

April 18, 2017

Allen Eggen Phillips 66 Company 2626 Lillian Avenue Billings, MT 59101

Dear Mr. Eggen:

Montana Air Quality Permit #2945-09 is deemed final as of April 18, 2017, by the Department of Environmental Quality (Department). This permit is for a Bulk Gasoline 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,

Julis A Merkel

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

JM:JP Enclosure

for Part Prank

John P. Proulx Environmental Science Specialist Air Quality Bureau (406) 444-5391

Montana Department of Environmental Quality Air, Energy, & Mining Division

Montana Air Quality Permit #2945-09

Phillips 66 Company 2626 Lillian Avenue Billings, MT 59101

April 18, 2017



MONTANA AIR QUALITY PERMIT

Issued To: Phillips 66 Company 2626 Lillian Avenue Billings, MT 59101 MAQP: #2945-09 Administrative Amendment (AA) Request Received: 3/24/2017 Department's Decision on AA: 3/31/2017 Permit Final: 4/18/2017 AFS #: 031-0012

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Phillips 66 Company (Phillips 66), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

Phillips 66 operates a bulk gasoline terminal, which stores and transfers petroleum products (gasoline and distillate) received from the pipeline and distributes them to regional markets via tank truck. This facility is located in the Northwest ¼ of Section 6, Township 2 South, Range 6 East, in Gallatin County, Montana, just north of the city of Bozeman. The facility is known as the Phillips 66 Bozeman Bulk Terminal. A complete list of permitted equipment is contained in the Permit Analysis.

B. Current Permit Action

The current permit action updates the rule reference for the throughput limit conditions and adds the annual certification requirement for the authority to use enforceable permit conditions to limit a source's potential emissions to below the Title V major source threshold for hazardous air pollutants.

SECTION II: Conditions and Limitations

- A. Tank Truck Loading Rack:
 - 1. Loading of tank trucks shall be restricted to the use of submerged fill and dedicated normal service and/or switch loaded service (ARM 17.8.749).
 - 2. Phillips 66 shall be limited to a maximum of 97,500,000 gallons of gasoline throughput for the truck loadout operation during any rolling 12-month period (ARM 17.8.749 and ARM 17.8.1204).
 - 3. Phillips 66 shall be limited to a maximum of 105,000,000 gallons of distillate product throughput for the truck loadout operation during any rolling 12-month period (ARM 17.8.749 and ARM 17.8.1204).

- 4. Phillips 66 new truck loadout rack shall be equipped with a vapor combustion unit (VCU) to control VOC and HAP emissions during the loading of gasoline and distillate. The VCU shall be designed and operated to provide a destruction and removal efficiency (DRE) of 98% (ARM 17.8.749, ARM 17.8.752).
- 5. The total emissions discharged to the atmosphere from the VCU shall not exceed the following:
 - a. VOC emissions of 10.0 milligrams per liter (mg/L) of gasoline loaded (ARM 17.8.749 and ARM 17.8.752).
 - b. Any particulate emissions in excess of 0.10 grains per dry standard cubic foot (gr/dscf) corrected to 12% carbon dioxide (CO2) (ARM 17.8.749 and ARM 17.8.316(2))
 - c. Visible emissions that exhibit an opacity of 10% or greater averaged over six consecutive minutes (ARM 17.8.749 and ARM 17.8.316(3)).
- 6. Phillips 66 shall install an internal floating roof on the 10,000 barrel ethanol storage tank (Tank T-16) to control VOC emissions (ARM 17.8.752).
- 7. Phillips 66 shall not cause or authorize the use of any haul roads, access roads, parking lots, or the general plant property without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
- 8. Phillips 66 shall treat all unpaved portions of the access roads, parking lots, and general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.4 (ARM 17.8.749).
- 9. Phillips 66 shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- Phillips 66 shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in 40 CFR 60, Subpart XX, Standards of Performance for Bulk Gasoline Terminals for all loading racks at a bulk gasoline terminal that deliver liquid product into gasoline tank trucks that commenced construction or modification after December 17, 1980. (ARM 17.8.340 and 40 CFR 60, Subpart XX).
- 11. Phillips 66 shall comply with all applicable standards and limitations, and the reporting, recordkeeping and notification requirements contained in 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid (VOL) Storage vessels (including Petroleum Liquid Storage Vessels) for which construction, reconstruction or modification commenced after July 23, 1984, with a capacity of 75 to 151 cubic meters, and that have a product with a true vapor pressure of 15.0 kilopascals (kPa) or more. (ARM 17.8.340 and 40 CFR 60, Subpart Kb).

