## AIR QUALITY PERMIT

Issued To: Plains Pipeline, L.P. Permit #3353-01

Lone Tree Crude Oil Station Administrative Amendment (AA)

P.O. Box 708 Received: 8/14/06

Belfield, ND 58622 Department's Decision on AA: 2/21/07

Permit Final: 3/09/07 AFS #: 083-0041

An air quality permit, with conditions, is hereby granted to Plains Pipeline, L.P. (Plains Pipeline), pursuant to Sections 75-2-204 and 211, 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

The facility is known as the Lone Tree Crude Oil Station, which is located in the NW¼ of the NW¼ of Section 36, Township 24 North, Range 56 East, in Richland County, Montana. The Lone Tree Crude Oil Station is located approximately 25 miles southwest of Fairview, Montana, approximately three miles west of the intersection of county roads 338 and 131.

The facility unloads oil from pipeline gathering and transport trucks and injects the oil into a pipeline owned by Plains Pipeline. A complete list of the permitted equipment is contained in Section I.A of the permit analysis

## B. Current Permit Action

On August 14, 2006, the Department of Environmental Quality (Department) received a notification from Plains Pipeline that pumps and other components would be changed at the Lone Tree Crude Oil Station's 11,268 barrel (bbl) internal floating roof tank, which would increase the potential crude oil throughput. Since the resulting increase in emissions from the changes to this internal floating roof tank was less than de minimis, the permitting action was deemed to be administrative, and the facility remains a synthetic minor source. Permit #3353-01 replaces Permit #3353-00.

## Section II: Limitations and Conditions

#### A. Emission Control Requirements

- 1. Plains Pipeline shall not exceed 13.14 million barrels per year (MMbbl/yr) crude oil throughput for the 11,268-barrel (bbl) internal floating roof tank (ARM 17.8.749).
- 2. The two 400-bbl pipeline breakout tanks shall be limited to a combined total of 2,500,000-bbl of oil throughput during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
- 3. Plains Pipeline may not cause or authorize to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

- 4. Plains Pipeline shall not cause or authorize emissions to be discharged into the atmosphere from haul trucks, access roads, parking lots, or the general plant property without taking reasonable precautions to control emissions of airborne Particulate Matter (PM) (ARM 17.8.308).
- 5. Plains Pipeline shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.3 (ARM 17.8.749).
- 6. Plains Pipeline shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements of 40 Code of Federal Regulations (CFR), Part 60, Standards of Performance for New Stationary Sources (NSPS), Subpart Kb Standards of Performance for Volatile Liquid Organic Storage Vessels (Including Petroleum Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 (ARM 17.8.340 and 40 CFR 60, Subpart Kb).
- 7. Unloading tank trucks to storage tanks shall be restricted to the use of submerged fill (ARM 17.8.752).

## B. Inspection and Repair Requirements

- 1. Each calendar month, all fugitive piping components (valves, flanges, pump seals, open-ended lines) shall be inspected for leaks. For purposes of this requirement, detection methods incorporating sight, sound, or smell are acceptable (ARM 17.8.105 and ARM 17.8.752).
- 2. Plains Pipeline shall (ARM 17.8.105 and ARM 17.8.752):
  - a. Make a first attempt at repair for any leak not later than 5 calendar days after the leak is detected
  - b. Repair any leak as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in Section II.B.3
- 3. Delay of repair of equipment for which a leak has been detected will be allowed if repair is technically infeasible without a source shutdown. Such equipment shall be repaired before the end of the first source shutdown after detection of the leak (ARM 17.8.752).

# C. Operational Reporting Requirements

1. Plains Pipeline shall supply the Department with annual production information for all emission points, as required by the Department, in the annual emissions inventory request. The request will include, but is not limited to, all sources of emissions identified in the most recent emission inventory report and sources identified 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 units as required by the Department (ARM 17.8.505).

