

5. EnCana shall be limited to a maximum of 8,275 hours of operation during any rolling 12-month period (ARM 17.8.749 and ARM 17.8.1204).

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 testing (ARM 17.8.105).

C. Operational Reporting Requirement

1. EnCana 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 most recent emission inventory report and sources in Section I.A. of the permit analysis.

Production information shall be gathered on a calendar-year basis and be submitted to the Department by the date required in the emission inventory request and shall be in units as 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. EnCana shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit.

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

3. All records compiled in accordance with this permit must be maintained by EnCana 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. EnCana shall document, by month, the hours of operation of the station. By the 25th day of each month, EnCana shall total the hours of operation of the facility during the previous 12 months to verify compliance with the limitation in Section II.A.5. A written report of the compliance verification shall be submitted annually to the Department along with the annual emission inventory (ARM 17.8.749).
5. EnCana shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204 (3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted with the annual emission inventory information.

- A. Inspection - EnCana 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 all the terms, conditions, and matters stated herein shall be deemed accepted if EnCana fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving EnCana 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 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 Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section. The filing of a request for a hearing postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board.
- 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 Fees - Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay annual operation fee by EnCana may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

Permit Analysis
EnCana Gathering Services (USA), Inc.
Big Coulee Field, Station 057
Permit #2770-05

I. Introduction/Process Description

EnCana Gathering Services (USA), Inc. (EnCana) Big Coulee Field, Station 057, operates a compressor station and associated equipment, located in the SE¼ of the SE¼ of Section 25, Township 5 North, Range 19 East, in Golden Valley County, Montana.

A. Permitted Equipment

This facility includes, but is not limited to, the following equipment:

- One 1969 360-horsepower (hp) White Superior compressor engine
- One 1973 360-hp White Superior compressor engine
- One 175-thousand British thermal units per hour (MBtu/hr) PEC Dehydrator
- One 243-MBtu/hr BS&B Boiler
- Dehydrator Vent Emissions
- Various Building Heaters <1-million British thermal units per hour (MMBtu/hr)
- Process Valves

B. Source Description

The first White Superior compressor engine was installed at the Big Coulee Field, Station 057 compressor station in 1969 and the second White Superior compressor engine was installed in 1973.

The complex has two primary purposes. The first is to pump the field gas up to the required pressure in the natural gas transmission system. Compression of the gas is accomplished using both compressor engines described above. The boiler provides heat to the various station facilities.

The second purpose of the complex is to "dry" the gas as it is being processed. The gas contains some moisture, which must be removed from the system prior to being sent into the transmission system. This is accomplished with a dehydrator, also commonly called a reboiler or glycol unit.

The gas is treated with a glycol solution, which absorbs the water in the gas stream. The glycol solution is then heated to about 300 degrees Fahrenheit (°F) to drive off the water and return the glycol. Burning natural gas in the dehydrator reboiler generates the heat necessary for this activity. This unit will have a heat input of approximately 175 MBtu/hr. The reboiler is small by industrial standards, having a size approximately equivalent to a typical natural gas-fired small office heating system.

C. Permit History

On June 22, 1993, the Montana Power Company, Big Coulee Field, Station 057 (Montana Power - Station 057) was issued **Permit #2770-00** for the operation of their compressor station and associated equipment, located in the SE¼ of the SE¼ of Section 25, Township 5 North, Range 19 East, Golden Valley County near Ryegate, Montana. The station was identified as the Big Coulee Field, Station 057.

A Best Available Control Technology (BACT) determination was not required for each of the two 360-hp White Superior compressor engines, since they were operating at the same location prior to March 16, 1979.

Montana Power - Station 057 tested each 360-hp White Superior compressor engine for nitrogen oxides (NO_x) and carbon monoxide (CO), concurrently, and demonstrated compliance with the emission limits contained in the permit in November of 1993.