- 12. Phillips 66 shall comply with all applicable standards, limitations, reporting, recordkeeping, and notification requirements of ARM 17.8.342, as specified in 40 CFR 63, National Emission Standards for Hazardous Air Pollutants, Subpart A and Subpart BBBBBB (ARM 17.8.342, ARM 17.8.752, and 40 CFR 63, Subpart A and Subpart BBBBBB).
- 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. Phillips 66 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, except as provided in Section II.B.3. below.
 - 3. 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. Notification Requirements:
 - 1. Phillips 66 shall furnish the Department a notification of the date that construction of the Truck Loading Rack is commenced, postmarked no later than 30 days after such date (ARM 17.8.749).
 - 2. Phillips 66 shall furnish the Department a notification of the date that the ethanol tank (Tank T-16) construction is commenced, postmarked no later than 30 days after such date (ARM 17.8.749).
 - 3. Phillips 66 shall furnish the Department a notification of the date of initial startup of the Truck Loading Rack and VCU, postmarked no later than 15 days after such date (ARM 17.8.749).
 - 4. Phillips 66 shall furnish the Department a notification of the date of initial startup of the new ethanol tank (Tank T-16), 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 Truck Loading Rack and VCU, the VCU shall be tested for total VOC emissions to demonstrate compliance with the emission limitations stated in Section II.A.5.a. 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. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 3. The Department may require further testing (ARM 17.8.105).
- E. Operational Reporting Requirements
 - 1. Phillips 66 shall document, by calendar month, the gasoline and distillate throughput for the truck loadout operation. By the 25th of each calendar month, Phillips 66 shall total the amount of throughput by fuel during the previous calendar month. The monthly information will be used to demonstrate compliance with the rolling 12-month total throughput limitations in Sections II.A.2 and II.A.3. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
 - 2. A record of each monthly leak inspection required under Section II.B. of this permit shall be kept on file at the bulk 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.
 - 3. Phillips 66 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. For reporting purposes, the tanks shall be identified using the tank numbers contained in Section I.A. of the Permit Analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in 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). 4. Phillips 66 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*, 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.

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).

- 5. All records compiled in accordance with this permit must be maintained by Phillips 66 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).
- 6. Phillips 66 shall annually certify that its 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 be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

SECTION III: General Conditions

- A. Inspection Phillips 66 shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (Continuous Emissions Monitoring System (CEMS), Continuous Emissions Rate Monitoring System (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and the terms, conditions, and matters stated herein shall be deemed accepted if Phillips 66 fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Phillips 66 of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the

provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA.

The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the MAQP 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 Phillips 66 may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit (MAQP) Analysis Phillips 66 Company – Bozeman Product Terminal MAQP #2945-09

I. Introduction/Process Description

Phillips 66 Company (Phillips 66) owns and operates a bulk petroleum products terminal. The facility is located in the Northwest ¹/₄ of Section 6, Township 2 South, Range 6 East, Gallatin County, Montana, just north of the city of Bozeman, and is known as the Phillips 66 Bozeman Product Terminal.

