AIR QUALITY PERMIT

Issued to: ConocoPhillips Company P.O. Box 30198 Billings, MT 59107-0198 Permit: #3021-04 Administrative Amendment (AA) Request Received: 01/10/2003 Department Decision on AA: 03/12/03 Permit Final: 03/28/03 AFS#: 063-0022

An air quality permit, with conditions, is hereby granted to ConocoPhillips Company (ConocoPhillips) 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

ConocoPhillips operates a bulk gasoline terminal, which is defined as a bulk gasoline terminal that stores and transfers petroleum products (gasoline and distillate) via tank trucks and railcars. This facility is located in Section 9, Township 13 North, Range 19 West, in Missoula County, Montana. The facility is known as the Missoula product terminal. A complete list of permitted equipment is contained in the permit analysis.

B. Current Permit Action

A letter from ConocoPhillips dated January 3, 2003, and received by the Montana Department of Environmental Quality (Department), January 10, 2003, notified the Department that Conoco Inc. had changed its name to ConocoPhillips. The current permit action changes the name on this permit from Conoco Inc. to ConocoPhillips. Permit #3021-04 has also been updated to reflect current permit language and rule references used by the Department.

SECTION II: Conditions and Limitations

- A. Tank Truck and Railcar Loading Racks
 - 1. Loading of tank trucks and railcars shall be restricted to the use of submerged fill and dedicated normal service and/or switch loaded service (ARM 17.8.749).
 - 2. ConocoPhillips shall be limited to a maximum total of 756,000,000 gallons of gasoline throughput for loadout operation, on Rack I and Rack III combined, during any rolling 12-month period (ARM 17.8.749).
 - 3. ConocoPhillips shall be limited to a maximum total of 1,100,000,000 gallons of distillate product throughput for the loadout operation, on Rack I and Rack III combined, during any rolling 12-month period (ARM 17.8.749).
 - 4. ConocoPhillips shall be limited to a maximum of 50,000,000 gallons of jet fuel throughput for the loadout operation on, Rack I and Rack III combined, during any rolling 12-month period (ARM 17.8.749).
 - 5. ConocoPhillips shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

- 6. ConocoPhillips shall not 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 (ARM 17.8.304).
- 7. ConocoPhillips shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308).
- 8. ConocoPhillips shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.7. (ARM 17.8.749).
- 9. Loading of liquid product into the tank trucks and railcars shall be limited to vapor-tight tank trucks and railcars using the following procedures (ARM 17.8.749).
 - a. ConocoPhillips shall obtain the vapor tightness documentation described in Environmental Protection Agency (EPA) Method 27 (or another method approved by the Department) and procedures in Attachment 1 to this permit or Department of Transportation (DOT) certification methods for each gasoline tank truck or railcar that is loaded at the loading racks;
 - b. ConocoPhillips shall require the tank truck and railcar identification number to be recorded as each gasoline tank truck or railcar is loaded at the terminal; and
 - c. ConocoPhillips shall take the necessary steps to ensure that any nonvapor-tight gasoline tank truck and railcar will not be reloaded at the loading racks until vapor tightness documentation for that tank truck or railcar is obtained.
- 10. The vapor recovery and liquid loading equipment shall be designed and operated to prevent gauge pressure in the gasoline railcar from exceeding 4,500 Pascal (Pa) (450 millimeters (mm) of water) during product loading. This level shall not be exceeded when measured by the procedures specified in the test methods and procedures in Attachment 1 to this permit (ARM 17.8.340 and 40 CFR 60, Subpart XX).
- 11. No pressure-vacuum vent in the vapor recovery system shall begin to open at a system pressure less than 4,500 Pa (450 mm of water) (ARM 17.8.340 and 40 CFR 60, Subpart XX).
- 12. ConocoPhillips shall ensure that loading of gasoline and distillate tank trucks and gasoline railcars at the loading racks are made only into tank trucks and railcars with vapor recovery equipment compatible with the terminal's vapor recovery system (ARM 17.8.340 and 40 CFR, Subpart XX).
- 13. ConocoPhillips shall install, operate, and maintain the vapor recovery system to collect volatile organic compound (VOC) and hazardous air pollutant (HAP) emissions from the gasoline and distillate tank truck loading Rack I and the gasoline railcar loading Rack III (ARM 17.8.340 and 40 CFR 60, Subpart XX).

