



Montana Department of  
**ENVIRONMENTAL QUALITY**

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June 3, 2013

Jill Linn  
WBI Energy Transmission, Inc.  
Saco Compressor Station  
2100 Montana Avenue  
Glendive, MT 59330

Dear Miss Linn:

Montana Air Quality Permit #2822-06 is deemed final as of June 1, 2013, by the Department of Environmental Quality (Department). This permit is for a natural gas compressor station plant. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

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

Craig Henrikson, P.E.  
Environmental Engineer  
Air Resources Management Bureau  
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JM:CH  
Enclosure

Montana Department of Environmental Quality  
Permitting and Compliance Division

Montana Air Quality Permit #2822-06

WBI Energy Transmission, Inc.  
Saco Compressor Station  
2100 Montana Avenue  
Glendive, MT 59330

June 1, 2013



# MONTANA AIR QUALITY PERMIT

Issued to: WBI Energy Transmission, Inc. MAQP: #2822-06  
Saco Compressor Station Application Complete: April 3, 2013  
2010 Montana Avenue Preliminary Determination: April 30, 2013  
Glendive, MT 59330 Department's Decision Issued: May 16, 2013  
Permit Final: June 1, 2013  
AFS #: 105-0002

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to WBI Energy Transmission, Inc. (WBI), pursuant to Sections 75-2-204 and 211 of the Montana Codes 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

WBI owns and operates a natural gas compressor station and associated equipment located in the NE¼ of the SW¼ of Section 13, Township 31 North, Range 34 East, near Saco, in Valley County, Montana. The facility is known as the Saco Compressor Station.

### B. Current Permit Action

On April 3, 2013, the Montana Department of Environmental Quality (Department) received a request from WBI to replace a dry bed dehydration system with a tri-ethylene glycol (TEG) dehydration unit. The new emitting units associated with the equipment include a 0.75 MMBtu/hr reboiler and a TEG dehydration still vent and flash tank being relocated from the South Baker Compressor station. The permit language allows concurrent operation for a short period of time until the relocated equipment has been successfully started up.

## Section II: Conditions and Limitations

### A. Emission Limitations

1. The 660-horsepower (hp) Ingersoll-Rand compressor engine (Unit #7) shall be operated with an electronic air-to-fuel ratio (AFR) controller and a Non-Selective Catalytic Reduction (NSCR) unit. Emissions from Unit #7 shall not exceed the following (ARM 17.8.749):

Oxides of Nitrogen (NO <sub>x</sub> <sup>1</sup> ):	4.60 pounds/hour (lb/hr)
Carbon Monoxide (CO):	17.50 lb/hr

2. The 600-hp Ajax compressor engine (Unit #8) shall be operated with an Ajax Low Emission Conversion Kit. Emissions from Unit #8 shall not exceed the following (ARM 17.8.752):

NO <sub>x</sub> <sup>1</sup>	8.60 lb/hr
CO	3.97 lb/hr
Volatile Organic Compounds (VOC)	6.62 lb/hr

3. The 600-hp Ajax DPC-600 compressor engine (Unit #9) shall be operated with an Ajax Low Emission Conversion Kit. Emissions from Unit #9 shall not exceed the following (ARM 17.8.752):

NO <sub>x</sub> <sup>1</sup>	8.60 lb/hr
CO	3.97 lb/hr
VOC	6.62 lb/hr

4. The 600-hp Ajax compressor engine (Unit #10) shall be operated with an Ajax Low Emission Conversion Kit. Emissions from Unit #10 shall not exceed the following (ARM 17.8.752):

NO <sub>x</sub>	8.60 lb/hr
CO	3.97 lb/hr
VOC	6.62 lb/hr

5. The total maximum rated design capacity of the Saco Gen #1 electric generator shall not exceed 265 horsepower (hp) (175 kilowatt (kW)) (ARM 17.8.749).
6. WBI 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).
7. WBI shall not cause or authorize the use of any street, road, parking lot, or the general plant property without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
8. WBI 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.7 (ARM 17.8.749).
9. WBI shall operate all equipment to provide the maximum air pollution control for which it was designed (ARM 17.8.749).
10. WBI shall comply with all applicable standards and limitations, and the reporting, record keeping, and notification requirements contained in 40 CFR 60, Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* and 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable natural gas engine (ARM 17.8.340 and 40 CFR 60, Subpart JJJJ and ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).
11. WBI is allowed to operate both the existing dry bed dehydrator and relocated TEG dehydration system concurrently for 180 days following the initial delivery of the TEG dehydration system to the site. This 180 day period shall provide the installation, check-out, and debugging time necessary to reliably put the TEG dehydration system into operation. Once the TEG dehydration system has replaced the dry bed dehydrator, WBI shall notify the Department within 30 days as to the date the TEG dehydration system showed up on site and the date the dry bed dehydrator was replaced in full operation by the TEG dehydration system (ARM 17.8.749).
12. WBI shall utilize only pipeline quality natural gas in the TEG Dehydration Unit Reboiler (ARM 17.8.752).

B. Testing Requirements

1. All compliance source tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
2. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. WBI 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. WBI shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include *the addition of a new emissions unit*, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted to the Department, in writing, 10 days prior to start up or use of the 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 WBI as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
4. Once the TEG dehydration system has replaced the dry bed dehydrator, WBI shall notify the Department within 30 days as to the date the TEG dehydration system showed up on site and the date the dry bed dehydrator was replaced in full operation by the TEG dehydration system (ARM 17.8.749).

D. Monitoring and Recordkeeping Requirements

1. WBI shall operate and maintain the NSCR unit and AFR controller on Unit #7, within the parameters recommended by the equipment manufacturer (ARM 17.8.749).
2. WBI shall, at a minimum, inspect on the compressor engines: the AFR controllers, the NSCR units, and the catalyst in the unit once every 6 months, as well as after every upset condition that could have caused damage to the control equipment. WBI shall conduct any subsequent maintenance to ensure that the control equipment and the catalyst will continue to perform as designed. If the catalyst fails to promote the chemical reactions required to reduce the NO<sub>x</sub> and CO emissions to the limits stated in Section II.A, WBI shall replace the catalyst with a new catalyst capable of achieving these limits (ARM 17.8.749).

3. WBI shall keep a record of any and all inspections and maintenance conducted on the NSCR units and AFR controllers on the compressor engines (ARM 17.8.749).
4. WBI shall monitor and record the glycol flow rate on a monthly basis to prevent excessive recycle glycol flow (ARM 17.8.752).
5. WBI shall establish the glycol flow rate required to achieve the target moisture content in the natural gas product stream and demonstrate through standard operating procedures, a logbook or other site documentation that when the flowrate becomes excessively high, corrective measures are taken to return to the flowrate closer to the target flow (ARM 17.8.752).