A. Permitted Equipment

Source ¹	Existing/New	Capacity/ Rating	Fuel	Pollution Control Device
EU002 - Tank T-10,	F · · ·	20,000 BBL		
20,000 barrels (bbl) Storage Tank (Installed 1955)	Existing	(840,000 gallon)	Gasoline	Internal floating roof
EU003 -Tank T-11,		20,000 BBL		
20,000 bbl Storage Tank (Installed 1955)	Existing	(840,000 gallon)	Gasoline	Internal floating roof
EU004 -Tank T-12		20,000 BBL		
20,000 bbl Storage Tank (Installed 1955)	Existing	(840,000 gallon)	Distillates	Vertical fixed roof
EU005 -Tank T-13		20,000 BBL		
20,000 bbl Storage Tank (Installed 1955)	Existing	(840,000 gallon)	Distillates	Vertical fixed roof
EU007 – Fugitives/Misc. Emissions ¹	Existing	N/A	-	N/A
EU008 - Loading Rack (bottom filling) (Installed 2015)	Existing	144,000 gal/hr	Gasoline and distillates	Vapor combustion unit
EU009 - Tank T-16, 10,000 bbl Storage Tank (Installed 2015)	Existing	10,000 BBL (420,000 gallon)	Ethanol	Internal floating roof
EU010 – Vapor Combustion Unit (VPU) (Installed 2015)	Existing	4,800 GPM of Gasoline	Gasoline and distillates	N/A

1. Emission Unit ID EU006 (40,000 barrel Tank T-15) was placed out of service May 2, 2008 and is now insignificant emission unit IEU05.

B. Source Description

Phillips 66 operates a bulk petroleum products terminal, which stores and transfers petroleum products (gasoline and distillate) received from the pipeline and distributes them to regional markets via tank truck. The surrounding vicinity is mainly industrial.

C. Permit History

The Bozeman Product Terminal was installed and operating by 1955. Tanks were installed from 1955 to 1966 and therefore the facility was grandfathered from the Air Quality Preconstruction Permit process. On September 28, 1997, **MAQP #2945-00** was issued final to Conoco, Inc. (Conoco), for the operation of a bulk gasoline terminal.

MAQP #2945-00 reflected the fact that Conoco requested a throughput limit on the facility. The proposed throughput limit kept Conoco below the 40 Code of Federal Regulations (CFR) 63, Subpart R applicability threshold.

On March 30, 1998, the Montana Department of Environmental Quality (Department) modified MAQP #2945-00. The modification corrected an error made in the original permitting process, as reflected in Section II.A.1. This condition did not contain the "...and/or switch loaded service" language, which should have been included in MAQP #2945-00. **MAQP** #2945-01 replaced MAQP #2945-00.

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 #2945-02** replaced MAQP #2945-01.

A letter from ConocoPhillips dated November 24, 2004, and received by the Department on December 1, 2004, notified the Department that ConocoPhillips planned to install a 3,000-gallon vertical tank used to store a lubricity additive. Since the uncontrolled potential to emit (PTE) of the 3,000-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 ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. The permit was also updated to reflect current permit language and rule references used by the Department. **MAQP #2945-03** replaced MAQP #2945-02.

A letter from ConocoPhillips dated August 6, 2008, and received by the Department August 8, 2008, requested an administrative amendment to further limit the facilities annual truck loading throughput of gasoline. The throughput limit was requested to be reduced to 97,500,000 gallons per year of gasoline. **MAQP #2945-04** replaced MAQP #2945-03.

A letter from ConocoPhillips dated June 8, 2009, and received by the Department June 10, 2009, requested an administrative amendment to change the address associated with MAQP #2945-04. The permit action incorporated the request into the MAQP. **MAQP #2945-05** replaced MAQP #2945-04.

A letter from ConocoPhillips, received by the Department September 13, 2010, requested an administrative amendment to reduce the allowable throughput of gasoline for the facility to 91,000,000 gallons of gasoline per rolling 12-month period. **MAQP#2945-06** replaced MAQP #2945-05.

On March 30, 2012, ConocoPhillips submitted a letter to the Department notifying the Department that ConocoPhillips changed their name to Phillips 66 Company. In addition, ConocoPhillips requested to change the mailing address for the facility. **MAQP #2945-07** replaced MAQP# 2945-06.

On August 18, 2014, the Department received an application from Phillips 66 via email to modify MAQP #2945-07 as follows:

- reconfigure the existing loading rack (EU001) installed in 1955 to be used to off load ethanol and additives and therefore be listed as an insignificant emissions source,
- add a new bottom-filling loading rack with eight arms in a new bay and a new additional loading arm in the existing truck bay (nine loading arms total, all controlled by the addition of a vapor combustion unit [VCU]), and,
- install a new 10,000 bbl denatured ethanol tank

The addition of a VCU for the control of emissions from the truck loading rack decreased the potential to emit from the terminal to less than 100 tons per year of VOC and, therefore, below Title V operating permit threshold. The decrease allowed for the proposed increase in throughput for the facility while allowing the terminal to remain below Title V thresholds. Phillips 66 proposed to increase the available truck loading throughput to the previously permitted level of 97,500,000 gallons of gasoline per rolling 12-month period. Upon issuance of MAQP#2945-08, Phillips 66 requested revocation of #OP2945-07. **MAQP #2945-08** replaces MAQP# 2945-07.

