

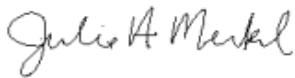
May 31, 2017

Tesoro High Plains Pipeline, LLC – Putnam Station
2972 108S Avenue SW
Dickinson, ND 58601

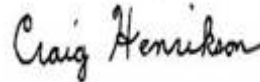
Dear Mr. Glaser:

Montana Air Quality Permit #5180 is deemed final as of May 31, 2017, by the Department of Environmental Quality (Department). As this is an energy project, the appeal period runs for an additional 15 days beyond May 31, 2017. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,



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



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

JM:CH
Enclosure

Montana Department of Environmental Quality
Air, Energy & Mining Division

Montana Air Quality Permit #5180

Tesoro High Plains Pipeline, LLC Putnam Station
2972 108S Avenue SW
Dickinson, ND 58601

May 31, 2017



MONTANA AIR QUALITY PERMIT

Issued To: Tesoro High Plains Pipeline, LLC
 Putnam Station
 2972 108S Avenue SW
 Dickinson, ND 58601

MAQP: #5180-00
 Application Complete: 4/6/17
 Preliminary Determination Issued: 4/27/17
 Department Decision Issued: 5/15/17
 Appeal Period Ends: 6/14/17
 Permit Final: 5/31/17

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Tesoro High Plains Pipeline, LLC (Tesoro), 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. Permitted Equipment

Tesoro proposes to permit a crude oil unloading facility which currently is in operation. The site is identified as the Putnam Station and is located approximately 9 miles west of Sidney, Montana. A complete list of permitted equipment is contained in Section I.A of the permit analysis.

B. Plant Location

The Tesoro facility is located in the Northwest ¼ of the Northwest ¼ of Section 13, Township 23N, Range 57E in Richland County.

C. Response to Public Comments

| Person/Group Commenting | Permit Reference | Comment | Department Response |
|-------------------------|------------------|--|-----------------------|
| Tesoro Logistics | II.B.1.a | Tesoro requests to modify the referenced condition to the following and allow a compliant Spill, Control and Countermeasure (SPCC) Plan to satisfy the BACT condition. "Have available for review by the Department, an inspection and maintenance plan which includes a frequency for inspection of tanks, valves, flanges, floating roof integrity, pump seals, open ended lines, connectors, hatches, and air eliminators, if applicable. A compliant Spill Prevention, Control, and Countermeasure | Changed as requested. |

| | | | |
|------------------|----------|--|-----------------------|
| | | (SPCC) Plan is sufficient in meeting the requirement of this condition.” | |
| Tesoro Logistics | II.B.1.b | Tesoro requests to modify the referenced condition to the following and allow a compliant Spill, Control and Countermeasure (SPCC) Plan to satisfy the BACT condition “Have available for review by the Department, a leak repair policy that identifies timelines for fixing leaks and making attempts at first repairs as soon as practicable. A compliant Spill Prevention, Control, and Countermeasure (SPCC) Plan is sufficient in meeting the requirements of this condition.” | Changed as requested. |

Section II: Conditions and Limitations

A. Operational and Emission Limitations

1. Tesoro shall only unload crude oil at the facility (ARM 17.8.749).
2. The combined throughput of crude oil from truck unloading to Tanks 1175, 1176, and 1177 shall not exceed 128,772,000 gallons during any Rolling 12-month period (ARM 17.8.749).
3. The combined throughput of crude oil to the 6” Outbound pipeline shall not exceed 147,168,000 gallons during any rolling 12-month period (ARM 17.8.749).
4. Tesoro shall be limited to tanker truck unloading operations only. No loading of tanker trucks shall take place at the facility (ARM 17.8.749).
5. Loading of crude oil into the tanks shall be restricted to submerged fill loading. Submerged fill loading may be accomplished via a submerged fill pipe method and/or a bottom fill loading method (ARM 17.8.752).
6. Tesoro shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).

7. Tesoro 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. Tesoro 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 17.8.752).
9. Tesoro shall comply with all applicable standards, testing, reporting, recordkeeping, and monitoring requirements of Title 40 Code of Federal Regulations (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*, for any applicable liquid storage vessel (ARM 17.8.752, ARM 17.8.340, and 40 CFR 60, Subpart K).