### Section III: General Conditions

- A. Inspection - WBI 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 WBI fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving WBI 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 permitted source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by WBI may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit (MAQP) Analysis  
WBI Energy Transmission, Inc.  
MAQP #2822-06

I. Introduction/Process Description

A. Permitted Equipment

WBI Energy Transmission, Inc. (WBI) owns and operates a natural gas compressor station and associated equipment located in the NE¼ of the SW¼ of Section 13, Township 31 North, Range 34 East, near Saco, in Valley County Montana. The facility is known as the Saco Compressor Station. Permitted equipment includes, but is not limited to, the following:

<u>Unit #</u>	<u>Year Inst.</u>	<u>Make</u>	<u>Model</u>	<u>Size</u>	<u>Source</u>
7	1959	Ingersoll-Rand	62 KVG	660 hp <sup>a</sup>	04
8	1979	Ajax	DPC-600	600 hp	05
9	1979	Ajax	DPC-600	600 hp	06
10	1981	Ajax	DPC-600	600 hp	07
Furnace	1947	Petro-Chem	regeneration	2.4 MMBtu/hr <sup>b</sup>	09
Saco Gen #1	2005	Waukesha	F18GL	265 hp (175 kW) <sup>c</sup>	13

<sup>a</sup> Horsepower (hp)

<sup>b</sup> million British thermal unit per hour (MMBtu/hr)

<sup>c</sup> Kilowatt (kW)

Small natural gas-fired building, garage, office, and water heaters include the following:

<u>Unit Type</u>	<u>Year Inst.</u>	<u>Make</u>	<u>Model</u>	<u>Size</u>
Plant boiler #1	1987	Weil-McLain	LGB-6	650,000 Btu/hr <sup>d</sup>
Plant boiler #2	1987	Weil-McLain	LGB-6	650,000 Btu/hr
Water heater	1982	AO Smith	KGA 40	40,000 Btu/hr
Aux. bldg. heater	1983	Modine	PA 200 AB	200,000 Btu/hr
Aux. garage heater	N/A	Janitrol	68-130-81	30,000 Btu/hr
Shop heater	1980	N/A	N/A	250,000 Btu/hr
Meter house heater	N/A	Breust	N/A	10,000 Btu/hr

<sup>d</sup>Heaters do not include process heaters or boilers.

<sup>d</sup>British thermal unit per hr (Btu/hr)

New Equipment Included in #2822-06

Tri-ethylene Glycol (TEG) Dehydration System including:

0.75 MMBtu/hr TEG Dehydration Unit Reboiler

TEG Dehydration Unit Still Vent

Associated Equipment

B. Source Description

The Saco Compressor Station serves as a natural gas pipeline booster station to transport natural gas gathered in the Bowdoin Field near Saco to storage at the Cabin Creek, Montana storage area and to further sales destinations. This facility was upgraded in order

to handle the increased gas volumes of the Bowdoin area development project. The Saco compressor station is designed to boost a maximum of 32.0 million standard cubic feet per day (MMScfd) of natural gas into the pipeline system and has a current average throughput of approximately 25.0 MMScfd.

B. Permit History

The Saco Compressor Station was originally constructed by WBI's predecessor, the Montana-Dakota Utilities Company (MDU), in 1934 and the emission sources consisted of three 200-horsepower (hp) Ingersoll-Rand Imperial XG compressor engines (Units #1, #2, and #3). Over the period from 1934 to 1959, three 300-hp Ingersoll-Rand 8XVG compressor engines (Units #4, #5, and #6) and a 660-hp Ingersoll-Rand 62 KVG compressor engine (Unit #7) were added to accomplish capacity upgrades. In addition to the compressor engines, several auxiliary engines were installed during the period between 1934 and 1947. These auxiliary units consisted of the following equipment: two 45-hp Waukesha VRG 330 cooling fan drivers; one 38-hp Waukesha BZ for the gas cooler; one 45-hp Waukesha VRG 330 for the dehydration system; three 12-hp Waukesha FC drivers for jacket water pumps; two 12-hp Waukesha FC engines driving air compressors; and a 10-hp standby generator (243-hp total).

On November 20, 1974, MDU filed docket No. CP75-154 with the Federal Energy Regulatory Commission (FERC), which requested authority to construct and operate the additional facility necessary for the transportation of natural gas from the Bowdoin Field, near Saco, Montana to storage at the Cabin Creek, Montana storage area and to further sales destinations. During the period from 1974 to 1977 Kansas-Nebraska Gas, Inc. (K-N) aggressively developed the production capacity of the Bowdoin area. In November 1977, K-N completed construction of an extensive gas-gathering network in the Bowdoin Field. Coincidental to this event, and for the purpose of handling K-N's additional gas volumes, WBI initiated a pipeline capacity upgrade project, which included construction of the Vida Compressor Station and installation of two Ajax DPC-600 compressor engines at the Saco Compressor Station (Units #8 & #9).

WBI was issued a FERC certificate on May 11, 1977, to construct and operate those facilities identified in docket No. CP75-154. The purchase order for Units #8 and #9 was issued on March 31, 1978, with a no-charge cancellation date of August 15, 1978. The actual on-site construction of Units #8 and #9 at the Saco station began on April 1, 1979, and was completed by April 26, 1979.

In 1981, WBI decommissioned the three 200-hp Ingersoll-Rand Imperial XG compressor engines (Units #1, 2, & 3) and replaced their horsepower with a 600-hp Ajax DPC-600 compressor engine (Unit #10). The purchase order for Unit #10 was issued on July 28, 1980, with a no-charge cancellation date of November 1, 1980. The actual installation of Unit #10 was on April 1, 1981, and the project was completed by June 14, 1982. Unit #10 was originally installed with the high air cylinder modification. This engine modification increases the volume of scavenged air during the purge stroke, thus effectively lowering combustion temperatures.

In 1986, WBI replaced the auxiliary drivers at the Saco station (243 hp total) with electric motors. In conjunction with this switch to electric drivers, a 190-hp Waukesha 6-NKRU/F1905G standby generator set was installed.



In June 1992, WBI modified Unit #9, a 600-hp Ajax DPC-600 compressor engine, with the high air cylinder modification. This engine modification lowered the nitrogen oxides (NO<sub>x</sub>) emissions from 15.5 grams per brake horsepower-hour (g/bhp-hr) to 6.5 g/bhp-hr and also resulted in a minor increase in fuel efficiency.

In May 1993, WBI had an emission source test conducted to determine the NO<sub>x</sub> and carbon monoxide (CO) emissions from the 300-hp Ingersoll-Rand 8XVG compressor engine (Unit #4) and the modified 600-hp Ajax DPC-600 compressor engine (Unit #9). The results of the source test for Unit #4, based on averaging the three tests, were 13.29 pounds per hour (lb/hr) or 20.62 g/bhp-hr for NO<sub>x</sub> and 2.79 lb/hr or 4.34 g/bhp-hr for CO. The results of the source test for Unit #4 were inconclusive for NO<sub>x</sub> because of errors in the testing procedures, but were used to help estimate emissions from Units #4, #5 and #6. The results of the source test for Unit #9, based on averaging the three tests, were 2.91 lb/hr or 2.87 g/bhp-hr for NO<sub>x</sub> and 1.05 lb/hr or 1.03 g/bhp-hr for CO.