Permit #2770-01 was issued to Montana Power - Station 057 to revise the emission limitation units from grams per break horsepower-hour (g/bhp-hr) to pounds per hour (lb/hr). The revision allowed flexibility to account for varying parameters such as engine revolutions per minute (rpm), operating load (bhp), ambient air temperature, gas temperature, site, elevation, fuel gas quality, air/fuel ratio (AFR), field gas conditions, etc. Rather than limit the engines to a g/bhp-hr limit, an hourly emission limit allowed additional operational flexibility. Also, to clarify NO_x mass emission calculations, NO_x emission limitations were identified as nitrogen dioxide NO₂. Permit #2770-01 replaced Permit #2770-00. On March 7, 1994, Permit #2770-01 became final.

This permit alteration included an hourly operational limit that allowed Montana Power - Station 057 to stay below the Title V Operating Permit threshold. In addition, this permit change updated the rule references in the permit. **Permit #2770-02** replaced Permit #2770-01. On September 7, 1997, Permit #2770-02 became final.

This permit modification was a requested to address a name change from Montana Power Company to the Montana Power Gas Company. The appropriate references in this permit were changed to reflect the name change. In addition, the permit was updated to reflect the current format used for writing permits. **Permit #2770-03** replaced Permit #2770-02. On March 24, 1999, Permit #2770-03 became final.

On January 22, 2002, the Department of Environmental Quality (Department) received a notice of corporate merger and name change from the Montana Power Gas Company to PanCanadian Energy Resources, Inc. (PanCanadian). The letter notified the Department that Montana Power Gas Company, Xeno, Inc., and Entech Gas Ventures, Inc. merged into North American Resources Company (NARCO) as of January 1, 2002. The letter also stated that at the same time, NARCO changed its corporate name to PanCanadian. In addition, on April 18, 2002, the Department received a letter from PanCanadian requesting a name change from PanCanadian to EnCana. The current permit action transferred the permit from PanCanadian to EnCana and updated the permit with current permit language and rule references used by the Department. **Permit #2770-04** replaced Permit #2770-03. On August 22, 2002, Permit #2770-04 became final.

D. Current Permit Action

On June 5, 2003, the Department received a letter from Aspen Consulting & Engineering, Inc., on behalf of EnCana requesting the Department change the corporate name on Permit #2770-04 from EnCana Energy Resources, Inc. to EnCana. The current permitting action changes the name from EnCana Energy Resources, Inc. to EnCana and updates the permit to reflect current permit language and rule references used by the Department. Permit #2770-05 replaces Permit #2770-04.

E. Additional Information

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

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for the locations 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 is a list of applicable definitions used in this subchapter, 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).

EnCana shall comply with all 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 in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation. (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:

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 PM₁₀

EnCana 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. (1) This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes. (2) This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 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 emissions sources and that reasonable precautions be taken to control emissions of airborne particulate. (2) Under this rule, EnCana 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. (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. EnCana will use natural gas in its fuel burning equipment, which will meet this limitation.
6. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. The owner or operator of any stationary source or modification, as defined and applied in 40 CFR Part 60, shall comply with the standards and provisions of 40 CFR Part 60.

40 CFR 60, Subpart KKK Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants. Owners or operators of onshore natural gas processing plants, as defined and applied in 40 CFR Part 60, shall comply with standards and provisions of 40 CFR Part 60, Subpart KKK. This subpart does not apply to the EnCana facility because the facility does not meet the definition of a natural gas processing plant as defined in 40 CFR Part 60, Subpart KKK.

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:

40 CFR 63, Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63, shall comply with the applicable provisions of 40 CFR Part 63, Subpart HH. In order for a natural gas production facility to be subject to 40 CFR Part 63, Subpart HH requirements, certain criteria must be met. First, the facility must be a major source of Hazardous Air Pollutants (HAP) as determined according to paragraphs (a)(1)(i) through (a)(1)(iii) of 40 CFR 63, Subpart HH. Second, a facility that is determined to be major for HAP must also either process, upgrade, or store hydrocarbon liquids prior to the point of custody transfer, or process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. Third, the facility must also contain an affected source as specified in paragraphs (b)(1) through (b)(4) of 40 CFR Part 63, Subpart HH. Finally, if the first three criteria are met, and the exemptions contained in paragraphs (e)(1) and (e)(2) of 40 CFR Part 63, Subpart HH do not apply, the facility is subject to the applicable provisions of 40 CFR Part 63, Subpart HH. Because the facility is not a major source of HAP, EnCana is not subject to the provisions of 40 CFR Part 63, Subpart HH.

