

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

**Permitting and Compliance Division
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Phillips 66 Company
Missoula Bulk Terminal
Section 9, Township 13 North, Range 19 West, Missoula County
2626 Lillian Avenue
Billings, MT 59101

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		
Ambient Monitoring Required		X	
COMS Required		X	
CEMS Required		X	
Schedule of Compliance Required		X	
Annual Compliance Certification and Semiannual Reporting Required	X		
Monthly Reporting Required		X	
Quarterly Reporting Required		X	
Applicable Air Quality Programs			
ARM Subchapter 7 – Montana Air Quality Permit (MAQP)	X		Missoula County Permit #MC3021-03
New Source Performance Standards (NSPS)	X		40 CFR 60, Subpart XX
National Emission Standards for Hazardous Air Pollutants (NESHAPS)		X	No 40 CFR Part 61 rules are applicable
Maximum Achievable Control Technology (MACT)	X		40 CFR 63 SubpartBBBBB
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 emissions units affected by the operating permit proposed for this facility. The document is intended for reference during review of the proposed permit by the Environmental Protection Agency (EPA) and the public. 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 original application submitted by Conoco Inc. (Conoco) on September 3, 1999, and an additional submittal by ConocoPhillips Company (ConocoPhillips) on February 21, 2003, and October 22, 2003, an administrative amendment received by the Department March 4, 2004, the renewal application submitted on October 28, 2005, an administrative amendment received by the Department on June 10, 2009, the renewal application submitted by ConocoPhillips on February 1, 2011, related correspondence on August 31, 2011, March 2, 2012, and May 1, 2012 and the administrative amendment received by the Department on September 4, 2015.

B. Facility Location

This facility is located at 3330 and 3350 Raser Drive in Missoula, Montana. The legal description is Section 9, Township 13 North, Range 19 West, in Missoula County.

C. Facility Background Information

Montana Air Quality Permit (MAQP) Background

MAQP #3021-00: On November 26, 1998, Conoco was issued MAQP #3021-00. Because Conoco Missoula and Exxon Company USA Missoula merged their bulk terminals, the permit alteration was needed to combine these permits and to incorporate production limits that would keep the facility below the 40 CFR 63, Subpart R, threshold levels. This action also transferred permitting authority from Missoula County to the Department. The Department is the responsible permitting authority for sources subject to the Title V Operating Permit Program or sources that are synthetic minor for Title V until Missoula County pursues a Title V Operating Permit Program. MAQP #3021-00 replaced both Missoula County permits held by Conoco and Exxon Company USA, for the Missoula bulk terminals.

MAQP #3021-01 replaces MAQP #3021-00: On September 3, 1999, the Department received a request from Conoco to modify MAQP #3021-00. The modification removed all references to Rack II and the associated vapor recovery unit because Conoco suspended the use of this rack. Included in this modification was a request to stagger the testing schedule for the railcar vapor tightness testing so that 1/3 of the railcars would be tested each year. MAQP #3021-01 replaced MAQP #3021-00.

MAQP #3021-02 replaces MAQP #3021-01: On January 3, 2000, the Department received a request from Conoco to modify MAQP #3021-01. Because vapor-tightness testing is required for only gasoline tank trucks and railcars, the phrase "liquid product" was changed to "gasoline." Because Conoco does not have to perform the testing on the tank trucks, but obtain proof of testing from truck drivers, the word "perform" was changed to "require." The testing section of

the Montana Air Quality permit listed the flare at the truck rack (rack I) as an enclosed rack that required testing for Volatile Organic Compounds (VOCs). However, the flare at rack I is truly an open flame flare and testing for VOC was determined to be unnecessary. Therefore, the Department clarified that testing of this flare consisted of Methods 21 and 22. The permit analysis section was also updated to change the tank usage at the facility. MAQP #3021-02 replaced MAQP #3021-01.