In addition to the seven compressor engines (Units #4 - #10) and the standby generator, there are eight natural gas-fired boilers/heaters. The boilers/heaters range from 10,000 British thermal units per hour (Btu/hr) to 2.4 million British thermal units per hour (MMBtu/hr) maximum heat input. All of the boilers/heaters were installed at various dates between 1934 and 1987 (Reference Section I.A of this permit analysis). At the time of the initial permit application review; the Saco compressor station had estimated potential NO<sub>x</sub> and CO emissions of 567.3 and 176.90 tons per year (ton/yr), respectively. A Best Available Control Technology (BACT) analysis was conducted as part of the permit review process and, as a result of the Department of Environmental Quality's (Department) BACT determination, the permitted potential emissions would be reduced to 474.60 and 223.06 ton/yr for NO<sub>x</sub> and CO, respectively, by the addition of control equipment and enforceable emission limits.

The Department issued a Department Decision (DD) for a prevention of significant deterioration of air quality (PSD) permit for the WBI Saco compressor station on January 19, 1995. The Environmental Protection Agency (EPA) filed an appeal on February 3, 1995, to challenge the BACT determination made by the Department. EPA cited a need for national uniformity in making such determinations for a PSD permit. A stipulated settlement agreement (stipulation) between the Department, EPA, and WBI was agreed to, which eliminated the issues raised by EPA in the appeal.

The stipulation required WBI to make modifications to the Saco compressor station in order to reduce the facility's potential NO<sub>x</sub> emissions below 250 ton/yr. WBI was required to install and operate air/fuel ratio (AFR) controllers and/or non-selective catalytic reduction (NSCR) units on any or all of Units #4, 5, 6, and 7 in order to keep the combined potential emissions from Units #4, #5, #6, and #7 below 111.0 ton/yr NO<sub>x</sub> and 149.0 ton/yr CO. WBI was also required to install and operate all necessary controls by August 1, 1996. Upon issuance of **MAQP #2822-00**, the Saco compressor station was no longer considered a major stationary source, which removed the facility from the PSD permitting requirements. After the installation of the necessary control equipment, NO<sub>x</sub> and CO emission limits for Units #4, #5, #6, and #7 were to be established in a permit modification. MAQP #2822-00 became final on May 19, 1995.

On February 12, 1996, the Department received a request for a permit modification, with the proposed emission limits for Units #4, #5, #6, and #7. The modification incorporated the emission control requirements and established NO<sub>x</sub> and CO emission limits for Units #4, #5, #6, and #7, as required by Section II.A.6 and II.A.7 of MAQP #2822-00. In addition, the testing, monitoring, and record keeping requirements were updated. **MAQP #2822-01** replaced MAQP #2822-00 on September 1, 1996.

On January 23, 2003, the Department received a letter from WBI dated January 20, 2003. WBI requested the Department to amend MAQP #2822-01 to remove the every 4-year testing requirements from Units #4, #5, #6, #7, #8, #9, and #10 because WBI's Title V Operating Permit #OP2822-00 requires the units to be tested every 6 months.

In addition, on March 14, 2003, the Department received an additional letter from WBI dated March 13, 2003. WBI requested to add a 600-hp Ajax DPC600LE compressor engine (Unit #11) to MAQP #2822-01 according to the provisions of Administrative Rules of Montana (ARM) 17.8.745.

The permit action removed the every 4-year testing requirement for Units #4, #5, #6, #7, #8, #9, and #10 from the permit. Also, the permit action added the 600-hp Ajax compressor engine to the permit according to the provisions of ARM 17.8.745. Emission limits and testing requirements for the 600-hp Ajax compressor engine were incorporated into the permit according to the provisions of ARM 17.8.745(2). Further, the permit format, language, and rule references were updated to reflect current Department permit format, language, and rule references. **MAQP #2822-02** replaced MAQP #2822-01.

On May 9, 2005, the Department received a letter from WBI requesting changes to MAQP #2822-02. The proposed change includes the addition of a 175-kW generator powered by an F18GL Waukesha lean burn engine at the Saco Compressor Station. The generator limits the Waukesha F18GL to 265-hp. The potential emissions from the proposed equipment are less than the de minimis threshold of 15 tons per year. WBI also requested the Department remove the 190-hp Waukesha generator engine, Source 08 (6-NKRU). The permit action updated the permit analysis with the new equipment. An emission inventory for the WBI Saco Compressor Station is contained in Section IV of the permit analysis. **MAQP #2822-03** replaced MAQP #2822-02.

On October 3, 2008, the Department received a letter from WBI requesting changes to MAQP #2822-03. The proposed change included the removal of three Ingersoll-Rand Model 8XVG integral spark ignition reciprocating internal combustion engines (SI RICE), with serial numbers 8FV1264, 9GV1450, and 8GV1718, respectively. These units have been removed from the facility. Additionally, the change request included the removal of a temporary Ajax Model DPC-600LE SI Rice unit which was replaced by an electric prime mover unit which does not have emissions. The Ajax unit was removed in June of 2004. In addition, WBI requested that the engine listings be removed from past permits as well as from the current one. The removal actions are not retroactive to past permits and therefore, under this action, they were not removed from MAQP #2822-03. **MAQP #2822-04** replaced MAQP #2822-03.

On December 10, 2012, the Department received an Administrative Amendment (AA) request from WBI to change the official name of the company from Williston Basin Interstate Pipeline Company to WBI Energy Transmission, Inc. **MAQP #2822-05** replaced MAQP #2822-04.

### C. Current Permit Action

On April 3, 2013, the Department received a request from WBI to replace a dry bed dehydration system with a TEG dehydration unit. The TEG dehydration system is being relocated from the South Baker Compressor station facility. The TEG system will remove water from the natural gas stream and in the process will produce a small increase in VOC and HAP emissions. The new emitting units associated with the equipment include a 0.75

MMBtu/hr reboiler and a TEG dehydration still vent and flash tank being relocated from the South Baker Compressor station. The permit language allows concurrent operation for 180 days until the relocated equipment is operating appropriately.

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

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

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices), and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).  
  
WBI 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 which, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which 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 Oxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Dioxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

WBI 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, WBI 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. WBI will utilize natural gas for operating its fuel burning equipment, which will meet this limitation.
6. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS).
  - a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below.