- 2. Plains Pipeline shall notify the Department of any construction or improvement project conducted pursuant to ARM 17.8.745 that would include a change in the 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 start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
- 3. Plains Pipeline shall document, by month, the combined total oil throughput of the two 400-bbl crude oil storage tanks. By the 25<sup>th</sup> day of each month, Plains Pipeline shall calculate the combined total oil throughput of the 400-bbl crude oil storage tanks for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.2. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 4. Plains Pipeline shall document, by month, the total oil throughput of the 11,268-bbl crude oil storage tank. By the 25<sup>th</sup> day of each month, Plains Pipeline shall calculate the total oil throughput of this tank for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.1. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 5. Plains Pipeline shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emission inventory information (ARM 17.8.749 and ARM 17.8.1204).

## D. Recordkeeping Requirements

- 1. A record of each monthly leak inspection required by Section II.B.1 of this permit shall be kept on file with Plains Pipeline. Inspection records shall include, at a minimum, the following information (ARM 17.8.749):
  - a. Date of inspection
  - b. Findings (may indicate no leaks discovered or location, nature, and severity of each leak)
  - c. Leak determination method
  - d. Corrective action (date each leak repaired and reasons for any repair interval in excess of 15 calendar days)
  - e. Inspector's name and signature
- 2. The records compiled in accordance with the requirements above shall be maintained by Plains Pipeline as a permanent business record for at least 5 years, shall be submitted to the Department upon request, and shall be available for inspection by the Department (ARM 17.8.749).

## E. Testing Requirements

- 1. Plains Pipeline shall visually inspect the 11,268-bbl internal floating roof tank in conformance with 40 CFR 60.113(b) (ARM 17.8.340 and 40 CFR 60, Subpart Kb).
- 2. The Department may require testing (ARM 17.8.105).
- 3. All compliance source tests shall be conducted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

## Section III: General Conditions

- A. Inspection Plains Pipeline shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections, surveys, collecting samples, obtaining data, auditing any monitoring equipment or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if Plains Pipeline fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving Plains Pipeline 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 as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. 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.
- H. Permit Fee Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Plains Pipeline may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.

# PERMIT ANALYSIS Plains Pipeline, L.P. Lone Tree Crude Oil Station Permit #3353-01

## I. Introduction/Process Description

Plains Pipeline, L.P. (Plains Pipeline) submitted a permit application for the construction and operation of the Lone Tree Crude Oil Station located in the NW¼ of the NW¼ of Section 36, Township 24 North, Range 56 East, in Richland County, Montana. The facility is located approximately 25 miles southwest of Fairview, Montana, approximately 3 miles west of the intersection of county roads 338 and 131.

## A. Permitted Equipment

The following equipment is permitted for this facility:

Tanks	Year Constructed	Source Description
Tank 1	permitted Nov. 2004*	400-barrel (bbl) Fixed Roof Tank
Tank 2	permitted Nov. 2004*	400-bbl Fixed Roof Tank
Tank 3	2005	11,268-bbl Internal Floating Roof Tank
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\*Note: The two 400-bbl tanks were not installed as of February 2007. Since Permit #3353-00 allows 3-years to construct, Plains Pipeline must request a permit modification if they plan to install after November 2007.

- Pipeline Component Fugitives
- Unpaved Road Fugitives

## B. Source Description

The Plains Pipeline facility unloads crude oil from pipeline gathering and transport trucks and injects the oil into a pipeline owned by Plains Pipeline.

## C. Permit History

On November 13, 2004, Permit #3353-00 was issued to Plains Pipeline for the construction and operation of a crude oil unloading station known as the Lone Tree Crude Oil Station. The facility unloads oil from pipeline gathering and transport trucks and injects the oil into a pipeline owned by Plains Pipeline.

#### D. Current Permit Action

On August 14, 2006, the Department received notification from Plains Pipeline that pumps and other components would be changed at the Lone Tree Crude Oil Station, which would increase the potential crude oil throughput for the 11,268 bbl internal floating roof (IFR) tank. Since the resulting increase in emissions was less than the de minimis threshold, the permitting action was deemed to be administrative. The facility remains a synthetic minor source.

