



**Brian Schweitzer, Governor**

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September 10, 2009

Ms. Amy Gross  
338 Hwy 87 East  
Billings, MT 59101

Dear Ms. Amy Gross:

Montana Air Quality Permit #2907-05 is deemed final as of September 9, 2009, by the Department of Environmental Quality (Department). This permit is for the Helena Bulk Terminal. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Vickie Walsh  
Air Permitting Program Supervisor  
Air Resources Management Bureau  
(406) 444-9741

Shawn Juers  
Environmental Engineer  
Air Resources Management Bureau  
(406) 444-2049

VW:SJ  
Enclosure

Montana Department of Environmental Quality  
Permitting and Compliance Division

Montana Air Quality Permit #2907-05

ConocoPhillips  
338 Hwy 87 East  
Billings, MT 59101

September 9, 2009



## MONTANA AIR QUALITY PERMIT

Issued to: ConocoPhillips Company  
338 Hwy 87 East  
Billings, MT 59101

MAQP: #2907-05  
Application Complete: 6/2/2009  
Preliminary Determination Issued: 7/17/2009  
Department Decision Issued: 8/21/2009  
Permit Final: 9/9/2009  
AFS #: 049-0011

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to ConocoPhillips Company (ConocoPhillips), pursuant to Sections 75-2-204, 211, and 215 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

ConocoPhillips operates a bulk gasoline terminal, which receives gasoline and distillate fuels from the Yellowstone Pipeline and distributes them around the state via railcar and tank truck. This facility is located in the SE $\frac{1}{4}$  of the NE $\frac{1}{4}$  of Section 28, Township 10 North, Range 3 West, in Lewis and Clark County, Montana. The facility is known as the Helena Bulk Terminal. A complete list of permitted equipment is contained in the permit analysis.

#### B. Current Permit Action

On May 21, 2009, the Department received an Application for a Modification of MAQP #2907-04 from Bison Engineering, Inc. on behalf of ConocoPhillips. An affidavit of Public Notice was received by the Department on June 2, 2009, and additional information received June 9, 2009, completing the application. The application proposes 1.) to modify the existing truck loading rack by removing the north loading bay, and using only the south loading bay with loading being accomplished by using the bottom valve connections of the tanker trucks and 2.) to use an existing Vapor Combustion Unit (VCU) for Volatile Organic Carbon (VOC) emissions control from both the truck loading rack and the railcar loading rack (collectively called the cargo tank loading racks). The project will result in a net decrease of emissions, significantly reducing VOC emissions with a slight increase in conventional combustion products. The requested operational permit conditions will allow the facility to be designated as a synthetic minor with respect to Title V.

Because the VCU meets the definition of an incinerator pursuant to 75-2-103, MCA, the permit analysis includes a health risk assessment as required by ARM 17.8.770. Operational and emissions limitations were combined for both the railcar and the tank truck loading operations. Other changes include updates made to reflect the current applicable requirements, permit language, format, and rule references used by the Department. Title V synthetic minor status for this facility is conditional based upon the installation and operation of the equipment as described in the application.

## SECTION II: Cargo Tank Loading Racks (Plant-wide loading)

### A. Operational Conditions:

1. Until the Department receives the notifications required by Section II.C, notifying the Department of commencement and completion of the project as described in MAQP Application #2907-05, ConocoPhillips shall continue to operate as required by MAQP #2907-04 (ARM 17.8.749(2)).
2. ConocoPhillips shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 Code of Federal Regulations (CFR) 60 Subpart XX, Standards of Performance for Bulk Gasoline Terminals (ARM 17.8.340 and 40 CFR 60, Subpart XX).
3. ConocoPhillips shall not exceed a combined 6,800,000 barrels of gasoline throughput through the truck and railcar loadout operations, on a rolling 12-month basis (ARM 17.8.749).
4. ConocoPhillips shall not exceed a combined 12,500,000 barrels of distillate product throughput through the truck and railcar loadout operations, on a rolling 12-month basis (ARM 17.8.749).
5. ConocoPhillips shall operate and maintain an enclosed VCU to control Total Organic Carbon and Hazardous Air Pollutant (HAP) emissions during the loading of gasoline (ARM 17.8.752).
6. ConocoPhillips shall limit, by design, the maximum throughput for any possible loading scenario to less than 2,300 gallons per minute (gpm). Flowrate limiting design may include, but not be limited to, the combined capacity of pumps, the use of control valves with maximum flowrate settings, orifices, and/or locked out valves (ARM 17.8.749).
7. ConocoPhillips' loading racks shall be equipped with a vapor recovery system designed to collect the organic compounds displaced from gasoline loading and send those emissions to an enclosed VCU (ARM 17.8.752).
8. Loading of cargo tanks shall be restricted to the use of submerged loading or bottom fill loading and dedicated normal service (ARM 17.8.749).
9. ConocoPhillips shall ensure that loading of gasoline cargo tanks is made only into cargo tanks equipped with vapor recovery equipment that is compatible with the terminal's vapor recovery system (ARM 17.8.749).
10. Loading of product into gasoline cargo tanks shall be limited to vapor-tight cargo tanks using the following procedures (ARM 17.8.749):
  - a. ConocoPhillips shall obtain the vapor tightness documentation described in 40 CFR 60 Appendix A Method 27 (or another method approved by the Department) or Department of Transportation (DOT) certification methods for each gasoline cargo tank that is to be loaded at the loading rack;
  - b. ConocoPhillips shall require the cargo tank identification number to be recorded as each gasoline cargo tank is loaded at the terminal; and

- c. ConocoPhillips shall take the necessary steps to ensure that any non-vapor-tight gasoline cargo tank will not be reloaded until vapor tightness documentation for that cargo tank is obtained.
11. The vapor recovery and liquid loading equipment shall be designed and operated to prevent gauge pressure in the gasoline cargo tank from exceeding 4,500 Pascals (Pa) (450 millimeters (mm) of water) during product loading (ARM 17.8.749).
12. No pressure-vacuum vent in the terminal's vapor recovery system shall begin to open at a system pressure less than 4,500 Pa (450 mm of water) (ARM 17.8.749).
13. The vapor recovery system shall be designed to prevent any vapors collected at one loading position from passing to another loading position (ARM 17.8.749).
14. ConocoPhillips shall ensure that the terminal's and the cargo tank's vapor recovery systems are connected during each loading of gasoline (ARM 17.8.749).
15. ConocoPhillips shall install and continuously operate a thermocouple, ultraviolet beam, or other equivalent heat sensing device, in proximity to the pilot flame, and an associated recorder, to detect the presence of a pilot flame in the VCU fire box. The VCU shall be equipped to automatically prevent loading operations from beginning at any time that the pilot flame is absent. (ARM 17.8.749).
16. ConocoPhillips shall operate and maintain the VCU and vapor collection system according to manufacturer's recommendations. ConocoPhillips shall perform semiannual (or more frequent according to manufacturer's recommendations) preventative maintenance inspections (ARM 17.8.749).
17. ConocoPhillips 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).
18. ConocoPhillips shall treat all unpaved portions of 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.17 (ARM 17.8.749).