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

- 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. EnCana shall submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. The current permit action is considered an administrative action; therefore, an application fee is not required.
 2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source

of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated 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, as described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions which pro-rate the required fee amount.

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this subchapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter or use any air contaminant sources that have the potential to emit greater than 25 tons per year of any pollutant. EnCana has the potential to emit more than 25 tons per year of NO_x; therefore, an air quality permit is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, alteration or use of a source. EnCana was not required to submit an application for the current permit action because the change is considered administrative.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. A BACT determination was not required for the current permit action because there are no new or altered sources permitted as a part of this action.
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 Statutes and Rules. This rule states that nothing in the permit shall be construed as relieving EnCana of the responsibility for complying

with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*

10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.

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

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

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

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one HAP, or PTE > 25 tons/year of a combination of all HAP, or lesser quantity as the Department may establish by rule or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.

2. ARM 17.8.1204, Air Quality Operating Permit Program Applicability. Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2770-05 for EnCana, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for all criteria pollutants
 - b. The facility's PTE is less than 10 tons/year of any one HAP and less than 25 tons/year of all HAP
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is not subject to any current NESHAP standards
 - e. This facility is not subject to any current NSPS standards
 - f. This source is not a Title IV affected source nor a solid waste combustion unit
 - g. This source is not an EPA designated Title V source
 - h. (2) The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations, which limit that source's potential to emit. Permit #2770-05 includes a federally enforceable limit that allows the facility to stay below the Title V Operating permit threshold. Therefore, the facility will not be required to obtain a Title V Operating Permit.
 - i. In applying for an exemption under this section the owner or operator of the source shall certify to the Department that the source's potential to emit does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on potential to emit shall annually certify its actual emissions are less than those that would require the source to obtain an air quality operating permit.

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

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

The compliance certification submittal required by 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state, based

on information and belief formed after reasonable inquiry, that the statements and information in the document are true, accurate, and complete.

III. BACT Determination

A BACT determination is required for each new or altered source. EnCana shall install on the new or altered source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized. A BACT analysis is not required for the current permit action, because there are no new or altered sources permitted as a part of this action and because the change is considered administrative.

IV. Emission Inventory

	Ton/Year					
	PM	PM ₁₀	NO _x	CO	VOC	SO _x
360 White Superior (#01)	0.13	0.13	49.27	5.91	0.66	0.01
360 White Superior (#02)	0.13	0.13	49.27	5.91	0.66	0.01
PEC Dehy Reboiler 175 MBtu/hr	0.01	0.01	0.07	0.01	0.00	0.00
B S & B Boiler 250 MBtu/hr	0.01	0.01	0.10	0.02	0.01	0.00
Dehy Vent Emissions					2.11	
Various Building Heaters <1 MMBtu/hr	0.05	0.05	0.41	0.09	0.02	0.00
Process Valves	0.00					
Total	0.33	0.33	99.12	11.94	3.46	0.02

(SOURCE #01)

