Montana Department of
ENVIRONMENTAL QUALITY
Brian Schweitzer, Governor
P. O. Box 200901 Helena, MT 59620-0901 (406) 444-2544 Website: www.deq.mt.gov

December 6, 2012

Mike Howerton
Hiland Crude, LLC
P.O. Box 5103
Enid, OK 73702

Dear Mr. Howerton:

Montana Air Quality Permit #4599-03 is deemed final as of December 6, 2012, by the Department of Environmental Quality (Department). This permit is for a crude oil unloading facility and associated equipment. 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 Merkel
Air Permitting Program Supervisor
Air Resources Management Bureau
(406) 444-3626

Doug Kuenzli
Environmental Science Specialist
Air Resources Management Bureau
(406) 444-4267

JM:DCK
Enclosure

Montana Department of Environmental Quality
Permitting and Compliance Division

Montana Air Quality Permit #4599-03

Hiland Crude, LLC
P.O. Box 5103
Enid, OK 73702

December 6, 2012

MONTANA AIR QUALITY PERMIT

Issued To: Hiland Crude, LLC
Albin Station
P.O. Box 5103
Enid, OK 73702

MAQP: #4599-03
Application Complete: 05/09/2012
Preliminary Determination Issued: 11/02/2012
Department's Decision Issued: 11/20/2012
Permit Final: 12/06/2012
AFS #: 083-0796

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Hiland Crude, LLC (Hiland) 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

Hiland owns and operates a crude oil unloading facility located in the Southwest ¼ of the Southwest ¼ of Section 25, Township 24 North, Range 56 East in Richland County, Montana. The site, identified as the Albin Station, is sited approximately five miles southwest of Girard, Montana.

B. Current Permit Action

On October 5, 2012, the Department of Environmental Quality (Department) received an application for modification of MAQP #4599-02 from Bison Engineering, Inc. (Bison), on behalf of Hiland, proposing the installation of four (4) additional 400 barrel fixed roof crude oil storage tanks to the Albin Station. The current action incorporates the proposed modifications, as well as equipment previous installed under the de minimis rule. Furthermore, this permit action updates the rule references and language used by the Department and updates the emissions inventory.

SECTION II: Conditions and Limitations

A. Operational Limitations

1. Hiland shall only unload crude oil at the facility. (ARM 17.8.749).

2. The combined throughput of crude oil through Tanks A1 through A6 and Tanks AE1 through AE13, shall not exceed 207,176,000 gallons during any Rolling 12-month period (ARM 17.8.749).

3. The combined throughput of crude oil through Tank 100-1, Tank 25-1, and Tank 25-2 shall not exceed 192,885,000 gallons during any Rolling 12-month period (ARM 17.8.749).

4. Hiland 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. Hiland shall not operate or have on site more than one (1) propane-fired generator set and the maximum rated design capacity of the engine driving the generator shall not exceed 11 brake-horsepower (8 kilowatts) (ARM 17.8.749).

7. Hiland 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).

8. Hiland 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).

9. Hiland 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.8 (ARM 17.8.752).

10. Hiland shall comply with all applicable standards, testing, reporting, recordkeeping, and monitoring requirements of 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*, for any applicable liquid storage vessel (ARM 17.8.752, ARM 17.8.340, and 40 CFR 60, Subpart Kb).

11. Hiland shall comply with all applicable standards, testing, reporting, recordkeeping, and monitoring requirements of 40 CFR 60, Subpart OOOO, *Standards of Performance for crude Oil and Natural Gas Production, Transmission and Distribution*, for any applicable liquid storage vessel (ARM 17.8.752, ARM 17.8.340, and 40 CFR 60, Subpart OOOO).

12. Hiland shall comply will all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart JJJJ, *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* and 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable spark ignition internal combustion engine (ARM 17.8.340; 40 CFR 60, Subpart JJJJ; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).

B. Inspection and Maintenance Requirements

1. Each calendar month, tanks, valves, flanges, pump seals, open-ended lines, connectors, hatches, man way covers, and air eliminators shall be inspected for excessive 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. Hiland shall (ARM 17.8.105 and ARM 17.8.752):

   a. Make a first attempt at repair for any leak no later than 5 calendar days after the leak is detected; and

   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 would be allowed if repair within 15 days is technically infeasible. Such equipment shall be repaired as soon as reasonably possible (ARM 17.8.752).

C. Recordkeeping Requirements

1. Hiland shall document the monthly inspections, indicating the date of the inspection and the results (ARM 17.8.749).

2. For any repair delayed under the exception of Section II.B.3 above, the duration of the leak, a general description of the repair required, and the reasons justifying the delay, shall be recorded and maintained with the records required in Section II.C.1 (ARM 17.8.749).

3. All records compiled in accordance with this permit must be maintained by Hiland 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 17.8.105).

2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).

E. Reporting Requirements

1. Hiland 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. A copy of any records kept as required by Section II.C.2 shall be submitted to the Department postmarked within 30 days of the inspection in which the leak was detected. A follow up report, if needed, shall follow describing corrective actions taken (ARM 17.8.749).

3. Hiland 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).

SECTION III: General Conditions

A. Inspection – Hiland 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 (Continuous Emissions Monitoring System (CEMS), Continuous Emissions Rate Monitoring System (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 Hiland fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Hiland 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 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 MAQP shall be made available for inspection by the Department at the location of the source.

G. Air Quality Operation Fees – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by Hiland 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
Hiland Crude, LLC
MAQP #4599-03

I. Introduction/Process Description

Hiland Crude, LLC (Hiland) owns and operates a crude oil unloading station. The facility is located in the Southwest ¼ of the Southwest ¼ of Section 25, Township 24 North, Range 56 East, in Richland County, Montana, and is referred to as the Albin Station.

A. Permitted Equipment

1. Crude Oil Tanks:
   - One (1) 4,200,000 gallon (gal) internal floating roof tank [100,000 barrels (bbl)]
   - Two (2) 1,050,000 gal internal floating foof tanks [25,000 bbl]
   - Nineteen (19) 16,800 gal vertical fixed roof tanks [400 bbl]

2. Two (2) 500 British Thermal Units per hour (Btu/hr) natural gas fired heaters.

3. One (1) 8 kilowatt (kW) propane-fired emergency generator.

4. Associated Equipment; including truck unloading racks, pumps, valves, and miscellaneous connections.

5. Three (3) 16,800 gal vertical fixed roof fresh water Storage tanks [400 bbl].

B. Source Description

Hiland 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 off-site by way of pipeline using an electric pump. The natural gas fired heaters are employed to heat the crude oil, reducing its viscosity to facilitate the oil transfer process. Evaporative losses during storage and during filling and emptying operations occur from the tanks. Fugitive emissions occur from vapor losses from valves, pump seals, flanges, connectors, hatches, man-way covers, and air eliminators.

C. Permit History

On September 21, 2010, the Montana Department of Environmental Quality (Department) received a complete MAQP Application from Banner Transportation Co., LLC for the operation of a crude oil unloading facility to be known as the Albin Station. **MAQP #4599-00** was issued final on November 25, 2010.