D. Current Permit Action

When first issued an MAQP for the Bozeman Bulk Terminal, Phillips 66 accepted voluntary throughput limits to keep below the major source applicability threshold for Hazardous Air Pollutants (HAP) of Title 40 Code of Federal Regulations (CFR) Part 63, Subpart R - National Emissions Standards for Gasoline Distribution Facilities. While this resulted in avoiding major source obligations for HAP, criteria pollutant emissions exceeded major source levels and the Bozeman Bulk Terminal was subject to the Title V Operating Permit program. Phillips 66 maintained a Title V Operating Permit for the Bozeman Bulk Terminal as required. MAQP #2945-08 authorized the construction of the Vapor Combustion Unit (VCU) which decreased the potential to emit criteria pollutants to below the Title V major source level. Phillips 66 revoked the Title V Operating Permit following the installation of the VCU. Because the throughput limits now serve the purpose of not only avoiding 40 CFR 63 Subpart R but also avoiding the requirement to maintain a Title V Operating Permit as a major source of HAP emissions, the permit conditions must contain the appropriate rule reference and the MAQP must also require an annual certification that its emissions are less than those that would require the source to obtain a Title V Operating Permit. The current permit action updates the rule reference for the throughput limit conditions and adds the annual certification requirement. MAQP #2945-09 replaces MAQP #2945-08.

E. Additional Information

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

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the 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. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. 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. <u>ARM 17.8.106 Source Testing Protocol</u>. 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).

Phillips 66 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. <u>ARM 17.8.110 Malfunctions</u>. (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. <u>ARM 17.8.111 Circumvention</u>. (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. <u>ARM 17.8.204 Ambient Air Monitoring</u>
 - 2. <u>ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide</u>
 - 3. <u>ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide</u>
 - 4. <u>ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide</u>
 - 5. <u>ARM 17.8.213 Ambient Air Quality Standard for Ozone</u>
 - 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. <u>ARM 17.8.222 Ambient Air Quality Standard for Lead</u>
 - 10. ARM 17.8.223 Ambient Air Quality Standard for PM10

Phillips 66 must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. 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. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (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, Phillips 66 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. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. 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. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. 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. <u>ARM 17.8.316 Incinerators</u>. 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.

- 6. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
- 7. <u>ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products</u>. (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. <u>ARM 17.8.340 Standard of Performance for New Stationary Sources and</u> <u>Emission Guidelines for Existing Sources</u>. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). Phillips 66 is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
 - a. <u>40 CFR 60, Subpart A General Provisions</u> apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. <u>40 CFR 60, Subpart Kb Standards of Performance for Volatile</u> Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984. This rule applies to certain storage vessels with a design capacity greater than or equal to 75 cubic meters (m³) (472 bbl) used to store volatile organic liquids (40 CFR 60.110b(a)). Specifically, this regulation applies to all storage vessels storing volatile organic liquids with a capacity over 151m³ that contain a product with a true vapor pressure of 3.5 kilopascals (kPa) or greater. The design capacity of the T-16 ethanol storage tank is approximately 1,576 m³ (10,000 bbls) and ethanol has a true vapor pressure of approximately 11.5kPa (1.7 pound per square inch atmospheric (psia)) at 90°F. The ethanol tank is subject to Subpart Kb.
 - 40 CFR 60 Subpart XX Standards of Performance for Bulk c. Gasoline Terminals. This rule applies to the loading racks at a bulk gasoline terminal with a gasoline throughput greater than 75,700 liters per day (19,997.8 gallons) that deliver liquid product into gasoline tank trucks that commenced construction or modification after December 17, 1980. Gasoline is defined as a petroleum distillation/alcohol blend having a Reid Vapor Pressure of 27.6kPa or greater that is used as a fuel for internal combustion engines. The gasoline and ethanol to be loaded at this facility meet this criterion. Since these products may be pumped through any of the loading racks and arms, Subpart XX is applicable to this facility. This regulation requires a vapor collection system capable of discharging to the atmosphere VOCs less than 35 mg/liter of gasoline loaded. This regulation also requires loading gasoline to vapor-tight trucks only.