- 14. ConocoPhillips shall route all emissions from the vapor recovery system to a vapor control system (ARM 17.8.749).
- 15. ConocoPhillips shall install, operate, and maintain the vapor control system to control VOC and HAP emissions as described in Section II.A.16. (ARM 17.8.340 and 40 CFR 60, Subpart XX).
- 16. ConocoPhillips shall not cause or authorize to be discharged into the atmosphere from any flare: (ARM 17.8.316)
 - a. Any visible emissions that exhibit an opacity of 10% or greater
 - b. Any particulate emissions in excess of 0.10 grains per dry standard cubic foot (gr/dscf) corrected to 12% CO₂
 - c. Total VOC emissions due to loading liquid product into gasoline tank truck exceeding 35.0 milligrams per liter (mg/L) of gasoline loaded (40 CFR 60, Subpart XX)
 - d. VOC emissions due to loading liquid product into gasoline railcars exceeding 10.0 mg/L of gasoline loaded
 - e. Total carbon monoxide (CO) emissions due to loading liquid product into gasoline railcars exceeding 10.0 mg/L of gasoline loaded
 - f. Total nitrogen oxide (NO_x) emissions due to loading liquid product into gasoline railcars exceeding 4.0 mg/L of gasoline loaded
- B. Product Storage Tanks

ConocoPhillips shall not store petroleum liquid with a maximum true vapor pressure greater than 2.5 pounds per square inch absolute (psia) in the permitted petroleum liquid storage tanks unless (ARM 17.8.749):

- 1. The tank is equipped with an internal floating roof equipped with a closure seal or seals to close the space between the roof edge and the tank wall;
- 2. The tank is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or material; and
- 3. All openings, except stub drains, are equipped with covers, lids, or seals such that:
 - a. The cover, lid, or seal is in the closed position at all times, except when in actual use.
 - b. The automatic bleeder vents are closed at all times, except when the roof is being floated off or being landed on the roof leg supports.
 - c. The rim vents are set to open when the roof is not floating off the roof leg supports, or at the manufacturer's recommended setting.

- d. ConocoPhillips shall comply with all applicable standards, limitations, reporting, recordkeeping and notification requirements contained in 40 CFR 60, Subpart K, for Tank 56.
- e. ConocoPhillips shall comply with all applicable standards, limitations, reporting, recordkeeping and notification requirements contained in 40 CFR 60, Subpart Kb, for Tanks 54 and 58.
- C. Fugitive Emission Sources
 - 1. ConocoPhillips shall ensure that all valves used are high quality valves containing high quality packing (ARM 17.8.749).
 - 2. ConocoPhillips shall ensure that all open-ended valves are of the same quality as the valves described above. Any open-ended line shall be sealed with a valve (ARM 17.8.749).
 - 3. ConocoPhillips shall ensure that all pumps used in gasoline service shall be equipped with either a single or double mechanical seal system (ARM 17.8.749).
- D. Inspection and Repair Requirements
 - 1. Each calendar month, the vapor collection systems and the loading racks shall be inspected for total organic compound leaks, (liquid or vapor), during product transfer operations. For purposes of this requirement, detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded and the source of the leak repaired within 15 calendar days after it is detected (ARM 17.8.105, ARM17.8.340, and 40 CFR 60, Subpart XX).
 - 2. For tanks equipped with a single and double-seal system, ConocoPhillips shall:
 - a. Visually inspect the internal floating roof and its closure seal or seals through roof hatches at least once every 12 months; and
 - b. Perform a complete inspection of any cover and single seal whenever the tank is emptied for non-operational reasons or at least every 10 years, whichever is more frequent.
 - 3. Each calendar month, all valves, flanges, pump seals, and open-ended lines shall be inspected for total organic compound leaks. For purposes of this requirement, detection methods incorporating sight, sound, or smell are acceptable (ARM 17.8.749).
 - 4. Each calendar quarter, all pump seals shall be instrument tested for total organic compounds (liquid or vapor) leaks. When an instrument reading of 10,000 parts per million (ppm), or greater is measured, or if there are indications of liquid dripping from the equipment, it shall be determined that a leak has been detected.
 - 5. ConocoPhillips shall (ARM 17.8.749):
 - a. Make a first attempt at repair for any leak not later than 5 calendar days after the leak is detected; and