On January 10, 2012, the Department received an application for modification of the existing air quality permit proposing the installation of three (3) additional 400 barrel fixed roof crude oil storage tanks to the Albin Station. A subsequent correspondence was received on February 8, 2012 requesting the inclusion of two additional 400 barrel fixed roof crude oil storage tanks in the permit action. The permitting action incorporated the proposed modifications, updated the rule references and language used by the Department, and updated the emissions inventory. **MAQP #4599-01** replaced MAQP #4599-00.

The Department received a letter from Hiland on June 13, 2012, that requested an administrative amendment of MAQP $4599-01 to change the name from Banner Transportation Co, LLC to Hiland. **MAQP #4599-02** replaced MAQP# 4599-01.

D. Current Permit Action

On October 5, 2012, the Department received an application for modification of MAQP #4599-02 from Bison Engineering, Inc. (Bison), on behalf of Hiland, proposing the installation of four (4) additional 400 barrel fixed roof crude oil storage tanks to the Albin Station. The current permit action incorporates the proposed modifications, as well as, the installation of an 8 kilowatt (kW) propane-fired emergency generator, addressed in a de minimis notification received by the Department on April 30, 2012. The application received for the current action did not account for two 400 bbl fixed roof crude oil tanks which were installed under MAQP #4599-01. Upon consultation with Hiland, it was determined that four additional tanks were still necessary. In addition to the aforementioned changes, adjustments were made at the request of the permit holder to several tank identification references. This permit action also updates the rule references and language used by the Department, and updates the emissions inventory. **MAQP #4599-03** replaces MAQP# 4599-02.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology/ (BACT)/Reasonably Available Control Technology 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. 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. ARM 17.8.101 Definitions. This rule includes 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).

   Hiland 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. 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 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 nuisance.

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

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide (SO_2)
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide (NO_2)
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide (CO)
5. ARM 17.8.213 Ambient Air Quality Standards for Ozone (O_3)
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide (H_2S)
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter (PM)
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.222 Ambient Air Quality Standards for Lead
10. ARM 17.8.223 Ambient Air Quality Standards for Particulate Matter with an Aerodynamic Diameter of Ten Microns or Less (PM_{10})

Hiland must maintain compliance 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, Hiland 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, 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. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, authorize, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.

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 rule.

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 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 and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 Code of Federal Regulation (CFR) Part 60, Standards of Performance for New Stationary Sources (NSPS). Based on the information submitted for this action and in past applications, the following NSPS (40 CFR 60) are applicable to Hiland:

   a. 40 CFR 60, Subpart A – General Provisions apply to all equipment or facilities subject to an NSPS Subpart as listed below:

   b. 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. The affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m^3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984, except storage vessels with a capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure less than 15.0 kPa.

      This subpart does not apply to the 400 bbl tanks (63.6 m^3). However, the 25,000 bbl tanks [Tanks 25-1 and 25-2) and the 100,000 (Tank 100-1) bbl tank are subject to this subpart. Therefore, these tanks must comply with the requirements of 40 CFR 60.112b. Based on the information submitted by Bison Engineering, Inc on behalf of Hiland, the design and operation of these tanks complies with the requirements of this subpart.

   c. 40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The provisions of this subpart are applicable to owners and operators of stationary spark ignition internal combustion engines (SI ICE) that commence construction after June 12, 2006, where the stationary SI ICE are manufactured on or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 horsepower. As the condition related to generator set engine is written de minimis friendly, applicability to 40 CFR 60, Subpart JJJJ is dependent upon the SI ICE equipment installed and operated.

   d. 40 CFR 60, Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution. Pursuant to 40 CFR §60.5365, affected sources are those onshore crude oil and natural gas production, transmission and distribution facilities listed which commence construction, modification or reconstruction after August 23, 2011. Facility operations at the Albin Station subject to this subpart are limited to each single crude oil storage vessel. 40 CFR 60, Subpart OOOO does not prescribe emissions standards or control requirements for storage vessel with VOC (volatile organic compounds) emissions less than 6 tons per year (tpy), nor storage vessel subject to and controlled in accordance with the requirements for storage vessels in 40 CFR 60, Subpart Kb.

      At this time no applicable emission standards or control requirements exist for the storage vessels operating at the Albin Station, as the 400 bbl fixed roof tanks (Tanks A01-A6 and AE1-AE13) do not present VOC emissions equal to or greater than 6 tpy and the remaining storage vessels (Tanks 100-1, 25-1, and 25-2) are subject to and controlled in accordance with the requirements for storage vessels in 40 CFR 60, Subpart Kb.

8. ARM 17.8.341 Emission Standards for Hazardous Air Pollutants. This source shall comply with the standards and provisions of 40 CFR Part 61, as appropriate.

9. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with any applicable requirements of 40 CFR Part 63. Based on the information submitted by Hiland, the following NESHAP (40 CFR 63) are applicable:

    a. 40 CFR 63, Subpart A – General Provisions apply to all equipment of facilities subject to a NESHAP Subpart as listed below:

    b. 40 CFR 63, Subpart ZZZZ – NESHAPs for Stationary Reciprocating Internal Combustion Engines (RICE). Pursuant to 40 CFR §63.6590(a), an affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of hazardous air pollutant (HAP) emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand. Pursuant to 40 CFR 63.6590(a)(2)(iii), a stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006. As Hiland is considered an area source of HAP emissions and operates RICE equipment the propane-fired generator engine is subject to this subpart.

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. This rule requires that an applicant submit an MAQP application fee concurrent with the submittal of an MAQP application. A permit application is incomplete until the proper application fee is paid to the Department. Hiland 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 MAQP (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.

   An air quality operation fee is separate and distinct from an MAQP 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 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. 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 tpy of any pollutant. Hiland has a PTE greater than 25 tpy of PM and VOC; 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 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, modification, or use of a source. Hiland 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. Hiland submitted an affidavit of publication of public notice for the October 7, 2012 issue of the *Sidney Herald*, a newspaper of general circulation in the City of Sidney in Richland County, as proof of compliance with the public notice requirements.

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 MAQPs 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 Hiland 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. 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 Modifications--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 this facility is not a listed source and the facility's PTE is below 250 tpy 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 tpy of any pollutant.

b. PTE > 10 tpy of any single Hazardous Air Pollutant (HAP), or PTE > 25 tpy of any combination of HAP's, or lesser quantity as the Department may establish by rule.

c. PTE > 70 tpy of PM_{10} in a serious PM_{10} non-attainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (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 MAQP #4599-02 for Hiland, the following conclusions were made:

a. The facility's PTE is less than 100 tpy 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 PM_{10} non-attainment area.

d. This facility is subject to a current NSPS (40 CFR 60, Subpart Kb, Subpart OOOO, and potentially Subpart JJJJ).

e. This facility is subject to current NESHAP standards (40 CFR 63, Subpart ZZZZ).

f. This source is not a Title IV affected source.

g. This source is not an EPA designated Title V source.

Based on these facts, the Department has determined that Hiland will be a minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Hiland will be required to obtain a Title V Operating Permit.

