ADMINISTRATIVE AMENDMENT
TO MONTANA AIR QUALITY PERMIT

Date of Mailing: August 17, 2016

Name of Applicant: Hiland Partners Holdings, LLC

Source: Natural Gas Compressor Station

Location: NE¼ NW¼ Section 18, Township 27 North, Range 59 East, Roosevelt County, Montana

Proposed Action: The Department of Environmental Quality (Department) proposes to issue an Administrative Amendment, with conditions, to the above-named permittee. The permit will be assigned #4693-04. The permittee may appeal the Department's decision to the Board of Environmental Review (Board). A request for hearing must be filed by 9/1/2016. This permit shall become final on 9/2/2016, unless the Board orders a stay on the permit.

Proposed Conditions: See attached.

Procedures for Appeal: The permittee may request a hearing before the Board. Any appeal must be filed before the final date stated above. The request for hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, Montana 59620.

For the Department,

Julie Merkel
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-3626

Loni Patterson
Environmental Engineer
Air Quality Bureau
(406) 444-1452

JM:LP
Enclosure

MONTANA AIR QUALITY PERMIT

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|---|---|---|
| Issued To: | Hiland Partners Holdings, LLC<br>Hebron Compressor Station<br>370 Van Gordon Street<br>Lakewood, CO 80228 | MAQP: #4693-04<br>Administrative Amendment (AA) Request<br>Received: 7/25/2016<br>Departments Decision on AA: 8/17/2016<br>Permit Final: 9/2/2016<br>AFS #: 085-0103 |

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Hiland Partners Holdings, LLC (HPH), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq*., as amended, for the following:

Section I: Permitted Facilities

A. Plant Location

The Hebron Compressor Station is located approximately four miles southeast of Bainville, Montana. The legal description of the facility is the NE¼ NW¼ of Section 18, Township 27 North, Range 59 East, Roosevelt County, Montana.

B. Current Permit Action

On July 25 2016, the Department received a request from Hiland Partners Holdings, LLC, to change the mailing address from PO Box 5103, Enid, OK 73702 to 370 Van Gordon Street, Lakewood, CO 80228.

Section II: Conditions and Limitations

A. Emission Limitations

1. HPH shall not operate more than five natural gas compressor engines at any given time at the Hebron Compressor Station and the maximum rated design capacity of each engine shall not exceed 1,380 bhp. The engines shall be of a rich burn four- stroke engine class (ARM 17.8.749).

2. Emissions from Compressor Engine #1 shall be controlled with a dual non-selective catalytic reduction (NSCR) unit and an air-to-fuel (AFR) controller (ARM 17.8.752).

3. Emissions from Compressor Engines #2, #3, #4, and #5 shall be controlled with a dual NSCR unit and an AFR capable of maintaining the required emission limits in Sections II.A.4, II.A.5, and II.A.6 through all load and speed changes at which the engine may be operated (17.8.752).

4. The following gram per brake horsepower-hour (g/bhp-hr) emissions limit for the Compressor Engines #1 and #2 shall be met at all operating load conditions. (ARM 17.8.752):

Emission Factors (rich-burn engine)

| | |
|---|---|
| Oxides of Nitrogen ($NO_x$) | 1.0 g/bhp-hr |
| Carbon monoxide (CO) | 2.0 g/bhp-hr |
| Volatile Organic Compounds (VOC) | 0.7 g/bhp-hr |

5. The following gram per brake horsepower-hour (g/bhp-hr) emissions limit for the Compressor Engines #3, #4, and #5 shall be met at all operating load conditions. (ARM 17.8.752):

Emission Factors (rich-burn engine)

| | |
|---|---|
| Oxides of Nitrogen ($NO_x$) | 1.0 g/bhp-hr |
| Carbon monoxide (CO) | 1.0 g/bhp-hr |
| Volatile Organic Compounds (VOC) | 0.7 g/bhp-hr |

6. The pound per hour (lb/hr) emission limits for the Compressor Engines #1, #2, #3, #4, and #5 shall be determined using the following equation and pollutant specific g/bhp-hr emission factors from Sections II.A.4 and II.A.5 (ARM 17.8.752):