B. Emissions Limitations:

1. ConocoPhillips shall not cause or authorize to be discharged into the atmosphere from the enclosed VCU:
  - a. Visible emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.749)
  - b. Any particulate emissions in excess of 0.10 grains per dry standard cubic foot (gr/dscf) corrected to 12% carbon dioxide (CO<sub>2</sub>) (ARM 17.8.749).
  - c. VOC emissions of 10.0 milligrams per liter (mg/L) of gasoline loaded (ARM 17.8.1204).
  - d. Carbon monoxide (CO) emissions of 10.0 mg/L of gasoline loaded (ARM 17.8.749).
  - e. Oxides of Nitrogen (NO<sub>x</sub>) emissions of 4.0 mg/L of gasoline loaded (ARM 17.8.749).

C. Notification Requirements:

1. ConocoPhillips shall furnish the Department a notification of the date that the modification to the Truck Loading Rack is commenced, postmarked no later than 30 days after such date (ARM 17.8.749).
2. ConocoPhillips shall furnish the Department a notification of the date that modification to the VCU is commenced and an estimate of emissions and emissions factors during this time, postmarked no later than 30 days after such date (ARM 17.8.749).
3. ConocoPhillips shall furnish the Department a notification of the date of initial startup of the modified Loading Rack and VCU, postmarked no later than 15 days after such date (ARM 17.8.749).

D. Testing Requirements

1. Within 180 days of the initial startup of the modified Loading Rack, collection system, and VCU, the VCU shall be tested for total VOC emissions to demonstrate compliance with the emission limitation stated in Section II.B.1.c. The VCU shall be tested for total VOC emissions every 5 years or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105).
2. Compliance with the vapor recovery and liquid loading equipment gauge pressure limit contained in Section III.A.12 shall be demonstrated every 5 years, or according to another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105).
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).

E. Inspection and Repair Requirements

Each calendar month, the vapor recovery system, the vapor control system, and the loading racks shall be inspected for total organic compound leaks, liquid or vapor, during product transfer operations. For purposes of this requirement, detection methods incorporating sight, sound, or smell are acceptable. Each detected leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected (ARM 17.8.105 and ARM 17.8.749).

F. Recordkeeping Requirements:

1. ConocoPhillips shall document, by month, the total gasoline throughput for the loading racks. This shall include all gasoline products shipped and received at the loading racks. By the 25<sup>th</sup> day of each month, ConocoPhillips shall total the amount of throughput during the previous month. This information will be used to demonstrate compliance with the throughput limitations of Section II.A.3 (ARM 17.8.749).
2. ConocoPhillips shall document, by month, the total distillate throughput for the loading racks. This shall include all distillate products shipped and received at the loading racks. By the 25<sup>th</sup> day of each month, ConocoPhillips shall total the amount of throughput during the previous month. This information will be used to demonstrate compliance with the throughput limitations of Section II.A.4 (ARM 17.8.749).

3. The cargo tank vapor tightness documentation required in Section II.A.10 of this permit shall be kept on file at the terminal, in a permanent form, and be made available for inspection and shall be updated at least once per year to reflect current test results (ARM 17.8.749).
4. ConocoPhillips shall document, by month, any VCU and/or vapor collection system malfunction which affects the collection and/or destruction efficiency while gasoline is loaded (ARM 17.8.749).
5. ConocoPhillips shall maintain a current diagram and/or other documentation as needed, depicting the design systems in place to limit the maximum design loading rack throughput capacity to less than 2,300 gpm. This information will be used to demonstrate compliance with Section II.A.6 (ARM 17.8.749).
6. A record of each monthly leak inspection required under Section II.E of this permit shall be kept on file at the terminal. Inspection records shall include, at a minimum, the following information (ARM 17.8.749):
  - a. Date of inspection;
  - b. Findings (may indicate no leaks discovered or location, nature, and severity of each leak);
  - c. Leak determination method;
  - d. Corrective action (date each leak repaired and reasons for any repair interval in excess of 15 calendar days); and
  - e. Inspector's name and signature.
7. All records compiled in accordance with this permit must be maintained by ConocoPhillips 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).

### SECTION III: Fugitive Emission Sources

#### A. Limitations and Conditions

ConocoPhillips shall ensure that any open-ended line be sealed with a valve (ARM 17.8.749).

#### B. Inspection and Repair Requirements

1. Each calendar month, all valves, flanges, pump seals, and open-ended lines shall be inspected for total organic compound leaks. For purposes of this requirement, detection methods incorporating sight, sound, or smell are acceptable (ARM 17.8.749).
2. ConocoPhillips shall (ARM 17.8.749):
  - a. Make a first attempt at repair for any leak not later than 5 calendar days after the leak is detected; and
  - b. Repair any leak as soon as practicable, but not later than 15 calendar days after it is detected. Delay of repair of equipment for which a leak has been detected will be

allowed if repair is technically infeasible without a source shutdown. Such equipment shall be repaired before the end of the first source shutdown after detection of the leak (ARM 17.8.749).

#### C. Recordkeeping Requirements

1. A record of each monthly leak inspection required under Section III.B of this permit shall be kept on file at the terminal. Inspection records shall include, at a minimum, the following information (ARM 17.8.749):
  - a. Date of inspection;
  - b. Findings (may indicate no leaks discovered or location, nature, and severity of each leak);
  - c. Leak determination method;
  - d. Corrective action (date each leak repaired and reasons for any repair interval in excess of 15 calendar days); and
  - e. Inspector's name and signature.

#### SECTION IV: Soil Vapor Extraction Unit

##### A. Emissions Limitations

VOC Emissions from the Soil Vapor Extraction Unit (SVE) system shall not exceed 23.7 tons per year (TPY) of VOC (ARM 17.8.749).

##### B. Recordkeeping Requirements

ConocoPhillips shall calculate total annual VOC emissions from the SVE system. The emissions must be reported on the annual emissions inventory (ARM 17.8.749).

#### SECTION V: Facility Wide

##### A. Reporting Requirements

1. ConocoPhillips 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). ConocoPhillips shall submit the following information annually to the Department by March 1 of each year; the information may be submitted along with the annual emission inventory (ARM 17.8.505).

- a. The type of petroleum liquid stored in each tank.
- b. The average true vapor pressure of the petroleum liquid stored in each tank.

- c. The estimated annual throughput of petroleum liquids for each tank.
- d. The annual throughput of distillate and gasoline for the cargo tank loading racks.
- e. The annual VOC facility-wide emissions for each month, on a 12-month rolling basis, taking into consideration any malfunction, leaks, or other miscellaneous or fugitive emissions.

For reporting purposes, the tanks shall be identified using the tank numbers contained in Section I.B. of the permit analysis.

2. ConocoPhillips shall calculate facility wide annual VOC emissions, including emissions from the SVE system, the loading racks, and storage tanks, and miscellaneous and fugitive emissions. The emissions must be reported on the annual emissions inventory (ARM 17.8.749).
3. ConocoPhillips 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(1)(d) (ARM 17.8.745).
4. All records compiled in accordance with this permit must be maintained by ConocoPhillips 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).
5. ConocoPhillips 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 along with the annual emission inventory information (ARM 17.8.749 and ARM 17.8.1204).