B. Inspection and Maintenance Requirements

1. Tesoro shall (ARM 17.8.105 and ARM 178.752):
 - a. Have available for review by the Department, an inspection and maintenance plan which includes a frequency for inspection of tanks, valves, flanges, floating roof integrity, pump seals, open ended lines, connectors, hatches, and air eliminators, if applicable. A compliant Spill Prevention, Control and Countermeasure (SPCC) Plan is sufficient in meeting the requirements of this condition.
 - b. Have available for review by the Department, a leak repair policy that identifies timelines for fixing leaks and making attempts at first repairs as soon as practicable. A compliant Spill Prevention, Control, and Countermeasure (SPCC) Plan is sufficient in meeting the requirements of this condition.

C. Recordkeeping Requirements

1. Tesoro shall document the inspections, indicating the date of the inspection and the results (ARM 17.8.749).
2. All records compiled in accordance with this permit must be maintained by Tesoro as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department of Environmental Quality (Department) and must be submitted to the Department upon request (ARM 17.8.749).

D. Testing Requirements

1. The Department may require testing (ARM 17.8105).
2. All compliance source tests shall conform to the requirements of the Montana Test Protocol and Procedures Manual (ARM 17.8.106).

E. Reporting Requirements

1. Tesoro 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.

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 (ARM 17.8.505).

2. Tesoro shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include the addition of a new emissions unit, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to 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(l)(d) (ARM 17.8.745).
3. Tesoro shall document, by month, the total combined throughput from truck unloading to Tanks 1175, 1176, and 1177. By the 25th day of each month, Tesoro shall total the crude oil throughput for these tanks for the previous month. The monthly information will be used to demonstrate 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. Tesoro shall document, by month, the combined throughput of crude oil to the 6" Outbound pipeline. By the 25th day of each month, Tesoro shall total the crude oil throughput to the 6" Outbound pipeline for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.3. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

Section III: General Conditions

- A. Inspection – Tesoro 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 such as continuous emission monitoring systems (CEMS) or continuous emission rate monitoring systems (CERMS), 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 Tesoro fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Tesoro of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for 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. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Tesoro may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit – Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).

Montana Air Quality Permit (MAQP) Analysis
Tesoro High Plains Pipeline, LLC
MAQP #5180-00

I. Introduction/Process Description

Tesoro High Plains Pipeline, LLC (Tesoro), proposes to permit an existing crude oil unloading facility.

A. Permitted Equipment

Equipment permitted under this action includes, but is not limited to the following:

- Two (2) 10,000 barrel (bbl) oil storage tanks each with internal floating roofs and mechanical shoe seal.
- Three (3) 400 bbl oil unloading vertical fixed roof storage tanks
- And Associated Equipment including unloading racks, pumps, valves and piping.

B. Source Description

Tesoro owns and operates a crude oil unloading facility. Crude oil enters the facility via tanker truck and pipeline and is stored in various sized tanks. Crude oil is transferred from the facility via pipeline.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the ARM and are available, upon request, from the Department. Upon request, the Department will provide references for 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. ARM 17.8.101 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Tesoro shall comply with all 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. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction in 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 that a public nuisance is created.

B. ARM 17.8, Subchapter 2 - Ambient Air Quality, including, but not limited to:

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen 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. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀
11. ARM 17.8.230 Fluoride in Forage

Tesoro must comply with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 - Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions are taken to control emissions of airborne particulate matter. (2) Under this rule, Tesoro shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). Based on the information submitted by Tesoro the crude oil unload facility and associated equipment are subject to NSPS (40 CFR 60), as follows:
 - a. 40 CFR 60, Subpart A – General Provisions. This subpart applies to all equipment or facilities subject to an NSPS subpart as listed below:
 - 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.

At this time no applicable emission standards or control requirements exist for the storage vessels operating at the Putnam Station other than the submerged filling requirements identified as BACT.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. This rule incorporates, by reference, 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Source Categories. Based on the information submitted by Tesoro there is no equipment subject to this rule.
- D. ARM 17.8, Subchapter 5 - Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:
1. ARM 17.8.504 Air Quality Permit Application Fees. Tesoro shall 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. Tesoro submitted the appropriate permit application fee for the current permit action.