Equation

Emission Limit (lb/hr) = Emission Factor (g/bhp-hr)
* maximum rated design capacity of engine (bhp)
* 0.002205 lb/g

Compressor Engines #1 and #2 lb/hr Limit

| | |
|---|---|
| Oxides of Nitrogen ($NO_x$) | 3.04 lbs/hr |
| Carbon monoxide (CO) | 6.08 lbs/hr |
| Volatile Organic Compounds (VOC) | 2.13 lbs/hr |

Compressor Engines #3, #4, and #5 lb/hr Limit

| | |
|---|---|
| Oxides of Nitrogen ($NO_x$) | 3.04 lbs/hr |
| Carbon monoxide (CO) | 3.04 lbs/hr |
| Volatile Organic Compounds (VOC) | 2.13 lbs/hr |

7. Compressed gas will flow from the compressor units to a triethylene glycol (TEG) dehydration unit for treatment prior to entering the transmission pipeline. HPH shall direct emissions from the TEG dehydration still vent to a flash tank condenser and route the non-condensable gasses to a reboiler firebox (ARM 17.8.749).

8. HPH 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).

9. HPH shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).

10. HPH shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.9 (ARM 17.8.749).

11. HPH shall operate their control equipment to provide the maximum air pollution control for which it was designed (ARM 17.8.752).

12. HPH shall comply with any applicable standards, limitations, reporting, recordkeeping, and notification requirements contained in Title 40, Code of Federal Regulations (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* (ARM 17.8.340; 40 CFR 60, Subpart JJJJ; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

13. HPH shall submit to the Department within 180 days of initial start-up of Compressor Engines #3, #4, and #5, the "maintenance plan" as called out in 40 CFR 60 Subpart JJJJ (40 CFR 60.4243(a)(2) (iii)) as required for stationary spark ignition engines greater than 500 hp (ARM 17.8.749).

B. Testing Requirements

1. Compressor Engines #3, #4, and #5 shall initially be tested for $NO_x$, CO, and VOC concurrently, within 180 days of the initial start-up date of the compressor engine, and the results submitted to the Department in order to demonstrate compliance with the emission limitations contained in Section II.A.5 and Section II.A.6 (ARM 17.8.105, ARM 17.8.749, and 40 CFR 60, Subpart JJJJ).

2. After the initial source test, HPH shall test each compressor engine for $NO_x$ and CO concurrently, every 8,760 hours or 3 years, whichever comes first or according to another testing/monitoring schedule as may be approved by the Department (ARM17.8.105 and ARM 17.8.749, 40 CFR 60, Subpart JJJJ).

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

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

C. Operational Reporting Requirements

1. HPH 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). HPH 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. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(l)(d) (ARM 17.8.745).

2. All records compiled in accordance with this permit must be maintained by HPH 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).

D. Notification

HPH shall provide the Department with written notification of the actual start-up date of the Compressor Engines #3, #4, and #5 within 15 days after the actual start-up date. The notification shall include the engine model and maximum rated design capacity (ARM 17.8.749).

SECTION III: General Conditions

A. Inspection – HPH shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (continuous emissions monitoring system (CEMS) or continuous emissions rate monitoring system (CERMS)), or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.

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

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

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

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

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

G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by HPH 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
Hiland Partners Holdings, LLC
Hebron Compressor Station
MAQP #4693-04

# I. Introduction/Process Description

Hiland Partners Holdings, LLC (HPH) owns and operates a natural gas compressor station. The facility is located approximately four miles southeast of Bainville, Montana and is known as the Hebron Compressor Station. The legal description of the facility is the NE¼ NW¼ of Section 18, Township 27 North, Range 59 East, Roosevelt County, Montana.

## A. Permitted Equipment

The facility consists of five four-stroke rich-burn compressor engines each with a maximum rated design capacity of 1,380 brake horsepower (bhp). Emissions from the rich-burn engines are each controlled with dual non-selective catalytic reduction (NSCR) unit and an air-to-fuel ratio (AFR) controller. The facility also has a triethylene glycol (TEG) dehydrator with an associated 0.50 million british thermal units per hour (MMBtu/hr) reboiler and still vent, one 400 barrel (bbl) atmospheric water tank, and two 30,000 gallon pressurized natural gas liquids (NGL) tanks.

