

**MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OPERATING PERMIT TECHNICAL REVIEW DOCUMENT**

**Permitting and Compliance Division
1520 E. Sixth Avenue
P.O. Box 200901
Helena, Montana 59620-0901**

Phillips 66 Company – Great Falls Product Terminal
NE ¼ of Section 3, Township 20 North, Range 4 East, in Cascade County
1401 52nd Street North
Great Falls, MT 59405

The following table summarizes the air quality programs testing, monitoring, and reporting requirements applicable to this facility.

| Facility Compliance Requirements | Yes | No | Comments |
|---|-----|----|--|
| Source Tests Required | X | | Method 9 |
| Ambient Monitoring Required | | X | |
| COMS Required | | X | |
| CEMS Required | | X | |
| Schedule of Compliance Required | | X | |
| Annual Compliance Certification and Semiannual Reporting Required | X | | As Applicable |
| Monthly Reporting Required | X | | As Applicable |
| Quarterly Reporting Required | | X | |
| Applicable Air Quality Programs | | | |
| ARM Subchapter 7 – Montana Air Quality Permit (MAQP) | X | | 2946-05 scheduled for Decision May 12, 2012 |
| New Source Performance Standards (NSPS) | | X | Due to the size or the year built, no tanks located at this facility are subject to NSPS standards. The previously permitted Transmix tank was never constructed. This tank would have been subject to 40 CFR 60 Subpart Kb. |
| National Emission Standards for Hazardous Air Pollutants (NESHAPS) | | X | |
| Maximum Achievable Control Technology (MACT) | X | | 40 CFR 63, Subpart BBBBBB |
| Major New Source Review (NSR) – includes Prevention of Significant Deterioration (PSD) and/or Non-attainment Area (NAA) NSR | | X | |

| | | | |
|---------------------------------------|---|---|-------------|
| Risk Management Plan Required (RMP) | | X | |
| Acid Rain Title IV | | X | |
| Compliance Assurance Monitoring (CAM) | | X | |
| State Implementation Plan (SIP) | X | | General SIP |

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SECTION I. GENERAL INFORMATION

A. Purpose

This document establishes the basis for the decisions made regarding the applicable requirements, monitoring plan, and compliance status of emission units affected by the operating permit proposed for this facility. The EPA and the public intend the document for reference during review of the proposed permit. It is also intended to provide background information not included in the operating permit and to document issues that may become important during modifications or renewals of the permit. Conclusions in this document are based on information provided in the administrative amendment received by the Department of Environmental Quality (Department) on December 22, 2004, the administrative amendment received by the Department on March 4, 2004, the renewal operating permit application submitted by ConocoPhillips Company (ConocoPhillips), formerly Conoco, Inc. (Conoco), and received by the Department on April 11, 2003, an administrative amendment received February 21, 2003, as well as the original operating permit application received on June 10, 1996. In addition, a letter was received by the Department on April 2, 2012 requesting a name change from ConocoPhillips Company to Phillips 66 Company. The name references in this document have only been changed to reflect the latest name change to Phillips 66, where appropriate.

B. Facility Location

Phillips 66 (Phillips) owns and operates the Great Falls Product Terminal located in the NW¼ of Section 3, Township 20 North, Range 4 East in Cascade County, Montana. Cascade County is designated as an Unclassifiable/Attainment area for National Ambient Air Quality Standards (NAAQS) for all criteria pollutants. The Great Falls Product Terminal is located just east of the Great Falls city limits at the intersection of Highway 87 and 52nd Street. The facility is surrounded by a meat packing plant on the north, a construction company and a few residences to the west, a distribution company on the south and a field and fertilizer plant northeast and northwest, respectively. There are no schools, medical facilities, or recreational areas in the immediate vicinity of the terminal.

C. Facility Background Information

Montana Air Quality Permit

On October 9, 1997, **Permit #2946-00** was issued to Conoco to exempt them from 40 CFR 63, Subpart R (Gasoline Distribution MACT (Maximum Achievable Control Technology)) applicability. The Great Falls Product Terminal tanks were constructed in 1960.