MAQP #3021-03 replaces MAQP #3021-02: On April 20, 2000, the Department received a request from Conoco to modify MAQP #3021-02. MAQP #3021-02 contained a condition (Section II.F.5.) that required Conoco to submit records of inspection on the tanks equipped with single or double-seal systems within 60 days of the date of inspection. The Department agreed with Conoco that this was an initial requirement. The Department and Conoco agreed to change the condition to require reporting within 30 days only if a gap, as defined by NSPS Subpart Kb, is detected. MAQP #3021-03 replaced MAQP #3021-02.

MAQP #3021-04 replaces MAQP #3021-03: 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 name on the permit from Conoco to ConocoPhillips. MAQP #3021-04 was also updated to reflect current permit language and rule references used by the Department. MAQP #3021-04 replaced MAQP #3021-03.

Missoula City-County Health Department Permit #MC3021-00 replaces MAQP #3021-04: On July 1, 2002, air quality permitting for this facility was transferred to the Missoula City-County Health Department and Permit #MC3021-00 replaced MAQP #3021-04. Tank and product loading arm information was also updated.

Permit #MC3021-01 replaces Permit #MC3021-00: On December 9, 2004, ConocoPhillips submitted a letter to the Missoula City-County Health Department requesting a permit modification to permit #MC3021-00. ConocoPhillips requested to add two additive tanks to the Missoula bulk terminal for a lubricity additive that is required for the new ultra low sulfur diesel fuels. A 14,100 gallon additive tank will be placed at the truck rack and a 1,057 gallon tank will be placed near the pipeline. Permit #MC3021-01 replaced permit #MC3021-00 and reflected the addition of two additive tanks.

Permit #MC3021-02 replaces Permit #MC3021-01: In 2007 ConocoPhillips replaced a 1,002 gallon MRL Pipeline Lubricity tank with a 1,950 gallon Jet Fuel Deicer tank. The TANKS 4.09d program shows that total emissions will decrease with this change because the volatility of the deicer additive is less than the volatility of the lubricity additive. Permit #MC3021-02 replaced permit #MC3021-01 and the new permit reflects the removal of one additive tank and the addition of a different additive tank.

Title V Operating Permit Background

Operating Permit #OP3021-00 became effective and final on March 22, 2001.

Operating Permit #OP3021-01 replaces Operating Permit #OP3021-00: A letter from ConocoPhillips dated February 12, 2003, and received by the Department February 21, 2003, notified the Department that Conoco had changed its name to ConocoPhillips. Permit action #OP3021-01 changed the name on this permit from Conoco to ConocoPhillips. Permit #OP3021-01 replaced Permit #OP3021-00.

Operating Permit #OP3021-02 replaces Operating Permit #OP3021-01: On October 22, 2003, the Department received a request from ConocoPhillips for an administrative amendment of Permit #OP3021-01 to update Section V.B.3 of the General Conditions incorporating changes to federal Title V rules 40 CFR 70.6(c)(5)(iii)(B) and 70.6(c)(5)(iii)(C) (to be incorporated into Montana's Title V rules at ARM 17.8.1213) regarding Title V annual compliance certifications. Permit #OP3021-02 replaced Permit #OP3021-01.

Operating Permit #OP3021-03 replaces Operating Permit #OP3021-02: On March 4, 2004, the Department received a letter from ConocoPhillips to change the responsible official from Tom Wanzeck to Karen L. Kennedy. Permit #OP3021-03 replaced Permit #OP3021-02.

Operating Permit #OP3021-04 replaces Operating Permit #OP3021-03: On September 26, 2005, the Department received a renewal application from ConocoPhillips. The application was deemed administratively complete November 28, 2005, and technically complete on December 28, 2005. Permit #OP3021-04 replaced Operating Permit #OP3021-03.

Operating Permit #OP3021-05 replaces Operating Permit #OP3021-04: On June 10, 2009, the Department received a letter from ConocoPhillips to change the responsible official from John T. Barrett to Amy Gross. Operating Permit #OP3021-05 replaced Operating Permit #OP3021-04.