2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department. This operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that 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. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an MAQP or permit modification to construct, modify, or use any air contaminant sources that have the potential to emit (PTE) greater than 25 tons per year (TPY) of any pollutant. Tesoro has a PTE greater than 25 TPY of volatile organic compounds (VOCs), therefore, an MAQP is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.
4. ARM 17.8.745 Montana Air Quality Permits—Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the MAQP program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. This rule requires that a permit application be submitted prior to installation, alteration or use of a source. Tesoro submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. Tesoro submitted an affidavit of publication of public notice for the March 19, 2017, issue of the *Sidney Herald*, a newspaper of general circulation in the city of Sidney, Richland County, Montana.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving Tesoro of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An MAQP shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An MAQP 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 MAQP may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an MAQP may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

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

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major 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.

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

G. ARM 17.8, Subchapter 12 - Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary 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.
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 MAQP #5180-00 for Tesoro the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 TPY for any single HAP and less than 25 TPY of combined HAPs.

- c. This source is not located in a serious PM₁₀ nonattainment area.
- d. This facility is subject to a current NSPS (40 CFR 60, Subpart A and subject to 40 CFR 60, Subpart K).
- e. This facility is not subject to any current NESHAP.
- f. This source is not a Title IV affected source.
- g. This source is not a solid waste combustion unit.
- h. This source is not an EPA designated Title V source.

Based on these facts, the Department determined that this facility is a minor source of emissions and therefore, is not subject to the Title V Operating Permit Program. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit; this source may be subject to the Title V Operating Permit Program.

III. BACT Determination

A BACT determination is required for each new or modified source. Tesoro shall install on the new or modified source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized. The only pollutant requiring a BACT analysis at the Putnam Station is for VOCs. Tesoro provided the following information for the BACT analysis.

A. 400 Barrel Storage Tanks

Floating Roofs

Floating roofs are required by 40 CFR 60, Subparts K, Ka, and Kb for tanks that meet the specific volume-based applicability definitions of those subparts as noted in 40 CFR 60.110, 60.110a, and 60.110b, respectively. Tanks 1175, 1176, and 1177 at the Putnam Station are below the respective volume-based applicability definitions for NSPS K, Ka, or Kb to apply. In addition, the Department has not required floating roof tanks as BACT for other similar sources with small 400 bbl fixed roof tanks.

Flares

Tesoro reviewed determinations made by the Department regarding the implementation of flares) including open or enclosed flares to thermally destroy the VOC emissions at similar facilities. Flares can provide a high level of destruction efficiency. Tesoro also reviewed the annualized capital cost and other annual operating costs for a flare system to be installed at the Putnam Station based on an available vendor quote provided to Tesoro and estimates provided in the EPA Air Pollution Control Cost Manual. The economic analysis took into account the total annualized cost to implement the flare control system and the associated emissions reductions from the VFRTs. The analysis shows that a flare will exceed \$4600 per ton of emissions reduction as shown in Appendix B. Therefore, the implementation of a flare system is not economically feasible. The Putnam Station does not meet the definition of an oil and gas production facility and therefore, is not subject to ARM 17.8.1602 which requires control on tanks that exceed 15 tons of VOC per year.

Vapor Recovery Unit

Tesoro reviewed determinations reviewed by the Department regarding the implementation of vapor recovery units as control for fixed roof tanks at similar facilities. The use of a vapor recovery unit would result in the condensation of the organic compound vapors and the routing of the captured condensate back to the storage tanks. There would still continue to be a fraction of non-condensable vapors and not destroying or capturing all of the vapors is ineffective for this option.

Submerged Fill Practices

During submerged fill loading, liquid enters the tank below the liquid level in the tank. Liquid turbulence is controlled significantly during submerged loading, resulting in lower vapor generation than encountered during splash loading. Based on a review of crude oil emission factors associated with cargo tank loading via submerged fill versus splash loading, a reduction in emissions can be achieved by utilizing submerged filling. Therefore, Tesoro will continue to operate the tanks with submerged fill practices, which has been previously identified as BACT by the Department. Tesoro also proposes proper operation, inspection and maintenance as BACT. Submerged filling for the 400 bbl fixed roof tanks is accepted as BACT.