- b. 40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The Saco Compressor Station is not subject to this subpart as the engines were manufactured and installed before the applicability dates outlined in the subpart. However, future engine installations, replacements, or reconstructions may be subject to 40 CFR 60 Subpart JJJJ.
  - c. CFR Part 60. Subpart KKK, Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants, is not applicable to this facility because the facility does not meet the definition of a natural gas processing plant.
7. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:
- a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to an NESHAP Subpart as listed below:
  - b. 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 standards and provisions of 40 CFR 63, Subpart HH. Based on previous information provided by WBI, the Saco Compressor Station facility is considered an area source of HAPs that is subject to 40 CFR 63, Subpart HH. For area sources, the affected source includes each TEG glycol dehydration unit. However, because the glycol dehydration unit emits less than 0.9 megagrams (1 ton per year (TPY)) of benzene, it is exempt from the control requirements listed in 40 CFR 63, Subpart HH. Records of the determinations applicable to this exemption must be maintained as required in 40 CFR 63.774(d)(1).
  - c. 40 CFR 63, Subpart HHH National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. In order for a natural gas transmission and storage facility to be subject to 40 CFR 63, Subpart HHH requirements, the facility must be a major source of Hazardous Air Pollutants (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 63, Subpart HHH. Based on the information submitted by WBI, the Saco facility is not subject to the provisions of 40 CFR 63, Subpart HHH because the facility is not a major source of HAPs.
  - d. 40 CFR 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). As an area source, the RICE at WBI will be subject to this rule. However, although the RICE engines are an affected source, per 40 CFR 63.6590(b)(3) they do not have any requirements unless they are new or reconstructed after June 12, 2006. Any RICE engine operated by WBI that is new or reconstructed after June 12, 2006 will be subject to this Maximum Available Control Technology (MACT) standard if the engine

remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year. Although the RICE engines operated by WBI at the Saco facility were installed prior to June 12, 2006, area source provisions of the MACT requirements may apply to future engines.

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. WBI 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 facility to obtain an air quality permit or permit modification if they construct, modify, or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year of any pollutant. WBI has the potential to emit more than 25 tons per year of NO<sub>x</sub>, CO, and VOC; therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. WBI 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. WBI submitted an affidavit of publication of public notice for the April 3, 2013, issue of the Glasgow Courier, a newspaper of general circulation in Valley 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 required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving WBI of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).

13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

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

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications-- Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since it 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 stationary source having:
  - a. PTE > 100 tons/year of any pollutant;
  - b. PTE >10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
  - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) in a serious PM<sub>10</sub> nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (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 #2822-05 for WBI, the following conclusions were made:
  - a. The facility's PTE is greater than 100 tons/year for NO<sub>x</sub>, and CO.



- b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.
- c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
- d. This facility may become subject to current NSPS 40 CFR 60, Subpart JJJJ.
- e. This facility is subject to area source provisions of a current NESHAP standard (40 CFR 63, Subpart HH) and may become subject to 40 CFR 63, Subpart ZZZZ.
- f. This source is not a Title IV affected source, or a solid waste combustion unit; and
- g. This source is not an EPA designated Title V source.

Based on these conclusions, the Department determined that WBI is a major source of emissions as defined under Title V.

### III. BACT Determination

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

A BACT analysis was required for the current permit action because the current permit action is considered a modification to the existing permit. There are three potential sources associated with the TEG dehydration system. These include the reboiler, and the process vent emissions which could come from either the flash tank or dehydration still vent. Each of the three sources is looked at individually in the BACT analysis.

Reboiler: The reboiler emissions associated with combusting natural gas include primarily NO<sub>x</sub> and CO and are estimated at 0.34 tpy, and 0.29 tpy, respectively when combusting natural gas. Given the extremely small emissions associated with the reboiler, BACT for the reboiler is determined to be limiting the reboiler to combusting only pipeline quality natural gas.

#### Process Vent Emissions.

Both the flash tank and the dehydration still vent have potential VOC emissions including Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX). The source of VOC emissions comes from pressure and temperature changes resulting in species flashing from liquid to vapor. Per modeling provided by WBI using GlyCalc and site testing results, most of the BTEX is xylene. Xylene emissions are estimated at a total of 5.1 tpy from the dehydration still vent and 0.01 tpy from the flash tank. Control technologies reviewed for the process vent emissions included a recycled/closed vent system, a flare, an add-on condenser, and best management practices. Given the extremely small emission rate from the process vents, adding additional control equipment is not merited given the approximate 5.1 tpy of xylene. Xylene emissions can be minimized by maintaining adequate but not excessive flow of glycol in the dehydrator which is considered a best management practice for TEG dehydrators. WBI shall meet BACT by using best management practices to avoid excessive glycol recirculation flows and operate the equipment in a manner consistent with good air pollution control practices. A monitoring and recordkeeping requirement to prevent excess glycol recycle flow has been included to demonstrate BACT.

## Greenhouse Gas Evaluation

The process of removing water from natural gas using TEG also releases methane to the atmosphere. Methane is not regulated as a VOC but is a greenhouse gas. The levels of methane released do not trigger any regulatory requirements requiring BACT.

- IV. Emission Inventory (Carried Over from #2822-05 without change). Additions to the Emission Inventory under #2822-06 are noted at the end of the Emission Inventory section which results in 5.1 tpy of HAP xylene emissions.

Source	Tons/Year				
	PM <sub>10</sub>	NO <sub>x</sub>	VOC	CO	SO <sub>x</sub>
660-hp Ingersoll-Rand 62-KVG (Unit #7)	0.26	20.10	4.80	76.47	0.01
600-hp Ajax DPC-600 (Unit #8)	0.22	37.58	28.91	17.34	0.01
600-hp Ajax DPC-600 (Unit #9)	0.22	37.58	28.91	17.34	0.01
600-hp Ajax DPC-600 (Unit #10)	0.22	37.58	28.91	17.34	0.01
265-hp Waukesha (Saco Gen #1 (175-kW))	0.13	5.11	2.55	7.69	0.01
Petro-Chem Regen. Furnace	0.13	1.09	0.12	0.23	0.01
Plant Boilers #1 & #2	0.07	0.59	0.07	0.12	0.00
Misc. Heaters	0.03	0.27	0.03	0.11	0.00
Total	1.15	139.90	94.30	136.64	0.06

### 660-hp Ingersoll-Rand 62-KVG (Unit #7)

Horsepower: 660 hp  
Hours of operation: 8760 hr/yr

#### PM<sub>10</sub> Emissions:

Emission Factor: 10 lb/MMScf (AP-42, Chapter 3, Table 3.2-1, 7/00)  
Fuel Consumption: 8500 Btu/hp-hr (Maximum Design)  
Calculations: 8500 Btu/hp-hr \* 0.001041 Scf/Btu \* 660 hp \* 8760 hr/yr = 51,158,488 Scf/yr  
51,158,488 Scf/yr \* 10 lb/MMScf gas \* 0.0005 ton/lb = 0.26 ton/yr

#### NO<sub>x</sub> Emissions:

Emission factor: 3.16 gram/hp-hr (Based on company information)  
Calculations: 3.16 gram/hp-hr \* 660 hp \* 0.002205 lb/gram = 4.60 lb/hr  
4.60 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 20.10 ton/yr

#### VOC Emissions:

Emission factor: 0.75 gram/hp-hr (Based on company information)  
Calculations: 0.75 gram/hp-hr \* 660 hp \* 0.002205 lb/gram = 1.10 lb/hr  
1.10 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 4.80 ton/yr

