



February 5, 2016

Phillips 66 Company
2626 Lillian Ave
Billings, MT 59101

Dear Mr. Miller:

The Department of Environmental Quality (Department) has made its decision on the Montana Air Quality Permit application for Phillips 66 Company. The application was given permit number 2757-05. The Department's decision may be appealed to the Board of Environmental Quality (Board). This project is considered an Energy Development Project and as such the appeal period is 30 days (15 days beyond the date the permit goes final). A request for hearing must be filed by March 7, 2016. This permit shall become final on February 21, 2016, unless the Board orders a stay on the permit.

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

Conditions: See attached

For the Department,

A handwritten signature in black ink that reads "Julie A. Merkel".

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

A handwritten signature in black ink that reads "Craig Henrikson".

Craig Henrikson, P.E.
Environmental Engineer
Air Quality Bureau
(406) 444-6711

JM:CH
Enclosure

Montana Air Quality Permit

Issued To: Phillips 66 Company
2626 Lillian Ave
Billings, MT 59101

MAQP: #2757-05
Application Complete: 12/18/15
Preliminary Decision: 01/20/16
Department Decision Issued: 2/5/2016
Permit Final:
AFS #: 035-0005

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 owns and operates a crude oil tank farm located Southeast of the city of Cut Bank on Government Lot 1 in the NE¹/₄ of Section 18, Township 33 North, Range 5 West, in Glacier County, Montana. The facility is known as the Cut Bank Crude Station.

B. Current Permit Action

On December 18, 2015, the Department received a request from Phillips 66 to clarify the BACT language to better reflect vapor controls at the facility and make those consistent with recent Department BACT determinations. Additionally, the 120,000 barrel crude tank added under MAQP #2757-02 has been changed to be referenced as Tank #1060. In addition, the responsible official was updated.

Section II: Limitations and Conditions

A. Emission Control Requirements:

Phillips 66 shall install, operate, and maintain the following emission control equipment and practices to provide the maximum air pollution control for which it was designed as stated in Administrative Rules of Montana (ARM) 17.8.752 and as included in MAQP Application #2757-00 and updated in the application for MAQP #2757-05.

1. Storage Tank #1010 shall be equipped with an external floating roof plus single wiper seals with a foam log or equivalent control equipment.
2. Storage Tank #1020 shall be equipped with a floating roof which meets the requirements specified in 40 CFR 60, Subpart Kb.
3. Storage Tank #1030 shall be equipped with a floating roof which meets the requirements specified in 40 CFR 60, Subpart Ka.

4. Storage Tank #1040 shall be equipped with a floating roof which meets the requirements specified in 40 CFR 60, Subpart Kb.
5. Storage Tank #1060 shall be equipped with a floating roof which meets the requirements specified in 40 CFR 60, Subpart Kb.
6. All applicable requirements of ARM 17.8.340, which incorporates, by reference 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS):
 - a. 40 CFR 60, Subpart Ka - Standards of Performance for Volatile Organic Liquid Storage Vessels shall apply to all volatile organic storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction or modification commenced after May 18, 1978, and prior to July 23, 1984. This shall include, but not be limited to, storage tank #1030. These requirements shall be as specified in 60.112a, 60.113a, 60.114a, and 60.115a.
 - b. 40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels shall apply to all volatile organic storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction or modification commenced after July 23, 1984. This shall include, but not be limited to, storage tanks #1020, #1040, and #1060). These requirements shall be as specified in 60.112b, 60.113b, 60.114b, 60.115b, 60.116b, and 60.117b.
7. Phillips 66 shall not cause or authorize the use of any street, road, or parking lot, or the general plant area, 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 precaution limitation in Section II.A.7 (ARM 17.8.749).

B. Testing Requirements:

1. Phillips 66 shall meet the requirements of all testing and procedures as described in 40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels, for Tank #1020 with a liquid mounted internal floating roof (IFR) and double wiper seals, including but not limited to the following (ARM 17.8.340 and 40 CFR 60, Subpart Kb):
 - a. Phillips 66 shall visually inspect the IFR, the primary seal, and the secondary seal through manholes and roof hatches on the fixed roof at least every 12 months after initial fill.