B. Storage Tanks 1171 and 1172

Floating roofs are required by 40 CFR 60, Subpart K for tanks 1171 and 1172. Tesoro is proposing to operate tanks 1171 and 1172 as currently constructed utilizing the floating roof tanks which already exist. VOC emissions from organic liquids in storage occur because of evaporative loss of the liquid during its storage and as a result of changes in the liquid level. Floating roof tanks are emissions sources because of evaporative losses that occur during standing storage and withdrawal of liquid from the tank. Standing storage losses are a result of evaporative losses h rim seals, deck fittings, and/or deck seams. New Source Performance Standards exist for these storage tanks which include 40 CFR 60, Subparts K, Ka, and Kb. Each requires internal floating roof tanks be equipped with one of the specific closure devices between the wall of the storage vessel and the edge of the internal floating roof. Tesoro proposes that since tanks 1171 and 1172 are equipped with a mechanical shoe seal and internal floating roofs, and are subject to 40 CFR 60 Subpart K, they are meeting BACT. The current mechanical shoe seal and floating roof design is accepted as BACT for tanks 1171 and 1172.

C. Tank and Piping Components – Leaks

Fugitive VOC emissions and leaks may occur from valves, pump seals, flanges, connectors, and or air eliminators. Routine maintenance and inspection procedures represent BACT for both VOC vapor and liquid leaks. Additionally, newer standards require response procedures for fixing and repairing identified leak locations. Although 40 CFR 60, Subpart OOOO does not apply to this facility, leak response procedures identified in 40 CFR 60, Subpart OOOO sets standard practices for leak repair timelines. The Department proposes Tesoro have a documented inspection frequency for tanks, valves, flanges, pump seals, open-ended lines, connectors, hatches, man way covers, and air eliminators. For purposes of this best practice, detection methods incorporating sight, sound, or smell are acceptable. Additionally, Tesoro shall document response guidelines for making attempts at first repairs and shall repair leaks as soon as practicable. A documented inspection and maintenance program is accepted as BACT for purposes of VOC and liquid leak detection.

D. Fugitive Emissions

Tesoro must take reasonable precautions to limit the fugitive emissions of airborne particulate matter on haul roads, access roads, parking lots, and the general plant area. Reasonable precautions include treating 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. Using water and/or chemical dust suppressant to comply with the reasonable precautions limitation will be considered BACT.

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

IV. Emission Inventory

Tesoro provided an emission inventory using Tanks 4.09d. The summary of the five tanks is included below. The entire inventory is on file with the department.

| TANKS 4.0.9d | | | | | |
|---|--|--|--|--|---------------------|
| Emissions Report - Detail Format | | | | | |
| Total Emissions Summaries - All Tanks in Report | | | | | |
| Emissions Report for: January thru December | | | | | |
| | | | | | VOC |
| Tank Identification | | | | | Losses (lbs) |
| 1171 - 10,000 bbls Internal Floating Roof Tank | | | | | 2922.2 |
| 1172 - 10,000 bbls Internal Floating Roof Tank | | | | | 3030.13 |
| 1175 - 400 bbls Vertical Fixed Roof Tank | | | | | 42,777.23 |
| 1176 - 400 bbls Vertical Fixed Roof Tank | | | | | 42,777.23 |
| 1177 - 400 bbls Vertical Fixed Roof Tank | | | | | 42,777.23 |
| Total | | | | | 134284.02 |
| VOC = Volatile Organic Compounds | | | | | |

V. Existing Air Quality

MAQP #5180-00 is issued for the operation of a crude oil unloading facility located in Richland County, Montana. As the facility is currently already in operation, and no known air quality issues are known, continued operation of the facility is not expected to degrade future air quality.

VI. Ambient Air Quality Impact Analysis

MAQP #5180-00 allows operation of a crude oil unloading facility. The Department determined that the impacts from this permitting analysis 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 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

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

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

VIII. Environmental Assessment

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

Permit Analysis Prepared By: Craig Henrikson

Date: April 17, 2017

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Air, Energy, & Mining Division
Air Quality Bureau
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ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Tesoro High Plains Pipeline, LLC