#### SECTION VI: General Conditions

- A. Inspection – ConocoPhillips 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, Continuous Emission Rate Monitoring System) 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 ConocoPhillips fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving ConocoPhillips 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 ConocoPhillips 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).

Permit Analysis  
ConocoPhillips Company  
Montana Air Quality Permit (MAQP) #2907-05

I. Introduction/Process Description

ConocoPhillips Company (ConocoPhillips) owns and operates a bulk product terminal which receives gasoline and distillates from the Yellowstone pipeline and distributes them around the state via railcar and tank truck and to Great Falls via Pipeline. The facility is located in the SE¼ of the NE¼ of Section 28, Township 10 North, Range 3 West, in Lewis and Clark County, Montana. The facility is known as the Helena Bulk Terminal.

A. Permitted Equipment:

ConocoPhillips operates a bulk fuel terminal that includes the following equipment:

- Seven (7) product storage tanks (T-30 through T-33, and T-35 through T-37);
- Railcar loading rack
- Tank truck loading rack
- Combined cargo tank loading racks emissions control unit: enclosed flame vapor combustor (VCU)
- Miscellaneous additive tanks
- A Soil Vapor Extraction (SVE) System

B. Source Description

1. Product Storage Tanks

<u>Tank #</u>	<u>Yr manuf.</u>	<u>Fuel Stored</u>	<u>Capacity (Barrels)</u>	<u>Type of Tank</u>
T-30	1953	Jet Kerosene	20,000	Fixed roof
T-31	1953	#2 Diesel	30,000	Fixed roof
T-32	1953	Gasoline	20,000	Int. flt. Roof
T-33	1953	Gasoline	30,000	Int. flt. Roof
T-35	1959	Gasoline	30,000	Ext. flt. Roof
T-36	1959	Gasoline	30,000	Ext. flt. Roof
T-37	1959	Gasoline	30,000	Ext. flt. Roof

2. Cargo Tank Loading Racks

ConocoPhillips proposed to modify and update the existing truck rack. Currently the truck rack consists of two loading bays, each with four loading arms. ConocoPhillips proposed to take out the north loading bay and only use the south bay. The modified bay would include two gasoline loading arms and two diesel arms. There would also be modifications to the truck rack to connect it to the VCU.

Proposed:

- One (1) Truck Loading Rack consisting of two gasoline loading arms and two distillates arms.
- One (1) Railcar Loading Rack consisting of six loading arms capable of loading gasoline or distillates.

3. Loading Racks Emissions Control Unit – One (1) Vapor Combustion Unit

A Vapor Recovery System will capture the gasoline vapors from the cargo tank loading operations and thermally oxidize the vapors in a 1957 John Zink model ZTOF enclosed VCU.

4. Fugitive Emissions

Fugitive Emissions include emissions from valves, flanges, pump seals, and open-ended lines. The number of components is derived from an actual count by ConocoPhillips and adjusted for the expected changes due to this permitting action.

Component Type	Estimated Number of Components
Valves	281
Open-ended Lines	49
Load Arms	16
Pump Seals and Meters	23

5. Five (5) Miscellaneous Additive Tanks containing fuel detergents and lubricity additive.

6. SVE System

An 11-well soil vapor extraction system installed for remediation purposes.

C. Permit History

The original facility included 2 distillate tanks (T-30 and T-31), 2 gasoline tanks (T-32 and T-33), a gasoline and distillate railcar loading rack, and a gasoline and distillate truck loading rack. The truck rack consists of 4 distillate loading arms and 4 gasoline loading arms. The railcar loading rack consists of 4 loading arms capable of loading gasoline and distillate. In 1959, Conoco, Inc. (Conoco), added gasoline storage tanks T-35, T-36, and T-37.

On January 24, 1996, **MAQP #2907-00** was issued for Conoco to expand their rail loadout facility to accommodate the loading of gasoline. The proposed changes to the product railcar loading rack consisted of the removal of the existing loading arms and the installation of 6 new loading arms capable of loading gasoline and distillate fuel. Volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from the gasoline railcar loadout were controlled with an enclosed flare. The control on the gasoline railcar, combined with the throughput limits on the truck loading rack, kept Conoco below Title III MACT applicability thresholds.

On February 14, 2002, **MAQP #2907-01** was issued to Conoco for construction and operation of a new truck loading rack and installation of a flare to control loading emissions. The new loading rack replaced the existing truck loading rack at the Helena Products Terminal. The Helena Products Terminal operated under a Title V operating permit because the facility was considered a major source for VOC emissions. The installation of the flare on the truck loading rack significantly reduced VOC emissions below the major source threshold. The flare was controlled beyond the requirements of Title 40 Code of Federal Regulations (40 CFR) Part 60 New Source Performance Standards (NSPS), which was considered to be Best Available Control Technology (BACT) for similar loading racks. The Montana Department of Environmental Quality (Department) had grounds to revoke the Title V permit following appropriate installation of the flare and at Conoco's request; however, Conoco would be considered a Title V synthetic minor.

The limit on the VOC emissions from the flare was as follows: the total VOC emissions to the atmosphere from the flare due to loading liquid product into tank trucks shall not exceed 10.0 milligrams per liter (mg/L) of gasoline loaded. This limit is more stringent than the 40 CFR 60, Subpart XX, VOC emissions limit of 35.0 mg/L of gasoline loaded. The source complied with the Subpart XX 35.0 mg/L limit by maintaining compliance with the 10.0 mg/L limit in MAQP #2907-01.

Because Conoco's flare was defined as an incinerator under Montana Code Annotated (MCA) 75-2-215, a determination that the emissions from the flare would constitute a negligible risk to public health was required prior to the issuance of a permit to the facility. Conoco and the Department identified the following hazardous air pollutants from the flare, which were used in the health risk assessment. These constituents are typical components of gasoline.

- Benzene
- Ethyl Benzene
- Hexane
- Toluene
- Xylenes

The reference concentrations for the above pollutants were obtained from EPA's Integrated Risk Information System (IRIS) database, where available. The model performed for the hazardous air pollutants identified above demonstrated compliance with the negligible risk requirement. MAQP #2907-01 replaced MAQP #2907-00.

A letter from ConocoPhillips dated January 3, 2003, and received by the Department January 10, 2003, notified the Department that Conoco had changed its name to ConocoPhillips. The permit action changed the facility name from Conoco to ConocoPhillips. **MAQP #2907-02** replaced MAQP #2907-01.

A letter from ConocoPhillips dated November 24, 2004, and received by the Department December 1, 2004, notified the Department that ConocoPhillips planned to install a 2,000-gallon vertical tank used to store a lubricity additive. Since the uncontrolled potential to emit (PTE) of the 2,000-gallon vertical tank was less than 15 tons per year of any regulated pollutant the tank was added to the permit under the provisions of Administrative Rules of Montana (ARM) 17.8.745 Montana Air Quality Permits--Exclusion for de minimis Changes. MAQP #2907-03 was also updated to reflect current permit language and rule references used by the Department. **MAQP #2907-03** replaced MAQP #2907-02.