360-hp White Superior Compressor Engine

Brake Horsepower:	360 Bhp @ 900 rpm
Hours of Operation:	8,275 hr/yr
Max Fuel Combustion Rate:	8.50 MBtu/Bhp-hr * 360 Bhp = 3060 MBtu/hr 3060 MBtu/hr * 1 MMBtu/1000 MBtu = 3.06 MMBtu/hr
Fuel Heating Value:	1,000Btu/SCF or 0.0010 MMSCF/MMBtu
PM Emissions	
Emission Factor:	10.00 lb/MMSCF {FIRE, PC Version, 1/95, 2-02-002-02}
Calculations:	10.00 lb/MMSCF * 0.001 MMSCF/MMBtu * 3.06 MMBtu/hr = 0.03 lb/hr 0.03 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.13 ton/yr
PM₁₀ Emissions	
Emission Factor:	10.00 lb/MMSCF {FIRE, PC Version, 1/95, 2-02-002-02}
Calculations:	10.00 lb/MMSCF * 0.001 MMSCF/MMBtu * 3.06 MMBtu/hr = 0.03 lb/hr 0.03 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.13 ton/yr
NO_x Emissions	
Emission Factor:	15.00 gram/Bhp-hr {Manufacturer's Data}
Calculations:	15.00 gram/Bhp-hr * 360 Bhp * 0.002205 lb/gram = 11.91 lb/hr 11.91 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 49.27 ton/yr
CO Emissions	
Emission Factor:	1.80 gram/Bhp-hr {Manufacturer's Data}
Calculations:	1.80 gram/Bhp-hr * 360 Bhp * 0.002205 lb/gram = 1.43 lb/hr 1.43 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 5.91 ton/yr
VOC Emissions	
Emission Factor:	0.20 gram/Bhp-hr {Manufacturer's Data}
Calculations:	0.20 gram/Bhp-hr * 360 Bhp * 0.002205 lb/gram = 0.16 lb/hr 0.16 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.66 ton/yr
SO_x Emissions	
Emission Factor:	0.6000 lb/MMSCF {FIRE, PC Version, 1/95, 2-02-002-02}

Calculations: $0.6000 \text{ lb/MMSCF} * 0.001 \text{ MMSCF/MMBtu} * 3.06 \text{ MMBtu/hr} = 0.0018 \text{ lb/hr}$
 $0.0051 \text{ lb/hr} * 8275 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

(SOURCE #02)

360-hp White Superior Compressor Engine

Brake Horsepower: 360 Bhp @ 900 rpm
Hours of Operation: 8,275 hr/yr
Max Fuel Combustion Rate: $8.50 \text{ MBtu/Bhp-hr} * 360 \text{ Bhp} = 3060 \text{ MBtu/hr}$
 $3060 \text{ MBtu/hr} * 1 \text{ MMBtu}/1000 \text{ MBtu} = 3.06 \text{ MMBtu/hr}$
Fuel Heating Value: 1,000 Btu/SCF or 0.0010 MMSCF/MMBtu

PM Emissions

Emission Factor: 10.00 lb/MMSCF {FIRE, PC Version, 1/95, 2-02-002-02}
Calculations: $10.00 \text{ lb/MMSCF} * 0.001 \text{ MMSCF/MMBtu} * 3.06 \text{ MMBtu/hr} = 0.03 \text{ lb/hr}$
 $0.03 \text{ lb/hr} * 8275 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.13 \text{ ton/yr}$

PM₁₀ Emissions

Emission Factor: 10.00 lb/MMSCF {FIRE, PC Version, 1/95, 2-02-002-02}
Calculations: $10.00 \text{ lb/MMSCF} * 0.001 \text{ MMSCF/MMBtu} * 3.06 \text{ MMBtu/hr} = 0.03 \text{ lb/hr}$
 $0.03 \text{ lb/hr} * 8275 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.13 \text{ ton/yr}$

NO_x Emissions

Emission Factor: 15.00 gram/Bhp-hr {Manufacturer's Data}
Calculations: $15.00 \text{ gram/Bhp-hr} * 360 \text{ Bhp} * 0.002205 \text{ lbs/gram} = 11.91 \text{ lb/hr}$
 $11.91 \text{ lb/hr} * 8275 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 49.27 \text{ ton/yr}$

CO Emissions

Emission Factor: 1.80 gram/Bhp-hr {Manufacturer's Data}
Calculations: $1.80 \text{ gram/Bhp-hr} * 360 \text{ Bhp} * 0.002205 \text{ lb/gram} = 1.43 \text{ lb/hr}$
 $1.43 \text{ lb/hr} * 8275 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 5.91 \text{ ton/yr}$

VOC Emissions

Emission Factor: 0.20 gram/Bhp-hr {Manufacturer's Data}
Calculations: $0.20 \text{ gram/Bhp-hr} * 360 \text{ Bhp} * 0.002205 \text{ lb/gram} = 0.16 \text{ lb/hr}$
 $0.16 \text{ lb/hr} * 8275 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.66 \text{ ton/yr}$