III. BACT Determination

A BACT determination is required for each new or modified source. Hiland 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.

On behalf of Hiland, Bison submitted a BACT analysis with the current application, addressing some available emission control methods for operations associated with the current permit action. The Department reviewed these methods, as well as previous BACT determinations. The following control options have been reviewed by the Department in order to make the following BACT determination.

A. Storage Tanks – VOC BACT

1. Floating Roof Storage Tanks

Installing floating roofs on the smaller 400 bbl crude oil tanks would not be economically infeasible, given the uncontrolled emissions of VOC from those tanks. Furthermore, the commercial availability of floating roof in the 400 bbl storage range is limited or non-existent. The Department has not required floating roof tanks as BACT for other similar sources. Therefore, floating roofs are not considered BACT in this case.

2. Flares

Hiland provided a review of operating an open or enclosed flare to thermally destroy VOC emissions. Flares provide a high level of destruction efficiency and can be operated with low capital cost and maintenance; however, the operation of such a device presents several shortcomings in conjunction with this type of facility. Operation of a flare at a crude oil unloading station presents a safety concern due to the intake of air into the tanks during liquid withdrawal and the potential of the flare to ignite the vapors within the tank during this process.

Additionally, a continuous source of fuel gas for the pilot flame is not available, nor is there a continuous vent gas stream for the primary flame. An external fuel source would be required to enrich the vent stream to maintain a minimum heating value for flare combustion.

Due to the expressed safety concerns and the technical and economical impracticability associated with the lack of fuel gas, a flare does not constitute BACT in this instance. The Department does not consider the use of a flare as a generally accepted practice at crude oil unloading facilities.

3. Vapor Recovery Unit

Hiland evaluated the use of a vapor recovery unit (VRU) to condense the organic compound vapors and route the captured condensate back to the storage tanks while non-condensable vapors could be sold. The engineering and material cost involved in the installation of a VRU and associated pipe network to connect the tanks make the option cost prohibited. In addition, there is no sales gas line available for a recovered gas stream. VRU technology was eliminated as BACT in this instance due to technical and economic infeasibility.

4. 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 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, the Department has determined that submerged filling practices constitute BACT in this instance, as proposed by Hiland. The Department has also determined that proper operation, inspection, and maintenance of the tanks, as proposed by Hiland, constitute BACT.

5. Fugitive Emissions – VOC BACT

Fugitive emissions occur from vapor losses from valves, pump seals, flanges, connectors, and air eliminators. The Department is not aware of any method of controlling these emissions other than through routine inspection and maintenance of the components. Therefore, the Department has determined that routine inspections and appropriate maintenance of these components constitutes BACT.

B. Haul Road Fugitive Emissions – PM BACT

An increase in fugitive emissions particulate emissions from the additional vehicle traffic that will occur as a result of the tank expansion project. Two types of emissions controls are readily available and are typically used for dust suppression of fugitive particulate emissions from vehicle traffic – chemical dust suppressant and water. Chemical dust suppressant could be used on the gravel roads at the facility. However, because water is more readily available, is less expensive, is equally as effective, and is more environmentally friendly than chemical dust suppressant, water has been identified as BACT for particulate emissions at the facility. Hiland may, however, use chemical dust suppressant to assist in controlling particulate emissions from the surrounding plant area. Water suppression, with the option of using chemical dust suppressant, has been required of recently permitted similar sources.

C. Generator Engine – VOC/CO/NO_x BACT

Due to the limited amount of emissions produced by the propone-fire generator engine used in associate with MAQP #4599-03 and cost of add-on controls, any control approach would be cost prohibitive and economically infeasible. Therefore, the Department determined that proper operation and maintenance with no add-on controls would constitute BACT for the generator set engine.

The control options selected above present controls and control costs consistent with other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emissions Inventory

Emission Source		Emissions Tons/Year [PTE]							
Tank ID	Tank Description	PM	PM_{10}	$PM_{2.5}$	CO	NO_x	SO_2	VOC	HAPS
100-1	100,000 bbl Internal Floating Roof Tank	--	--	--	--	--	--	0.56	0.021
25-1	25,000 bbl Internal Floating Roof Tank	--	--	--	--	--	--	0.86	0.032
25-2	25,000 bbl Internal Floating Roof Tank	--	--	--	--	--	--	0.86	0.032
A1	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
A2	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
A3	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
A4	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
A5	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
A6	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
AE1	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
AE2	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
AE3	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
AE4	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
AE5	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
AE6	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
AE7	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
AE8	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
AE9	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.51	0.095
AE10	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.86	0.108
AE11	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.86	0.108
AE12	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.86	0.108
AE13	400 bbl Vertical Fixed Roof Tank	--	--	--	--	--	--	2.86	0.108
--	Fugitive Emissions - Equipment Leaks	--	--	--	--	--	--	17.50	0.660
--	Natural Gas-Fired Heater [500 Btu/hr]	NG	NG	NG	NG	NG	NG	NG	NG
--	Natural Gas-Fired Heater [500 Btu/hr]	NG	NG	NG	NG	NG	NG	NG	NG
--	8 kW Propane-Fired Emergency Generator	0.007	0.007	0.007	0.38	2.79	NG	0.08	NG
--	Fugitive Particulate Emissions - Vehicle Travel	29.56	9.27	0.93	--	--	--	--	--
	TOTAL EMISSIONS ►	29.57	9.28	0.94	0.38	2.79	NG	74.00	2.79

[1] *Meteorological Data used in Tank Emissions Calculations: Williston, N. Dakota (Avg. Atmospheric Pressure = 13.82 psia).*

bbl, U.S. barrels
Btu, British Thermal Units
CO, carbon monoxide
EF, emission factor
Ft^3, cubic feet
Gal, gallon
HAP, Hazardous Air Pollutant
hp, horsepower
kW, kilowatt
lb. pound
MMBtu, million British Thermal Units
MMscf, million standard cubic feet
NO_x, oxides of nitrogen
NG, negligible emissions [< 0.001 tpy]
PTE, Potential To Emit
PM, particulate matter
PM_{COND}, condensable particulate matter
PM_{10}, particulate matter with an aerodynamic diameter of 10 microns or less
$PM_{2.5}$, particulate matter with an aerodynamic diameter of 2.5 microns or less [Sum of condensable and filterable]
psia, pounds per square inch actual
psig, pounds per square inch as read by gauge (not including atmospheric pressure)
R, degrees Rankine
RVP, Reid Vapor Pressure
SO_2, oxides of sulfur
scf, standard cubic feet
sq/ft, square feet
TPH, tons per hour
TPY, tons per year
VMT, vehicle miles travelled
VOC, volatile organic compounds

Crude Oil Storage & Handling

Emission determination based on U.S. EPA TANKS 4.0.9d Emissions Estimate Software(1)

Tank Identification and Physical Characteristics:

100,000 Barrel Internal Floating Roof Tank [SCC 40400332]

Tank Dimensions

Diameter (ft):	134.00
Volume (gallons):	4,200,000.00
Turnovers:	4.80
Self Supporting Roof:	YES
Annual Net Throughput(gal/yr):	20,160,000.00
Is Tank Heated (y/n):	NO
Number of Columns:	0.00
Effective Column Diameter:	0.00