#### CO Emissions:

Emission factor: 12.02 gram/hp-hr (Based on company information)  
Calculations: 12.02 gram/hp-hr \* 660 hp \* 0.002205 lb/gram = 17.50 lb/hr  
17.50 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 76.47 ton/yr

#### SO<sub>x</sub> Emissions:

Emission factor: 0.002 gram/hp-hr (AP-42, Chapter 3, Table 3.2-1, 7/00)  
Calculations: 0.002 gram/hp-hr \* 660 hp \* 0.002205 lb/gram = 0.003 lb/hr  
0.003 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 0.01 ton/yr

### 600-hp Ajax DPC-600 (Unit #8)

Horsepower: 600 hp  
Hours of operation: 8760 hr/yr

PM<sub>10</sub> Emissions:

Emission Factor: 10 lb/MMScf (AP-42, Chapter 3, Table 3.2-2, 7/00)  
Fuel Consumption: 8100 Btu/hp-hr (Maximum Design)  
Calculations: 8100 Btu/hp-hr \* 0.001041 Scf/Btu \* 600 hp \* 8760 hr/yr = 44,617,133 Scf/yr  
44,617,133 Scf/yr \* 10 lb/MMScf gas \* 0.0005 ton/lb = 0.22 ton/yr

NO<sub>x</sub> Emissions:

Emission factor: 6.50 gram/hp-hr (Based on BACT determination)  
Calculations: 6.50 gram/hp-hr \* 600 hp \* 0.002205 lb/gram = 8.60 lb/hr  
8.60 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 37.58 ton/yr

VOC Emissions:

Emission factor: 5.00 gram/hp-hr (Based on BACT determination)  
Calculations: 5.00 gram/hp-hr \* 600 hp \* 0.002205 lb/gram = 6.62 lb/hr  
6.62 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 28.91 ton/yr

CO Emissions:

Emission factor: 3.00 gram/hp-hr (Based on BACT determination)  
Calculations: 3.00 gram/hp-hr \* 600 hp \* 0.002205 lb/gram = 3.97 lb/hr  
3.97 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 17.34 ton/yr

SO<sub>x</sub> Emissions:

Emission factor: 0.002 gram/hp-hr (AP-42, Chapter 3, Table 3.2-1, 7/00)  
Calculations: 0.002 gram/hp-hr \* 600 hp \* 0.002205 lb/gram = 0.003 lb/hr  
0.003 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 0.01 ton/yr

600-hp Ajax DPC-600 (Unit #9)

Horsepower: 600 hp  
Hours of operation: 8760 hr/yr  
PM<sub>10</sub> Emissions:

Emission Factor: 10 lb/MMScf (AP-42, Chapter 3, Table 3.2-1, 7/00)  
Fuel Consumption: 8100 Btu/hp-hr (Maximum Design)  
Calculations: 8100 Btu/hp-hr \* 0.001041 Scf/Btu \* 600 hp \* 8760 hr/yr = 44,617,133 Scf/yr  
44,617,133 Scf/yr \* 10 lb/MMScf gas \* 0.0005 ton/lb = 0.22 ton/yr

NO<sub>x</sub> Emissions:

Emission factor: 6.50 gram/hp-hr (Based on BACT determination)  
Calculations: 6.50 gram/hp-hr \* 600 hp \* 0.002205 lb/gram = 8.60 lb/hr  
8.60 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 37.58 ton/yr

VOC Emissions:

Emission factor: 5.00 gram/hp-hr (Based on BACT determination)  
Calculations: 5.00 gram/hp-hr \* 600 hp \* 0.002205 lb/gram = 6.62 lb/hr  
6.62 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 28.91 ton/yr

CO Emissions:

Emission factor: 3.00 gram/hp-hr (Based on BACT determination)  
Calculations: 3.00 gram/hp-hr \* 600 hp \* 0.002205 lb/gram = 3.97 lb/hr  
3.97 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 17.34 ton/yr

SO<sub>x</sub> Emissions:

Emission factor: 0.002 gram/hp-hr (AP-42, Chapter 3, Table 3.2-1, 7/00)  
Calculations: 0.002 gram/hp-hr \* 600 hp \* 0.002205 lb/gram = 0.003 lb/hr  
0.003 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 0.01 ton/yr

600-hp Ajax DPC-600 (Unit #10)

Horsepower: 600 hp  
Hours of operation: 8760 hr/yr

PM<sub>10</sub> Emissions:

Emission Factor: 10 lb/MMScf (AP-42, Chapter 3, Table 3.2-1, 7/00)  
Fuel Consumption: 8100 Btu/hp-hr (Maximum Design)  
Calculations: 8100 Btu/hp-hr \* 0.001041 Scf/Btu \* 600 hp \* 8760 hr/yr = 44,617,133 Scf/yr  
44,617,133 Scf/yr \* 10 lb/MMScf gas \* 0.0005 ton/lb = 0.22 ton/yr

NO<sub>x</sub> Emissions:

Emission factor: 6.50 gram/hp-hr (Based on BACT determination)  
Calculations: 6.50 gram/hp-hr \* 600 hp \* 0.002205 lb/gram = 8.60 lb/hr  
8.60 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 37.58 ton/yr

VOC Emissions:

Emission factor: 5.00 gram/hp-hr (Based on BACT determination)  
Calculations: 5.00 gram/hp-hr \* 600 hp \* 0.002205 lb/gram = 6.62 lb/hr  
6.62 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 28.91 ton/yr

CO Emissions:

Emission factor: 3.00 gram/hp-hr (Based on BACT determination)  
Calculations: 3.00 gram/hp-hr \* 600 hp \* 0.002205 lb/gram = 3.97 lb/hr  
3.97 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 17.34 ton/yr

SO<sub>x</sub> Emissions:

Emission factor: 0.002 gram/hp-hr (AP-42, Chapter 3, Table 3.2-1, 7/00)  
Calculations: 0.002 gram/hp-hr \* 600 hp \* 0.002205 lb/gram = 0.003 lb/hr  
0.003 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 0.01 ton/yr

Saco Gen #1 265-hp Waukesha (175-kW)

Brake Horse Power: 265 hp  
Hours of Operation: 8,760 hr/yr  
Fuel Combustion: 2.86 MMBtu/hr  
Fuel Heating Value: 1,050 Btu/SCF or 0.001 MMSCF/MMBtu

PM<sub>10</sub> Emissions

Emission Factor: 10.0 lb/MMSCF (AP-42, Chapter 3, Table 3.2-1, 7/00)  
Calculations: 10.0 lb/MMSCF \* 0.001 MMSCF/MMBtu \* 2.86 MMBtu/hr = 0.03 lb/hr  
0.03 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 0.13 ton/yr

NO<sub>x</sub> Emissions

Emission Factor: 2.00 g/bhp-hr {BACT and de minimis Determination}  
Calculations: 2.00 g/bhp-hr \* 265 bhp \* 0.002205 lb/gram = 1.17 lb/hr  
1.17 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 5.11 ton/yr