## B. Source Description

The HPH Hebron Compressor Station compresses and transports natural gas from the nearby Bakken gas fields. The five compressor engines, TEG Dehydrator reboiler, still vent, and the atmospheric water tank are the only emitting units at the facility.

## C. Permit History

On January 14, 2012, Hiland Partners, LP (HPL) was issued **MAQP #4693-00** to operate a natural gas compressor station which included a 1,380 bhp compressor engine, TEG Dehydrator reboiler, and atmospheric water tank.

On May 30, 2012, the Department of Environmental Quality – Air Resources Management Bureau (Department) issued a modification to MAQP #4693-00 which added a 1,380 brake horsepower (bhp) compressor engine. The compressor engine is identical in size and model to the single compressor engine that was currently operating at the site. The original compressor engine is referred to as Compressor Engine #1 and the newer compressor engine is referred to as Compressor Engine #2. **MAQP #4693-01** replaced MAQP#4693-00.

On October 30, 2014, the Department received a request from HPL to modify MAQP #4693-01 by adding three new 1,380 brake horsepower (bhp) compressor engines. The new compressor engines are identical in size and model to the existing compressor engines currently operating at the site. The existing compressor engines are referred to as Compressor Engine #1 and as Compressor Engine #2. The new compressor engines shall be referred to as Compressor Engine #3, Compressor Engine #4, and Compressor Engine #5. **MAQP #4693-02** replaced MAQP#4693-01.

On September 30, 2015, the Department received a request from Hiland Partners Holdings, LLC, to change the name from Hiland Partners, LP, to the current legal name of Hiland Partners Holdings, LLC, and to update contact information. **MAQP#4693-03** replaced MAQP#4693-02.

D. Current Permit Action

On July 25 2016, the Department received a request from Hiland Partners Holdings, LLC, to change the mailing address from PO Box 5103, Enid, OK 73702 to 370 Van Gordon Street, Lakewood, CO 80228 via an administrative amendment in accordance with ARM 17.8.764. **MAQP #4693-04** replaces MAQP #4693-03.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department 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).

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

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

5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

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

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for $PM_{10}$ _

HPH 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, HPH 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. HPH will utilize pipeline quality natural gas for operating its fuel burning equipment, which will meet this limitation.

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

7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). HPH is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.

   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 KKK - Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants does not apply to the Hebron Compressor Station because the Hebron Compressor Station only gathers and compresses natural gas and is not a natural gas processing plant that either engages in the extraction of natural gas liquids or processes sour gas; therefore, the Hebron Compressor Station does not meet the definition of a natural gas processing plant as defined in 40 CFR 60, Subpart KKK.

   c. 40 CFR 60, Subpart LLL – Standards of Performance for Onshore Natural Gas Processing: $SO_2$ Emissions does not apply to the Hebron Compressor Station because the Hebron Compressor Station does not utilize a sweetening unit to process sour gas and is not a natural gas processing plant.

   d. 40 CFR 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition Internal Combustion Engines contains NSPS requirements that apply to owners or operators of stationary spark ignition (SI) internal combustion engine (ICE) that commence construction, modification, or reconstruction after June 12, 2006, where the stationary ICE is manufactured after July 1, 2007, for engines greater than 500 bhp, or after January 1, 2008, for engines less than 500 bhp. This NSPS will apply 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 three months or more each year. Because the natural gas SI ICE engines were manufactured after July 1, 2007, this NSPS does apply.

e. 40 CFR 60, Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution contains NSPS requirements that apply to owners or operators of one or more onshore affected facility for which construction, modification or reconstruction commenced after August 23, 2011. Reciprocating compressor affected facilities include single reciprocating compressors located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. The three new reciprocating compressors located at the Hebron Station (compressor engine #3, #4, and #5) manufactured after August 23, 2011, are subject to this subpart.

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

a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to a National Emission Standards for Hazardous Air Pollutants (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 the applicable provisions of 40 CFR 63, Subpart HH. In order for a natural gas production facility to be subject to 40 CFR 63, Subpart HH requirements, certain criteria must be met. First, a facility must either process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. Second, the facility must also contain an affected source as specified in paragraphs (b)(1) or (b)(2) of 40 CFR 63, Subpart HH. Finally if the criteria are met, and the exemptions contained in paragraphs (e)(1) and (e)(2) of 40 CFR 63, Subpart HH do not apply, the facility is subject to the applicable provisions of 40 CFR 63, Subpart HH. The facility can be either a major or area source of HAPs.