Paint Characteristics

Internal Shell Condition:	Light Rust
Shell Color/Shade:	White/White
Shell Condition:	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Rim-Seal System

Primary Seal:	Mechanical Shoe
Secondary Seal:	None

Deck Characteristics

Deck Fitting Category:	Typical
Deck Type:	Welded

Deck Fitting/Status

Access Hatch (24-in. Diam.)/Unbolted Cover, No Gasket	1
Automatic Gauge Float Well/Unbolted Cover, No Gasket	1
Roof Leg or Hanger Well/Adjustable	49
Sample Pipe or Well (24-in. Diam.)/Slit Fabric Seal 10% Open	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1

25,000 Barrel Internal Floating Roof Tank(s) [SCC 40400332]

Tank Dimensions

Diameter (ft):	67.00
Volume (gallons):	1,050,000.00
Turnovers:	82.25
Self Supporting Roof:	YES
Annual Net Throughput(gal/yr):	86,361,030.00
Is Tank Heated (y/n):	NO
Number of Columns:	0.00
Effective Column Diameter:	0.00

Paint Characteristics

Internal Shell Condition:	Light Rust
Shell Color/Shade:	White/White
Shell Condition:	Good
Roof Color/Shade:	White/White
Roof Condition:	Good

Rim-Seal System

Primary Seal:	Mechanical Shoe
Secondary Seal:	None

Deck Characteristics

Deck Fitting Category:	Typical
Deck Type:	Welded

Deck Fitting/Status

Access Hatch (24-in. Diam.)/Unbolted Cover, No gasket	1
Automatic Gauge Float Well/Unbolted Cover, No gasket	1
Roof Leg or Hanger Well/Adjustable	20
Sample Pipe or Well (24-in. Diam.)/Slit Fabric Seal 10% Open	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1

400 Barrel Veridical Fixed Roof Tank(s) [SCC 40400312]

Tank Dimensions

Shell Length (ft):	20.00
Diameter (ft):	12.00
Volume (gallons):	16,920.59

Paint Characteristics

Shell Color/Shade:	Gray/Medium
Shell Condition:	Good

Roof Characteristics		Breather Vent Settings	
Type:	Dome	Vacuum Settings (psig):	-0.03
Height (ft)	0.00	Pressure Settings (psig)	0.03
Radius (ft) [Dome Roof]	12.00	Is Tanks Heated (Y/N):	N

Tank Throughput	Existing Tanks [A1 - A6 and AE1 - AE9]	New Tanks [Tanks AE10 - AE13]
Turnovers:	560.36	679.5
Net Throughput (gal/yr):	9,481,584	11,497,500

Liquid Contents of Storage Tank - Properties:

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F) Avg.	Min.	Max.	Liquid Bulk Temp (deg F)	Vapor Pressure (psia) Avg.	Min.	Max.	Vapor Mol. Weight.	Liquid Mass Fraction	Vapor Mass Fraction	Mol. Weight	Basis for Vapor Pressure Calculations
Crude Oil (RVP 5)	All	43.08	37.17	48.98	41.45	2.041	N/A	N/A	50.00			207.00	Option 4: RVP=5

TANKS 4.0.9D Annual Emission Reports:

100,000 bbl IFRT Annual Emission Calculations

Rim Seal Losses (lb):	620.7157
Seal Factor A (lb-mole/ft-yr):	5.8000
Seal Factor B (lb-mole/ft-yr (mph)^n):	0.3000
Value of Vapor Pressure Function:	0.0399
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	2.0410
Tank Diameter (ft):	134.0000
Vapor Molecular Weight (lb/lb-mole):	50.0000
Product Factor:	0.4000
Withdrawal Losses (lb):	143.8990
Number of Columns:	0.0000
Effective Column Diameter (ft):	0.0000
Annual Net Throughput (gal/yr.):	20,160,000.0000
Shell Clingage Factor (bbl/1000 sqft):	0.0060
Average Organic Liquid Density (lb/gal):	7.1000
Tank Diameter (ft):	134.0000
Deck Fitting Losses (lb):	363.6282
Value of Vapor Pressure Function:	0.0399
Vapor Molecular Weight (lb/lb-mole):	50.0000
Product Factor:	0.4000
Tot. Roof Fitting Loss Fact.(lb-mole/yr):	455.3000
Deck Seam Losses (lb):	0.0000
Deck Seam Length (ft):	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000
Deck Seam Length Factor(ft/sqft):	0.0000
Tank Diameter (ft):	134.0000
Vapor Molecular Weight (lb/lb-mole):	50.0000
Product Factor:	0.4000
Total Losses (lb):	1,128.2429

Roof Fitting/Status	Qty	Roof Fitting Loss Factors KFa(lb-mole/yr)	KFb(lb-mole/(yr mph^n))	m	Losses(lb)
Access Hatch (24-in. Diam.)/Unbolted Cover, No Gasket	1	36.00	5.90	1.20	28.7516
Automatic Gauge Float Well/Unbolted Cover, No Gasket	1	14.00	5.40	1.10	11.1812
Roof Leg or Hanger Well/Adjustable	49	7.90	0.00	0.00	309.1599
Sample Pipe or Well (24-in. Diam.)/Slit Fabric Seal 10% Open	1	12.00	0.00	0.00	9.5839
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1	6.20	1.20	0.94	4.9517

25,000 bbl IFRT Annual Emission Calculations

Rim Seal Losses (lb):	310.3579
Seal Factor A (lb-mole/ft-yr):	5.8000
Seal Factor B (lb-mole/ft-yr (mph)^n):	0.3000
Value of Vapor Pressure Function:	0.0399
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	2.0410
Tank Diameter (ft):	67.0000
Vapor Molecular Weight (lb/lb-mole):	50.0000
Product Factor:	0.4000
Withdrawal Losses (lb):	1,232.8845
Number of Columns:	0.0000
Effective Column Diameter (ft):	0.0000
Annual Net Throughput (gal/yr.):	86,362,500.0000
Shell Clingage Factor (bbl/1000 sqft):	0.0060
Average Organic Liquid Density (lb/gal):	7.1000
Tank Diameter (ft):	67.0000
Deck Fitting Losses (lb):	180.6561
Value of Vapor Pressure Function:	0.0399
Vapor Molecular Weight (lb/lb-mole):	50.0000
Product Factor:	0.4000
Tot. Roof Fitting Loss Fact.(lb-mole/yr):	226.2000
Deck Seam Losses (lb):	0.0000
Deck Seam Length (ft):	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000
Deck Seam Length Factor(ft/sqft):	0.0000
Tank Diameter (ft):	67.0000
Vapor Molecular Weight (lb/lb-mole):	50.0000
Product Factor:	0.4000
Total Losses (lb):	1,723.8985