- b. Phillips 66 shall visually inspect the IFR, the primary seal, and secondary seal, gaskets, slotted membranes and sleeve seals each time the storage vessel is emptied and degassed. These inspections shall occur at intervals no greater than 10 years, in the case of vessels conducting the annual emissions inspection.
 2. Phillips 66 shall meet the requirements of all testing and procedures as described in 40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels, for Tank #1040 with an IFR and double wiper seals, including but not limited to the following (ARM 17.8.340 and 40 CFR 60, Subpart Kb):
 - a. Phillips 66 shall visually inspect the IFR, the primary seal, and the secondary seal and make the necessary repairs prior to filling the storage vessel with volatile organic liquid.
 - b. Phillips 66 shall visually inspect the IFR, the primary seal, and the secondary seal through manholes and roof hatches on the fixed roof at least every 12 months after initial fill.
 - c. Phillips 66 shall visually inspect the IFR, the primary seal, and secondary seal, gaskets, slotted membranes and sleeve seals each time the storage vessel is emptied and degassed. These inspections shall occur at intervals no greater than 10 years in the case of vessels conducting the annual emissions inspection.
 3. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
 4. The Department may require further testing (ARM 17.8.105).
- C. Operational Reporting Requirement:

1. 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 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 for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505). In addition, Phillips 66 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 true vapor pressure of the petroleum liquid stored in each tank;
- c. The annual throughput of petroleum liquids for each tank in barrels;
- d. The number of the following fugitive VOC emission sources in service:
 - i. light liquid valves;
 - ii. heavy liquid valves;
 - iii. open-end valves;
 - iv. flanges;
 - v. pump seals/light liquid;
 - vi. pump seals/heavy liquid;
 - vii. sumps; and
 - viii. oil/water separators.

For reporting purposes, the equipment should be identified using the tank numbers contained in Section I.A of the permit analysis.

- 2. 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*, 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).
- 3. 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 for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

D. Additional Reporting Requirements

Phillips 66 shall supply the Department with the reports as required by 40 CFR 60, Subpart Kb. Phillips 66 shall supply the Department with initial and annual reports for each storage vessel in which this subpart applies. These reports shall include information described in 40 CFR 60, Subpart Kb.

E. Notification

Phillips 66 shall provide the Department with written notification of the dates of tank inspections at least 30 days prior to the filling or refilling of each storage tank for which Section II.B of this permit requires an inspection.

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.*, Montana Code Annotated (MCA).
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department’s decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department’s decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department’s decision on the application is final 16 days after the Department’s decision is made.
- F. Permit Inspection – As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by the Department at the location of the source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, 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).

Permit Analysis
Phillips 66 Company
Montana Air Quality Permit (MAQP) #2757-05

I. Introduction/Process Description

A. Permitted Equipment

Phillips 66 Company (Phillips 66) owns and operates a crude oil tank farm located Southeast of the city of Cut Bank on Government Lot 1 in the NE¹/₄ of Section 18, Township 33 North, Range 5 West, in Glacier County, Montana. The facility is known as the Cut Bank Crude Station and includes the following equipment:

<u>Tank #</u>	<u>Installed</u>	<u>Capacity (bbl)</u>	<u>Diameter (ft)</u>	<u>NSPS</u>
1010	1968	55,000	100	Not Applicable
1020	1986	55,000	100	Subpart Kb
1030	1980	25,000	67	Subpart Ka
1040	1993	80,000	120	Subpart Kb
1060	2005	120,000	134	Subpart Kb

B. Source Description

Crude oil is transferred from the Glacier pipeline system to the crude oil storage tanks (#1010, #1020, #1030, #1040, and #1060). The crude oil is then pumped back into the Glacier line for transport to refineries located in the Billings, Montana area. The Cut Bank Crude Station is utilized to provide a continuous crude oil supply to the refineries. Maximum throughput for the crude station is 4,375 barrels per hour (bbl/hr) based on the Cut Bank pipeline pump capacity. Flow rates into Cut Bank are significantly less than the Cut Bank pipeline pump capacity.