Based on information provided by HPH and in accordance with the definition of natural gas processing found in the preamble to 40 CFR 63, Subpart HH, the Hebron Compressor Station does process natural gas and as such, does meet the definition of a natural gas production facility as defined in 40 CFR Part 63. The TEG unit meets the definition of an affected source at an area source of HAPs as defined in paragraph (b)(2) of 40 CFR 63, Subpart HH. After including the benzene, toluene, ethylbenzene, and xylenes (BTEX) from the condenser, and requiring the routing of the emissions back to the reboiler firebox; the condenser becomes a federally enforceable control device. Since the benzene emissions are less than 0.90 megagram per year with the federally enforceable control device in place, and in accordance with the exemptions of 40 CFR §63.764(e)(ii), the facility is not subject to the provisions of 40 CFR 63, Subpart HH.

c. Subpart HHH – National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. This subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271. Because the Hebron compressor station is not a major source of HAPs, the facility is not subject to the provisions of 40 CFR 63, Subpart HHH.

d. Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines. This rule establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. Affected sources include any existing, new or reconstructed stationary RICE located at a major or area source of HAP emissions. A stationary RICE is new if construction of the RICE commenced on or after June 12, 2006.

Since the natural gas 4-stroke rich burn RICE at the Hebron compressor station were constructed after June 12, 2006, the engines are considered a new stationary RICE located at an area source of HAP emissions, and must meet the requirements specified by 40 CFR 63.6590(b)(3)(c) by meeting the requirements of 40 CFR 60 subpart JJJJ.

D. ARM 17.8, Subchapter 4 – Stack Height and Dispersion Techniques, including, but not limited to:

1. ARM 17.8.401 Definitions. This rule includes a list of definitions used in this chapter, unless indicated otherwise in a specific subchapter.

2. ARM 17.8.402 Requirements. HPH must demonstrate compliance with the ambient air quality standards with a stack height that does not exceed Good Engineering Practices (GEP). The proposed height of the new or modified stack for HPH is below the allowable 65-meter GEP stack height.

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

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. HPH 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.

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

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

2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year of any pollutant. HPH has a PTE greater than 25 tons per year of nitrogen oxides ($NO_x$), carbon monoxide (CO), and volatile organic compounds (VOCs); 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. The current permit action is considered an administrative amendment; therefore, a permit application was not required. (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. The current permit action is an administrative amendment, and therefore, did not require publication of a public notice.

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 HPH 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. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

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

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

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

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

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:

   a. PTE > 100 tons/year of any pollutant;

   b. PTE > 10 tons/year of any one 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 ($PM_{10}$) in a serious $PM_{10}$ nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #4693-02 for HPH, the following conclusions were made:

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

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

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

   d. This facility is subject to a current NSPS (40 CFR Subpart JJJJ).

   e. This facility is subject to area source provisions of current NESHAP standards (40 CFR 63, Subpart ZZZZ).

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

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

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

   Based on these facts, the Department determined that the Hebron Compressor Station is a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, HPH may be required to obtain a Title V Operating Permit.

## III. BACT Determination

A BACT determination is required for each new or modified source. HPH 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. The current permit action is an administrative amendment and does not require a BACT analysis.