The Department added a condition reflecting the increased crude throughput and associated recordkeeping requirement. A testing requirement was added to the Testing section to incorporate the visual inspections required by NSPS for the IFR tank. In addition, the emission inventory was updated to reflect the changes in emissions from this project, as well as to correct the emissions from the 400-bbl tanks and fugitive sources. Permit #3353-01 replaces Permit #3353-00.

#### E. Additional Information

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

# II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the administrative rules of Montana (ARM) and are available upon request from the Department of Environmental Quality (Department). Upon request, the Department will provide references for locations 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 emissions 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).

Plains Pipeline 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. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

- B. ARM 17.8, Subchapter 2, Ambient Air Quality, including, but not limited to:
  - 1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
  - 2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
  - 3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
  - 4. ARM 17.8.213 Ambient Air Quality Standards for Ozone
  - 5. ARM 17.8.220 Ambient Air Quality Standards for Settled Particulate Matter
  - 6. ARM 17.8.221 Ambient Air Quality Standards for Visibility
  - 7. ARM 17.8.223 Ambient Air Quality Standards for PM<sub>10</sub>

Plains Pipeline must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3, Emission Standards, including, but not limited to:
  - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged to an outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
  - ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne Particulate Matter (PM).
     (2) Under this rule, Plains Pipeline shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
  - 3. ARM 17.8.324 Hydrocarbon Emissions Petroleum Products. No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule. The Plains Pipeline Lone Tree Crude Oil Station is exempt from this rule because each of the two 400-bbl crude oil storage tanks have a capacity less than 65,000 gallons and the 11,268-bbl pipeline breakout tank is equipped with an internal floating roof.
  - 4. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) 60, New Source Performance Standards (NSPS). Plains Pipeline is considered an NSPS affected facility under 40 CFR 60 and is subject to NSPS Subparts including, but not limited to:
    - 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. The 11,268 bbl-pipeline breakout tank and each of the two 400-bbl storage tanks are subject to Subpart Kb.
  - 5. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source

    Categories. This rule incorporates, by reference, 40 CFR 63, National Emission
    Standards for Hazardous Air Pollutants (NESHAP) for Source Categories. Since
    the emissions of Hazardous Air Pollutants (HAP) from the Plains Pipeline Lone
    Tree Crude Oil Station are less than 10 tons per year for any individual HAP and
    less than 25 tons per year for all HAPs combined, the Plains Pipeline facility is
    not subject to the provisions of 40 CFR Part 63.

- 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. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.
  - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

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 pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7, Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
  - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
  - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter or use any air contaminant sources that have a Potential to Emit (PTE) greater than 25 tons per year of any pollutant. The Plains Pipeline facility has a PTE greater than 25 tons per year of Volatile Organic Compounds (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 Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
  - 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application
    Requirements. (1) This rule requires that a permit application be submitted prior
    to installation, alteration or use of a source. A permit application was not
    required for the current permit action because the current permit action is
    considered an administrative permit change. (7) This rule requires that the
    applicant notify the public by means of legal publication in a newspaper of
    general circulation in the area affected by the application for a permit. An
    affidavit of public notice was not required for the current permit action because
    the current permit action is considered an administrative permit change.

- 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
- 7. <u>ARM 17.8.752 Emission Control Requirements</u>. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
- 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
- 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Plains Pipeline 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. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or 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, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

- 14. <u>ARM 17.8.765 Transfer of Permit</u>. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8, Prevention of Significant Deterioration of Air Quality, including, but not limited to:
  - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
  - 2. ARM 17.8.818 Review of Major Stationary Sources and Major Modification—Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

The Plains Pipeline Lone Tree Crude Oil Station is not a major stationary source because it is not listed and does not have a PTE greater than 250 tons per year (excluding fugitive emissions) of any air pollutant.