SO_x Emissions

Emission Factor: 0.6000 lb/MMSCF {FIRE, PC Version, 1/95, 2-02-002-02}
Calculations: $0.6000 \text{ lb/MMSCF} * 0.001 \text{ MMSCF/MMBtu} * 3.06 \text{ MMBtu/hr} = 0.0018 \text{ lb/hr}$
 $0.0051 \text{ lb/hr} * 8275 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

(SOURCE #03)

PEC Dehy Reboiler 175 MBtu/hr

Hours of Operation: 8,275 hr/yr
Max Fuel Combustion Rate: 0.175 MMBtu/hr {Information from company}
Fuel Heating Value: 1,000 Btu/SCF or 0.0010 MMSCF/MMBtu
0.0002 MMSCF/hr

PM Emissions

Emission Factor: 12.000 lb/MMSCF {AP-42, 1.4-1}
Calculations: $12.000 \text{ lb/MMSCF} * 0.000175 \text{ MMSCF/hr} = 0.0021 \text{ lb/hr}$
 $0.001 \text{ lb/hr} * 8275 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.009 \text{ ton/yr}$

PM₁₀ Emissions

Emission Factor: 12.000 lb/MMSCF {AP-42, 1.4-1}
Calculations: $12.000 \text{ lb/MMSCF} * 0.000175 \text{ MMSCF/hr} = 0.0021 \text{ lb/hr}$
 $0.001 \text{ lb/hr} * 8275 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.009 \text{ ton/yr}$

NO_x Emissions

Emission Factor: 100.000 lb/MMSCF {AP-42, 1.4-1}
Calculations: $100.000 \text{ lb/MMSCF} * 0.000175 \text{ MMSCF/hr} = 0.0175 \text{ lb/hr}$
 $0.018 \text{ lb/hr} * 8275 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.07 \text{ ton/yr}$

CO Emissions
 Emission Factor: 20.000 lb/MMSCF {AP-42, 1.4-1}
 Calculations: 20.000 lb/MMSCF * 0.000175 MMSCF/hr = 0.0035 lb/hr
 0.004 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.01 ton/yr

VOC Emissions
 Emission Factor: 5.300 lb/MMSCF {AP-42, 1.4-1}
 Calculations: 5.300 lb/MMSCF * 0.000175 MMSCF/hr = 0.0009 lb/hr
 0.001 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.004 ton/yr

SO_x Emissions
 Emission Factor: 0.6000 lb/MMSCF {AP-42, 1.4-1}
 Calculations: 0.6000 lb/MMSCF * 0.000175 MMSCF/hr = 0.0001 lb/hr
 0.0001 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.0004 ton/yr

(SOURCE #04)

B S & B Boiler 250 MBtu/hr

Hours of Operation: 8,275 hr/yr
 Max Fuel Combustion Rate: 0.25 MMBtu/hr {Information from company}
 Fuel Heating Value: 1,000 Btu/SCF or 0.0010 MMSCF/MMBtu
 0.00025 MMSCF/hr

PM Emissions
 Emission Factor: 5.000 lb/MMSCF {AP-42, 1.4-1}
 Calculations: 5.000 lb/MMSCF * 0.00025 MMSCF/hr = 0.0012 lb/hr
 0.001 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.01 ton/yr

PM₁₀ Emissions
 Emission Factor: 5.000 lb/MMSCF {AP-42, 1.4-1}
 Calculations: 5.000 lb/MMSCF * 0.00025 MMSCF/hr = 0.0012 lb/hr
 0.001 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.01 ton/yr

NO_x Emissions
 Emission Factor: 100.000 lb/MMSCF {AP-42, 1.4-1}
 Calculations: 100.000 lb/MMSCF * 0.00025 MMSCF/hr = 0.0245 lb/hr
 0.025 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.10 ton/yr

CO Emissions
 Emission Factor: 20.000 lb/MMSCF {AP-42, 1.4-1}
 Calculations: 20.000 lb/MMSCF * 0.00025 MMSCF/hr = 0.0049 lb/hr
 0.005 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.02 ton/yr

VOC Emissions
 Emission Factor: 8.000 lb/MMSCF {AP-42, 1.4-1}
 Calculations: 8.000 lb/MMSCF * 0.00025 MMSCF/hr = 0.0020 lb/hr
 0.002 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.01 ton/yr

SO_x Emissions
 Emission Factor: 0.6000 lb/MMSCF {AP-42, 1.4-1}
 Calculations: 0.6000 lb/MMSCF * 0.00025 MMSCF/hr = 0.0001 lb/hr
 0.0001 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.001 ton/yr

(SOURCE #05)

Dehy Vent Emissions

The emissions are calculated using the GRI GLYCalc program.