On February 1, 2011, the Department received a Title V Permit Renewal Application from ConocoPhillips. This action updated the permit to incorporate the conditions of **Permit #MC3021-03**, and renewed the Title V permit.

On May 1, 2012, the Department received an administrative amendment request from ConocoPhillips requesting a name change from ConocoPhillips Company to Phillips 66 Company. Because the Department had issued the draft and proposed Operating Permit #OP3021-06 for the above renewal action, the Department rolled the administrative amendment action into the renewal action before posting the operating permit decision, in accord with the usual administrative amendment process. To recognize the separate permit action request, the Department increased the increment on the permit. Therefore, **Operating Permit #OP3021-07** replaced Operating Permit #OP3021-05.

D. Current Permit Action

On September 4, 2015, the Department received notification of a change in responsible official, with Eli Kliewer replacing Amy Gross. As such, **Operating Permit #OP3021-08** replaces Operating Permit #OP3021-07.

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

The last full compliance evaluation of this facility was conducted by the Missoula City-County Health Department on August 10, 2015. The associated compliance monitoring report indicated that, based on review of available information, the facility appears in compliance with all requirements.

SECTION II. SUMMARY OF EMISSIONS UNITS

A. Facility Process Description

The Phillips 66 Missoula Bulk Terminal receives petroleum product via pipeline and stores it in tanks on site. Tanks are either fixed roof or internal floating roofs. The facility then transfers the petroleum product to tank trucks and railcars. Vapors displaced during the loading process are sent to flares for destruction.

B. Emissions Units and Pollution Control Device Identification

Emission Unit ID	Description	Pollution Control Device/Practice
EU001	Loading Racks I and III	Vapor Collection with Flares
EU002	Flares	The flares are the control equipment
EU003	T-50 – 1,264,536-gallon gasoline tank	Internal floating roof
EU004	T-51 – 845,082-gallon gasoline tank	Internal floating roof
EU005	T-52 – 845,208-gallon transmix tank	Internal floating roof
EU006	T-53 – 854,040-gallon EtOH/gas tank	Internal floating roof
EU007	T-54 – 1,260,000-gallon gasoline tank	Internal floating roof
EU008	T-55 – 868,938-gallon jet fuel #1 tank	Fixed roof
EU009	T-56 – 2,677,290-gallon diesel tank	Internal floating roof
EU010	T-58 – 3,827,250-gallons gasoline tank	Internal floating roof
EU011	T-401 – 614,000-gallon mogas tank	Internal floating roof
EU012	T-402 – 1,260,000-gallon mogas tank	Internal floating roof
EU013	T-404 – 850,000-gallon diesel tank	Fixed roof
EU014	T-405 – 650,000-gallon jet fuel tank	Fixed roof
EU015	T-406 – 650,000-gallon mogas tank	Internal floating roof
EU017	Additive tanks (8)	Fixed roof
EU018	Fugitive emissions from valves, flanges, pump seals, and open-ended lines	None
EU019	Fugitive emissions – Truck Traffic	Water and/or chemical dust suppressant

C. Categorically Insignificant Sources/Activities

Insignificant sources for the Phillips 66 Missoula Bulk Terminal are Miscellaneous VOC Emissions from tank cleaning and additive tanks emissions.

SECTION III. PERMIT CONDITIONS

A. Emission Limits and Standards

All emission limits and standards in the Title V permit have been taken directly from the Missoula County air quality permit. Missoula County is a CO and particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment area, but the State Implementation Plans for these pollutants in this area do not include any specific stipulations for the Phillips 66 Missoula Bulk Terminal. Permit limitations have been established to keep the Phillips 66 Bulk Terminal below the 40 CFR 63, Subpart R, threshold levels. 40 CFR 60, Subpart XX, and 40 CFR 63 Subpart BBBBBB are applicable to the Phillips 66 Bulk Terminal. Additionally, 40 CFR 60, Subpart K, is applicable to Tank 56, and 40 CFR 60, Subpart Kb, is also pertinent to Tanks 54 and 58.