- b. Repair any leak as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Section II.D.6. below.
- 6. Delay of repair of equipment for which a leak has been detected will be allowed if repair is technically infeasible without a source shutdown. Such equipment shall be repaired before the end of the first source shutdown after detection of the leak.
- 7. ConocoPhillips may discontinue monthly inspections when a loading rack(s) is not in operation for an entire calendar month or longer. The loading racks must be purged to remove all petroleum products from the loading racks. ConocoPhillips must provide the following to the Department:
 - a. Written notification within 15 days of shutdown of a loading rack that will not be operating for a calendar month or longer; and
 - b. Written notification within 15 days of startup of a loading rack that has not been in operation and the previous month's inspection(s) was not conducted.
- E. Testing Requirements
 - 1. The open flame flare controlling Rack I shall be tested using Methods 21 and 22, in lieu of other testing required by NSPS Subpart XX. Compliance shall be demonstrated with the emission limitations contained in Section II.A.16.(a) by January 31, 2000, and every 5 years thereafter, or by another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105).
 - 2. The enclosed flare controlling Rack III shall be tested for total organic compounds, and compliance demonstrated with the emission limitation in Section II.A.16.(c). The flare shall be tested by January 31, 2004, and every 5 years thereafter, or by another testing/monitoring schedule as may be approved by the Department (ARM 17.8.105).
 - 3. ConocoPhillips shall use the test methods and procedures in Attachments 1 and 2 to this permit to determine compliance with Sections II.A.10., II.A.16.(c), and II.A.16.(d) of this permit (ARM 17.8.105).
 - 4. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
 - 5. The Department may require further testing (ARM 17.8.105).
- F. Operational Reporting Requirements
 - ConocoPhillips shall document, by month, the gasoline, distillate, and jet fuel throughput for the truck loadout and railcar loadout operations. By the 25th day of each month, ConocoPhillips shall total the amount of throughput during the previous 12 months to verify compliance with the limitations in Sections II.A.2., II.A.3., and II.A.4. A written report of the compliance verification shall be maintained on site and submitted to the Department no later than March 1 and may be submitted along with the annual emission inventory (ARM 17.8.749).

- 2. A record of each monthly leak inspection required under Section II.D.1. and II.D.3. of this permit shall be kept on file at the bulk terminal. Inspection records shall include, at a minimum, the following information (ARM 17.8.749):
 - a. Date of inspection
 - b. Findings (may indicate no leaks discovered or location, nature, and severity of each leak)
 - c. Leak determination method
 - d. Corrective action (date each leak repaired and reason for any repair interval in excess of 15 calendar days)
 - e. Inspector's name and signature
- 3. ConocoPhillips shall record any change in products stored in the permitted storage tanks, which are allowed within the restrictions of this permit.
- 4. For sources containing a petroleum liquid with a true vapor pressure greater than 2.5 pounds per square inch absolute (psia), the following records shall be maintained on site for a minimum of 5 years and shall be made available to the Department upon request:
 - a. The average monthly storage temperature
 - b. The type of liquid stored
 - c. The maximum true vapor pressure for any petroleum liquid with a true vapor pressure greater than 2.5 psia
- 5. ConocoPhillips shall submit records of inspections required by Section II.D.2. to the Department within 30 days of the date of inspection, if a gap is detected.
- 6. ConocoPhillips shall notify the Department of the date of the inspection at least 30 days prior to the refilling of each storage vessel for which an inspection is required by Section II.D.2.
- 7. ConocoPhillips shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but is not limited to, all sources of emissions identified in the emission inventory contained in the permit analysis. For reporting purposes, the tanks shall be identified using the tank numbers contained in Section I.A. of the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used to calculate operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations. ConocoPhillips shall submit the following information annually to the Department by March 1 of each year; the information may be submitted along with the annual emission inventory (ARM 17.8.505 and 40 CFR 63, Subpart R):

- a. The type of petroleum 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 (gallons)
- d. The annual throughput of petroleum liquids for each loading rack (gallons)
- e. The equipment shall be identified using the tank numbers in the permit analysis
- 8. ConocoPhillips shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745 that would include a change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emissions unit.