		Roof Fitting Loss Factors			
Roof Fitting/Status	Qty.	KFa(lb-mole/yr)	KFb(lb-mole/(yr mph^n))	m	Losses(lb)
Access Hatch (24-in. Diam.)/Unbolted Cover, No Gasket	1	36.00	5.90	1.20	28.7516
Automatic Gauge Float Well/Unbolted Cover, No Gasket	1	14.00	5.40	1.10	11.1812
Roof Leg or Hanger Well/Adjustable	20	7.90	0.00	0.00	126.1877
Sample Pipe or Well (24-in. Diam.)/Slit Fabric Seal 10% Open	1	12.00	0.00	0.00	9.5839
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1	6.20	1.20	0.94	4.9517

400 bbl VFR Annual Emission Calculations [Existing Tanks A1-A6; AE1- AE9]

Standing Losses (lb):	657.9258
Vapor Space Volume (cu ft):	1,224.0621
Vapor Density (lb/cu ft):	0.0214
Vapor Space Expansion Factor:	0.1611
Vented Vapor Saturation Factor:	0.4268
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	1,224.0621
Tank Diameter (ft):	12.0000
Vapor Space Outage (ft):	10.8231
Tank Shell Height (ft):	20.0000
Average Liquid Height (ft):	10.0000
Roof Outage (ft):	0.8231
Roof Outage (Dome Roof)	
Roof Outage (ft):	0.8231
Dome Radius (ft):	12.0000
Shell Radius (ft):	6.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0214
Vapor Molecular Weight (lb/lb-mole):	50.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	2.3409
Daily Avg. Liquid Surface Temp. (deg. R):	509.3644
Daily Average Ambient Temp. (deg. F):	41.4292
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	504.1792
Tank Paint Solar Absorptance (Shell):	0.6800

Tank Paint Solar Absorptance (Roof):	0.6800
Daily Total Solar Insulation Factor (Btu/sqft day):	1,217.5000
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.1611
Daily Vapor Temperature Range (deg. R):	41.0192
Daily Vapor Pressure Range (psia):	0.9849
Breather Vent Press. Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	2.3409
Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	1.8900
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	2.8749
Daily Avg. Liquid Surface Temp. (deg R):	509.3644
Daily Min. Liquid Surface Temp. (deg R):	499.1096
Daily Max. Liquid Surface Temp. (deg R):	519.6192
Daily Ambient Temp. Range (deg. R):	24.7750
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.4268
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	2.3409
Vapor Space Outage (ft):	10.8231
Working Losses (lb):	4,363.8226
Vapor Molecular Weight (lb/lb-mole):	50.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	2.3409
Annual Net Throughput (gal/yr.):	9,481,623.1909
Annual Turnovers:	560.3600
Turnover Factor:	0.2202
Maximum Liquid Volume (gal):	16,920.5925
Maximum Liquid Height (ft):	20.0000
Tank Diameter (ft):	12.0000
Working Loss Product Factor:	0.7500
Total Losses (lb):	5,021.7484

400 bbl VFR Annual Emission Calculations [New Tanks AE10 - AE13]

Standing Losses (lb):	657.9258
Vapor Space Volume (cu ft):	1,224.0621
Vapor Density (lb/cu ft):	0.0214
Vapor Space Expansion Factor:	0.1611
Vented Vapor Saturation Factor:	0.4268
Tank Vapor Space Volume:	
Vapor Space Volume (cu ft):	1,224.0621
Tank Diameter (ft):	12.0000
Vapor Space Outage (ft):	10.8231
Tank Shell Height (ft):	20.0000
Average Liquid Height (ft):	10.0000
Roof Outage (ft):	0.8231
Roof Outage (Dome Roof)	
Roof Outage (ft):	0.8231
Dome Radius (ft):	12.0000
Shell Radius (ft):	6.0000
Vapor Density	
Vapor Density (lb/cu ft):	0.0214
Vapor Molecular Weight (lb/lb-mole):	50.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	2.3409
Daily Avg. Liquid Surface Temp. (deg. R):	509.3644
Daily Average Ambient Temp. (deg. F):	41.4292
Ideal Gas Constant R (psia cuft / (lb-mol-deg R)):	10.731
Liquid Bulk Temperature (deg. R):	504.1792
Tank Paint Solar Absorptance (Shell):	0.6800
Tank Paint Solar Absorptance (Roof):	0.6800
Daily Total Solar Insulation Factor (Btu/sqft day):	1,217.5000
Vapor Space Expansion Factor	
Vapor Space Expansion Factor:	0.1611
Daily Vapor Temperature Range (deg. R):	41.0192
Daily Vapor Pressure Range (psia):	0.9849
Breather Vent Press. Setting Range(psia):	0.0600
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	2.3409

Vapor Pressure at Daily Minimum Liquid Surface Temperature (psia):	1.8900
Vapor Pressure at Daily Maximum Liquid Surface Temperature (psia):	2.8749
Daily Avg. Liquid Surface Temp. (deg R):	509.3644
Daily Min. Liquid Surface Temp. (deg R):	499.1096
Daily Max. Liquid Surface Temp. (deg R):	519.6192
Daily Ambient Temp. Range (deg. R):	24.7750
Vented Vapor Saturation Factor	
Vented Vapor Saturation Factor:	0.4268
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	2.3409
Vapor Space Outage (ft):	10.8231
Working Losses (lb):	5,066.0416
Vapor Molecular Weight (lb/lb-mole):	50.0000
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	2.3409
Annual Net Throughput (gal/yr.):	11,497,500.0000
Annual Turnovers:	679.4975
Turnover Factor:	0.2108
Maximum Liquid Volume (gal):	16,920.5925
Maximum Liquid Height (ft):	20.0000
Tank Diameter (ft):	12.0000
Working Loss Product Factor:	0.7500
Total Losses (lb):	5,723.9674

Total Tank VOC Losses/Emissions

Tank Identification	Rim Seal Loss (lbs/year)	Withdrawal Loss (lbs/year)	Deck fitting Loss (lbs/year)	Deck Seam Loss (lbs/year)	Working Loss (lbs/year)	Breathing Loss (lbs/year)	Total Emissions (lbs/year)	Total Emissions TPY
100,000 bbl [100-1]	620.72	143.9	363.63	--	--	--	1128.24	0.56
25,000 bbl [25-1 & 25-2]	310.39	1232.88	180.66	--	--	--	1723.90	0.86
400 bbl [Existing Tanks A1-A6; AE1- AE9]	--	--	--	--	4363.82	657.93	5021.75	2.51
400 bbl [New Tanks AE10 - AE13]	--	--	--	--	5066.04	657.93	5723.97	2.86

Fugitive Emissions - Equipment Leaks

VOC Emissions = (Number of Components) * (Component Specific EF)

Component Description	Number of Components	Emission Factors (kg/hr)	Emission Factors (lbs/hr)	VOC Emissions lbs/hr	VOC Emissions TPY
Valves	473	0.0025	0.0055	2.67	11.71
Pump Seals	17	0.013	0.0287	0.52	2.26
Other	41	0.0075	0.0165	0.73	3.19
Connectors	0	0.00021	0.0005	--	--
Flanges	314	0.00011	0.0002	0.08	0.34
Open-end Lines	0	0.0014	0.0031	--	--
			Total VOC Emissions ►	3.994	17.495