- 9. <u>ARM 17.8.341 Emission Standards for Hazardous Air Pollutants</u>. This source shall comply with the standards and provisions of 40 CFR Part 61, as appropriate.
- 10. <u>ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source</u> <u>Categories</u>. 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. <u>40 CFR 63, Subpart A General Provisions</u> apply to all equipment or facilities subject to an NESHAP Subpart as listed below:
 - b. <u>40 CFR 63, Subpart R National Emission Standards for Gasoline</u> <u>Distribution Facilities (Bulk Gasoline Terminals and Pipeline</u> <u>Breakout Stations)</u>. This rule applies to each bulk gasoline terminal, except those bulk gasoline terminals meeting the exemption requirements of 40 CFR 63.420 (a). The Bozeman terminal will not be a major source of HAPs. Therefore, Subpart R will not be applicable to the facility.
 - c. <u>40 CFR 63, Subpart BBBBBB National Emissions Standards for</u> <u>Hazardous Air Pollutants for Gasoline Distribution Bulk Terminals,</u> <u>Bulk Plants, and Pipeline Facilities</u>. This rule applies to bulk gasoline terminals that are an area source of HAPs that were constructed or modified after November 9, 2006, and that are not subject to the control requirements of 40 CFR 63 Subpart R. The Bozeman terminal is an area source of HAPs. The emissions sources to which this subpart applies are gasoline storage tanks, gasoline loading racks, vapor collection-equipped gasoline cargo tanks, and equipment components in vapor or liquid gasoline service that meet the criteria specified in Tables 1 through 3 of this subpart.
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that an applicant submit an air quality application fee concurrent with the submittal of an MAQP application. A permit application is incomplete until the proper application fee is paid to the Department. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. 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 MAQP (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. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. 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 PTE greater than 25 tons per year of any pollutant. Phillips 66 has a PTE greater than 25 tons per year of volatile organic compounds (VOC); therefore, an MAQP is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 - 4. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis</u> <u>Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 - 5. <u>ARM 17.8.748 New or Modified Emitting Units--Permit Application</u> <u>Requirements</u>. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. An application was not required because for the current permit action because the current permit action is considered an administrative permit change. (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. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.
 - 6. <u>ARM 17.8.749 Conditions for Issuance or Denial of Permit</u>. 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.
 - <u>ARM 17.8.752 Emission Control Requirements</u>. 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. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Phillips 66 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. <u>ARM 17.8.759 Review of Permit Applications</u>. 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. <u>ARM 17.8.762 Duration of Permit</u>. An MAQP 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. <u>ARM 17.8.763 Revocation of Permit</u>. An MAQP 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. <u>ARM 17.8.764 Administrative Amendment to Permit</u>. An MAQP 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. <u>ARM 17.8.765 Transfer of Permit</u>. This rule states that an MAQP 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. <u>ARM 17.8.770 Additional Requirements for Incinerators</u>. 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. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 2. <u>ARM 17.8.818 Review of Major Stationary Sources and Major Modifications-Source Applicability and Exemptions</u>. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (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. $PTE > 70 \text{ tons/year of particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) in a serious PM₁₀ nonattainment area.$
 - <u>ARM 17.8.1204 Air Quality Operating Permit Program</u>. (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 #2945-09 for Phillips 66, the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year for all HAPs.
 - c. This source is not located in a serious PM_{10} nonattainment area.
 - d. This facility is subject to current NSPS (40 CFR 60, Subpart Kb and Subpart XX).
 - e. This facility is subject to a current NESHAP (40 CFR 63, Subpart BBBBBB).

- f. This source is not a Title IV affected source.
- g. This source is not a solid waste combustion unit.
- h. This source is not an EPA designated Title V source.