A letter from ConocoPhillips dated January 3, 2003, and received by the Department on January 10, 2003, notified the Department that Conoco had changed its name to ConocoPhillips and requested the name change on both their Montana Air Quality Permit and Title V Operating Permit. The current permit action changed the name on the permit from Conoco to ConocoPhillips. Permit #2946-01 has been updated to reflect current permit language and rule references used by the Department. Permit **#2946-01** replaced Permit #2946-00.

A letter from ConocoPhillips dated December 6, 2004, and received by the Department December 15, 2004, notified the Department that ConocoPhillips planned to install a 20,000-barrel internal floating roof tank used to store a combination of distillates and gasoline. Since the uncontrolled Potential to Emit (PTE) of the 20,000-barrel internal floating roof 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. ConocoPhillips was 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 conservatively calculated using more total throughput than allowed by the current permit. **Permit #2946-03** replaced Permit #2946-02

ConocoPhillips, in review of information for application for the Title V Renewal Application, identified that the de minimis addition previously permitted as the Transmix Tank (permit action for MAQP #2946-03) had not to date been installed. The application also identified applicability of 40 CFR 63 Subpart BBBBBB to this facility. This permit action is an administrative action pursuant to ARM 17.8.764 to remove the Transmix Tank from the listed permitted equipment and emissions inventory sections of the Permit Analysis, adds 40 CFR 63 Subpart BBBBBB to the Permit Analysis, and updates the emissions inventory. **MAQP #2946-04** replaced MAQP #2946-03.

The Department received a letter from ConocoPhillips on April 2, 2012 to change the name of the company from ConocoPhillips Company to Phillips 66 Company for both the MAQP#2946-04 and OP#2946-06. **MAQP #2946-05** is scheduled to go final on May 12, 2012.

Title V Operating Permit

Conoco's Great Falls Product Terminal was not required to obtain an air quality permit because this facility was constructed prior to November 23, 1968; however, Conoco requested a throughput limit on the facility to keep them below the 40 CFR 63, Subpart R applicability threshold. **Operating Permit #OP2946-00** was issued final and effective on October 9, 1997.

The permit action contained in #OP2946-01 changed the name on the permit from Conoco to ConocoPhillips. **Operating Permit #OP2946-01** replaced Operating Permit #OP2946-00.

The permit action was a renewal of ConocoPhillips' Title V Operating Permit #OP2946-01 for the Great Falls Product Terminal. ConocoPhillips' Operating Permit #OP2946-01 was applicable for 5 years and expired on January 12, 2004. ConocoPhillips applied for a renewal of their Title V Operating Permit on April 11, 2003. **Operating Permit #OP2946-02** replaced Operating Permit #OP2946-01.

On March 4, 2004, the Department received a letter from ConocoPhillips to change the responsible official from Tom Wanzeck to Karen L. Kennedy. **Operating Permit #OP2946-03** replaced Operating Permit #OP2946-02.

A letter from ConocoPhillips dated December 21, 2004, and received by the Department December 22, 2004, notified the Department that ConocoPhillips planned to install a 20,000-barrel internal floating roof tank used to store a combination of distillates and gasoline. Since the uncontrolled PTE of the 20,000-barrel internal floating roof 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. ConocoPhillips 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 conservatively calculated using more total throughput than allowed by the current permit. **Operating Permit #OP2946-04** replaced Operating Permit #OP2946-03.

On March 30, 2006, the Department received a letter from ConocoPhillips to change the responsible official from Karen L. Kennedy to John T. Barrett. **Operating Permit #OP2946-05** replaced Operating Permit #OP2946-04.