## IV. Emission Inventory

| | TPY | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Emission Source** | **PM** | **$PM_{10}$** | **$PM_{2.5}$** | **$NO_x$** | **CO** | **VOC[a]** | **$SO_2$** | **HAPs** | **HCOH** | **$CO_2$** | **$CH_4$** | **$N_20$** |
| #1-1380 bhp Waukesha L5794GSI | 0.88 | 0.88 | 0.88 | 13.33 | 26.63 | 9.33 | 0.027 | 1.85 | 1.33 | 5321.27 | 0.10 | 0.01 |
| #2-1380 bhp Waukesha L5794GSI | 0.88 | 0.88 | 0.88 | 13.33 | 26.63 | 9.33 | 0.027 | 1.85 | 1.33 | 5321.27 | 0.10 | 0.01 |
| #3-1380 bhp Waukesha L5794GSI | 0.88 | 0.88 | 0.88 | 13.33 | 13.33 | 9.33 | 0.027 | 1.85 | 1.33 | 5321.27 | 0.10 | 0.01 |
| #4-1380 bhp Waukesha L5794GSI | 0.88 | 0.88 | 0.88 | 13.33 | 13.33 | 9.33 | 0.027 | 1.85 | 1.33 | 5321.27 | 0.10 | 0.01 |
| #5-1380 bhp Waukesha L5794GSI | 0.88 | 0.88 | 0.88 | 13.33 | 13.33 | 9.33 | 0.027 | 1.85 | 1.33 | 5321.27 | 0.10 | 0.01 |
| TEG Glycol Reboiler 0.5 MMBTU/hr | 0.02 | 0.02 | 0.02 | 0.21 | 0.18 | 0.01 | 0.001 | -- | -- | 257.4 | .005 | .005 |
| Dehydrator Still Vent[b] | -- | -- | -- | -- | -- | 1.18 | -- | 0.07 | -- | -- | -- | -- |
| 400 bbl Condensate Tank (fugitive)[c] | -- | -- | -- | -- | -- | 1.99 | -- | -- | -- | -- | -- | -- |
| 400 bbl Condensate Tank (flash)[d] | -- | -- | -- | -- | -- | < 1.00 | -- | -- | -- | -- | -- | -- |
| Fugitive Emissions[e] | **--** | **--** | **--** | **--** | **--** | **1.99** | **--** | **--** | **--** | **--** | **--** | **--** |
| **Total** | 4.42 | 4.42 | 4.42 | 66.86 | 93.43 | 51.82 | 0.136 | 9.32 | 6.65 | 26863.75 | 0.505 | 0.055 |

a. Emissions of VOC's do not include emissions of formaldehyde.
b. Calculated with GRI GLYCalc (submitted by applicant). Flash tank off gass will be recycled. A condenser is used to reduce the BTEX emissions by 80%. The non-condensable gas from the condenser will be routed to the reboiler firebox. It is estimated the efficiency of the firebox will be 98%. Updated using 2013 gas analysis.
c. Calculated with TANKS 4.0.9d (submitted by applicant).
d. Flashing emissions, working and breathing losses are expected to be negligible (i.e. less than one ton per year) because of the liquid composition in the atmospheric tank.
e. Calculated based on estimated component count, weight percent of VOC, and application of leak factors from Protocol for Equipment Emissions Estimates, EPA-453/R-95-017, 11/95.

### 1,380 bhp four-stroke Rich Burn Compressor Engines with NSCR and AFR

Brake Horsepower: 1380 bhp
Fuel Consumption: 10.394 MMBtu/hr (manufacturer's data)
Hours of operation: 8,760 hr/yr

<u>$PM/PM_{10}/PM_{2.5}$ Emissions (Filterable & Condensable)</u>
Emission Factor: 1.941E-02 lb/MMBtu (filterable + condensable; AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 10.394 MMBtu/hr (manufacturer's data)
Calculations: 10.394 MMBtu/hr * 1.941E-02 lb/MMBtu = 0.202 lb/hr
0.202 lb/hr* 8,760 hr/yr * 0.0005 ton/lb = 0.88 ton/yr

<u>$NO_X$ Emissions</u>
Emission factor: 1.0 gram/bhp-hour (BACT Determination for Engines #1 - #5)
Calculations: 1.0 gram/bhp-hour * 1380 hp * 0.002205 lb/gram = 3.04 lb/hr
3.04 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 13.33 ton/yr

<u>VOC Emissions</u>
Emission factor: 0.7 gram/bhp-hour (BACT Determination for Engines #1 - #5)
Calculations: 0.7 gram/bhp-hour * 1380 hp * 0.002205 lb/gram = 2.13 lb/hr
2.13 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 9.33 ton/yr

CO Emissions
Emission factor: 2.0 gram/bhp-hour (BACT Determination for Engines #1 and #2)
Calculations: 2.0 gram/bhp-hour * 1380 hp * 0.002205 lb/gram = 6.09 lb/hr
6.09 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 26.66 ton/yr