The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745 (ARM 17.8.745).

9. All records compiled in accordance with this permit shall be maintained by ConocoPhillips as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection ConocoPhillips shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, 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 ConocoPhillips fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving ConocoPhillips of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement action as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders it's 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 Department's decision on the application is not final unless 15 days have elapsed and there is no request for a hearing under this section. The filing of a request for a hearing postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board.

- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy 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 ConocoPhillips may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement Construction must begin within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall be revoked (ARM 17.8.762).

ATTACHMENT 1 ConocoPhillips Missoula Terminal Test Methods and Compliance Procedures

- 1. In determining compliance with Section II.A.10. of this permit, the following procedures shall be used:
 - a. Calibrate and install a pressure measurement device (liquid manometer or equivalent instrument) capable of measuring up to 500 millimeters (mm) (20 inches (in.)) of water gauge pressure with 2.5 mm (0.10 in.) of water precision.
 - b. Connect the pressure measurement device to a pressure tap in the terminal's vapor recovery system, located as close as possible to the connection with the gasoline railcar.
 - c. During the performance test, record the pressure every 5 minutes (min.) while a gasoline railcar is being loaded and record the highest instantaneous pressure that occurs during each loading. Every loading position shall be tested at least once during the performance test.
- 2. In determining compliance with the mass emission limitations in this permit, the following reference methods shall be used:
 - a. In determining volume at the flare stack, Method 2A for all other vapor control systems
 - b. In determining total organic compounds concentration at the flare stack, Method 25A or 25B. The calibration gas shall be either propane or butane.
- 3. Immediately prior to the performance test required to determine compliance with Sections II.A.10., II.A.16.(c), and II.A.16.(d) of this permit, all potential sources of vapor and liquid leakage from the terminal's vapor recovery system equipment shall be monitored for leaks according to the procedures in Attachment 2 to this permit. The monitoring shall be conducted only while a gasoline tank truck or railcar is being loaded. A reading of 10,000 parts per million by volume (ppmv) or greater as methane shall be considered a leak. All leaks shall be repaired prior to conducting the performance test.
- 4. The test procedure for determining compliance with Sections II.A.10, 16.(c) and II.A.16.(d), of this permit is as follows:
 - a. All testing equipment shall be prepared and installed as specified in the appropriate test methods.
 - b. The time period for a performance test shall be not less than 6 hours, during which at least 300,000 L (80,000 gal) of gasoline are loaded. If the throughput criterion is not met during the initial 6 hours, the test may be either continued until the throughput criterion is met, or resumed the next day with another complete 6 hours of testing. As much as possible, testing should be conducted during the 6-hour period in which the highest throughput normally occurs.
 - c. For intermittent vapor control systems:
 - i. The vapor holder level shall be recorded at the start of the performance test. The end of the performance test shall coincide with a time when the vapor holder is at its original level.

- ii. At least two startups and shutdowns of the vapor processor shall occur during the performance test. If this does not occur under automatically controlled operation, the system shall be manually controlled.
- d. The volume of gasoline dispensed during the performance test period at all loading racks where vapor emissions are controlled by the vapor processing system being tested shall be determined. This volume may be determined from terminal records or from gasoline dispensing meters at each loading rack.
- e. An emission testing interval shall consist of a 5-minute period during the performance test. For each interval:
 - i. The reading from each measurement instrument shall be recorded.
 - ii. The volume exhausted and the average total organic compounds concentration in the flare stack shall be determined, as specified in the appropriate test method. The average total organic compounds concentration shall correspond to the volume measurement by taking into account the sampling system response time.
- f. The mass emitted during each testing interval shall be calculated as follows:

$$M_{ei} = 10^{-6} \text{ KV}_{es}C_e$$

Where:

 M_{ei} = Mass of total organic compounds (milligrams (mg)) emitted during testing interval i.

 V_{es} = Volume of air-vapor mixture exhausted (cubic meters (m³)), at standard conditions.

 C_e = Total organic compounds concentration (measure as carbon) at the exhaust vent (ppmv).