On July 18, 2008, the Department received a renewal application letter from ConocoPhillips dated July 11, 2008 to renew their current Title V Operating Permit. The fee associated with renewal was received by the department on July 31, 2008, completing the application. The only change requested was the

inclusion of 40 CFR 63, Subpart BBBBBB. The Department also added or modified rule references and language including prompt deviation language and the general requirement for NESHAP SSM plans. Other changes include incorporation of de-minimis additions and removal of the previously permitted Transmix tank which to date had not been installed. **Operating Permit #OP2946-06** replaced Operating Permit #OP2946-05.

D. Current Permit Action

The Department received a letter from ConocoPhillips on April 2, 2012, to change the name of the company from ConocoPhillips Company to Phillips 66 Company for both the MAQP#2946-04 and OP#2946-06. All new facility references added to the permit and TRD document will use “Phillips 66 Company” or “Phillips”, leaving the old name only in the description of historical permit actions. **Operating Permit #OP2946-07** replaces Operating Permit #OP2946-06.

E. Taking and Damaging Analysis

HB 311, the Montana Private Property Assessment Act, requires analysis of every proposed state agency administrative rule, policy, permit condition or permit denial, pertaining to an environmental matter, to determine whether the state action constitutes a taking or damaging of private real property that requires compensation under the Montana or U.S. Constitution. As part of issuing an operating permit, the Department is required to complete a Taking and Damaging Checklist. As required by 2-10-101 through 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.

F. Compliance Designation

Review of all the material in the Department's compliance files and information provided from inspections indicates that the facility is in compliance.

SECTION II. SUMMARY OF EMISSION UNITS

A. Facility Process Description

Phillips operates a bulk gasoline terminal at the Great Falls Product Terminal. The terminal stores and transfers petroleum products (gasoline and distillate) received from the pipeline and distributes them to regional markets via cargo tanks (tank trucks). The Standard Industrial Classification (SIC) for this facility is "Wholesale Distribution" which has an SIC Code of "5171."

B. Emission Units and Pollution Control Device Identification

Currently, the Great Falls Product Terminal owns and operates three gasoline tanks, two distillate tanks, and one off spec product tank. Fugitive and miscellaneous emissions include emissions from valves, flanges, pump seals, additive tanks, provers, tank cleaning, wastewater sumps, rack drains, tank roof landings, connections, meters, and open-ended lines.

C. Categorically Insignificant Sources/Activities

The Administrative Rules of Montana (ARM) 17.8.1201(22)(a) defines an insignificant emission unit as one that emits less than 5 tons per year of any regulated pollutant, has the potential to emit less than 500 pounds per year of lead or any hazardous air pollutant, and is not regulated by an applicable requirement other than a generally applicable requirement.

The miscellaneous emissions from the Phillips Product Terminal include emissions from tank cleaning, rack drains, additive tanks, etc. These units are insignificant because they emit less than 5 tons per year of any regulated pollutant.

SECTION III. PERMIT CONDITIONS

A. Emission Limits and Standards

The Phillips Great Falls Product Terminal is limited to a maximum of 88,200,000 gallons of gasoline and 88,200,000 gallons of distillate product throughput for the truck loadout operation during any 12-month rolling period. Phillips is also required to conduct monthly leak checks for fugitive emissions. Detection methods incorporating sight, sound, or smell are acceptable for the purposes of these inspections. The emission units at this facility have synthetic minored out of the 40 CFR 63, Subpart R Gasoline Distribution MACT requirements. Due to the federally enforceable limitations on throughput of the loading rack operations, this facility is also not subject to PSD regulations.

40 CFR 63, Subpart BBBBBB will be applicable to this facility. The compliance date for these requirements is January 10, 2011, except for storage tanks which are equipped with floating roofs and not already meeting these requirements, for which compliance must be achieved by the first degassing and cleaning activity after January 10, 2011, or by January 10, 2018, whichever is first. The emissions limits, management practices, and standards of this rule vary depending on the compliance methods chosen by Phillips. Therefore, the permit addresses these requirements by reference and these requirements are not yet applicable.