C. Permit History

MAQP #2757-00: On November 6, 1992, the Department of Environmental Quality (Department) received an application from Conoco, Inc. (Conoco) for the Cut Bank Crude Station. The application was assigned MAQP #2757-00 and was deemed complete on December 23, 1992. The project was developed to ensure a continuous crude oil supply to refineries located in the Billings, Montana area. The project consisted of adding an 80,000 barrel (bbl) capacity storage tank to the existing facility (two 55,000 bbl capacity tanks and a 25,000 bbl capacity tank). MAQP #2757-00 became final on January 29, 1992.

MAQP #2757-01: On January 10, 2003, Conoco submitted a letter to the Department notifying the Department that Conoco changed their name to ConocoPhillips Company (ConocoPhillips). In addition, ConocoPhillips requested to change the mailing address for the facility. The permit action updated the permit to reflect the name change and new mailing address. Further, the permit format and language was updated to reflect Department permit format and language. MAQP #2757-01 replaced MAQP #2757-00.

MAQP #2757-02: A letter from ConocoPhillips dated May 20, 2005, and received by the Department on May 23, 2005, notified the Department that ConocoPhillips planned to install a 120,000-barrel internal floating roof tank used to store crude oil from pipeline operations. Since the uncontrolled Potential to Emit (PTE) of the 120,000-barrel internal floating roof tank is 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. The 120,000-barrel internal floating roof tank is considered a New Source Performance Standard (NSPS)-affected facility under 40 Code of Federal Regulations (CFR) 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels. The emissions were calculated using the maximum design fill rate of 4,500 barrels per hour. In addition, MAQP #2757-02 was updated to reflect current permit language and rule references used by the Department. MAQP #2757-02 replaced MAQP #2757-01.

MAQP #2757-03: 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 #2757-02. The current permit action incorporates the request into the MAQP. MAQP #2757-03 replaced MAQP #2757-02.

MAQP #2757-04: On April 2, 2012, the Department received a letter from ConocoPhillips Company requesting a name change of the company from ConocoPhillips Company to Phillips 66 Company. The current permit action reflects the transfer of ownership of the facility. In addition, the 'issued to' address was updated to the most recent mailing address on file. MAQP #2757-04 replaced MAQP #2757-03.

D. Current Permit Action

On December 18, 2015, the Department received a request from Phillips 66 to clarify the BACT language to better reflect vapor controls at the facility and make those consistent with recent Department BACT determinations. Additionally, the 120,000 barrel crude tank added under MAQP #2757-02 has been changed to be referenced as Tank #1060. In addition, the responsible official was updated.

MAQP #2757-05 replaces MAQP #2757-04.

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 the 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).

Phillips 66 shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited, 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:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Oxide

4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Dioxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for 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. 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, 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. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, NSPS. Phillips 66 is considered an NSPS-affected facility under 40 CFR Part 60 and is subject to NSPS Subparts including, but not limited to:

- a. Subpart A, General Provisions, applies to all equipment or facilities subject to an NSPS Subpart as listed below.
- b. Subpart Ka, Standards of Performance for Volatile Organic Liquid Storage Vessels shall apply to all volatile organic storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction or modification commenced after May 18, 1978, and prior to July 23, 1984. These requirements shall be as specified in 40 CFR Part(s) 60.112a, 60.113a, 60.114a, and 60.115a.
- c. Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels, shall apply to all volatile organic storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction or modification commenced after July 23, 1984. These requirements shall be as specified in 40 CFR Part(s) 60.110b through 60.117b.

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. Philips 66 provided the appropriate application fee for this 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 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 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. Phillips 66 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. Phillips 66 submitted an affidavit of publication of public notice for the December 23, 2015, issue of the *Cut Bank Pioneer Press*, a newspaper of general circulation in Cut Bank in Glacier 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 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. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making

permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

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

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

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

This facility is not a major stationary source since 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. 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 (PM₁₀) in a serious PM₁₀ 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 #2757-05 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 PM₁₀ nonattainment area.
 - d. This facility is subject to current NSPS standards (40 CFR 60, Subpart(s) A, Ka, and Kb).
 - e. This facility is not subject to any current NESHAP standards.
 - f. This source is not a Title IV affected source, nor a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that the Phillips 66 facility will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Phillips 66 will be required to obtain an operating permit.