CO Emissions
Emission factor: 1.0 gram/bhp-hour (BACT Determination for Engines #3, #4, and #5)
Calculations: 1.0 gram/bhp-hour * 1380 hp * 0.002205 lb/gram = 3.04 lb/hr
3.04 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 13.33 ton/yr

$SO_2$ Emission
Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 10.394 MMBtu/hr (Maximum Design)
Calculations: 10.394 MMBtu/hr * 5.88E-04 lb/MMBtu = 0.0061 lb/hr
0.0061 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.027 ton/yr

HCOH (Formaldehyde) Emissions
Emission factor: 0.1 gram/bhp-hour (manufacturer information for Compressors #1 and #2 manufacturer information for Compressors #3, #4, and #5 indicate HCOH emission factor is 0.01 g/bhp-hr. Using the larger number to be conservative.)
Calculations: 0.1 gram/bhp-hour * 1380 hp * 0.002205 lb/gram = 0.304 lb/hr
0.304 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 1.33 ton/yr

HAPs Emission
Emission factor: 1.192E-02 lb/MMBtu (AP-42, Chapter 3, Table 3.2-3, 7/00)
Fuel Consumption: 10.394 MMBtu/hr (Maximum Design)
Calculations: 10.394 MMBtu/hr * 1.192E-02 lb/MMBtu = 0.124 lb/hr
0.124 lb/hr * 8,760 hr/yr * 0.0005 ton/lb = 0.543 ton/yr
Formaldehyde: 1.33 tpy (manufacturer's information)
Total HAPs: 1.33 tpy + 0.543 tpy = 1.88 tpy

$CO_2$ Emissions
Emission factor: 53.02 kg/MMBtu = (40 CFR 98, Subpart C Table C-1)
Fuel Consumption: 10.394 MMBtu/hr (Maximum Design)
Calculations: 10.394 MMBtu/hr * 53.02 kg/MMBtu = 551.09 kg/hr
551.09 kg/hr * 8,760 hr/yr *0.001 kg/metric ton = 4,827.62 metric ton/yr
4,827.62 metric ton/yr *1.10 ton/metric ton = 5310.39 ton/yr

$CH_4$ Emissions
Emission factor: 1.00E-03 kg/MMBtu = (40 CFR 98, Subpart C Table C-2)
Fuel Consumption: 10.394 MMBtu/hr (Maximum Design)
Calculations: 10.394 MMBtu/hr * 1.00E-03 kg/MMBtu = 0.010 kg/hr
0.010 kg/hr * 8,760 hr/yr * 0.001 kg/metric ton = 0.09 metric ton/yr
0.09 metric ton/yr *1.10 ton/metric ton = 0.10 ton/yr

$N_2O$ Emissions
Emission factor: 1.00E-04 kg/MMBtu = (40 CFR 98, Subpart C Table C-2)
Fuel Consumption: 10.394 MMBtu/hr (Maximum Design)
Calculations: 10.394 MMBtu/hr * 1.00E-04 kg/MMBtu = 0.001 kg/hr
0.001 kg/hr * 8,760 hr/yr * 0.001 kg/metric ton = 0.009 metric ton/yr
0.009 metric ton/yr *1.10 ton/metric ton = 0.01 ton/yr