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 emissions 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 a 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 emissions 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.

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 five years following the date of the generation of the record.

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.

F. Public Notice

As an administrative action, no public notice was required.

SECTION IV. NON-APPLICABLE REQUIREMENT ANALYSIS

The following table outlines those requirements that Phillips 66 had previously identified as non-applicable, but will not be shielded in the Operating Permit.

Rule Citation	Reason for Not Including
ARM 17.8.340	A shield from rules which are or may become applicable to the source is not appropriate.

SECTION V. FUTURE PERMIT CONSIDERATIONS

A. MACT Standards

The Department is not aware of any 40 CFR Part 63 rules being promulgated with would be applicable to this facility.

B. NESHAP Standards

The Department is not aware of any 40 CFR Part 61 rules being promulgated with would be applicable to this facility.

C. NSPS Standards

The Department is not aware of any 40 CFR Part 60 rules being promulgated with would be applicable to this facility.

D. Risk Management Plan

This facility does not exceed the minimum threshold quantities for any regulated substance listed in 40 CFR 68.115 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 three 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.

E. CAM Applicability

An emitting unit located at a Title V facility that meets the following criteria listed in ARM 17.8.1503 is subject to Subchapter 15 and must develop a CAM Plan for that unit:

- The emitting unit is subject to an emission limitation or standard for the applicable regulated air pollutant (unless the limitation or standard that is exempt under ARM 17.8.1503(2));
- The emitting unit uses a control device to achieve compliance with such limit; and
- The emitting unit has potential pre-control device emission of the applicable regulated air pollutant that is greater than major source thresholds.

Phillips 66 enclosed a Compliance Assurance Monitoring Plan for the Flare and VCU as required by 40 CFR Part 64, 40 CFR Part 64.5, and ARM 17.8, Subchapter 15.

F. 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 would become final on or after 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 (CO₂e) and greater than 0 TPY on a mass basis. Similarly, if such action were taken, any resulting requirements would be subject to inclusion in the Title V Operating Permit. Facilities which hold Title V permits due to criteria pollutant emissions over 100 TPY would need to incorporate any GHG applicable requirements into their operating permits for any Title V action that would have a final decision occurring on or after January 2, 2011.

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 are not considered PSD major sources based on criteria pollutant emissions would become subject to PSD review if their facility-wide potential emissions equaled or exceeded 100,000 TPY of CO₂e and 100 or 250 TPY of GHG on a mass basis depending on their listed status in ARM 17.8.801(22) and they undertook a permitting action with increases of 75,000 TPY or more of CO₂e and greater than 0 TPY of GHG on a mass basis. With respect to Title V, sources not currently holding a Title V permit that have potential facility-wide emissions equal to or exceeding 100,000 TPY of CO₂e and 100 TPY of GHG on a mass basis would be required to obtain a Title V Operating Permit.

The Supreme Court of the United States (SCOTUS), in its *Utility Air Regulatory Group v. EPA* decision on June 23, 2014, ruled that the Clean Air Act neither compels nor permits EPA to require a source to obtain a PSD or Title V permit on the sole basis of its potential emissions of GHG. SCOTUS also ruled that EPA lacked the authority to tailor the Clean Air Act's unambiguous numerical thresholds of 100 or 250 TPY to accommodate a CO₂e threshold of 100,000 TPY. SCOTUS upheld that EPA reasonably interpreted the Clean Air Act to require sources that would need PSD permits based on their emission of conventional pollutants to comply with BACT for GHG. As such, the Tailoring Rule has been rendered invalid and sources cannot become subject to PSD or Title V regulations based on GHG emissions alone. Sources that must undergo PSD permitting due to pollutant emissions other than PSD may still be required to comply with BACT for GHG emissions.