minimize any potential adverse impact on the immediate and surrounding area.

3. Geology and Soil Quality, Stability, and Moisture

There will be minor impacts to the geology and soil quality, stability and moisture in the area as a result of the proposed facility. The topsoil will be moved around to provide level surfaces to house the structures and road necessary for the compressor station, but only to a minor extent. The end result will be that only a small portion of the site will be disturbed.

4. Vegetation Cover, Quantity, and Quality

There will be minor impacts to the vegetation cover quantity and quality. Several structures and a road are required for proper operation of the compressor station. The vegetation cover quantity and quality will be impacted for the compressor station, but only to a minor extent.

5. Aesthetics

The proposed project will create a minor negative affect on the aesthetics of the area. The area will not look exactly the same as it did prior to the addition of the compressor station. Noise from the facility will be minimized by enclosing the compressor engines within buildings.

6. Air Quality

The air quality in the area will be impacted by the addition of the compressor station to the area. By placing BACT controls on the compressor engines, the impacts to the air quality will be minimized. The BACT control chosen for each of the 2225-Hp compressor engines was a lean burn engine provided by the manufacturer (Caterpillar).

7. Unique, Endangered, Fragile or Limited Environmental Resource

The department has contacted the Montana Natural Heritage Program (MNHP) in an effort to identify any species of special concern associated with the proposed site location. Search results have concluded there are no such environmental resources in the area. Area in this

case will be defined by the township and range of the proposed site, with an additional one-mile buffer.

8. Demands on Environmental Resource of Water, Air, and Energy

The current project will place additional demands on the air and energy resources in the area. More than likely, the energy demands of running the compressor station will be satisfied by using the natural gas from the field. As part of compressing the gas taken from the field, the facility will emit pollutants to the surrounding air. As a result, the surrounding air quality will be minimally impacted. However, physical controls on the equipment and permit conditions will minimize the impacts. Further, no impact is expected on local water resources.

9. Historical and Archaeological sites

The department is not aware of any historic, cultural, or archaeological sites located on or near the proposed operating site. If the construction and operations will take place in an area with no previous industrial disturbance it is recommended that the owner/operator conduct a reconnaissance survey prior to any initial ground disturbance at the site to ensure that the operation will not disturb any historical, cultural, or archaeological sites.

10. Cumulative and Secondary Impacts

Overall, the cumulative and secondary impacts from this project will result in minor impacts to the physical and human environment in the immediate area. Air pollution from the facility will be controlled by department-determined BACT and conditions in permit #3085-00. The department is not aware of any separate sources of emissions in the proposed area of operations or any other source of emissions related to the proposed project. Further, the department believes that this facility can be expected to operate in compliance with all applicable rules and regulations as outlined in permit #3085-00 and otherwise.

POTENTIAL IMPACT ON HUMAN ENVIRONMENT

1. Social Structures and Mores

There will be no change in social structures or mores as a result of the addition of the Fulton Facility.

2. Cultural Uniqueness and Diversity

There will be no change to the cultural uniqueness and diversity of the area as a result of the addition of the Fulton Facility.

3. Local and State Tax Base and Tax Revenue

The compressor operations will have little, if any, affects on the local and state tax base and tax revenue.

4. Agricultural or Industrial Production

The compressor operations will take place in an area suitable for agricultural grazing or

production. However, the proposed project is small enough that any potential impact is minimal. The proposed operations are small by industrial standards and will, therefore, have only a minor impact on local industrial production.

5. Human Health

Permit #3085-00 incorporates conditions to ensure that the compressor station will be operated in compliance with all applicable rules and standards. These rules and standards are designed to be protective of human health.

6. Access to and Quality of Recreational and Wilderness Activities

The proposed operations will not affect any access to recreational and wilderness activities. However, minor affects to the quality of recreational and wilderness activities may be created by the noise from the site.

7. Quantity and Distribution of Employment

Activities from the proposed operations will not affect the quantity and distribution of employment in the area. Fulton will utilize a few existing company employees for project operations.

8. Distribution of Population

The proposed operations will not disrupt the normal population distribution in the area.

9. Demands of Government Services

Minor increases will be seen in traffic on existing roads in the area as a result of the compressor operations. In addition, government services will be required for acquiring the appropriate permits from government agencies. Demands for government services will be minimal.

10. Industrial and Commercial Activity

Only minor impacts to industrial or commercial activity are expected as a result of establishing the compressor station in the area. Commercial activity will remain unaffected by this project.

11. Locally Adopted Environmental Plans and Goals

The department is not aware of any locally adopted environmental plans or goals. The state standards will protect the proposed site and the environment surrounding the site.

12. Cumulative and Secondary Impacts

Overall, the cumulative and secondary impacts from this project will result in minor impacts to the physical and human environment in the immediate area. Air pollution from the facility will be controlled by department-determined BACT and conditions in permit #3085-00. The department is not aware of any separate sources of emissions in the proposed area of

operations or any other source of emissions related to the proposed project. Further, the department believes that this facility can be expected to operate in compliance with all applicable rules and regulations as outlined in permit #3085-00 and otherwise.

Recommendation: No EIS is required.

If an EIS is not required, explain why the EA is an appropriate level of analysis: The limitations in permit #3085-00 will restrict emissions from the Fulton facility. By applying the conditions that were derived through the BACT determination, the emissions from the facility will be controlled and the effects to the surrounding air quality will be minimal. The results of the EA that was performed for the Fulton facility reflect the minimal impacts that will result from the addition of the compressor station. For these reasons, the EA is the appropriate level of analysis and an EIS is not required.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Natural Heritage Program (NRIS), Montana Historical Society.

Individuals or groups contributing to this EA: Department of Environmental Quality, Permitting and Compliance Division, Montana Natural Heritage Program (NRIS), Montana Historical Society.

EA prepared by: M. Eric Merchant, MPH
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