| HAPS[1] | Emission Factor (lb/MMBtu) | NG Emission Factor(g/bhp-hr)[2] | tpy | |
|---|---|---|---|---|
| 1,1,2,2-Tetrachloroethane | 0.0000253 | | 1.15E-03 | |
| 1,1,2-Trichloroethanel | 0.0000153 | | 6.97E-04 | |
| 1,3-Butadiene | 0.000663 | | 3.02E-02 | |
| 1,3-Dichloropropene | 0.0000127 | | 5.78E-04 | |
| Acetaldehyde, m | 0.00279 | | 1.27E-01 | |
| Acrolein, m | 0.00263 | | 1.20E-01 | |
| Benzene | 0.00158 | | 7.19E-02 | |
| Carbon Tetrachloride | 0.0000177 | | 8.06E-04 | |
| Chlorobenzene | 0.0000129 | | 5.87E-04 | |
| Chloroform | 0.0000137 | | 6.24E-04 | |
| Ethylbenzene | 0.0000248 | | 1.13E-03 | |
| Ethylene Dibromide | 0.0000213 | | 9.70E-04 | |
| Formaldehyde, m | | 1.00E-01 | 1.3325621 | manufacturer's info |
| Methanol | 0.00306 | | 1.39E-01 | |
| Methylene Chloride | 0.0000412 | | 1.88E-03 | |
| Naphthalene | 0.0000971 | | 4.42E-03 | |
| PAH | 0.000141 | | 6.42E-03 | |
| Styrene | 0.0000119 | | 5.42E-04 | |
| Toluene | 0.000558 | | 2.54E-02 | |
| Vinyl Chloride | 7.18E-06 | | 3.27E-04 | |
| Xylene | 0.000195 | | 8.88E-03 | |
| **Pollutant** | **Emission Factor lb/$10^6$ scf** | | **tpy** | |
| Arsenic | 0.000204 | | 1.0315E-05 | |
| Beryllium | 0.000012 | | 6.0678E-07 | |
| Cadmium | 0.0011 | | 5.5621E-05 | |
| Chromium | 0.0014 | | 7.0791E-05 | |
| Cobalt | 0.000084 | | 4.2474E-06 | |
| Manganese | 0.00038 | | 1.9215E-05 | |
| Mercury | 0.00026 | | 1.3147E-05 | |
| Nickel | 0.0021 | | 0.00010619 | |
| Selenium | 0.000024 | | 1.2136E-06 | |
| Sub-TOTAL | 0.005564 | lb/$10^6$ scf | 2.813E-04 | tpy |
| **TOTAL HAPS** | **0.0175** | | **1.88** | tpy |

1. Emission factors from Ap-42 Table 3.2-3, Uncontrolled Emission Factors for 4 Stroke Rich-Burn Engines (7/09)
2. Emission factor from AP-42 Table 1.4-4, Emission Factors for Metals from Natural Gas Combustion (07/98)

**Dehydration Unit – O.50 MMBtu/hr – Reboiler**

| | | |
|---|---|---|
| Fuel Combustion Rate | 0.5 | MMBtu/hr |
| Fuel Heating Value (applicant info) | 1020 | MMBtu/ MMscf |
| Hours of Operation | 8760 | hours/yr |
| Fuel Usage: | 4.29 | MMscf/yr |

PM/$PM_{10}$/$PM_{2.5}$ Emissions (AP-42, Table 1.4-2, 7/98):

| | | |
|---|---|---|
| Emission Factor = | 7.6 | lbs/MMscf |
| Calculation: (7.60 lbs/MMscf) * (4.29 MMscf/yr) * (ton/2000 lb) = | 0.02 | ton/yr |

NOx Emissions (AP-42, Table 1.4-2, 7/98):

| | | |
|---|---|---|
| Emission Factor = | 100 | lbs/MMscf |
| Calculation: (100 lbs/MMscf) * (4.29 MMscf/yr) * (ton/2000 lb) = | 0.21 | ton/yr |

CO Emissions (AP-42, Table 1.4-2, 7/98):

| | | |
|---|---|---|
| Emission Factor = | 84 | lbs/MMscf |
| Calculation: (84 lbs/MMscf) * (4.29 MMscf/yr) * (ton/2000 lb) = | 0.18 | ton/yr |

SOx Emissions (AP-42, Table 1.4-2, 7/98):

| | | |
|---|---|---|
| Emission Factor = | 0.6 | lbs/MMscf |
| Calculation: (1 lbs/MMscf) * (4.29 MMscf/yr) * (ton/2000 lb) = | 0.0013 | ton/yr |

VOC Emissions (AP-42, Table 1.4-2, 7/98):

| | | |
|---|---|---|
| Emission Factor = | 5.5 | lbs/MMscf |
| Calculation: (5.5 lbs/MMscf) * (4.29 MMscf/yr) * (ton/2000 lb) = | 0.01 | ton/yr |