### CO Emissions

Emission Factor: 3.00 g/bhp-hr {BACT and de minimis Determination}  
Calculations: 3.00 g/bhp-hr \* 265 bhp \* 0.002205 lb/gram = 1.76 lb/hr  
1.76 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 7.69 ton/yr

### VOC Emissions

Emission Factor: 1.00 g/bhp-hr {BACT and de minimis Determination}  
Calculations: 1.00 g/bhp-hr \* 265 bhp \* 0.002205 lb/gram = 0.58 lb/hr  
0.58 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 2.55 ton/yr

### SO<sub>x</sub> Emissions

Emission Factor: 0.60 lb/MMSCF (AP-42, Chapter 3, Table 3.2-1, 7/00)  
Calculations: 0.60 lb/MMSCF \* 0.001 MMSCF/MMBtu \* 2.86 MMBtu/hr = 0.0017 lb/hr  
0.0017 lb/hr \* 8,760 hr/yr \* 0.0005 ton/lb = 0.0075 ton/yr

### 2.4 MMBtu/hr Petro-Chem Regen. Furnace

Hours of Operation: 8760  
Fuel Consumption: 2.40 MMBtu/hr \* 0.001041 scf/Btu \* 8760 hr/yr = 21.8860 MMScf/yr

### PM<sub>10</sub> Emissions:

Emission Factor: 12 lb/MMScf (AP-42, Chapter 1, 1.4-1, 10/92)  
Fuel Consumption: 21.8860 MMScf/yr (Information from company)  
Calculations: 21.89MMScf/yr \* 12 lb/MMScf gas \* 0.0005 ton/lb = 0.13 ton/yr

### NO<sub>x</sub> Emissions:

Emission Factor: 100 lb/MMScf (AP-42, Chapter 1, 1.4-2, 10/92)  
Fuel Consumption: 21.886 MMScf/yr (Information from company)  
Calculations: 21.89 MMScf/yr \* 100 lb/MMScf gas \* 0.0005 ton/lb = 1.09 ton/yr

### VOC Emissions:

Emission Factor: 11.00 lb/MMScf (AP-42, Chapter 1, 1.4-3, 10/92)  
Fuel Consumption: 21.886 MMScf/yr (Information from company)  
Calculations: 21.89 MMScf/yr \* 11.00 lb/MMScf gas \* 0.0005 ton/lb = 0.12 ton/yr

### CO Emissions:

Emission Factor: 21 lb/MMScf (AP-42, Chapter 1, 1.4-2, 10/92)  
Fuel Consumption: 21.886 MMScf /yr (Information from company)  
Calculations: 21.89 MMScf /yr \* 21 lb/MMScf gas \* 0.0005 ton/lb = 0.23 ton/yr

### SO<sub>x</sub> Emissions:

Emission Factor: 0.60 lb/MMScf (AP-42, Chapter 1, 1.4-2, 10/92)  
Fuel Consumption: 21.886 MMScf /yr (Information from company)  
Calculations: 21.89 MMScf/yr \* 0.60 lb/MMScf gas \* 0.0005 ton/lb = 0.01 ton/yr

### Plant Boilers #1 & #2

Type	Make/Model	Size
Space Heater	Weil-McLain LGB-6	650,000 Btu/hr
Space Heater	Weil-McLain LGB-6	650,000 Btu/hr
		1,300,000 Btu/hr

Fuel Consumption: 1.3 MMBtu/hr \* 0.001041 MMScf/MMBtu \* 8760 hr/yr = 11.85 MMScf/yr

PM<sub>10</sub> Emissions:

Emission Factor: 12.0 lb/MMScf (AP-42, Chapter 1, 1.4-1, 10/92)  
Fuel Consumption: 11.8549 MMScf/yr (Information from company)  
Calculations: 11.85 MMScf/yr \* 12.0 lb/MMScf gas \* 0.0005 ton/lb = 0.07 ton/yr

NO<sub>x</sub> Emissions:

Emission Factor: 100 lb/MMScf (AP-42, Chapter 1, 1.4-2, 10/92)  
Fuel Consumption: 11.8549 MMScf/yr (Information from company)  
Calculations: 11.85 MMScf /yr \* 100 lb/MMScf gas \* 0.0005 ton/lb = 0.59 ton/yr

VOC Emissions:

Emission Factor: 11.0 lb/MMScf (AP-42, Chapter 1, 1.4-3, 10/92)  
Fuel Consumption: 11.8549 MMScf/yr (Information from company)  
Calculations: 11.85 MMScf/yr \* 11.0 lb/MMScf gas \* 0.0005 ton/lb = 0.07 ton/yr

CO Emissions:

Emission Factor: 21 lb/MMScf (AP-42, Chapter 1, 1.4-2, 10/92)  
Fuel Consumption: 11.8549 MMScf/yr (Information from company)  
Calculations: 11.85 MMScf/yr \* 21 lb/MMScf gas \* 0.0005 ton/lb = 0.12 ton/yr

SO<sub>x</sub> Emissions:

Emission Factor: 0.6 lb/MMScf (AP-42, Chapter 1, 1.4-2, 10/92)  
Fuel Consumption: 11.8549 MMScf/yr (Information from company)  
Calculations: 11.85 \* MMScf/yr \* 0.6 lb/MMScf gas \* 0.0005 ton/lb = 0.00 ton/yr

Miscellaneous Heaters

Type	Make/Model	Size
Water Heater	A.O. Smith KGA 40	40,000 Btu/hr
Aux. Bldg Heater	Modine PA 200 AB	200,000 Btu/hr
Aux. Garage Heater	Janitrol 68-130-8	130,000 Btu/hr
Shop Heater	N/A	250,000 Btu/hr
Meter House Heater	Breust	10,000 Btu/hr
		630,000 Btu/hr

Fuel Consumption 0.63 MMBtu/hr \* 0.001041 MMScf/MMBtu \* 8760 hr/yr = 5.7451 MMScf/yr

PM<sub>10</sub> Emissions:

Emission Factor: 11.18 lb/MMScf (AP-42, Chapter 1, 1.4-1, 10/92)  
Fuel Consumption: 5.74507 MMScf/yr (Information from company)  
Calculations: 5.75 MMScf/yr \* 11.18 lb/ MMScf gas \* 0.0005 ton/lb = 0.03 ton/yr

NO<sub>x</sub> Emissions:

Emission Factor: 94 lb/ MMScf (AP-42, Chapter 1, 1.4-2, 10/92)  
Fuel Consumption: 5.74507 MMScf/yr (Information from company)  
Calculations: 5.75 MMScf /yr \* 94 lb/MMScf gas \* 0.0005 ton/lb = 0.27 ton/yr

VOC Emissions:

Emission Factor: 11.00 lb/MMScf (AP-42, Chapter 1, 1.4-3, 10/92)  
Fuel Consumption: 5.74507 MMScf/yr {Information from company}  
Calculations: 5.75 MMScf /yr \* 11.00 lb/ MMScf gas \* 0.0005 ton/lb = 0.03 ton/yr