Basis:

→ *Protocol for Equipment Leak Emission Estimates, EPA-453/R-95-017, USEPA-OAQPS Emission Standards Division 11/95*

→ *Applied Light Oil emission factors*

Hazardous Air Pollutant Emissions

HAP Constituents	Emission Factor [% HAP Vapor Phase]	HAP Emissions Per Source Type [tpy]: 100 K bbl Tank	25 K bbl Tank	400 bbl Tank [A1-A6; AE1-AE9]	400 bbl Tank [AE10-AE13]	Equip. Leaks
2,2,4,-Trimethylpentane	0.56	0.003	0.005	0.014	0.016	0.098
Benzene	0.12	0.0007	0.001	0.003	0.003	0.021
Ethyl Benzene	0.09	0.001	0.001	0.002	0.003	0.016
m & p-Xylene	0.46	0.003	0.004	0.012	0.013	0.080

n-Hexane	2.2	0.012	0.019	0.055	0.063	0.385
o-Xylene	0.11	0.0006	0.001	0.003	0.003	0.019
Toluene	0.23	0.001	0.002	0.006	0.007	0.040
	Total HAP Emissions [tpy] ►	0.021	0.032	0.095	0.108	0.660

Basis: Individual HAP emission factors US EPA Speciate Program Profile No. 1208 - Crude Oil Production Gathering Tanks

Natural Gas-Fired Heater [SCC 10500206]

Fuel Input: 500 Btu/hr [Design Maximum - Combined Throughput]
0.00000048 MMscf/hr [Based on 1,050 Btu/scf heating value]
Operating Hours: 8760 hours/year

Particulate Emissions (uncontrolled):

Total Particulate PM/PM_{10}/$PM_{2.5}$ Emissions:

Emission Factor 7.60 lb/MMscf [AP- 42 Table 1.4-1, 7/98]
Calculations (7.6 lb/MMscf) * (0.00000048 MMscf/hr) = 0.000004 lbs/hr
(0.000004 lbs/hr) * (hrs/yr) * (0.0005 tons/lb) = 0.000016 TPY

Total Particulate PM/PM_{10}/$PM_{2.5}$ Emissions (condensable):

Emission Factor 5.70 lb/MMscf [AP- 42 Table 1.4-2, 7/98]
Calculations (5.7 lb/MMscf) * (0.00000048 MMscf/hr) = 0.000003 lbs/hr
(0.000003 lbs/hr) * (hrs/yr) * (0.0005 tons/lb) = 0.000012 TPY

Total Particulate PM/PM_{10}/$PM_{2.5}$ Emissions (filterable):

Emission Factor 1.90 lb/MMscf [AP- 42 Table 1.4-2, 7/98]
Calculations (1.9 lb/MMscf) * (0.00000048 MMscf/hr) = 0.000001 lbs/hr
(0.000001 lbs/hr) * (hrs/yr) * (0.0005 tons/lb) = 0.000004 TPY

CO Emissions (uncontrolled):

Emission Factor 84.00 lb/MMscf [AP- 42 Table 1.4-1, 7/98]
Calculations (84 lb/MMscf) * (0.00000048 MMscf/hr) = 0.000040 lbs/hr
(0.000040 lbs/hr) * (hrs/yr) * (0.0005 tons/lb) = 0.000175 TPY

NO_x Emissions (uncontrolled):

Emission Factor 100.00 lb/MMscf [AP- 42 Table 1.4-1, 7/98]
Calculations (100 lb/MMscf) * (0.00000048 MMscf/hr) = 0.000048 lbs/hr
(0.000048 lbs/hr) * (hrs/yr) * (0.0005 tons/lb) = 0.000209 TPY

SO_2 Emissions (uncontrolled):

Emission Factor 0.60 lb/MMscf [AP- 42 Table 1.4-2, 7/98]
Calculations (0.6 lb/MMscf) * (0.00000048 MMscf/hr) = 0.000000 lbs/hr
(0.0000003 lbs/hr) * (hrs/yr) * (0.0005 tons/lb) = 0.000001 TPY

VOC Emissions (uncontrolled):

Emission Factor 5.50 lb/MMscf [AP- 42 Table 1.4-2, 7/98]
Calculations (5.5 lb/MMscf) * (0.00000048 MMscf/hr) = 0.000003 lbs/hr
(0.000003 lbs/hr) * (hrs/yr) * (0.0005 tons/lb) = 0.000011 TPY

Emergency Generator - 8 kW Propane-Fired [SCC 20201001]
Fuel Input: 62 ft^3/hr [Manufacturer Specification @ 100% Load]

0.15624 MMBtu/hr [Propane Heating Value = 2520 Btu/ft^3]

Operating Hours: 8760 hours/year

Basis:

→ *Utilized emission factors from AP-42 3.2 Natural Gas-Fired Reciprocating Engines*

→ *4SLB Engine to provide a for worst case NO_x Emissions Scenario [AP- 42 Table 3.2-2]*

→ *Worst case emission factor selected (< 90% Load)*

→ *Worst case emission factor selected (< 90% - 105% Load)*

Particulate Emissions (uncontrolled):

PM Emissions - filterable: (All PM assumed to be ≤ $PM_{2.5}$)

Emission Factor	0.0000771 lb/MMBtu	[AP- 42 Table 3.2-2, 7/00]	
Calculations	(0.0000771 lb/MMBtu) * (MMBtu/hr) =		0.00001 lbs/hr
	(0.00001 lbs/hr) * (hrs/yr) * (0.0005 tons/lb) =		0.00005 TPY

PM Emissions - condensable: (All PM assumed to be ≤ $PM_{2.5}$)

Emission Factor	0.00991 lb/MMBtu	[AP- 42 Table 3.2-2, 7/00]	
Calculations	(0.00991 lb/MMBtu) * (MMBtu/hr) =		0.00155 lbs/hr
	(0.00155 lbs/hr) * (hrs/yr) * (0.0005 tons/lb) =		0.00678 TPY

Total PM Emissions:

Calculations	PM Condensable + PM Filterable =	0.001560 lbs/hr
	(0.00155 lbs/hr) * (hrs/yr) * (0.0005 tons/lb) =	0.00683 TPY

CO Emissions (uncontrolled):

Emission Factor	0.557 lb/MMBtu*	[AP- 42 Table 3.2-3, 7/00]	
Calculations	(0.557 lb/MMBtu) * (0.15624 MMBtu/hr) =		0.087026 lbs/hr
	(0.09 lbs/hr) * (8760 hrs/yr) * (0.0005 tons/lb) =		0.381172 TPY

NO_x Emissions (uncontrolled):

Emission Factor	4.08 lb/MMBtu*	[AP- 42 Table 3.2-3, 7/00]	
Calculations	(4.08 lb/MMBtu) * (MMBtu/hr) =		0.63746 lbs/hr
	(0.64 lbs/hr) * (hrs/yr) * (0.0005 tons/lb) =		2.79207 TPY

SO_2 Emissions (uncontrolled):