ConocoPhillips submitted an application on June 28, 2006, for the addition of a SVE System. In addition, ConocoPhillips never installed the 2-Bay Truck Loading Rack and thermal oxidizer permitted in 2002 in MAQP #2907-01. Therefore, the company requested to remove this equipment from the permit. Furthermore, ConocoPhillips wanted to revise the throughput limits for Truck Loading and add limits for the Rail Loading Racks to maintain plant-wide emissions below 250 tons per year (tpy) of VOC. The permit was revised to clarify some of the conditions and limitations. The following provides more detail on each of these points.

The proposed SVE system has a calculated PTE of 23.7 tpy VOC from the eleven wells, based on field scale emission tests conducted in February 2006. Emissions were based on the predicted concentration of VOC, assuming exponential decrease in VOC concentrations from the initial range of 920 – 13,000 parts per million on a volume basis (ppmv) documented in the laboratory analysis for the field study. BACT was determined to be no additional control.

This permit removed references to the 2-Bay truck loading rack and thermal oxidizer that were never installed, and the permit reverted back to the original truck loading requirements. Without the addition of the new truck loading rack, the facility was no longer subject to the NSPS for gasoline loading, 40 CFR 60, Subpart XX.

In an effort to ensure the facility maintains its status as a minor source under Prevention of Significant Deterioration (PSD), the following limits were changed, added, or clarified: Section II -Railcar loading throughput limits for gasoline and distillate; Section III - Truck loading throughput limits for gasoline and distillate, and Section V - annual VOC emission limited to less than 250 tpy VOC.

Lastly, specific requirements for operating the storage tanks in conformance with ARM 17.8.324 were added for clarity. **MAQP #2907-04** replaced MAQP #2907-03.

#### D. Current Permit Action

On May 21, 2009, the Department received an Application for a Modification of MAQP #2907-04 from Bison Engineering, Inc. on behalf of ConocoPhillips. An affidavit of Public Notice was received by the Department on June 2, 2009, and additional information received June 9, 2009, completing the application. The application proposes 1.) to modify the existing truck loading rack by removing the north loading bay, and using only the south loading bay with loading being accomplished by using the bottom valve connections of the tanker trucks and 2.) to use an existing Vapor Combustion Unit (VCU) for Volatile Organic Carbon (VOC) emissions control from both the truck loading rack and the railcar loading rack (collectively called the cargo tank loading racks). The project will result in a net decrease of emissions, significantly reducing VOC emissions with a slight increase in conventional combustion products. The requested operational permit conditions will allow the facility to be designated as a synthetic minor with respect to Title V.

Because the VCU meets the definition of an incinerator pursuant to 75-2-103, MCA, the permit analysis includes a health risk assessment as required by ARM 17.8.770. Operational and emissions limitations were combined for both the railcar and the tank truck loading operations. Other changes include updates made to reflect the current applicable requirements, permit language, format, and rule references used by the Department. Title V synthetic minor status for this facility is conditional based upon the installation and operation of the equipment as described in the application. **MAQP #2907-05** replaces MAQP #2907-04.

#### 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 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 ARM and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

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

1. 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).

ConocoPhillips 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<sub>10</sub>

ConocoPhillips 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, ConocoPhillips 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 17.8.316 Incinerators. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any incinerator, particulate matter in excess of 0.10 grains per standard cubic foot of dry flue gas, adjusted to 12% carbon dioxide and calculated as if no auxiliary fuel had been used. Further, no person shall cause or authorize to be discharged into the outdoor atmosphere from any incinerator emissions that exhibit an opacity of 10% or greater averaged over 6 consecutive minutes. This particular rule does not apply to the ConocoPhillips VCU because ConocoPhillips has applied for and will operate under an MAQP in accordance with ARM 17.8.770 and MCA 75-2-215 for this unit.
6. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
7. 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.
8. 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). ConocoPhillips 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 XX – Standard of Performance for Bulk Gasoline Terminals applies to the total of all the loading racks at a bulk gasoline terminal which deliver liquid product into gasoline tank trucks, the construction or modification of which is commenced after December 17, 1980. Therefore, the project associated with this permit action places the tank truck loading rack subject to the provisions of this Subpart. The permit conditions of MAQP #2907-05 are similar but not completely consistent with these provisions.
9. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:
  - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment or facilities subject to an NESHAP Subpart as listed below:
  - b. 40 CFR 63 Subpart BBBBBB - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities. ConocoPhillips' Helena Bulk Terminal is subject to the provisions of this subpart.

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

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. ConocoPhillips submitted the appropriate permit application fee for the current permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit (excluding an open burning permit) issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that prorate the required fee amount.

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

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit 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. ConocoPhillips has a PTE greater than 25 tons per year of volatile organic compounds; 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. ConocoPhillips submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. ConocoPhillips submitted an affidavit of publication of public notice for the May 24, 2009, issue of the *Independent Record*, a newspaper of general circulation in the Town of Helena in Lewis and Clark County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this

subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.

7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving ConocoPhillips of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
15. ARM 17.8.770 Additional Requirements for Incinerators. This rule specifies the additional information that must be submitted to the Department for incineration facilities subject to 75-2-215, Montana Code Annotated (MCA).

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

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

This modification will not cause a net emission increase greater than significance levels and, therefore, does not require a New Source Review (NSR) analysis. This modification greatly reduces VOC emissions, for which the facility is major. As a result of the combustion process, there is a slight increase in combustion products. The net PTE changes are as follows:

	TONS/YR*					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM <sub>10</sub>	HAPs
MAQP #2907-04:	236.4	3.5	8.8	ND	ND	12.9
MAQP #2907-05:	65.99	4.78	11.95	ND	ND	4.55
<b>NET CHANGE:</b>	<b>-170.41</b>	<b>+1.28</b>	<b>+3.15</b>			<b>-8.35</b>

\* VOC = Volatile Organic Compounds  
 NO<sub>x</sub> = oxides of nitrogen  
 CO = carbon monoxide  
 SO<sub>2</sub> = sulfur dioxide  
 PM<sub>10</sub> = particulate matter with an aerodynamic diameter of less than 10 microns  
 HAPs = hazardous air pollutants

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

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
  - a. PTE > 100 tons/year of any pollutant;
  - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
  - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) in a serious PM<sub>10</sub> nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program. (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 #2907-05 for ConocoPhillips, the following conclusions were made:
  - a. Following the modification of the control equipment proposed in MAQP #2907-05, 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<sub>10</sub> nonattainment area.
- d. This facility is subject to current NSPS (40 CFR 60 Subpart XX).
- e. This facility is not subject to current NESHAP standards.
- f. This source is not a Title IV affected source.
- g. This source is not an EPA designated Title V source.
- h. As allowed by ARM 17.8.1204(3), the Department may exempt a source from the requirement to obtain a Title V Air Quality Operating Permit by establishing federally enforceable limitations which limit that source's potential to emit.
  - i. In applying for an exemption under this section, the owner or operator of the source shall certify to the Department that the source's potential to emit, does not require the source to obtain an air quality operating permit.
  - ii. Any source that obtains a federally enforceable limit on potential to emit shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

ConocoPhillips has taken federally enforceable permit limits to keep potential emissions below major source permitting thresholds. Therefore, the facility is not a major source and, upon completion of the project with performance as submitted, a Title V operating permit would not be required.