K = Density of calibration gas (milligrams/cubic meter (mg/m^3)) at standard conditions $(1.83 \times 10^6 \text{ for propane}; 2.41 \times 10^6 \text{ for butane}).$

S = Standard conditions, 20°C and 760 millimeters of mercury (mmHg).

g. The total organic compounds mass emissions shall be calibrated as follows:

$$E = \frac{\sum_{i=1}^{n} M_{ei}}{L}$$

Where:

E = Mass of total organic compounds emitted per volume gasoline loaded, mg/L.

L = Total volume of gasoline loaded, L.

n = Number of testing intervals.

5. Alternate test methods may be used for determining compliance only after approval from the Department.

ATTACHMENT 2

Leak Detection Methods for Volatile Organic Compounds (VOCs) Test Methods and Compliance Procedures

- 1. Each calendar month, sight, sound, or smell tests shall be conducted on areas of each vapor collection system capable of potential leaks. Each detection of a leak shall be recorded and the leak repaired within 15 days after the leak is detected.
- 2. Alternate test methods may be used for determining compliance only after approval from the Department.

PERMIT ANALYSIS ConocoPhillips Company Missoula Product Terminal Permit #3021-04

I. Introduction/Process Description

A. Permitted Equipment

ConocoPhillips Company (ConocoPhillips) operates a bulk gasoline terminal that includes the following equipment:

Tank #	Year	Product/	Capacity	Tank	Seal Type	Tank	Diameter
	Manu.	Status	(Gals)	Туре		Color	(ft)
50	1954	Diesel	1,264,536	IFR	Primary	White	73.3
51	1954	Gasoline	845,082	IFR	Primary	White	60
52	1954	Transmix	845,208	IFR	Prim & sec	White	60
53	1954	EtOH/gas	854,040	IFR	Primary	White	60
54	1997	Gasoline	1,260,000	IFR	Prim & sec	White	67
55	1972	Jet fuel #1	868,938	Fixed	Vented	White	60
56	1974	Gasoline	2,677,290	IFR	Primary	White	100
58	1997	Gasoline	3,827,250	IFR	Prim & sec	White	134
		Additive	1,000	Fixed	Vented		
		Additive	6,000	Fixed	Vented		
		Additive	1,000	Fixed	Vented		
		Additive	2,000	Fixed	Vented		
401	1955	Mogas	614,000	IFR	Prim & sec	White	49
402	1955	Mogas	1,260,000	IFR	Vented	White	73.3
404	1955	Diesel	850,000	Fixed	Vented	White	60
405	1955	Jet fuel	650,000	Fixed	Vented		49
406	1955	Mogas	650,000	IFR	Prim & sec	White	49
407	1955	Removed	20,000	Fixed	Vented	White	12
		from service					
408	1987	Inactive	10,000	Fixed	Vented	White	10.5
409	1987	Inactive	3,000	Fixed	Vented	White	5.3

Product loading racks:

Tank truck (Rack I) with 9 product loading arms

Railcar (Rack III) with 35 product loading arms

Vapor collection systems collect emissions during the truck and railcar loading operations.

Vapor Control systems:

John Zink Model LH thermal decomposition flare for treatment of vapors recovered by the vapor collection system during loading at Rack I (tank truck),

John Zink Model AFT thermal decomposition flare for the treatment of vapors recovered by the vapor collection system during the loading at Rack III (railcar).

B. Source Description

ConocoPhillips operates a bulk gasoline terminal, that stores and transfers petroleum products (gasoline and distillate) to tank trucks and railcars. This facility is located in Section 9, Township 13 North, Range 19 West, Missoula County. The facility's address is 3330 and 3350 Raser Drive. The facility is known as the Missoula product terminal.

C. Permit History

On November 26, 1998, Conoco Inc. (Conoco) was issued Permit **#3021-00**. 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 of Environmental Quality (Department). The Department was 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. Permit #3021-00 replaced both Missoula County permits held by Conoco and Exxon Company, USA for the Missoula bulk terminals.

On September 3, 1999, the Department received a request from Conoco to modify Permit #3021-00. This 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 one third of the railcars would be tested each year. Permit **#3021-01** replaced Permit **#3021-00**.