Emission Factor	0.000588 lb/MMBtu	[AP- 42 Table 3.2-3, 7/00]	
Calculations	(0.000588 lb/MMBtu) * (MMBtu/hr) =		0.00009 lbs/hr
	(0.00 lbs/hr) * (hrs/yr) * (0.0005 tons/lb) =		0.00040 TPY

VOC Emissions (uncontrolled):

Emission Factor	0.118 lb/MMBtu	[AP- 42 Table 3.2-3, 7/00]	
Calculations	(0.12 g/bhp-hr) * (hp) * 0.002205 lb/gram) =		0.01844 lbs/hr
	(0.02 lbs/hr) * (hrs/yr) * (0.0005 tons/lb) =		0.08075 TPY

Unpaved Roadways (Haul Roads)

Miles Travelled: 7959 Annual Vehicle Miles Travelled

Vehicle Weight: 39.1 Tons [Mean Vehicle Weight: 45 tons Loaded & 18.8 tons empty]

Control Method: Water Application

Control Efficiency (C_e): 50%

Mileage Calculations:

	Number of Tanks	Individual Tank Throughput [bbl/Yr]	Total Throughput [bbl]	No. Loads	VMT
100,000 bbl	1	480000	480000	1684.21	421.05
25000 bbl	2	2056215	4112430	14429.58	3607.39
400 bbl (1)	15	225752	3386280	11881.68	2970.42
400 bbl (2)	4	273750	1095000	3842.11	960.53
		Facility Totals ►	9073710	31837.58	7959.39

Particulate Emissions (controlled):

Emission Factor EF = k(s/12)^a * (W/3)^b [AP-42 13.2.2.2, 11/06]

where: EF, Emission Factor = lbs Emitted Per Vehicle Mile Traveled (VMT)

k, Empirical Constant PM =	4.9	[AP-42 Table 13.2.2-2, 11/06]
k, Empirical Constant PM_{10} =	1.5	[AP-42 Table 13.2.2-2, 11/06]
k, Empirical Constant $PM_{2.5}$ =	0.15	[AP-42 Table 13.2.2-2, 11/06]
s, Surface Material Silt Content (%) =	13.5	[AP-42 Table 13.2.2-1, 11/06]
W, Mean Vehicle Weight (tons) =	39.1	[Data Provided By Applicant]
a, Empirical Constant PM =	0.7	[AP-42 Table 13.2.2-2, 11/06]
a, Empirical Constant PM_{10} / $PM_{2.5}$ =	0.9	[AP-42 Table 13.2.2-2, 11/06]
b, Empirical Constant PM - $PM_{2.5}$ =	0.45	[AP-42 Table 13.2.2-2, 11/06]

PM Emissions:

Emission Factor Calculations
EF = 4.9 * (13.5/12)^0.7 * (39.1/3)^0.45 = 16.90 lbs/VMT
(16.90 lbs/VMT) * (7959.3947368421 VMT/year) * (1-.50 Ce) = 67240.03 lbs/year
(67,240.03 lbs/year) * (0.0005 tons/lb) = 33.62 TPY

PM_{10} Emissions:

Emission Factor Calculations
EF = 1.5 * (13.5/12)^0.7 * (39.1/3)^0.45 = 5.30 lbs/VMT
(5.30 lbs/VMT) * (7959.3947368421 VMT/year) * (1-.50 Ce) = 21074.32 lbs/year
(21,074.32 lbs/year) * (0.0005 tons/lb) = 10.54 TPY

$PM_{2.5}$ Emissions:

Emission Factor Calculations
EF = 0.15 * (13.5/12)^0.9 * (39.1/3)^0.45 = 0.53 lbs/VMT
(0.53 lbs/VMT) * (7959.3947368421 VMT/year) * (1-.50 Ce) = 2107.43 lbs/year
(2,107.43 lbs/year) * (0.0005 tons/lb) = 1.05 TPY

V. Existing Air Quality

The Albin station is located in the Southwest ¼ of the Southwest ¼ of Section 25, Township 24 North, Range 56 East in Richland County, Montana. Eastern Montana generally provides for very good ventilation throughout the year. The area is designated unclassified/attainment with all ambient air quality standards and there are no major air pollution sources in the surrounding area.

VI. Air Quality Impacts

The Albin Station is a minor source with respect to state and federal permitting regulations, so any effects to air quality will be minor. Further, MAQP #4599-03 contains conditions and limitations that require the source to implement controls and work practices that would protect air quality.

VII. Ambient Air Impact Analysis

Based on the information provided and the conditions established in MAQP #4599-03, the Department determined that impacts 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.

VIII. 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)
		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.

IX. 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: D. Kuenzli
Date: October 15, 2012

DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901, Helena, Montana 59620
(406) 444-3490

FINAL ENVIRONMENTAL ASSESSMENT (EA)

Issued To: Hiland Crude, LLC - Albin Station
P.O. Box 5103
Enid, OK 73702

Montana Air Quality Permit Number: 4599-03

Preliminary Determination Issued: 11/02/2012
Department Decision Issued: 11/20/2012
Permit Final: 12/06/2012

1. *Legal Description of Site*: Southwest ¼ of the Southwest¼ of Section 25, Township 24 North, Range 56 East, in Richland County, Montana.

2. *Description of Project*: Hiland Crude, LLC (Hiland) proposes to expand the storage capacity of the existing crude oil truck unloading station known as the Albin Station. Crude oil is received from surrounding well-sites via tank trucks to the facility's unloading racks which transfers the oil to storage tanks for eventual injection into the distribution pipeline.

3. *Objectives of Project:* The objectives of the project would be to generate business and revenue from the transport of crude oil to sales destinations.

4. *Alternatives Considered*: In addition to the proposed action, the Department also considered the "no-action" alternative. The "no-action" alternative would deny issuance of the air quality preconstruction permit to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because Hiland demonstrated compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.

5. *A Listing of Mitigation, Stipulations, and Other Controls*: A list of enforceable conditions, including a BACT analysis, would be included in MAQP #4599-03.

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.

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites			X			Yes
J	Cumulative and Secondary Impacts			X			Yes

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 Department would expect minor effects to terrestrial and aquatic life and habitats in issuing MAQP #4599-03. The allowable emissions associated with this permitting action are limited and include volatile organic compounds (VOC) and particulate emissions (PM), as well as, minor emissions of hazardous air pollutants (HAP). Control requirements for fugitive dust emissions would be included in MAQP #4599-03 to reduce particulate matter emissions and therefore the amount of deposition. Overall, any impacts to terrestrial and aquatic life and habitats would be expected to be minor.

B. Water Quality, Quantity and Distribution

Minor impacts would be expected on water quality, quantity, and distribution from the proposed project due to pollutant deposition and the use of water for dust suppression on the gravel roads. There would be no surface or groundwater discharges expected from this project, nor would there be any surface waters at or near the project site. Therefore minor, if any, impacts would be expected from the proposed project.

C. Geology and Soil Quality, Stability and Moisture

Water and/or chemical dust suppressant may be used to reduce fugitive dust emissions from vehicle traffic on unpaved roads. Minor, if any, impacts to water quality, quantity and distribution, and geology, soil quality, stability, and moisture would be expected from this activity.