- 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 stationary source having:
    - a. PTE > 100 tons/year of any pollutant
    - b. PTE > 10 tons/year of any one HAP, or PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule or
    - c. PTE > 70 tons/year of particulate matter with an aerodynamic diameter of 10 microns or less ( $PM_{10}$ ) in a serious  $PM_{10}$  nonattainment area
  - 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. 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 #3353-01 for Plains Pipeline, the following conclusions were made:
    - a. The facility's PTE is less than 100 tons/year for all criteria pollutants.
    - b. The facility's PTE is less than 10 tons/year of any one HAP and less than 25 tons/year of all HAPs.
    - c. This facility is not located in a serious PM<sub>10</sub> nonattainment area.
    - d. This facility is subject to a current NSPS standard (40 CFR 60, Subpart Kb).
    - e. This facility is not subject to a current NESHAP standard.
    - f. This facility is not a Title IV affected source.

- g. This facility is not an EPA designated Title V source.
- h. As allowed by ARM 17.8.1204(3), the Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's potential to emit.
  - i. In applying for an exemption under this section, the owner or operator of the source shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
  - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

Plains Pipeline has taken a federally enforceable permit limit to keep the facility's PTE below the major source permitting threshold. Therefore, the facility is not a major source; thus, a Title V operating permit is not required.

3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. Plains Pipeline shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204 (3)(b). The annual certification shall comply with requirements of ARM 17.8.1207 and shall be submitted along with the annual emission inventory information. The Department determined that the annual reporting requirements contained in the permit are sufficient to satisfy this requirement. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Plains Pipeline would be required to obtain a Title V Operating Permit.

# III. BACT Analysis

A BACT determination is required for each new or altered source. Plains Pipeline shall install on the new or altered source 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 the permit change is considered an administrative permit change.

## IV. Emission Inventory

	Tons/Year						
Source	PM	PM <sub>10</sub>	NO <sub>v</sub>	VOC	CO	SO <sub>2</sub>	HAPs
Tank 1 (400-bbl Fixed Roof Tank)				37.62			
Tank 2 (400-bbl Fixed Roof Tank)				37.62			8.41
Tank 3 (11,268-bbl IFR Tank)				6.69-			
Pipeline Component Fugitives				6.90			0.71
Haul Roads	11.70	11.29					
Total	11.70	11.29		88.83			9.12

#### Tanks (standing and working losses from facility storage tanks):

Two 400-bbl Tank VOC emissions

Each @ 1.21 MM bbl/yr crude oil @ RVP 14 = 75,233.73 lb/yr \* 0.0005 ton/lb = 37.62 ton/yr

11,268-bbl Tank VOC emissions

13.14 MMbbl/yr crude oil @ RVP 14 = 13,383.28 lb/yr \* 0.0005 ton/lb = 6.69 ton/yr

Total VOC emissions from tanks: 81.93 ton/yr

Emissions calculated using EPA Tanks v.4.0 Storage Tank Emissions Calculation Software.

#### **Tanks HAP Emission Calculations**

Basis for Speciation Factors: EPA Speciate Program Profile No. 1210 - Pipeline Terminal Tanks

НАР	Speciation Factor (% HAP in vapor phase)	VOC Emissions (Ton/yr)	HAP Emissions (Ton/yr)
Benzene	0.54	81.93	0.44
Toluene	0.90	81.93	0.74
Ethylbenzene	0.22	81.93	0.18
Xylene	0.89	81.93	0.73
Hexane	4.69	81.93	3.84
2,2,4 - Trimethylpentane	3.03	81.93	2.48
Total Fugitive HAPs			8.41

#### Fugitive VOC Emission Calculations (calculated at 100% VOC)

Basis for Emission Factors: EPA Protocol for Equipment Leak Emission Estimates, November 1995 (EPA-453/R-95-017)

Connector: 30 components in light oil service (>=20 API Gravity)

Emission Factor: 0.011111184 lb/day-component

Calculation: 30 components \* 0.0111111184 lb/day-component \* 365 day/yr \* 0.0005 ton/lb = 0.06 ton/yr

