September 7, 2022

Travis Roby, CEO
Bayou Midstream Bakken, LLC.
4-Mile Facility
820 Gessner Road, Ste. 1450
Houston, TX 77024

Sent via email: troby@bayoumidstream.com

RE: Final Permit Issuance for MAQP #5275-00

Dear Mr. Roby:

Montana Air Quality Permit (MAQP) #5275-00 is deemed final as of August 12, 2022, by DEQ. This permit is for a crude oil storage and transfer facility. All conditions of the Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For DEQ,

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

John P. Proulx
Environmental Scientist 2
Air Quality Bureau
(406) 444-5391

Montana Department of Environmental Quality
Air, Energy & Mining Division
Air Quality Bureau

Montana Air Quality Permit #5275-00

Bayou Midstream Bakken, LLC.
4-Mile Facility
830 Gessner Rd, Suite 1450
Houston, TX 77024

August 12, 2022

MONTANA AIR QUALITY PERMIT

Issued To: Bayou Midstream Bakken, LLC
4-Mile Facility
820 Gessner Rd. Suite 1450
Houston, TX 77024

MAQP: #5275-00
Application Complete: 5/23/2022
Preliminary Determination Issued: 6/22/2022
Department Decision Issued: 7/27/2022
Permit Final: 8/12/2022

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Bayou Midstream Bakken, LLC (Bayou), 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

Bayou proposes to permit a crude oil transfer facility that consists of four (4) 1,000-barrel (bbl) tanks, an enclosed combustor flare, and associated equipment.

B. Plant Location

The site is identified as the 4-Mile Facility and is located approximately 6.4 miles northwest of Fairview, Montana. The 4-Mile facility is located at latitude 47.9259, longitude -104.1348. The legal description is Section 8, Township 25N, Range 59E in Richland County.

Section II: Conditions and Limitations

A. Operational and Emission Limitations

1. Bayou shall only receive crude oil at the facility (ARM 17.8.749).

2. The combined throughput of crude oil through Tanks 01, 02, 03, and 04 (Tanks 01-04) shall not exceed 9,500 bbl per day or 3,467,500 bbl during any rolling 12-month period (ARM 17.8.749).

3. Bayou shall be limited to pipeline operations during normal operation but also is allowed to load trucks when the pipeline is not available for transfer (ARM 17.8.749).

4. Loading of crude oil into the tanks shall be restricted to submerged fill loading and/or bottom fill loading. (ARM 17.8.752).

5. Bayou 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).

6. Bayou 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).

7. Bayou 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.6 (ARM 17.8.752).

8. Bayou shall operate the Combustor Flare at all times to receive vapors from Tanks 01-04 with the following exceptions: 1) When the tanks are empty, 2) Maintenance periods or 3) During startup, shutdown or malfunction events (ARM 17.8.749 and ARM 17.8.752).

9. Bayou shall comply with all applicable standards, testing, reporting, recordkeeping, and monitoring requirements of Title 40 Code of Federal Regulations (CFR) 60, Subpart OOOOa, S*tandards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015* (ARM 17.8.340, ARM 17.8.749, and 40 CFR 60, Subpart OOOOa).

B. Inspection and Maintenance Requirements

1. Bayou shall (ARM 17.8.105 and ARM 178.752):

   a. Have available for review by DEQ, 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 requirement of this condition.

   b. Have available for review by DEQ, 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. Bayou shall document the inspections, indicating the date of the inspection and the results (ARM 17.8.749).

2. Bayou shall document shutdown and malfunction periods resulting in Combustor Flare not being able to control vapors from Tanks 01-04 (ARM 17.8.749).