D. Vegetation Cover, Quantity, and Quality

MAQP #4599-03 would require control of fugitive dust emissions to reduce deposition of particulate matter. The allowable emissions from the site are relatively small, and effects to vegetation cover, quantity, and quality would be expected to be minor.

E. Aesthetics

Hiland proposes to construct and operate additional storage tanks at an existing crude oil tanker truck unloading facility. The tanks would be visible at the site and the increase in capacity would imply an increase in truck traffic. Therefore, minor effects to aesthetics would be expected as a result of issuance of MAQP #4599-03.

F. Air Quality

MAQP #4599-03 would allow for increased emissions of volatile organic compounds, particulate matter, and a small amount of HAP's. The air emissions from the facility would be minimized by enforceable conditions in the facility's MAQP. The Department determined, based on the allowable emissions from the facility and the existing air quality in the area, that the impacts from this permitting action would be minor.

G. Unique Endangered, Fragile, or Limited Environmental Resources

In an effort to identify any unique, fragile, or limited environmental resources in the area, the Department contacted the Montana Natural Heritage Program, Natural Resource Information System (NRIS). Search results concluded that a single species of concern exists within the area. In this case, the area was defined by the section, township, and range of the proposed location with an additional one mile buffer zone. The known species of concern identified was the Whooping Crane (Endangered).

Site operations would occur within a previously disturbed industrial site which contains several similar crude oil tank unloading and storage locations. Therefore, the overall industrial nature of the area would not change as a result of this permitting action. Due to the limitations placed on allowable emissions and the current use of the site affects on any unique endangered, fragile, or limited environmental resources would be expected to be minor.

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

The proposed project would have minor impacts on the demands of environmental resources of water, air, and energy because the facility would be a source of air pollutants. Water would be required for the control of particulate matter from vehicle traffic. The Department has determined that while the proposed project would require environmental resources of water, air, and energy, the impact would be expected to be minor.

I. Historical and Archaeological Sites

In an effort to identify any historical and archaeological sites at or near the proposed project area, the Department contacted the Montana Historical Society, State Historic Preservation Office (SHPO). According to the SHPO, there have not been any previously recorded sites within the designated search locale and that there is a low likelihood that cultural properties would be impacted. In this case, the area was defined by the section, township, and range of the proposed location. Based on the results of SHPO search and the fact that this is an existing facility with no significant construction necessary, the Department had determined that there would be no impact on any historical or archaeological sites.

J. Cumulative and Secondary Impacts

Potential physical and biological effects of any individual considerations above would be expected to be minor. Collectively, the potential cumulative and secondary impacts would be expected to be minor.

8. The following table summarizes the potential economic and social effects of the proposed project on the human environment. The "no-action" alternative was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores				**XX**		Yes
B	Cultural Uniqueness and Diversity			XX			Yes
C	Local and State Tax Base and Tax Revenue			XX			Yes
D	Agricultural or Industrial Production			XX			Yes
E	Human Health			XX			Yes
F	Access to and Quality of Recreational and Wilderness Activities			XX			Yes
G	Quantity and Distribution of Employment			XX			Yes
H	Distribution of Population			XX			Yes
I	Demands for Government Services			XX			Yes
J	Industrial and Commercial Activity			XX			Yes
K	Locally Adopted Environmental Plans and Goals				XX		Yes
L	Cumulative and Secondary Impacts			XX			Yes

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

A. Social Structures and Mores

The facility would not cause a disruption to any native or traditional lifestyles or communities in the area. The proposed location would be on private property and the surrounding area would mainly be used for agriculture activities, livestock grazing, and other oil and gas activities. Therefore, no impacts would be expected on social structures and mores.

B. Cultural Uniqueness and Diversity

The project would be expected to result in minor, if any, impacts to cultural uniqueness and diversity. Effects to the distribution of population and the quantity and distribution of employment would be expected to be minor.

C. Local and State Tax Base and Tax Revenue

The proposed project would be expected to result in minor impacts to the local and state tax base and tax revenue. MAQP #4599-03 is for minor changes to an existing facility, therefore no new employment would be expected and no significant gains to tax base or revenue are expected.

D. Agricultural or Industrial Production

Impact on local industrial production would expect to be minor, as the facility is an existing and only a minor expansion is proposed. Minimal deposition of air pollutants would occur on the surrounding land (as described above in Section 7.F), therefore, only minor effects on the surrounding vegetation or agricultural production would be expected to occur. The surrounding area is largely undeveloped or agricultural land. Pollutant deposition from the project would be minimal because the emissions would be well controlled, widely dispersed (from factors such as wind speed and wind direction), and would expect to have minimal deposition on the surrounding area.

E. Human Health

As described in Section 7.F of the EA, the impacts from this facility on human health would expect to be minor because it would be considered a minor source of emissions and the conditions of MAQP #4599-03 would ensure that the facility would operate in compliance with all applicable rules and standards. These rules and standards are designed to be protective of human health.

F. Access to and Quality of Recreational and Wilderness Activities

Access to recreational opportunities would not be limited or modified by this facility. The equipment is located within an existing industrial site that has been established for similar use. All recreational opportunities, if available in the area, would still be accessible. Noise from the facility would be minimal to surroundings because of the facility size, expected hours of operation, and rural location. The facility is on private land and the Department has determined that the project would be a minor industrial source of emissions. Therefore, any changes in the quality of recreational and wilderness activities created by operating the equipment at this site would expect to be minor.

G. Quantity and Distribution of Employment

Minor effect to the quantity and distribution of employment as the facility would be expected. As this facility is in current operation and no significant changes in activity are proposed the impact to the quantity and distribution of employment associated with permit action would expect to be minor.

H. Distribution of Population

No significant change in the quantity and distribution of employment would be expected at this facility. Therefore, minor, if any, effects to the distribution of population would be expected as a result of issuance of MAQP #4599-03.

I. Demands for Government Services

Government services would be required for acquiring the appropriate permits for the proposed project and to verify compliance with the permits that would be issued. However, demands for government services would be expected to be minor.

J. Industrial and Commercial Activity

The Department would expect minor increases in local industrial and commercial activity with additional truck traffic associated with the normal operations of this facility.

K. Locally Adopted Environmental Plans and Goals

The Department is not aware of any locally adopted environmental plans or goals that would be affected by the proposed facility. MAQP #4599-03 would be issued to protect air quality.

L. Cumulative and Secondary Impacts

Overall, minor cumulative and secondary impacts to the social and economic aspects of the human environment would be expected in the immediate area of operation.

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 operation of a crude oil unloading station. MAQP #4599-03 includes conditions and limitations to ensure the facility will operate in compliance with all applicable rules and regulations. In addition, there are no significant impacts associated with this proposal.

Other groups or agencies contacted or which may have overlapping jurisdiction: Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program

Individuals or groups contributing to this EA: Department of Environmental Quality – Air Resources Management Bureau, Natural Resource Information System – Montana Natural Heritage Program

EA prepared by: D. Kuenzli
Date: October 24, 2012