The Department 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.

ConocoPhillips 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 requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emission inventory information.

H. MCA 75-2-103, Definitions provided, in part, as follows:

- 1. "Incinerator" means any single or multiple-chambered combustion device that burns combustible material, alone or with a supplemental fuel or catalytic combustion assistance, primarily for the purpose of removal, destruction, disposal, or volume reduction of all or any portion of the input material.
- 2. "Solid waste" means all putrescible and nonputrescible solid, semisolid, liquid, or gaseous wastes, including, but not limited to...air pollution control facilities...

G. MCA 75-2-215, Solid or hazardous waste incineration - additional permit requirements:

- 1. MCA 75-2-215 requires air quality permits for all new commercial solid waste incinerators; therefore, ConocoPhillips must obtain an air quality permit for the VCU.

2. MCA 75-2-215 requires the applicant to provide, to the Department's satisfaction, a characterization and estimate of emissions and ambient concentrations of air pollutants, including hazardous air pollutants from the incineration of solid waste. The Department determined that the information submitted in the MAQP application was sufficient to fulfill this requirement.
3. MCA 75-2-215 requires that the Department reach a determination that the projected emissions and ambient concentrations constitute a negligible risk to public health, safety, and welfare. ConocoPhillips included a health risk assessment in their application based on an emissions inventory and ambient air quality modeling for this MAQP application. Based on the results of the emission inventory, modeling, and the health risk assessment, the Department determined that ConocoPhillips complies with this requirement.
4. MCA 75-2-215 requires the application of pollution control equipment or procedures that meet or exceed BACT. The Department determined that operating ConocoPhillips' VCU according to the manufacturer-recommended operation procedures and in accordance with the permit limitations constitutes BACT.

### III. BACT Determination

A BACT determination is required for each new or modified source. ConocoPhillips 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.

ConocoPhillips has proposed modifications to the current vapor collection system to utilize an existing VCU to constitute BACT. The existing VCU is currently sized to handle a loading rate of 2,300 gallons per minute of gasoline.

A BACT analysis was prepared and submitted by Bison Engineering, Inc on behalf of ConocoPhillips in MAQP Application #2907-05. The following table summarizes the BACT analysis submitted:

<b>Emitting Unit</b>	<b>Control Efficiency</b>	<b>Information Source</b>	<b>Environmental Impacts</b>
Vapor Combustion Unit (VCU)	98%	OAQPS Manual	Combustion Products (combustion of VOCs and additional fuel)
Thermal Oxidation	98%	OAQPS Manual	Combustion Products (combustion of VOCs and additional fuel)
Condenser (Coalescer)	95%	Bison Engineering, Inc via Vendor Information	Coalescer Filter Media must be properly disposed
Carbon Adsorber	90+%	Bison Engineering, Inc.	Cleaning process of desorbing creates waste product to be properly disposed

The economic impacts of these control options were not investigated because ConocoPhillips is proposing a control strategy with the highest control efficiency and the VCU is already currently installed at the facility, thus requiring no capital costs for the purchase of the VCU itself. Furthermore, the manufacturer's emissions rates give an effective control efficiency slightly greater than 98%.

This permitting action does not include a new or modified emitting unit as applicable to BACT requirements. Therefore, BACT is not applicable and Department concurrence on the submitted BACT is not required.

IV. Emission Inventory

**ConocoPhillips Helena Product Terminal  
Potential To Emit, based on restricted limits on product throughput**

Source	Ton/Yr Emissions					
	VOC	NO.x	CO	SO2	PM10	HAPs
Storage Tank Emissions (7 Tanks)	16.20					0.88
Cargo Tank Loading Racks VCU Emissions	11.95	4.78	11.95	ND	ND	0.65
Cargo Tank Loading Losses	8.76					0.48
Equipment Leaks	0.39					0.02
Miscellaneous Emissions	4.98					1.23
SVE System	23.70					1.29
<b>TOTAL :</b>	<b>65.99</b>	<b>4.78</b>	<b>11.95</b>	<b>ND</b>	<b>ND</b>	<b>4.55</b>

Storage Tank Emissions based on:

- Tanks 30 and 31 – fixed roof, based on maximum throughput of jet kerosene and #2 fuel oil
- Tanks 32 and 33 – internal floating roof based on gasoline with Reid Vapor Pressure (RVP) of 15
- Tanks 35, 36, and 37 – external floating roof based on gasoline with RVP of 15.

Emissions calculated using EPA Tanks v.4.09b Storage Tanks Emissions Calculation Software.

## Vapor Combustion Unit (VCU) Emissions:

### VOC Emissions:

Emissions Factor: 10 mg/L gas loaded (Manufacturer Information)  
Gasoline Throughput: 285,600,000 gal/yr (Permit throughput limitation)  
Calculations:  $10 \text{ mg/L loaded} * 285600000 \text{ gal/yr} * 3.8 \text{ liter/gal} * 1 \text{ g/1000 mg} * 1 \text{ lb/454 gm} = 23905 \text{ lb/yr}$   
 $23904.845814978 \text{ lb/yr} * 0.0005 \text{ lb/ton} = 11.95 \text{ ton/yr}$

### NO.x Emissions:

Emissions Factor: 4 mg/L gas loaded (Manufacturer Information)  
Gasoline Throughput: 285,600,000 gal/yr (Permit throughput limitation)  
Calculations:  $4 \text{ mg/L loaded} * 285600000 \text{ gal/yr} * 3.8 \text{ liter/gal} * 1 \text{ g/1000 mg} * 1 \text{ lb/454 gm} = 9562 \text{ lb/yr}$   
 $9561.93832599119 \text{ lb/yr} * 0.0005 \text{ lb/ton} = 4.78 \text{ ton/yr}$

### CO Emissions:

Emissions Factor: 10 mg/L gas loaded (Manufacturer Information)  
Gasoline Throughput: 285,600,000 gal/yr (Permit throughput limitation)  
Calculations:  $10 \text{ mg/L loaded} * 285600000 \text{ gal/yr} * 3.8 \text{ liter/gal} * 1 \text{ g/1000 mg} * 1 \text{ lb/454 gm} = 23905 \text{ lb/yr}$   
 $23904.845814978 \text{ lb/yr} * 0.0005 \text{ lb/ton} = 11.95 \text{ ton/yr}$