Phillips 66 requested federally-enforceable permit limitations to remain an area source of HAP emissions with respect to Title V. Based on these limitations, the Department determined that this facility is not subject to the Title V Operating Permit Program. However, in the event that the EPA makes area sources that are subject to NSPS obtain a Title V Operating Permit, this source will be subject to the Title V Operating Permit Program.

- i. ARM 17.8.1204(3). 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 PTE.
 - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.
- 3. <u>ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness</u>. The compliance certification submittal required by ARM 17.8.1204(3)(a) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. BACT Determination

A BACT determination is required for each new or modified source. Phillips 66 shall install on the new or modified source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized.

A BACT determination was not required for the current permit action because the permit change is considered an administrative permit change.

IV. Emission Inventory

Potential to Emit in Tons Per Year (TPY) – Controlled							
Phillips 66 Company - Bozeman Product Terminal							
M	AQP #29	45-09				_	
	VOC	HAPs	NO_x	CO	PM	SO_2	CO ₂ e
Source	TPY	TPY	TPY	TPY	TPY	TPY	TPY
Storage Tank T-10 (stores gasoline) (RVP 11.5)	2.91	1.59E-03					
Storage Tank T-11 (stores gasoline) (RVP 11.5)	1.08	5.91E-04					
Storage Tank T-12 (stores distillates)	0.24	4.18E-04					
Storage Tank T-13 (stores distillates)	0.25	4.31E-04					
Storage Tank T-16 (stores ethanol)	0.09	6.69E-05					
Truck Loading Rack (bottom-fill, gasoline &			-	-	-	-	-
distillates) uncontrolled	328.93	0.24					
Truck Loading Rack (bottom-fill, gasoline &							
distillates) controlled	6.58	0.0					
Vapor Combustion Unit (controlling loading			3.52	8.55	0.01	0.00	154.0
rack	8.48	0.01					8
Fugitive and Miscellaneous Emissions	10.08	0.01					
TOTAL (uncontrolled) :			3.52	8.55	0.01	0.00	154.0
	343.58	0.25					8
TOTAL (controlled) :			3.52	8.55	0.01	0.00	154.0
Note: VOC emission rate from EPA TANKS 4.0.9h modelin	29.73	0.02					8

Note: VOC emission rate from EPA TANKS 4.0.9b modeling runs. HAPs are based on ConocoPhillips TRI Study

Emissions Calculations:

Storage Tanks

Emission Unit ID	Emission Unit	VOC, tpy	HAPs, tpy
EU002	Storage Tank T-10 (stores gasoline)	2.91	1.59E-03
EU003	Storage Tank T-11 (stores gasoline)	1.08	5.91E-04
EU004	Storage Tank T-12 (stores distillates)	0.24	4.18E-04
EU005	Storage Tank T-13 (stores distillates)	0.25	4.31E-04
EU009	Storage Tank T-16 (stores ethanol)	0.09	6.69E-05
	Total:	4.58	3.10E-03

Note: VOC emission rate from EPA TANKS 4.0.9b modeling runs. HAPs are based on ConocoPhillips TRI Study.

Truck Loading Rack

Parameter	Gasoline	Distillates
Saturation factor (S)	0.6	0.6
True vapor pressure of liquid loaded (P), psia	6.774	0.006
Molecular weight of vapors (M), lb/lb-mole	67	130
Temperature of bulk liquid loaded (T), °R	503.97	503.97
Loading losses, lb/1,000 gallons	6.73	0.01

Note: Loading losses based on EPA AP-42 Section 5.2-4: True vapor pressure from AP-42, Chapter 7.1, Table 7.1-2, for gasoline (RVP 15) and jet kerosene (distillates) at 50 °F.

$$L_L = 12.46 \frac{SPM}{T}$$

Emission Unit	Loading Losses, lb/1,000 gal	Throughput Limit, gal/yr	Uncontrolled VOC, tons/year	Uncontrolled HAP, tons/year	Controlled VOC, tons/year	Controlled HAP, tons/year
Gasoline truck loadout	6.73	97,500,000	328.22	0.24	6.56	0.00
Distillates truck loadout	0.01	105,000,000	0.61	0.00	0.01	0.00
		Total:	328.82	0.24	6.58	0.00