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 the BACT shall be utilized. An

updated BACT analysis was provided in this application to document that facility vapor control upgrades satisfy current BACT determinations; and to make the permit conditions consistent with 40 CFR 60 Subpart Ka and Kb.

VOC BACT Analysis for Crude Oil Storage Tanks

Phillips 66 submitted a BACT analysis to demonstrate that the controls currently in place for VOC control on the crude oil storage tanks represent BACT. This analysis was also used to validate the minor clarifications on the existing BACT permit conditions which cover the five crude oil storage tanks. There are no new emitting units being installed under this permit action so the BACT analysis just supports the current VOC controls that are already in service.

The provided BACT analysis methodology was as follows:

- Step 1 - Identify all control options;
- Step 2 - Eliminate technically infeasible options;
- Step 3 - Rank remaining options by control effectiveness;
- Step 4 - Evaluate most effective controls and document results; and
- Step 5 - Select BACT.

Available control options for VOC control were identified to be: Submerged Fill; Floating Roof; Flare (Smokeless Combustion Device); Vapor Recovery Unit (VRU); and Connect Tanks to Gas Pipeline.

Of these five, four were determined to be feasible while connecting to a pipeline was eliminated from further consideration as there is no existing pipeline available. Control efficiencies for the four remaining control options were provided as follows:

Emitting Unit	Control Efficiency
Flare	95%
Floating Roof	95%
VRU	90%
Submerged Fill	NA – Baseline

Subpart Kb requires the control of VOC emissions through the use of an internal floating roof, external floating roof or a flare. Each of the five crude storage tanks has floating roofs and therefore achieve one of the highest control efficiencies of the four remaining control options. The original tank (#1010) has an external floating roof and pre-dates 40 CFR Subpart Ka. Tank #1030 is subject to Subpart Ka and the three remaining (#1020, #1040, and #1060) are subject to Subpart Kb. Therefore, all five tanks effectively meet the preferred BACT control methodology. Compliance with Subparts Ka and Kb, as they apply, is accepted as BACT for Tanks #1020, 1030, 1040, and 1060. Tank #1010 having an external floating roof is accepted as BACT.

The control options selected contain control equipment and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory – Revised in application for MAQP #2757-05.

<u>VOC Emissions</u>	<u>(Ton/yr)</u>	(Tanks 4.09d)
Storage Tank # 1010	8.92	
Storage Tank # 1020	9.86	
Storage Tank # 1030	13.02	
Storage Tank # 1040	7.42	
Storage Tank # 1060	6.92	
<u>Fugitive Emissions</u>	<u>2.93</u>	
Total	49.07	

Fugitive VOC Emissions

<u>Source</u>	<u># of Sources</u>	<u>Factor (Ton/yr/source)</u>	<u>Emissions (Ton/yr)</u>
Light Liquid Valves	0	0.0685	0
Heavy Liquid Valves	148	0.0022	0.3256
Open-End Valves	0	0.0164	0
Flanges	42	0.0080	0.336
Pump Seals/Light Liquid	0	0.4769	0
Pump Seals/Heavy Liquid	11	0.2066	2.2726
Sumps	0	0.3066	0
<u>Oil/Water Separators</u>	<u>0</u>	<u>5.0000 **</u>	<u>0</u>
Total Fugitive Emissions			2.93

** (lb/10³ gal waste water)

Total Facility Emissions: 49.07 ton/yr

V. Existing Air Quality

This facility is in a location currently designated as attainment/unclassifiable for all pollutants.

VI. Ambient Air Impact Analysis

The current permit action is clarifying the BACT permit conditions but not adding or modifying any emission limits. No change to allowable emissions is included in this action. Therefore, the Department would expect no impacts to air quality as a result of this permitting action.