### PM Emissions:

ND

### SO.x Emissions:

ND

### HAPs Emissions:

Speciation of Gasoline VOC Emissions: 11.95 ton/yr

HAP	% of total VOC Emissions	emissions/yr
Benzene	0.70%	0.084 ton/yr
Ethylbenzene	0.10%	0.012 ton/yr
n-Hexane	2.40%	0.287 ton/yr
Toluene	1.10%	0.131 ton/yr
Xylenes	0.40%	0.048 ton/yr
2,2,4-Trimethyl pentane	0.70%	0.084 ton/yr
Cumene	0.03%	0.004 ton/yr
<b>TOTAL HAPs</b>	<b>5.43%</b>	<b>0.649 ton/yr</b>

**Loading Racks Emissions (Losses from Collection)**

VOC from Gasoline loading:

$$L_L = 12.46 \frac{SPM}{T} \quad (\text{AP-42 Chapter 5, 6/2008})$$

where:

- L<sub>L</sub> = loading loss, pounds per 1000 gallons (lb/10<sup>3</sup> gal) of liquid loaded
- S = a saturation factor (see Table 5.2-1)
- P = true vapor pressure of liquid loaded, pounds per square inch absolute (psia)  
(see Figure 7.1-5, Figure 7.1-6, and Table 7.1-2)
- M = molecular weight of vapors, pounds per pound-mole (lb/lb-mole) (see Table 7.1-2)
- T = temperature of bulk liquid loaded, °R (°F + 460)

- S = 0.6 (AP-42 Table 5.2-1, 6/2008, submerged loading: dedicated service)
- P = 4.945 psia (prior determination)
- M = 64.08 lb/lb-mol (prior determination)
- T = 503.64 Rankine (prior determination)

Collection Eff = 98.7% collection efficiency (manufacturer information)  
 Gasoline Loading = 6,800,000 barrels/yr = 285,600,000 gallons/yr

Calculations:  $12.46 * ((0.6 * 4.945 * 64.08) / 503.64) * (1 - 0.987) = 0.061 \text{ lb / thousand gal load}$   
 $4.704 * 285600000 / 1000 * 0.0005 \text{ ton/lb} = \mathbf{8.73 \text{ ton/yr VOC}}$

HAPs Fraction: 5.43% see VCU HAPs Speciation  
 $8.73191372819444 \text{ ton/yr} * 0.0543 \text{ HAPs fraction} = \mathbf{0.47 \text{ ton/yr HAPs}}$

VOC from Distillate loading:

- S = 0.6 (AP-42 Table 5.2-1, 6/2008, submerged loading: dedicated service)
- P = 0.0049 psia (ConocoPhillips)
- M = 130 lb/lb-mol (ConocoPhillips)
- T = 503.64 Rankine (ConocoPhillips)

Collection Eff = 98.7% collection efficiency (manufacturer information)  
 Gasoline Loading = 12,500,000 barrels/yr = 525,000,000 gallons/yr

Calculations:  $12.46 * ((0.6 * 0.0049 * 130) / 503.64) * (1 - 0.987) = 0.0001 \text{ lb / thousand gal load}$   
 $4.704 * 285600000 / 1000 * 0.0005 \text{ ton/lb} = \mathbf{0.03 \text{ ton/yr VOC}}$

HAPs Fraction: 17.10% Distillate HAPs Speciation - MAQP#2907-04  
 $0.03 \text{ ton/yr} * 0.171 \text{ HAP} = \mathbf{0.01 \text{ ton/yr HAPs}}$

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Total

	8.73 ton/yr + 0.03 ton/yr =	<b>8.76 ton/yr VOC</b>
	0.47 ton/yr + 0.01 ton/yr =	<b>0.48 ton/yr HAPs</b>

## Soil Vapor Extraction Emissions

\*\* 7-day field test in spring 2006 developed maximum anticipated emissions

Permitted VOC Emissions: 23.7 ton/yr  
 HAPs Emissions (see VCU HAPs Speciation): 5.43%

Calculations:  
 23.7 ton/yr \* 0.0543 HAPs Fraction = **1.29 ton/yr**

## Equipment Leaks

Fugitive Emissions From Equipment Leaks

The number of components comes from an actual component count by ConocoPhillips, adjusted by the expected change in number of components due to this permitting action. Only components in light liquid service are listed as components in distillate service have minimal VOC emissions

Component	Number of Components	Emissions Factor Per Component** (lb/hr)	Calculations
Valves	281	0.0000948	281 components * 0.0000948 lb/hr = 0.027 lb/hr 0.027 lb/hr * 8760 hr * 0.0005 ton/lb = 0.12 ton/yr
Connections	904	0.0000176	904 components * 0.0000176 lb/hr = 0.016 lb/hr 0.016 lb/hr * 8760 hr * 0.0005 ton/lb = 0.07 ton/yr
Open-ended Lines	49	0.000287	49 components * 0.000287 lb/hr = 0.014 lb/hr 0.014 lb/hr * 8760 hr * 0.0005 ton/lb = 0.06 ton/yr
Load Arms	16	0.000287	16 components * 0.000287 lb/hr = 0.005 lb/hr 0.005 lb/hr * 8760 hr * 0.0005 ton/lb = 0.02 ton/yr
Pumps and Meters	23	0.00119	23 components * 0.00119 lb/hr = 0.027 lb/hr 0.027 lb/hr * 8760 hr * 0.0005 ton/lb = 0.12 ton/yr
			<b>TOC Equipment Leak Emissions = 0.39 ton/yr</b>

\*\* Basis for emissions Factors: Table 2-3 of EPA Protocol for Equipment Leak Emission Estimates, November 1995 (EPA-453/RR-95-017).

No non-VOC concentrations are given, therefore this emissions inventory assumes all TOC = VOC

**HAPs emissions = 0.021 ton/yr**

## Miscellaneous Emissions

Miscellaneous Emissions Factors are those used by ConocoPhillips based on engineering calculations and process knowledge

Component Type	Number of Components	Emissions Factor (lb/yr-component)	Calculations	
Tank Cleaning	1	350	1 components * 350 lb/yr = 350 lb/yr * 0.0005 ton/lb =	350 lb/yr 0.18 ton/yr
WW Tanks	0	399.5	0 components * 399.5 lb/yr = 0 lb/yr * 0.0005 ton/lb =	0 lb/yr 0 ton/yr
WW Sumps	2	613	2 components * 613 lb/yr = 1226 lb/yr * 0.0005 ton/lb =	1226 lb/yr 0.61 ton/yr
Rack Drain	2	613	2 components * 613 lb/yr = 1226 lb/yr * 0.0005 ton/lb =	1226 lb/yr 0.61 ton/yr
OW Separator	0	11	0 components * 11 lb/yr = 0 lb/yr * 0.0005 ton/lb =	0 lb/yr 0.00 ton/yr
Provers (10 prover-meters x 3 replacements x 4x/yr)	120	7.4	120 components * 7.4 lb/yr = 888 lb/yr * 0.0005 ton/lb =	888 lb/yr 0.44 ton/yr
Tank Roof Landings	5	1218.5	5 components * 1218.5 lb/yr = 6092.5 lb/yr * 0.0005 ton/lb =	6092.5 lb/yr 3.05 ton/yr
Additive Tanks	5	37.4	5 components * 37.4 lb/yr = 187 lb/yr * 0.0005 ton/lb =	187 lb/yr 0.09 ton/yr
<b>Total Miscellaneous VOC Emissions:</b>				<b>4.98 ton/yr</b>

HAPs from Miscellaneous Emissions from application data.