3. All records compiled in accordance with this permit must be maintained by Bayou 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 (DEQ) and must be submitted to DEQ 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. Bayou shall supply DEQ with annual production information for all emission points, as required by DEQ 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 DEQ by the date required in the emission inventory request. Information shall be in the units required by DEQ. 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. Bayou shall notify DEQ 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 DEQ, 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. Bayou shall document, by month, the total combined throughput through tanks 01-04. By the 25th day of each month, Bayou 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. Bayou shall document, by month, the combined throughput of crude oil to the three outbound pipelines. By the 25th day of each month, Bayou shall total the crude oil throughput through the three pipelines 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 – Bayou shall allow DEQ'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 Bayou fails to appeal as indicated below.

C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Bayou 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 DEQ's decision may request, within 15 days after DEQ 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 DEQ'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 DEQ'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, DEQ's decision on the application is final 16 days after DEQ'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 Bayou 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
Bayou Midstream Bakken, LLC
4-Mile Facility
MAQP #5275-00

I. Introduction/Process Description

Bayou Midstream Bakken, LLC (Bayou), proposes remove two (2) decommissioned 400-barrel (bbl) crude oil tanks and install four (4) 1,000 bbl storage tanks, a combustor flare to control VOCs, and associated equipment to transfer crude oil.

A. Permitted Equipment

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

- Four (4) 1,000-barrel (bbl) oil storage tanks
- Combustor Flare to control VOCs from Tanks 01, 02, 03, and 04 (Tanks 01-04)
- Associated Equipment including pumps, valves, and piping.

B. Source Description

Bayou owns and operates a crude oil holding/pumping facility. Crude oil enters the facility via pipeline and is stored in various sized tanks. The crude oil is transferred from the facility via pipeline under normal operations but also my transfer to trucks when the pipeline is unavailable.

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 DEQ. Upon request, DEQ 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 DEQ, 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 DEQ.

3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by DEQ, 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).

Bayou 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 DEQ 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 PM_{10}
11. ARM 17.8.230 Fluoride in Forage

Bayou 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, Bayou 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 Bayou 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 OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, of Reconstruction Commenced After September 18, 2015. The 4-Mile facility is being constructed after September 15, 2015 and has a potential to emit more than 6 tons per year of Volatile Organic Compounds. Therefore, this subpart applies.

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 Bayou 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. Bayou 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 DEQ. Bayou 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 DEQ by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by DEQ. 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. Bayou 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, modification or use of a source. Bayou 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. Bayou submitted an affidavit of publication of public notice for the May 25, 2022, issue of the *Sidney Herald*, a newspaper of general circulation in the city of Fairview, Richland County, Montana.

6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by DEQ 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 DEQ 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 Bayou 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 DEQ'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 DEQ 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 DEQ.

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 DEQ may establish by rule, or

   c. PTE > 70 tons/year of PM_{10} in a serious PM_{10} nonattainment area.

2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #5275-00 for Bayou 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 PM_{10} nonattainment area.

   d. This facility is subject to a current NSPS (40 CFR 60, Subpart A and Subpart OOOOa).

   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, DEQ 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. Bayou 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 4 Mile Facility is for VOCs. Bayou provided an analysis in the application for MAQP #5275-00 of possible means to control VOCs from the 400 bbl. tanks. That analysis considered flares and a vapor recovery system to condense VOCs as well as submerged filling practices. Portions of that previous analysis are used for the current BACT analysis.

A. 1000 Barrel Storage Tanks

Flares

Bayou reviewed determinations made by DEQ 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 and in this case is assumed to provide for 98 percent destruction.

Vapor Recovery Unit

Bayou reviewed determinations reviewed by DEQ 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 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, Bayou will continue to operate the tanks with submerged fill practices, which has been previously identified as BACT by DEQ. Bayou also proposes proper operation, inspection and maintenance as BACT. Submerged filling for the 400 bbl. fixed roof tanks is accepted as a BACT requirement.

B. 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 Bayou 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, Bayou 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.

C. Fugitive Emissions

Bayou 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.

Bayou has proposed to use submerged fill practices and a Combustor flare to control VOCs from Tanks 01-04. Bayou also proposed routing inspections and maintenance procedures for fugitive emissions from components as BACT.