On January 3, 2000, the Department received a request from Conoco to modify Permit #3021-01. Because vapor-tightness testing was required for only gasoline tank trucks and rail cars, the Section II.A.9. phrase "liquid product" was changed to "gasoline." Because Conoco did not have to perform the testing on the tank trucks, but obtain proof of testing from truck drivers, the word "perform" was replaced by the word "require."

Section II.E.1. contained an error stating that the flare was an "enclosed flare"; however, the flare is truly an "open-flame flare," and the language was changed to indicate this. Also, the testing changed for the open-flame flare. This change allowed Method 21 and 22 in lieu of New Source Performance Standards (NSPS) Subpart XX testing. This was based on information in a letter dated April 23, 1985, from Gilber Wood, US Environmental Protection Agency (EPA), to Richard Crusnick, Alabama DEM. The EPA stated that Subpart XX did not take into account the use of flares at bulk plants. The EPA further stated that they have not developed test methods for flares and feel testing at flares could be unreasonably expensive. The EPA reviewed volatile organic compounds (VOC) testing data from flares and determined that flares such as the one at Conoco can meet the limit based on design. The EPA stated they would not disagree with a state decision to waive the NSPS required emission testing. The permit analysis section of this permit was updated to indicate changes in tank usage at the facility. Permit #3021-02 replaced Permit #3021-01.

On May 13, 2000, Permit #3021-03 was issued to Conoco because Permit #3021-02 contained a condition (Section II.F.5.), which 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 was detected. Permit #3021-03 replaced Permit #3021-02.

D. Current Permit Action

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 current permit action changes the name on this permit from Conoco

to ConocoPhillips. Permit #3021-04 has also been updated to reflect current permit language and rule references used by the Department. Permit **#3021-04** replaces Permit #3021-03.

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, which apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available upon request from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.105 Testing Requirements</u>. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment, including instruments and sensing devices, and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
 - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

ConocoPhillips shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.
- 5. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation.
 (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public notice.

- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.204 Ambient Air Monitoring</u>
 - 2. <u>ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide</u>
 - 3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
 - 6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
 - 7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
 - 9. <u>ARM 17.8.222 Ambient Air Quality Standard for Lead</u>
 - 10. <u>ARM 17.8.223 Ambient Air Quality Standard for PM₁₀</u>

ConocoPhillips must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8 Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. (1) This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over 6 consecutive minutes. (2) This rule requires that no person may cause or authorize emissions to be discharged into an outdoor atmosphere from any source installed after November 23, 1968, that exhibits an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate. (2) Under this rule, ConocoPhillips shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 - 3. <u>ARM 17.8.309 Particulate Matter, Fuel Burning Equipment</u>. This rule requires that no person shall cause, allow or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
 - 4. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. This rule requires that no person shall cause, allow or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
 - 5. <u>ARM 17.8.322 Sulfur Oxide Emissions -- Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set for the in this rule.
 - 6. <u>ARM 17.8.324 Hydrocarbon Emissions Petroleum Products</u>. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such a tank is equipped with a vapor loss control device as described in (1) of this rule.

- 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. ConocoPhillips is considered an NSPS affected facility under 40 CFR 60 and is subject to the requirements of the following subparts:
 - a. 40 CFR 60, Subpart XX Standards of Performance for Bulk Gasoline Terminals, where all loading racks were Constructed or Modified after December 17, 1980.
 - b. 40 CFR 60, Subpart K Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978, is applicable to tank 56.
 - c. 40 CFR 60, Subpart Kb Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, applies to Tanks 54 and 58.
- 8. <u>ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source</u> <u>Categories</u>. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63. However, ConocoPhillips has reduced emissions below applicability threshold levels; therefore, 40 CFR Part 63, Subpart R does not apply to this source.
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:
 - 1. <u>ARM 17.8.504 Air Quality Permit Application Fees</u>. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. ConocoPhillips was not required to submit a permit application fee for the current permitting action because it is considered an administrative action.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; and 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, as 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 which prorate the required fee amount.