HAPs Emissions (AP-42, Table 1.4-3, 7/98 -):

| | | |
|---|---|---|
| Emission Factor = | 1.88 | lbs/MMscf |
| Calculation: (1.88 lbs/MMscf) * (4.29 MMscf/yr) * (ton/2000 lb) = | 0.004 | ton/yr |

CH4 Emissions (mass) (AP-42, Table 1.4-2, 7/98):

| | | |
|---|---|---|
| Emission Factor = | 2.3 | lbs/MMscf |
| Calculation: (2.3 lbs/MMscf) * (4.29 MMscf/yr) * (ton/2000 lb) = | 0.005 | ton/yr |

CO2 Emissions (mass) (AP-42, Table 1.4-2, 7/98):

| | | |
|---|---|---|
| Emission Factor = - | 120000 | lbs/MMscf |
| Calculation: (120,000 lbs/MMscf) * (4.29 MMscf/yr) * (ton/2000 lb) = ton/yr | 257.4 | ton/yr |

N2O Emissions (mass) (AP-42, Table 1.4-2, 7/98): -

| | | |
|---|---|---|
| Emission Factor = | 2.2 | lbs/MMscf |
| Calculation: (2.2 lbs/MMscf) * (4.29 MMscf/yr) * (ton/2000 lb) = | 0.005 | ton/yr |

-

| HAPs | Emissions Factors (AP-42, Table 1.4-3, 7/98) | |
|---|---|---|
| 2-Methylnaphthalene, | 2.40E-05 | lbs/MMscf |
| 3-Methylchloranthrene | 1.80E-06 | lbs/MMscf |
| 7,12-Dimethylbenz(a)anthracene | 1.60E-05 | lbs/MMscf |
| Acenaphthene | 1.80E-06 | lbs/MMscf |
| Acenaphthylene | 1.80E-06 | lbs/MMscf |
| Anthracene | 2.40E-06 | lbs/MMscf |
| Benz(a)anthracene | 1.80E-06 | lbs/MMscf |
| Benzene | 2.10E-03 | lbs/MMscf |
| Benzo(a)pyrene | 1.20E-06 | lbs/MMscf |
| Benzo(b)fluoranthene | 1.80E-06 | lbs/MMscf |
| Benzo(g,h,i)perylene | 1.20E-06 | lbs/MMscf |
| Benzo(k)fluoranthene | 1.80E-06 | lbs/MMscf |
| Chrysene | 1.80E-06 | lbs/MMscf |
| Dibenzo(a,h)anthracene | 1.20E-06 | lbs/MMscf |
| Dichlorobenzene | 1.20E-03 | lbs/MMscf |
| Fluoranthene | 3.00E-06 | lbs/MMscf |
| Fluorene | 2.80E-06 | lbs/MMscf |
| Formaldehyde | 7.50E-02 | lbs/MMscf |
| Hexane | 1.80E+00 | lbs/MMscf |
| Indeno(1,2,3-cd)pyrene | 1.80E-06 | lbs/MMscf |
| Naphthalene | 6.10E-04 | lbs/MMscf |
| Phenanathrene | 1.70E-05 | lbs/MMscf |
| Pyrene | 5.00E-06 | lbs/MMscf |
| Toluene | 3.40E-03 | lbs/MMscf |
| TOTAL = | 1.88E+00 | lbs/MMscf |

## V. Existing Air Quality

The Hebron Compressor Station is located in the NE¼ NW¼ of Section 18, Township 27 North, Range 59 East, Roosevelt County. Roosevelt County is unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for all criteria pollutants.

## VI. Ambient Air Impact Analysis

The Department determined that the impacts from this permitting action will be minor. The Department believes the amount of controlled emissions from this facility will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

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

| YES | NO | |
|---|---|---|
| X | | 1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights? |
| | X | 2. Does the action result in either a permanent or indefinite physical occupation of private property? |
| | X | 3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property) |
| | X | 4. Does the action deprive the owner of all economically viable uses of the property? |
| | X | 5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)]. |
| | | 5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests? |
| | | 5b. Is the government requirement roughly proportional to the impact of the proposed use of the property? |
| | X | 6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action) |
| | X | 7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the 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

The current permit action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an Environmental Assessment is not required.

Analysis Prepared By: Loni Patterson
Date: August 9, 2016