CO Emissions:

Emission Factor: 40 lb/ MMScf (AP-42, Chapter 1, 1.4-2, 10/92)  
 Fuel Consumption: 5.74507 MMScf/yr (Information from company)  
 Calculations: 5.75 MMScf /yr \* 40 lb/MMScf gas \* 0.0005 ton/lb = 0.11 ton/yr

SO<sub>x</sub> Emissions:

Emission Factor: 0.60 lb/MMScf (AP-42, Chapter 1, 1.4-2, 10/92)  
 Fuel Consumption: 5.74507 MMScf/yr (Information from company)  
 Calculations: 5.75 MMScf/yr \* 0.60 lb/MMScf gas \* 0.0005 ton/lb = 0.00 ton/yr

**WBI Saco Dehydration System**

Emission Source	Emissions Tons/Year [PTE]								
	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	PM <sub>Cond.</sub>	CO	NO <sub>x</sub>	SO <sub>2</sub>	VOC	Xylene
Reboiler	0.03	0.03	0.03	0.02	0.29	0.34	0.002	0.019	0.00
Dehydration Still Vent and Flash Tank (Company Provided)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.24	5.10
<b>EMISSIONS</b>	0.03	0.03	0.03	0.02	0.29	0.34	0.00	7.26	5.10

<i>a. Emission Inventory reflects enforceable limits on hours of operation</i>									
CO, carbon monoxide									
NO <sub>x</sub> , oxides of nitrogen									
PM, particulate matter including condensable fraction									
PM <sub>10</sub> , particulate matter with an aerodynamic diameter of 10 microns or less including condensable fraction									
PM <sub>2.5</sub> , particulate matter with an aerodynamic diameter of 2.5 microns or less including condensable fraction									
PM <sub>Cond.</sub> , Condensable particulate matter									
SO <sub>2</sub> , sulfur dioxide									
TPY, tons per year									
VOC, volatile organic compounds									

**Reboiler**

Process Rate: 0.75 MMBtu/ One Unit 960 BTU/scf  
 hr  
 Operating Hours 8760 hours/year 0.00104 MMSCF/MMBtu  
 2  
 0.00078125 MMScf/  
 hr

**PM Emissions:**

Emission Factor 7.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)  
 Calculations (7.6 lbs/MMscf) \* (0.0008 MMScf/hr) = 0.006 lbs/hr  
 (0.006 lbs/hr) \* (8760 hrs/yr) \*(0.0005 tons/lb) = 0.026 TPY

**Filterable PM<sub>10</sub> Emissions= PM<sub>2.5</sub> Emissions:**

Emission Factor 1.9 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)  
 Calculations (1.9 lbs/MMscf) \* (0.0008 MMScf/hr) = 0.0014 lbs/hr  
 8  
 (0.001 lbs/hr) \* (8760 hrs/yr) \*(0.0005 tons/lb) = 0.0065 TPY

<b>PM<sub>Cond</sub>:</b>			
Emission Factor	5.7 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)		
Calculations	(5.7 lbs/MMscf) * (0.0008 MMScf/hr) =	0.004	lbs/hr
	(0.004 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =	0.020	TPY
<b>PM10 Filterable + Condensible = PM2.5 Filterable + Condensible</b>			
		0.006	lbs/hr
		0.026	TPY
<b>CO Emissions:</b>			
Emission Factor	84 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)		
Calculations	(5.7 lbs/MMscf) * (0.0008 MMScf/hr) =	0.066	lbs/hr
	(0.066 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =	0.29	TPY
<b>NO<sub>x</sub> Emissions:</b>			
Emission Factor	100.000 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)		
Calculations	(100 lbs/MMscf) * (0.0008 MMScf/hr) =	0.078	lbs/hr
	(0.078 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =	0.34	TPY
<b>SO<sub>2</sub> Emissions:</b>			
Emission Factor	0.60000 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)		
Calculations	(0.6 lbs/MMscf) * (0.0008 MMScf/hr) =	0.0004	lbs/hr
		7	
	(0.0005 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =	0.002	TPY
<b>VOC Emissions:</b>			
Emission Factor	5.50000 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)		
Calculations	(5.5 lbs/MMscf) * (0.0008 MMScf/hr) =	0.004	lbs/hr
	(0.004 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =	0.019	TPY

## V. Existing Air Quality

The air quality of this area is classified as either better than National Standards or unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for criteria pollutants.

## VI. Ambient Air Impact Analysis

The Department determined that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.



## VII. Taking and 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 public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

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.

Analysis Prepared By: Craig Henrikson

Date: April 10, 2013

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

**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

**Issued To:**            ***WBI Energy Transmission Inc.***  
                          ***2010 Montana Avenue***  
                          ***Glendive, MT 59330***

**Montana Air Quality Permit Number: 2822-06**

**Preliminary Determination Issued: 04/30/2013**

**Department Decision Issued: 05/16/2013**

**Permit Final: 06/01/2013**

1. *Legal Description of Site:* WBI Energy Transmission Inc. (WBI) submitted an application to relocate an existing triethylene glycol (TEG) dehydration system from the South Baker Compressor Station to the Saco Compressor Station. The location of the facility is NE¼ of the SW¼ of Section 13, Township 31 North, Range 34 East, near Saco, in Valley County, Montana.
2. *Description of Project:* The permit application is for replacing the existing dry bed dehydration system with a dehydration system relocated from an existing compressor station. The TEG system will remove water from the natural gas stream and in the process will produce a small increase in VOC and HAP emissions. The new emitting units associated with the equipment include a 0.75 MMBtu/hr reboiler and a TEG dehydration still vent and flash tank being relocated from the South Baker Compressor station. The permit language allows concurrent operation for a short period of time until the relocated equipment has been successfully started up.
3. *Objectives of Project:* The object of the project would be to remove moisture from the existing natural gas compressor facility. The issuance of MAQP #2822-06 would allow WBI to operate the permitted equipment the existing Saco Compressor Station.
4. *Alternatives Considered:* In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the MAQP to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because permitting WBI's equipment in a de minimis fashion should facilitate 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 listing of the enforceable permit conditions and a permit analysis, including a Best Available Control Technology (BACT) analysis, is included in this permit action.
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 the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would 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

The operation of the compressor station with the TEG dehydration system would have minor impacts upon the terrestrial and aquatic life and habitats in areas where the facility may operate. Although air pollutant deposition would occur in the areas where the equipment would operate, the size and nature of the operation, dispersion characteristics of pollutants, and conditions placed in MAQP #2822-06 would result in minor impacts as the site is an existing compressor station. Therefore, the operation of the equipment would present minor impacts on terrestrial and aquatic life is present in the area of potential operation.