Vapor Combustion Unit (VCU):

VCU: Criteria Pollutant Emissions

Pollutant	Emission Factor, mg/L	Emission Factor, lb/gal	Throughput, gal/yr	Emission Rate, lb/year	Emission Rate, tpy
VOC	10	8.37E-05		16,949	8.47
NOX	4	3.35E-05	202,500,000	6,780	3.39
СО	10	8.37E-05		16,949	8.47

Emission factors for VOC, NOx, and CO in mg/L from the manufacturer. Throughput includes gasoline (97,500,000 gal/yr) and distillate (105,00,000 gal/yr).

VCU: GHG Emissions

Pollutant	Emission Fa kg/MMBtu	ctor,	Emission Fa lb/MMBtu	ctor,	Average Emission	Heat Input,	Emission Rate,
	Gasoline	Distillate	Gasoline	Distillate	Factor, lb/MMBtu	MMBtu/yr	tpy
CO2	70.22	73.96	156.59	164.93	160.76		26.87
CH4	3.00E-03	3.00E-03	6.69E-03	6.69E-03	6.69E-03	004.04	1.12E-03
N ₂ O	6.00E-04	6.00E-04	1.34E-03	1.34E-03	1.34E-03	334.31	2.24E-04
CO2e	70.47	74.21	157.16	165.50	161.33		26.97

GHG Emission factors for gasoline ("Motor Gasoline") and distillate ("Distillate Fuel Oil No. 2") obtained from 40 CFR Part 98, Table C-1 and C-2. Emissions of CO2e were estimated assuming a throughput of gasoline of 97,500,000 gal/yr and distillate of 105,00,000 gal/yr at an emission rate of 10 mg/L. Based on the energy content (MMBtu/gal) and density (lb/gal) of gasoline (0.125 MMBtu/gal; 6.217 lb/gal) and diesel fuel (0.138 MMBtu/gal; 6.943 lb/gal) the total heat input was estimated to be approximately 334 MMBtu/yr.

Example Calculation:

Heat Input (MMBtu/yr) for gasoline = [97,500,000 (gal. of gasoline/yr) * 10 (mg/L) * 1/1000 (g/mg) * 3.75 (L/gal) * 1/454 (lb/g)/6.217 (lb/gal) * 0.125 (MMBtu/gal)] = 161.9 MMBtu/yr

VCU: Hazardous Air Pollutant Emissions

Pollutant	Emission
	Rate, tpy
HAPs	4.63E-03

Note: HAPs from the VCU are assumed to be a fraction of the VOC emission rate based on the ConocoPhillips TRI Study.

VCU Pilot and Assist Gas Usage

Parameter	Natural Gas	Propane
Pilot fuel flow, scfh	54	21
Max assist gas flow, scfh	150	60
Total gas flow, scfh	204	81
Total gas flow, gal/hr	N/A	2.27
Btu/hr	55,080	N/A
Btu/hr	55,080	N/A

Note: Fuel flow in gal/hr based on

http://www.oregon.gov/osp/SFM/docs/cr2k/cr2k_general/gasconversionchartpublic.pdf

		Natural Gas	•	Pro	pane
Pollutant	Emission	Emission	Emission	Emission	Emission
ronutant	Factor,	Factor,	Rate,	Factor,	Rate,
	lb/MMSCF	lb/MMBtu	tpy	lb/1000gal	tpy
NOX	100	0.10	0.02	13	0.13
CO	84	0.08	0.02	7.5	0.07
VOC	5.5	0.01	1.30E-03	1	0.01
PM	7.6	0.01	1.80E-03	0.7	0.01
SO2	0.6	5.88E-04	1.42E-04	-	-
CO2	120,000	117.65	28.38	12,500	124.40
N2O	2.2	2.16E-03	5.20E-04	0.9	0.01
CH4	2.3	2.25E-03	5.44E-04	0.2	0.00
CO2e	120,656	118.29	28.54	12,773	127.12
HAP	1.89	1.85E-03	4.47E-04	-	-

Note: Pilot gas emissions based upon EPA AP-42 Sections 1.4 - Natural Gas Combustion and 1.5 - Liquified Petroleum Gas Combustion. HAP values from propane not listed in AP-42. Values for propane are used to report pilot gas usage emissions, as they are most conservative.