B. Monitoring Requirements

ARM 17.8.1212(1) requires that all monitoring and analysis procedures or test methods required under applicable requirements are contained in operating permits. In addition, when the applicable requirement does not require periodic testing or monitoring, periodic monitoring must be prescribed that is sufficient to yield reliable data from the relevant time period that is representative of the source's compliance with the permit.

The requirements for testing, monitoring, recordkeeping, reporting, and compliance certification sufficient to assure compliance do not require the permit to impose the same level of rigor for all emissions units. Furthermore, they do not require extensive testing or monitoring to assure compliance with the applicable requirements for emission units that do not have significant potential to violate emission limitations or other requirements under normal operating conditions. When compliance with the underlying applicable requirement for an insignificant emissions unit is not threatened by lack of regular monitoring and when periodic testing or monitoring is not otherwise required by the applicable requirement, the status quo (i.e., no monitoring) will meet the requirements of ARM 17.8.1212(1). Therefore, the permit does not include monitoring for insignificant emission units.

The permit includes periodic monitoring or recordkeeping for each applicable requirement. The information obtained from the monitoring and recordkeeping will be used by the permittee to periodically certify compliance with the emission limits and standards. However, the Department may request additional testing to determine compliance with the emission limits and standards.

The 40 CFR 63, Subpart BBBBBB rules include monitoring requirements and are therefore included by reference. The monitoring requirements applicable to this facility will depend upon the compliance methods chosen by Phillips. These requirements are not yet applicable due to the compliance dates of the rule.

C. Test Methods and Procedures

The operating permit may not require testing for all sources if routine monitoring is used to determine compliance, but the Department has the authority to require testing if deemed necessary to determine compliance with an emission limit or standard. In addition, the permittee may elect to voluntarily conduct compliance testing to confirm its compliance status.

D. Recordkeeping Requirements

The permittee is required to keep all records listed in the operating permit as a permanent business record for at least 5 years following the date of the generation of the record.

The 40CFR63, Subpart BBBBBB rules include recordkeeping requirements. Therefore, the permit incorporates these recordkeeping requirements by reference. The recordkeeping requirements applicable to this facility will depend upon the compliance methods chosen by Phillips. These requirements are not yet applicable due to the compliance dates of the rule.

E. Reporting Requirements

Reporting requirements are included in the permit for each emissions unit, and Section V of the operating permit "General Conditions" explains the reporting requirements. However, the permittee is required to submit semi-annual and annual monitoring reports to the Department and to annually certify compliance with the applicable requirements contained in the permit. The reports must include a list of all emission limit and monitoring deviations, the reason for any deviation, and the corrective action taken as a result of any deviation.

The 40 CFR 63, Subpart BBBBBB rules include reporting requirements. Therefore, the permit incorporates these requirements by reference. The reporting requirements applicable to this facility will depend upon the compliance methods chosen by Phillips. These requirements are not yet applicable.

SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

| Requirement | Reason |
|--|---|
| ARM 17.8.601 ARM 17.8.602 ARM 17.8.1201(10)(a) ARM 17.8.1201(10)(f) ARM 17.8.1201(10)(i) ARM 17.8.1201(10)(k) | This is a statement of purpose, an applicability statement, regulatory definitions, or a statement of incorporation by reference. These types of rules do not have specific requirements associated with them. |
| ARM 17.8.604 ARM 17.8.605 ARM 17.8.606 ARM 17.8.611 ARM 17.8.612 ARM 17.8.613 ARM 17.8.614 ARM 17.8.615 | These rules are Open Burning rules. The department is not aware of any activities at this facility for which these rules apply. These rules are not applicable to the normal operation of this facility. These rules have specific requirements for open burning. These rules |

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT Standards and NESHAP Standards

The requirements of 40 CFR 63, Subpart BBBBBB will apply to this facility. The compliance date for most of the requirements is January 10, 2011, except for storage tanks which are equipped with floating roofs and not already meeting these requirements, for which compliance must be achieved by the first degassing and cleaning activity after January 10, 2011, or by January 10, 2018, whichever is first. These rules apply to gasoline related equipment only.