### V. Existing Air Quality

ConocoPhillips' Helena Bulk Product Terminal is located in an area designated as unclassifiable/attainment for the National Ambient Air Quality Standards for criteria pollutants.

### VI. Ambient Air Impact Analysis

This permit action is for a project that has a net decrease in emissions. The action greatly reduces VOC emissions, and has a minor increase in conventional combustion product emissions. The increases in NOx and CO were quantified, and are well below de-minimis levels. Therefore, the Department believes it will not cause or contribute to a violation of any ambient air quality standard.

A Screen3 Model Run, an EPA-approved screening model, using the inputs obtained from the permit application, was completed for the VCU emissions. The parameters and results of the run, along with HAPs speciation, are given in the Health Risk Assessment below. The Department determined, based on air modeling, that the impacts from this permitting action would be minor, and does not pose an unacceptable health risk.

## VII. Health Risk Assessment

A full health risk assessment was completed as a part of the application. The health risk assessment was completed using conservative assumptions internal to the Screen3 modeling, worst case operation parameters for the VCU, and conservative assumptions in the risk assessment. The following section outlines the health risk assessment completed.

The Screen3 model, version dated 96043, was used to estimate the maximum one-hour ground-level VOC concentration from the VCU. The one hour maximum was converted to an annual average, and speciated into HAP constituents to calculate cancer and non-cancer risks from operation of the VCU. The Screen3 Model Run, speciation, and resulting health risk assessment is presented below.

### Screen 3 Model Run Inputs

#### SIMPLE TERRAIN INPUTS:

SOURCE TYPE	=	POINT
EMISSION RATE (grams per second)	=	1.4600
STACK HEIGHT (meters)	=	10.6680
STK INSIDE DIAM (meters)	=	2.3241
STK EXIT VELOCITY (meters/second)	=	7.9248
STK GAS EXIT TEMP (Kelvin)	=	366.4833
AMBIENT AIR TEMP (Kelvin)	=	293.1500
RECEPTOR HEIGHT (meters)	=	0.0000
URBAN/RURAL OPTION	=	RURAL
BUILDING HEIGHT (meters)	=	0.0000
MIN HORIZ BLDG DIM (meters)	=	0.0000
MAX HORIZ BLDG DIM (meters)	=	0.0000

The regulatory mixing height option was selected and the regulatory anemometer height was entered. The model was run using full meteorology, with a minimum distance from the stack of 1 meter and maximum of 1500 meters. A terrain height of 1 meter was used and no building downwash was assumed. The maximum one hour concentration was 41.88 micrograms per cubic meter (ug/m<sup>3</sup>) at 244 meters from the stack.

#### Speciation:

Vapor weight fractions for benzene, ethylbenzene, toluene, and xylenes were provided by ConocoPhillips as shown below. The Vapor Weight Fractions were multiplied by the annual average concentration of VOC emissions to obtain the annual average concentration of each HAP:

<b>Constituent</b>	<b>Vapor Weight Fraction</b>
Benzene	0.007
Ethylbenzene	0.001
N-Hexane	0.024
Toluene	0.011
m-Xylene	0.04

#### Annual Average HAP Calculations:

Screen3 maximum ground-level VOC concentration = 41.88 ug/m<sup>3</sup>

Annual Average VOC = 0.1 x One Hour Maximum Concentration = 4.188 ug/m<sup>3</sup>

The Department determined the appropriate pathway to consider in the human health risk assessment of these VOC's is by inhalation. Pursuant to ARM 17.8.770 (1)(c), the only HAP that requires further consideration for a health risk assessment is benzene, as all other constituents fall below the screening values in Table 1 and Table 2 of ARM 17.8.770 as illustrated below.

Constituent	Modeled Annual Average Ground Level Concentration	ARM 17.8.770 Table 1 Cancer Annual	ARM 17.8.770 Table 2 NonCancer Chronic Annual	ARM 17.8.770 Table 2 NonCancer Acute Annual
	ug/m <sup>3</sup>	ug/m <sup>3</sup>	ug/m <sup>3</sup>	ug/m <sup>3</sup>
Benzene	<b>0.0293</b>	0.012048	0.71	-
Ethylbenzene	0.0042	-	10	-
n-Hexane	0.1005	-	2	-
Toluene	0.0461	-	4	-
m-Xylene	0.1675	-	3	44

A risk assessment was performed for the inhalation of benzene based on the output from the SCREEN3 modeling and included with the application. The cancer risk calculated is well below the accepted risk value. The following table summarizes:

Risk Assessment							
Component	Vapor Weight Fraction	Annual Average (ug/m <sup>3</sup> )	EPA Risk Factors		Calculated Cancer Risk	Calculated Non-Cancer Chronic Quotient	Calculated Non-Cancer Acute Quotient
			Cancer Chronic (per ug/m <sup>3</sup> )	Non-Cancer Chronic Quotient (ug/m <sup>3</sup> )			
Benzene	0.007	0.0293	7.80E-06	30	2.29E-07	9.77E-04	n/a

The EPA risk factors were referenced from <http://www.epa.gov/ttn/atw/toxsource/table1.pdf> and <http://www.epa.gov/ttn/atw/toxsource/table2.pdf>.

As shown in the table above, the calculated cancer risk is significantly below the acceptable level.

### VIII. 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	
xx		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	xx	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	xx	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	xx	4. Does the action deprive the owner of all economically viable uses of the property?
	xx	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?
	xx	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	xx	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?
	xx	7a. Is the impact of government action direct, peculiar, and significant?
	xx	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	xx	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?
	xx	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.

### IX. Environmental Assessment

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

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

**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

*Issued To:* ConocoPhillips Pipeline Company  
2330 5<sup>th</sup> Ave South  
Billings, MT 59101

*Montana Air Quality Permit Number:* 2907-05

*Preliminary Determination Issued:* 7/17/2009

*Department Decision Issued:* 8/21/2009

*Permit Final:* 9/9/2009

1. *Legal Description of Site:* This facility is located in the SE<sup>1</sup>/<sub>4</sub> of the NE<sup>1</sup>/<sub>4</sub> of Section 28, Township 10 North, Range 3 West, in Lewis and Clark County, MT
2. *Description of Project:* The Department received an Application for a Modification of MAQP #2907-04 from Bison Engineering, Inc. on behalf of ConocoPhillips. The application is for a project to remove the north truck loading bay from service, and to use an existing VCU for VOC emissions control from both the truck loading rack and the railcar loading rack. The project will result in a net decrease of emissions, significantly reducing VOC emissions with a slight increase in conventional combustion products.
3. *Objectives of Project:* The objective of the project is to reduce VOC emissions.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the “no-action” alternative. The “no-action” alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the “no-action” alternative to be appropriate because ConocoPhillips demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the “no-action” alternative was eliminated from further consideration.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A list of enforceable conditions, including a BACT analysis, would be included in MAQP #2907-05.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

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

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

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

A. Terrestrial and Aquatic Life and Habitats

This project would significantly reduce VOC emissions, with a very small increase in combustion products such as CO and NO<sub>x</sub> as a result of burning the VOCs. The Department determined that there would be no discernible impact on terrestrial and aquatic life. No habitats would be directly impacted, since the project would occur on existing developed industrial land. Therefore, no impacts to terrestrial and aquatic life habitats would be expected as a result of this permit action.