Global warming potentials obtained from Table A-1 to Subpart 98 - Global Warming Potentials

Equation A-1 $CO2e = \Sigma GHGi \times GWPi$

Where:

CO2e = Carbon dioxide equivalent (tons/year)

GHGi = Mass emissions of each GHG (tons/year)

GWPi = Global warming potential for each GHG (1 for CO2; 25 for CH4; 298 for N2O)

Total VCU Emissions, Including Pilot Gas Usage

Parameter	Emission
	Rate, tpy
VOC	8.48
NOX	3.52
СО	8.55
PM	0.01
SO2	0.00
CO2e	154.08
HAP	0.01

Total Fugitive and Miscellaneous Emissions

Source	VOC	HAPs
Fugitive component emissions, (valves, connectins, open-ended lines, load arms, pump and meters) tpy	0.18	9.91E-05
Miscellaneous emissions (tank roof landings), tpy	1.40	7.67E-04
Miscellaneous emissions (tank roof cleanings), tpy	7.02	3.83E-03
Miscellaneous emissions (other, wastewater tanks, wastewater sumps, oi/water separator, provers, rack drains, additive tanks), tpy	1.48	8.05E-04
Total fugitive and miscellaneous emissions, tpy	10.08	0.01

Note: Supporting calculations and data for the scaled annual ground-level VOC concentrations are on file at the Department.

Hazardous Air Pollutant Emission Factors from ConocoP	hillips TRI Study
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	Hazardous Air Pollutant?	Gasoline Factors	Distillate Factors
Species		Vapor	Vapor
Arsenic (and compounds)	Yes	N/A	0%
1,2,4-Trimethylbenzene	No	0.000741596%	0.007063651%
2,2,4-Trimethylpentane	Yes	0.007%	N/A
Benzene	Yes	0.007%	0.071721853%
Biphenyl	Yes	0.000000393369%	0.00000936704%
Chromium VI (and compounds)	Yes	0%	N/A
Cumene	Yes	0.000340463%	0.001621446%
Cyclohexane	No	0.003722767%	N/A
Ethyl benzene	Yes	0.001%	0.006843637%
Hexane (total)	No	0.014%	0.057697386%
Napthalene/Methylnapthalenes	Yes	0.0000144886%	0.000427373%
n-Hexane	Yes	0.024230037%	0.023078954%
Phenanthrene	No	N/A	0.000000271297%
Phenol	Yes	0.00000260336%	0.00007214%
Styrene	Yes	N/A	0.000757348%
Toluene	Yes	0.011%	0.041919818%
Xylene (mixed isomers)	Yes	0.004%	0.025192065%
Tot	al, weight fraction:	0.07305%	0.23641%
Total HAPs, weight fraction:		0.05459%	0.17164%

Note: Data is from ConocoPhillip's Refinery TRI team spreadsheets developed in 2008 and used for SARA 313 TRI submittals

V. Existing Air Quality

Gallatin County is currently designated as attainment/unclassifiable for all criteria pollutants.

VI. Ambient Air Impact Analysis

The Department determined that there will be no impacts from this permitting action because this permitting action is considered an administrative action. Therefore, the Department believes this action will not cause or contribute to a violation of any ambient air quality standard.

VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #2945-09, the Department determined that there will be no impacts from this permitting action. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

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	
Х		1. Does the action pertain to land or water management or environmental regulation affecting
Λ		private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private
		property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others,
	Λ	disposal of property)
	Х	4. Does the action deprive the owner of all economically viable uses of the property?
	Х	5. Does the action require a property owner to dedicate a portion of property or to grant an
		easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and
		legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of
		the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic
	Λ	impact, investment-backed expectations, character of government action)
	Х	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?
	Х	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible,
		waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the
		physical taking of adjacent property or property across a public way from the property in
		question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked
		in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6,
		7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

IX. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an environmental assessment is not required.

Analysis Prepared by: John P. Proulx Date: March 24, 2017