MAQP Number: #5180-00

EA Draft: April 27, 2017

EA Final: May 15, 2017

Permit Final: May 31, 2017

1. *Legal Description of Site:* Tesoro High Plains Pipeline, LLC (Tesoro) proposes to operate at Northwest ¼ of the Northwest ¼ in Section 13, Township 23N, Range 57E in Richland County.
2. *Description of Project:* Tesoro is proposing to permit an existing crude oil unloading facility. The permit would include two 10,000 barrel (bbl) crude oil storage tanks each with internal floating roof and three 400 bbl unloading vertical fixed roof tanks. A complete list of the permitted equipment is included in Section I.A of the permit analysis.
3. *Objectives of Project:* Collection point for oil and then transfer off-site via pipeline.
4. *Alternatives Considered:* In addition to the proposed action, the Department also considered the "no action" alternative. The "no action" alternative would deny the issuance of the MAQP to the facility. However, the Department does not consider the "no action" alternative to be appropriate because Tesoro's facility is already in existence and has demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no action" alternative was eliminated from further consideration. Other alternatives considered were discussed in the Best Available Control Technology analysis.
5. *A listing of mitigation, stipulations, and other controls:* A list of enforceable conditions, including a BACT analysis, would be included in MAQP #5180-00.
6. *Regulatory effects on private property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements and demonstrate compliance with those requirements and do not unduly restrict private property rights.

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

A. Terrestrial and Aquatic Life and Habitats

The proposed action would permit an existing crude oil unloading facility and associated equipment. Conditions requiring control mechanisms have been placed within MAQP #5180-00 to ensure that only minor air quality impacts would occur. Additionally, limitations established within MAQP #5180-00 would minimize air pollution. Overall, any adverse impact on terrestrial and aquatic life and habitats is anticipated to be minor.

B. Water Quality, Quantity, and Distribution

This facility would have little or no effect on the water quality, water quantity, and distribution, as there is no discharge to groundwater or surface water associated with the completed project. Therefore, the project would have minor, if any, impacts to water quality, quantity or distribution in the area.

C. Geology and Soil Quality, Stability, and Moisture

This permitting action would have a minor effect on geology and soil properties with land disturbances as the operation already is in existence. The Department determined that any impacts from deposition would be minor due to dispersion characteristics of pollutants, the atmosphere, and conditions that would be placed in MAQP #5180-00.

D. Vegetation Cover, Quantity, and Quality

This permitting action would have minor impacts on the surrounding vegetation because the facility is already in existence. The existing surrounding land is currently rural and agricultural in nature. The VOC emissions from this project may have a minor effect on the surrounding vegetation; however, the air quality permit associated with this project would contain limitations to minimize the effect of the emissions on the surrounding environment. Overall, this project would have minor effects on the vegetation cover, quantity and quality.

E. Aesthetics

Providing a permit for the existing facility and associated equipment will not result in any aesthetic changes as the facility already exists.

F. Air Quality

Emissions will be minimized by limitations and conditions that would be included in MAQP #5180-00. The permit will provide enforceable conditions which did not exist before. While deposition of pollutants will continue to occur, the Department determined that the impacts from deposition of pollutants would be minor due to dispersion characteristics of pollutants, the atmosphere (wind speed, wind direction, ambient temperature, etc.), and conditions that would be placed in MAQP #5180-00.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique endangered, fragile, or limited environmental resources in the area, the Department contacted the Montana Natural Heritage Program, Natural Resource Information System (NRIS). The area was defined by the section, township, and range of the proposed location with an additional 1-mile buffer zone. Search results identified a number of species within the search radius. Species of concern include Hoary Bat, Little Brown Myotis, Bobolink and Whooping Crane. Because potential emission levels are minor, and disturbance is limited, the Department has determined that there will be a minor disturbance to unidentified unique, endangered, fragile, or limited environmental resources in the area.

H. Demands on Environmental Resource of Water, Air, and Energy

The facility would have minor impacts on the demands for the environmental resources of air and water because the facility would be a source of air pollutants. Deposition of pollutants would occur as a result of operating the facility; however, as explained in Section 7.F of this EA, the Department determined that any impacts on air and water resources from the pollutants (including deposition) would be minor. The Department determined that controlled emissions from the source would not cause or contribute to a violation of any ambient air quality standard. Therefore, any impacts to air quality from the addition of the new equipment would be minor.

The facility would be expected to have minor impacts on the demand for the environmental resource of energy because of additional energy usage would be required at the site. The impact on the demand for the environmental resource of energy would be minor because the equipment is already in existence. Overall, the impacts for the demands on the environmental resources of water, air, and energy would be minor.