B. Water Quality, Quantity, and Distribution

Although there would be an increase in air emissions in the area where the Saco Compressor station is located, there would only be minor impacts on water quality, quantity, and distribution because of the nature, size, operational requirements, and conditions placed in MAQP #2822-06 for the facility. Further, as described in Section 7.F. of this EA, the Department determined that any impacts from deposition of pollutants would be minor. In addition, any accidental spills or leaks from equipment would be required to be handled according to the appropriate environmental regulations in an effort to minimize any potential adverse impact on the immediate and surrounding area. Overall, the operation of the equipment would have minor impacts to water quality, quantity, and distribution in the area of operations.

C. Geology and Soil Quality, Stability, and Moisture

As a result of the operation of the existing compressor station, there would be minor impacts to the geology and soil quality, stability, and moisture near the equipment's operational area because of the deposition of pollutants from the facility. As explained in Section 7.F. of this EA, the facility's size, operational requirements, nature of the operation at the existing facility, and conditions placed in MAQP #2822-06 would minimize the impacts from deposition.

D. Vegetation Cover, Quantity, and Quality

The operation of the TEG dehydration equipment would result in no impacts to the vegetative cover, quantity, and quality because the proposed operation would be located in an existing fenced area. As explained in Section 7.F. of this EA, the Department determined that, due to the nature of the operation, conditions placed in MAQP #2822-06, and dispersion characteristics of the emissions, any impacts from deposition would not be expected.

E. Aesthetics

MAQP #2822-06 would include conditions to control emissions from the equipment and the surrounding work area. The proposed project site is within a previous facility boundary and therefore no aesthetic change would occur.

F. Air Quality

Air quality impacts from the proposed TEG dehydration system would be minor because emissions increases from the facility would be small. Dispersion and deposition of pollutants would occur from the operation of the new equipment; however, the Department determined that any air quality impacts from the pollutants would be minor due to dispersion characteristics (from factors such as wind speed and wind direction) and conditions placed in MAQP #2822-06.

MAQP #2822-06 would include conditions limiting opacity from the facility and would require that reasonable precautions be taken to control emissions from haul roads, access roads, parking lots, or the general work area. In addition, the permit would also limit total emissions from the facility and any additional equipment operated at the same site to 250 tons per year or less. Further, because the facility has more than 100 tons per year of potential emissions, the Department determined that other conditions to minimize air quality impacts may be included in the Title V operating permit.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify species of special concern that may be present in the proposed areas of operation, the Department contacted the Montana Natural Heritage Program (MNHP) for a review of species of special concern. Three animal species of concern were identified within the area where the facility is located. These include the Greater Sage Grouse, Baird's Sparrow and Iowa Darter. A single plant species was also identified as a species of concern; the Hot Spring Phacelia. Issuance of this permit would increase emissions to the atmosphere near the existing facility. However, as explained in Section 7.F. of this EA, because of the nature of the facility, and conditions placed in MAQP #2822-06, any impacts to unique endangered, fragile, or limited environmental resources from the deposition of pollutants would not be expected given the location of the proposed facility on the existing compressor station site.

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

Water would be used on particulate emissions at haul roads, access roads, parking lots, or the general plant property, as necessary, to control dust resulting from the facility. The new equipment would consume energy from land-line power at the site. Therefore, any impacts on the demands of the environmental resources of water, air, and energy would be minor.

I. Historical and Archaeological Sites

According to correspondence with the Montana State Historic Preservation Office (SHPO), there have been no previously recorded sites in the vicinity of the proposed site location. Given the proposed site is an existing compressor station no impact to historical or archaeological sites would occur. Therefore, it is unlikely that the project would affect any historic or archaeological site and no resulting impacts would be expected.

J. Cumulative and Secondary Impacts

The operation of the facility would not likely cause any minor effects to the physical and biological environment because the facility is located within an existing compressor station and it is associated with a minor increase in emissions.

The facility operations would be limited by MAQP #2822-06 to total emissions of 250 tons/year or less from non-fugitive facility operations and any other additional equipment used at any given site.

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

The operation of the facility would not likely alter or disrupt any local lifestyles or communities (social structures and mores) in the area of operation because the operation is located within an existing compressor station boundary.

B. Cultural Uniqueness and Diversity

The operation of the proposed equipment would have no impact on the cultural uniqueness and diversity because the equipment operations would be at a site which is an existing compressor station.

C. Local and State Tax Base and Tax Revenue

The proposed operation of the TEG dehydration equipment at the facility would have no effect on local and state tax base and tax revenue as the operation is very small in size.

D. Agricultural or Industrial Production

No impact on agricultural or industrial production would occur as the proposed site for the TEG dehydration equipment would be located within the existing compressor station boundary.

E. Human Health

MAQP #2822-06 would incorporate conditions to ensure that the facility would be operated in compliance with all applicable rules and standards. These rules and standards are designed to be protective of human health. As described in Section 7.F. of this EA, the Department determined that any impacts from deposition of pollutants would be minor due to dispersion characteristics and conditions placed in MAQP #2822-06. The air emissions from this facility would be minimized.

F. Access to and Quality of Recreational and Wilderness Activities

The proposed TEG dehydration equipment would be located within the existing compressor station property, and therefore would not impact access to recreational and wilderness activities.

G. Quantity and Distribution of Employment

Given the site is existing, it is not expected that the activities from the addition of the TEG dehydration equipment at the facility would significantly affect the quantity and distribution of employment in any given area. Existing personnel would be expected to operate the proposed equipment with no new employees needed except with the installation and startup activities.

H. Distribution of Population

Given the overall capacity of the system would not change, it is not expected that the activities from the proposed addition of TEG dehydration equipment at the facility would disrupt the normal population distribution of any given area. No secondary activities are identified to move to the current proposed area as a result of the current project.

I. Demands of Government Services

Government services may be required for acquiring the appropriate permits and ensuring compliance with the permits that are issued; however, the government services required would be minor.

J. Industrial and Commercial Activity

The operation of the proposed equipment at the existing facility would represent only a temporary increase in the activity related to construction and installation of the proposed equipment. No additional industrial or commercial activities are identified from the operation of the TEG dehydration equipment at the facility and secondary activities are not expected from the facility. Therefore, no industrial and commercial activity resulting from the current permit action would be expected.

K. Locally Adopted Environmental Plans and Goals

The Department is unaware of any locally adopted environmental plans or goals at any given site that the facility may be operated at under MAQP #2822-06. The conditions identified in MAQP #2822-06 would apply to operation of the facility at the Saco Compressor Station site only.

L. Cumulative and Secondary Impacts

Overall, the cumulative and secondary social and economic impacts from this project would be minor because facility is already existing and considered a small sized operation by industrial standards. No new businesses are expected to be drawn to the area as a result of the county run operation. In addition, any social and economic impacts that are created would be minor because of the relatively small size and nature of the operation.

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

*If an EIS is not required, explain why the EA is an appropriate level of analysis:* Because this proposed modification does not increase the capacity of the existing compressor station, any impacts created would be minor impacts.

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.*

EA Prepared by: Craig Henrikson

Date: April 15, 2013