VII. Taking or Damaging Implication Analysis

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

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

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

VIII. Environmental Assessment

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

Analysis prepared by: Craig Henrikson
Date: December 23, 2015

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

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Phillips 66 Company
2626 Lillian Ave
Billings, MT 59101

Montana Air Quality Permit Number: 2757-05

Preliminary Determination Issued: 01/20/16

Department Decision Issued: 2/5/2016

Permit Final:

1. *Legal Description of Site:* Phillips 66 Company (Phillips 66) submitted an application to modify their existing Montana Air Quality Permit (MAQP) located on Government Lot 1 in the NE¼ of Section 18, Township 33 North, Range 5 West, in Glacier County, Montana. The facility is known as the Cut Bank Crude Station.
2. *Description of Project:* The permit application is for clarifying the crude oil storage tank vapor control requirements in the existing permit and reference applicable 40 CFR 60, Subpart Ka and Kb requirements. It also provides a tank number for a previously permitted storage tank. There are no new emitting units added under this permit action.
3. *Objectives of Project:* The object of the project would be to clarify the existing vapor control requirements on the existing crude oil storage tanks and to rely on 40 CFR 60, Subpart Ka and Kb, where applicable.
4. *Alternatives Considered:* In addition to the proposed action, the Department of Environmental Quality (Department) considered the "no- action" alternative. The "no-action" alternative would deny issuance of the MAQP to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because conditions in the permit should establish and demonstrate compliance. Therefore, the "no-action" alternative was eliminated from further consideration.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A listing of the enforceable permit conditions and a permit analysis, including a Best Available Control Technology (BACT) analysis, is included in this permit action.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would not unduly restrict private property rights.

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

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

SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS:

The following comments have been prepared by the Department.

A. Terrestrial and Aquatic Life and Habitats

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on terrestrial and aquatic life and habitats.

B. Water Quality, Quantity, and Distribution

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on water quality, quantity and distribution.

C. Geology and Soil Quality, Stability, and Moisture

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on geology and soil quality, stability and moisture.

D. Vegetation Cover, Quantity, and Quality

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on vegetation cover, quantity and quality.

- E. Aesthetics
The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on aesthetics.

- F. Air Quality
The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on air quality.

- G. Unique Endangered, Fragile, or Limited Environmental Resources
The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on unique endangered, fragile or limited resources.

- H. Demands on Environmental Resource of Water, Air, and Energy
The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on demands on environmental resources of water, air and energy.

- I. Historical and Archaeological Sites
The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on historical and archaeological sites.

- J. Cumulative and Secondary Impacts
The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on cumulative and secondary impacts.

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

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

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

A. Social Structures and Mores

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on social structures and mores.

B. Cultural Uniqueness and Diversity

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on cultural uniqueness and diversity.

C. Local and State Tax Base and Tax Revenue

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on local and state tax base and tax revenue.

D. Agricultural or Industrial Production

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on agricultural or industrial production.

E. Human Health

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on human health.

F. Access to and Quality of Recreational and Wilderness Activities

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on access to and quality of recreational and wilderness activities.

G. Quantity and Distribution of Employment

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on the quantity and distribution of employment.

H. Distribution of Population

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on the distribution of population.

I. Demands of Government Services

The clarification to the existing permit language does not result in a change in emissions and therefore other than the issuance of the revised permit has no impact on demands for government services.

J. Industrial and Commercial Activity

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on industrial and commercial activity.

K. Locally Adopted Environmental Plans and Goals

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on locally adopted environmental plans and goals.

L. Cumulative and Secondary Impacts

The clarification to the existing permit language does not result in a change in emissions and therefore has no impact on cumulative and secondary impacts.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: Because the proposed changes would occur at an existing crude oil storage facility, and the proposed change is limited to clarifying existing permit conditions with no new emitting units, an EA is satisfactory.

Individuals or groups contributing to this EA: *Department of Environmental Quality – Air Quality Bureau.*

EA Prepared by: Craig Henrikson

Date: December 23, 2015