I. Historical and Archaeological Sites

Since the site already exists and no new disturbance is planned, no review of any historical or archaeological sites was attempted.

J. Cumulative and Secondary Impacts

The facility would cause minor effects on the physical and biological aspects of the human environment because the facility and activities produce volatile organic compounds (VOCs) and particulate due to truck traffic. However, conditions have been placed in MAQP #5180-00 to ensure that only minor air quality impacts would occur. Limitations would be established in the permit to minimize air pollution. Overall, any impacts to the physical and biological environment would be minor.

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

A. Social Structures and Mores

The facility would not cause disruption to any native or traditional lifestyles or communities (social structures or mores) in the area because the facility already exists.

B. Cultural Uniqueness and Diversity

Only minor impacts to the cultural uniqueness and diversity of the area would be anticipated as the site already exists. No additional employees are expected with the permit issuance. In addition, no new disturbance is planned. Therefore, the cultural uniqueness and diversity of the area would not likely be affected.

C. Local and State Tax Base and Tax Revenue

The facility would result in minor impacts to the local and state tax base and tax revenue as a result of the facility operation. However, the on-going oil unloading would continue to necessitate raw material transportation activities. Overall, any impacts to the local and state tax base and tax revenue would be minor.

D. Agricultural or Industrial Production

The land at the location is currently used as an oil unloading facility. The facility would not have any known impact on agricultural production. However, because the facility currently exists, no impact to agricultural production or increase in industrial production would be expected.

E. Human Health

The completed project would result in minor, if any, impacts to human health. As explained in Section 7.F of this EA, deposition of pollutants would occur; however, the Department determined that the facility would comply with all applicable air quality rules, regulations, and standards. These rules, regulations, and standards are designed to be protective of human health. Overall any impacts to public health would be minor. The Department believes this oil unloading facility will only have minor impacts.

F. Access to and Quality of Recreational and Wilderness Activities

The facility already exists and there would be no impacts to access and quality of recreational and wilderness activities in the project.

G. Quantity and Distribution of Employment

The facility would have minor impacts on the quantity and distribution of employment as the facility is existing. Any impacts to the quantity and distribution of employment would be minor due to the relatively small size of the facility.

H. Distribution of Population

The facility would have minor impacts on the employment and population of the area as the facility is existing. However, any impacts to the quantity and distribution of employment from construction related employment would be minor due to the relatively small size of the facility. Overall, any impacts to the distribution of population in the area would be minor.

I. Demands of Government Services

There would be minor impacts on the demands for government services because additional time would be required by government agencies to issue MAQP #5180-00 and, in the future, to assure compliance with applicable rules, standards, and conditions that would be contained in MAQP #5180-00. Overall, any demands for government services to regulate the facility or activities associated with the facility would be minor due to the relatively small size of the facility.

J. Industrial and Commercial Activity

Only minor impacts would be expected on local industrial and commercial activity because the facility would represent only a minor increase in the industrial and commercial activity in the area.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans and goals affected by issuing MAQP #5180-00. This permit would contain limits for protecting air quality and keeping facility emissions in compliance with any applicable ambient air quality standards. Because the facility is relatively small, any impacts from the facility would be minor.

L. Cumulative and Secondary Impacts

Overall, cumulative and secondary impacts from this facility would result in minor impacts to the economic and social aspects of the human environment in the immediate area. Due to the relatively small size of the facility, the industrial production, employment, and tax revenue (etc.) impacts resulting from the facility would be minor. In addition, the Department believes that this facility could be expected to operate in compliance with all applicable rules and regulations as would be outlined in MAQP #5180-00.

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

If an EIS is not required, explain why the EA is an appropriate level of analysis: The current permitting action is for issuing a permit for an existing crude oil unloading facility. MAQP #5180-00 would include conditions and limitations to ensure the facility would operate in compliance with all applicable air quality rules and regulations. In addition, there are no major or unknown effects associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Natural Heritage Program and the Montana Historical Society.

Individuals or groups contributing to this EA: Montana Department of Environmental Quality, Montana Natural Heritage Program, Montana Historical Society.

EA prepared by: C. Henrikson

Date: April 17, 2017