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

- 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
- 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a facility to obtain an air quality permit or permit alteration if they construct, alter or use any air contaminant sources that have the potential to emit greater than 25 tons per year of any pollutant. ConocoPhillips has the potential to emit more than 25 tons per year of VOC; therefore, an air quality permit is required.
- 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
- 4. <u>ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis</u> <u>Changes</u>. This rule identifies the de minimis changes at permitted facilities that are not subject to the Montana Air Quality Permit Program.
- 5. <u>ARM 17.8.748 New or Modified Emitting Units--Permit Application</u> <u>Requirements</u>. This rule requires that a permit application be submitted prior to installation, alteration or use of a source. ConocoPhillips was not required to submit an application for the current permit action because it is considered administrative.
- 6. <u>ARM 17.8.749 Conditions for Issuance or Denial of Permit</u>. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- 7. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. A BACT determination was not required for the current permit action because there are no new or altered sources permitted as a part of this action.
- 8. <u>ARM 17.8.755 Inspection of Permit.</u> This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving ConocoPhillips of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.
- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.

- 11. <u>ARM 17.8.762 Duration of Permit</u>. An 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 altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An 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 (Act), rules adopted under the Act, the Federal Clean Air Act (FCAA), rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. <u>ARM 17.8.764 Administrative Amendment to Permit</u>. An 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. A source may not increase its emissions beyond those found in its permit unless the source applies for and receives another permit.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801, Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - 2. <u>ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--</u> <u>Source Applicability and Exemptions</u>. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

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

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any source having:
 - a. PTE > 100 tons/year of any pollutant;
 - b. PTE > 10 tons/year of any one Hazardous Air Pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons/year of PM₁₀ in a serious PM₁₀ nonattainment area.

- <u>ARM 17.8.1204 Air Quality Operating Permit Program Applicability</u>. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3021-04 for ConocoPhillips, the following conclusions were made:
 - a. The facility's PTE is greater than 100 tons/year for VOC.
 - b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
 - c. This source is located in a serious PM_{10} nonattainment area.
 - d. This facility is subject to current NSPS.
 - e. This facility is not subject to any current NESHAP or MACT standards with the operational limit implemented through this permit.
 - 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 ConocoPhillips is subject to the Title V operating permit program.

III. BACT Determination

A BACT determination is required for each new or altered source. ConocoPhillips shall install on the new or altered source the maximum air pollution control capability, which is technically practicable and economically feasible, except that BACT shall be utilized. Because this permit action is administrative and does not involve a new or altered source, a BACT determination was not required.

IV. Emission Inventory

	Tons/year					
Source	VOC	NO _x	СО	HAP		
T-50 #2 Gasoline	3.28			0.222		
T-51 Gasoline	2.53			0.172		
T-52 Transmix	0.97			0.067		
T-53 EtON/gas	1.87			0.127		
T-54 Gasoline	2.81			0.191		
T-55 Diesel	1.51			0.158		
T-56 Gasoline	2.00			0.136		
T-58 Gasoline	3.62			0.246		
Additive Tanks	Neg			Neg		
T-401 Mogas	3.23			0.316		
T-402 Mogas	4.78			0.487		
T-404 Diesel	0.52			0.054		
T-405 Jet Fuel	0.36			0.038		
T-406 Mogas	3.23			0.329		
T-408 Additive (inactive)	0.08			0.002		
T-409 Additive (inactive)	0.04			0.001		
Racks I & III (gas)	21.22			1.439		
Loading Racks (distillate)	0.021			0.002		
Loading Racks (jet)	0.001			0.000		
Rack I Controlled	108.97	12.45	31.13	7.388		
Rack III Controlled	0.0	0.0	0.0	0.0		
Misc VOC	5.02			0.442		
Total	166.05	12.45	31.13	11.81		
PSD and Title V Total	108.97					

V. Existing Air Quality

ConocoPhillips is located in Section 9, Township 13 North, Range 19 West, in Missoula County. This area is considered unclassified for all criteria pollutants, with the exception of PM_{10} and CO. The majority of the emissions from the facility are VOCs. This permitting action does not increase emissions from the facility; therefore, the impacts to existing air quality will be unchanged.

VI. Ambient Air Impact Analysis

The Department did not conduct ambient air modeling for this permit action. The Department believes it will not cause or contribute to a violation of any ambient air quality standard because the permit action is administrative.

VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

VIII. Environmental Assessment

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

Analysis Prepared by: Chris Ames Date: February 21, 2003