Flange: 720 components in light oil service (>=20 API Gravity)

Emission Factor: 0.005820144 lb/day-component

Calculation: 720 components \* 0.005820144 lb/day-component \* 365 day/yr \* 0.0005 ton/lb = 0.76 ton/yr

Open-ended Line: 20 components in light oil service (>=20 API Gravity)

Emission Factor: 0.07407456 lb/day-component

Calculation: 20 components \* 0.07407456 lb/day-component \* 365 day/yr \* 0.0005 ton/lb = 0.27 ton/yr

Other: 10 components in light oil service (>=20 API Gravity)

Emission Factor: 0.396828 lb/day-component

Calculation: 10 components \* 0.396828 lb/day-component \* 365 day/yr \* 0.0005 ton/lb = 0.72 ton/yr

Pump: 6components in light oil service (>=20 API Gravity)

Emission Factor: 0.6878352 lb/day-component

Calculation: 6 components \* 0.6878352 lb/day-component \* 365 day/yr \* 0.0005 ton/lb = 0.75 ton/yr

Valve: 180 components in light oil service (>=20 API Gravity)

Emission Factor: 0.132276 lb/day-component

Calculation: 180 components \*  $0.\overline{132276}$  lb/day-component \* 365 day/yr \* 0.0005 ton/lb = 4.34 ton/yr

Total Fugitives from Piping: 6.9 ton/yr

#### **Fugitive HAP Emission Calculations**

Basis for Speciation Factors: EPA Speciate Program Profile No. 1210 - Pipeline Terminal Tanks

НАР	Speciation Factor (% HAP in vapor phase)	VOC Emissions (Ton/yr)	HAP Emissions (Ton/yr)
Benzene	0.54	6.9	0.04
Toluene	0.90	6.9	0.06
Ethylbenzene	0.22	6.9	0.02
Xylene	0.89	6.9	0.06
Hexane	4.69	6.9	0.32
2,2,4 - Trimethylpentane	3.03	6.9	0.21
Total Fugitive HAPs			0.71

## Haul Roads: Fugitive PM and PM<sub>10</sub> Emissions from Unpaved Roads

Basis for Emission Factors: AP-42, Section 13.2.2 (12/03), Unpaved Roads

Semi-trucks: 2,417,228 bbl/yr total throughput / 220.0 bbl/truck \* 0.5 VMT/truck = 5493.70 VMT/yr

PM = 5493.70 VMT/yr \* 4.114091 lb/VMT \* 0.0005 ton/lb = 11.30 ton/yr  $PM_{10} = 5493.70 \text{ VMT/yr} * 3.966776 \text{ lb/VMT} * 0.0005 \text{ ton/lb} = 10.90 \text{ ton/yr}$ 

Pickups: 1460 truck/yr \* 0.5 VMT/truck = 730 VMT/yr

 $PM = 730 \ VMT/yr * 1.100078 \ lb/VMT * 0.0005 \ ton/lb = 0.40 \ ton/yr \ PM_{10} = 730 \ VMT/yr * 1.060687 \ lb/VMT * 0.0005 \ ton/lb = 0.39 \ ton/yr$ 

See Application #3353-00 and #3353-01 for detailed emission inventory information.

## V. Existing Air Quality

The Plains Pipeline facility is located in eastern Montana in a sparsely populated area with generally very good ventilation throughout the year. The legal description of the facility is the NW¼ of the NW¼ of Section 36, Township 24 North, Range 56 East, in Richland County, Montana. Richland County is unclassifiable/attainment for the National Ambient Air Quality Standards (NAAQS) for all criteria pollutants.

## VI. Ambient Air Impact Analysis

The Department determined, based on the relatively small amount of emissions and the existing air quality in the area, that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

# 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 a significant increase of emissions from the facility and is considered an administrative action; therefore, an environmental assessment is not required.

Prepared by: Christine Weaver

Date: February 12, 2007