B. Water Quality, Quantity and Distribution

This project would significantly reduce VOC emissions, with a very small increase in combustion products such as CO and NO<sub>x</sub> as a result of burning the VOCs. This project would not require the use of water, and there is no surface water on the site. There would be a reduction in the number of valves, connections, load arms, and pump seals and meters, therefore reducing leak possibilities. The Department determined that there would be no discernible impacts to water quality, quantity and distribution for this permit action.

C. Geology and Soil Quality, Stability and Moisture

This project would significantly reduce VOC emissions, with a very small increase in combustion products such as CO and NO<sub>x</sub> as a result of burning the VOCs. There would be a reduction in the number of valves, connections, load arms, and pump seals and meters, therefore reducing leak possibilities. The project would occur on existing developed industrial land on site. Therefore, the Department determined that there would be no discernible impacts to water quality, quantity and distribution for this permit action.

D. Vegetation Cover, Quantity, and Quality

This project would significantly reduce VOC emissions, with a very small increase in combustion products such as CO and NO<sub>x</sub> as a result of burning the VOCs. Deposition of pollutants from this permitting action would be minute due to the very small amount of pollutants emitted. Overall, there would be no discernable impacts to vegetation cover, quantity, and quality.

E. Aesthetics

This project would occur within the current site for this terminal. The project would remove equipment. The VCU would be required to be enclosed, and have no visible emissions, therefore no visible flame or visible emissions would result from this project. Therefore, there would be no impacts to aesthetics as a result of this permitting action.

F. Air Quality

This project would significantly reduce VOC emissions, with a very small increase in combustion products such as CO and NO<sub>x</sub> as a result of burning the VOCs. The table below illustrates the net changes as a result of this proposed project being completed:

TON/YR	VOC	NO <sub>x</sub>	CO	HAPs
MAQP #2907-04:	236.4	3.5	8.8	12.9
MAQP #2907-05:	65.99	4.78	11.95	4.55
NET CHANGE:	-170.41	+1.28	+3.15	-8.35

Given the large decrease in VOC emissions and small increase in NO<sub>x</sub> and CO, this permitting action would result in a minor impact to air quality.

G. Unique Endangered, Fragile, or Limited Environmental Resources

This project would significantly reduce VOC emissions, with a very small increase in combustion products such as carbon monoxide and oxides of nitrogen as a result of burning the VOCs. Furthermore, the facility resides in an area which has been used for industrial purposes for longer than 50 years. Therefore, there would be expected to be no impacts to unique, endangered, fragile, or limited environmental resources.

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

This project would significantly reduce VOC emissions, with a very small increase in combustion products such as CO and NO<sub>x</sub> as a result of burning the VOCs. Therefore, there would be no demands on air resources. The project would combust VOCs using a VCU which may be supplemented with additional fuel, and so therefore would have a minor demand for energy. The project would not require the use of water, and the Department determined that there would be no discernible impacts to water quality, quantity and distribution for this permit action. Therefore, no demand on water resources would be expected as a result of this project.

I. Historical and Archaeological Sites

This project would occur on-site and therefore not disturb any land on which has not already been developed and currently in use by ConocoPhillips. Therefore, no impacts to any historical or archaeological site would be anticipated.

J. Cumulative and Secondary Impacts

This project would significantly reduce VOC emissions, with a very small increase in combustion products such as CO and NO<sub>x</sub> as a result of burning the VOCs. The Department therefore would expect that there would be no cumulative and secondary impacts as a result of this project.

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

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

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

A. Social Structures and Mores

The proposed facility would not cause a disruption to any native or traditional lifestyles or communities (social structures or mores) in the area because the project would take place at a previously disturbed, industrial site. The proposed project would not change the nature of the site.

B. Cultural Uniqueness and Diversity

The proposed project would not cause a change in the cultural uniqueness and diversity of the area because the land is currently used as a bulk terminal; therefore, the land use would not be changing.

C. Local and State Tax Base and Tax Revenue

The terminal's overall throughput capacity limitation would not change as a result of the proposed project. In addition, no new employees would be expected to be needed for this project. Therefore, no impacts to the local and state tax base and tax revenue are anticipated from this project.

D. Agricultural or Industrial Production

The proposed project would not result in a reduction of available acreage or productivity of any agricultural land; therefore, agricultural production would not be affected. The bulk terminal's overall throughput capacity limitation would not change as a result of the proposed project. Therefore, industrial production would not be affected.

E. Human Health

This project would significantly reduce VOC emissions, with a very small increase in combustion products such as CO and NO<sub>x</sub> as a result of burning the VOCs. Furthermore, modeling and a human health risk assessment were completed as a part of this permitting action. The risk assessment was assessing emissions that would be lower as a part of this project than they currently would be if the project was not completed. Therefore this permitting action has a net positive affect to overall Human Health.

F. Access to and Quality of Recreational and Wilderness Activities

This project would not have an impact on recreational or wilderness activities because this project would not result in any changes in access to and quality of recreational and wilderness activities.

G. Quantity and Distribution of Employment

No change in the number of employees currently onsite is anticipated as a result of this project. Therefore, this project would have not impacts to the quantity and distribution of employment at the facility

H. Distribution of Population

This project does not involve any significant physical or operational change that would affect the location, distribution, density, or growth rate of the human population. The distribution of population would not change as a result of this project.

I. Demands for Government Services

The demands on government services would experience a minor impact. The primary demand on government services would be the acquisition of the appropriate permits by the facility and compliance verification with those permits. However, as a result of completion of this project, the facility would be able to rescind the Title V permit for this facility, ultimately lowering the air quality related government services required.

J. Industrial and Commercial Activity

The bulk terminal's overall capacity would not change as a result of the proposed project. Industrial and commercial activity in the neighboring area is not anticipated to be affected by issuing MAQP #2907-05. It is not known if removal of one of the truck terminals would result in an increase in traffic in the future. Therefore, minor impacts on industrial activity may be expected as a result.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals that would be impacted by this project.

L. Cumulative and Secondary Impacts

This project would significantly reduce VOC emissions, with a very small increase in combustion products such as CO and NO<sub>x</sub> as a result of burning the VOCs. The project would result in removal of equipment, a net reduction in emissions, no expected change in the quantity or distribution of employment, and a potential decrease in demands for governmental services. Therefore, no cumulative or secondary impacts are expected to result from this permitting action.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for the modification of loading racks and associated emissions control. MAQP #2907-05 includes conditions and limitations to ensure the facility would operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

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

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau

EA prepared by: Shawn Juers  
Date: 6/10/2009