Uncontrolled Regenerator Emissions - VOC: 0.9115 ton/yr

Flash Tank Offgas Emissions - VOC: 1.1998 ton/yr

Total 2.1113 ton/yr

(Source #06)

Various Building Heaters <1 MMBtu/hr

Hours of Operation:	8,275 hr/yr
Max Fuel Combustion Rate:	1.00 MMBtu/hr {Information from company}
Fuel Heating Value:	1,000 Btu/SCF or 0.0010 MMSCF/MMBtu 0.00100 MMSCF/hr
PM Emissions	
Emission Factor:	12.000 lb/MMSCF {AP-42, 1.4-1}
Calculations:	12.000 lb/MMSCF * 0.00100 MMSCF/hr = 0.0120 lb/hr 0.012 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.05 ton/yr
PM ₁₀ Emissions	
Emission Factor:	12.000 lb/MMSCF {AP-42, 1.4-1}
Calculations:	12.000 lb/MMSCF * 0.00100 MMSCF/hr = 0.0120 lb/hr 0.012 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.05 ton/yr
NO _x Emissions	
Emission Factor:	100.000 lb/MMSCF {AP-42, 1.4-1}
Calculations:	100.000 lb/MMSCF * 0.00100 MMSCF/hr = 0.1000 lb/hr 0.100 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.41 ton/yr
CO Emissions	
Emission Factor:	21.000 lb/MMSCF {AP-42, 1.4-1}
Calculations:	21.000 lb/MMSCF * 0.00100 MMSCF/hr = 0.0210 lb/hr 0.021 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.09 ton/yr
VOC Emissions	
Emission Factor:	5.300 lb/MMSCF {AP-42, 1.4-1}
Calculations:	5.300 lb/MMSCF * 0.00100 MMSCF/hr = 0.0053 lb/hr 0.005 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.02 ton/yr
SO _x Emissions	
Emission Factor:	0.6000 lb/MMSCF {AP-42, 1.4-1}
Calculations:	0.6000 lb/MMSCF * 0.00100 MMSCF/hr = 0.0006 lb/hr 0.0006 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.002 ton/yr

(Source #07)

Process Valves

Hours of Operation:	8,275 hr/yr
Max Fuel Combustion Rate:	20.00 MMBtu/hr {Information from company}
Fuel Heating Value:	1,000 Btu/SCF or 0.0010 MMSCF/MMBtu 0.02000 MMSCF/hr
VOC Emissions	
Emission Factor:	0.0100 lb/MMSCF {AP-42, 1.4-1}
Calculations:	0.0100 lb/MMSCF * 0.02000 MMSCF/hr = 0.0002 lb/hr 0.0002 lb/hr * 8275 hr/yr * 0.0005 ton/lb = 0.001 ton/yr

V. Existing Air Quality

The current permit action is an Administrative Amendment to Permit #2770-05 and will not increase emissions from this source. In the view of the Department, Encana will continue to operate in compliance with all applicable rules and regulations that apply to the facility.

VI. Ambient Air Quality

Permit #2770-05 allows the operation of a natural gas compressor station and associated equipment located in the SE¹/₄ of the SE¹/₄ of Section 25, Township 5 North, Range 19 East, in Golden Valley County, Montana. The Department believes that the amount of controlled emissions generated by this project will not cause or contribute to a violation of any set ambient air quality standard.

VII. Taking or Damaging Implication Analysis

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

VIII. Environmental Assessment

An environmental assessment was not required for this permitting action because it is considered an administrative action.

Permit Analysis Prepared By: Chris Ames

Date: July 10, 2003