It is expected that installation of control options may allow the facility to become a synthetic minor under the Title V rules. An application for Modification of the Montana Air Quality Permit will be required prior to installation of the control device. Although the facility may become a synthetic minor with respect to Title V following the MAQP permit modification described above, the requirements of 40 CFR 63, Subpart BBBBBB would still apply. Phillips is also subject to the notification requirements of this rule. The notification requirements of 40 CFR 63, Subpart BBBBBB reference the notification rules outlined in 40 CFR 63.9.

One of the control options available in meeting the requirements of 40 CFR 63, Subpart BBBBBB is utilization of a flare. Should Phillips apply to install a flare, the requirements of ARM 17.8.770 would apply. This rule requires a human health risk assessment to be completed as described in the rule.

B. NSPS Standards

40 CFR 60, Subpart Kb would have applied to the Transmix Tank that was included in Operating Permit #OP2946-04. However, Phillips notified the Department in the application cover letter that this tank has not yet been installed. Therefore, these standards do not apply. The tank was removed from the MAQP as the 3 year time period since the addition was permitted has lapsed.

As of the draft issuance of Operating Permit #OP2946-06, the Department is unaware of any future NSPS Standards that may be promulgated that will affect this facility.

C. Risk Management Plan

As of the draft issuance of Operating Permit #OP2946-06, the Department is unaware of any regulated substance listed in 40 CFR 68.115 which exceeds the minimum threshold quantities for any facility process. Consequently, this facility is not required to submit a Risk Management Plan.

If a facility has more than a threshold quantity of a regulated substance in a process, the facility must comply with 40 CFR 68 requirements no later than June 21, 1999; 3 years after the date on which a regulated substance is first listed under 40 CFR 68.130; or the date on which a regulated substance is first present in more than a threshold quantity in a process, whichever is later.

D. CAM Applicability

Compliance Assurance Monitoring under 40 CFR 64.2 is exempted for facilities that have emission limitations or standards proposed after November 15, 1990, pursuant to Section 111 or 112 of the Clean Air Act. Therefore, 40 CFR 63, Subpart BBBBBB would not make this facility subject to these CAM rules. However, within the rules of 40 CFR 63, Subpart BBBBBB are requirements for monitoring of the operations of the control technology selected.

E. PSD and Title V Greenhouse Gas Tailoring Rule

On May 7, 2010, EPA published the “light duty vehicle rule” (Docket # EPA-HQ-OAR- 2009-0472, 75 FR 25324) controlling greenhouse gas (GHG) emissions from mobile sources, whereby GHG became a pollutant subject to regulation under the Federal and Montana Clean Air Act(s). On June 3, 2010, EPA promulgated the GHG “Tailoring Rule” (Docket # EPA-HQ-OAR-2009-0517, 75 FR 31514) which modified 40 CFR Parts 51, 52, 70, and 71 to specify which facilities are subject to GHG permitting requirements and when such facilities become subject to regulation for GHG under the PSD and Title V programs.

Under the Tailoring Rule, any PSD action (either a new major stationary source or a major modification at a major stationary source) taken for a pollutant or pollutants other than GHG that was not final prior to January 2, 2011, would be subject to PSD permitting requirements for GHG if the GHG increases associated with that action were at or above 75,000 TPY of carbon dioxide equivalent (CO_{2e}) emissions. Similarly, if such action were taken, any resulting requirements would be subject to inclusion in the Title V Operating Permit. Starting on July 1, 2011, PSD permitting requirements would be triggered for modifications that were determined to be major under PSD based on GHG emissions alone, even if no other pollutant triggered a major modification. In addition, sources that exceed the 100,000 TPY CO_{2e} threshold under Title V would be required to obtain a Title V Operating Permit if they were not already subject.