DEQ concurs that the selected control options constitute BACT based on economic, technical, and practical feasibility.

IV. Emission Inventory

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

Storage Tank Emissions

Company: Bayou Midstream LLC
Site Name: Bayou Midstream 4-Mile Facility

Site Information

Oil Production Rate	18000	bbl/day
Number of Oil Tanks	4	tanks
Gas Oil Ratio (GOR)	0.26	scf/bbl
Heating Value (HV) (Tank Vapors)	2346.83	Btu/scf
Molecular Weight (MW) (Tank Vapors)	41.91	lb/lb-mole
VOC Weight % (Tank Vapors)	73.2	%
HAP Weight % (Tank Vapors)	0.7	%
H_2S Weight % (Tank Vapors)	0.0	%
Control Destruction Efficiency (DRE)	98.0	%

Emission Factors (EF) (Flare Combustion):

Pollutant	Emission Factor (lb/MMBtu)
NO_X	0.14
CO	0.035

Source: C6 S2 O&G Production Facilities Permitting Guidance.

Equations:

$$Uncontrolled\ Emissions_{VOC,HAP} = \frac{Oil\ Production\ Rate \times GOR \times MW \times Annual\ Hours\ of\ Operation}{\frac{379\ scf}{lb-mole} \times \frac{2000\ lb}{ton} \times \frac{24\ hr}{day}} \times Wt\%_{Pollutant}$$

$$Controlled\ Emissions_{VOC,HAP} = Uncontrolled\ Emissions \times \left(\frac{100 - DRE}{100}\right)$$

$$Emissions_{NO_x,CO} = \frac{Emission\ Factor \times Oil\ Production\ Rate \times GOR \times Fuel\ HV \times Annual\ Hours\ of\ Operation}{\frac{2000\ lb}{ton} \times \frac{24\ hours}{day} \times \frac{1{,}000{,}000\ Btu}{MMBtu}}$$

Uncontrolled Emissions:

Pollutant	Emissions (tpy)
VOC	68.3
HAPs	0.65

Controlled Emissions:

Pollutant	Emissions (tpy)
VOC	1.37
HAPs	0.01
NO_X	0.28
CO	0.07

Fugitive Emissions

Company: Bayou Midstream LLC
Site Name: Bayou Midstream 4-Mile Facility

Product Characteristics:

VOC Weight % (Tank Vapors)	73.2	%
HAP Weight % (Tank Vapors)	0.7	%
VOC Weight % (Produced Gas)	N/A	%
HAP Weight % (Produced Gas)	N/A	%

Component Counts:

Equipment Type	Equipment Service Category			
	Gas	Heavy Oil (<20° API)	Light Oil (>20° API)	Water/ Light Oil
Connector	0	0	60	0
Flange	0	0	15	0
Open Ended Line	0	0	0	0
Pump	0	0	3	0
Valve	0	0	36	0
Other	0	0	0	0

Emission Factors (lb/hr/component):

Equipment Type	Equipment Service Category			
	Gas	Heavy Oil (<20° API)	Light Oil (>20° API)	Water/ Light Oil
Connector	4.4E-04	1.7E-05	4.6E-04	2.4E-04
Flange	8.6E-04	8.6E-07	2.4E-04	6.4E-06
Open Ended Line	4.4E-03	3.1E-04	3.1E-03	5.5E-04
Pump	5.3E-03	N/A	0.03	5.3E-05
Valve	9.9E-03	1.8E-05	5.5E-03	2.2E-04
Other	0.019	7.0E-05	0.017	0.031

Source: EPA-453/R-95-017, Protocol for Equipment Leak Emission Estimates

Equations:

$$Emissions = \frac{[(EF_{C1} \times \#_{C1}) + (EF_{C2} \times \#_{C2}) + \cdots] \times Annual\ Hours\ of\ Operation}{\frac{2000\ lb}{ton}} \times Wt\%_{Pollutant}$$

VOC Emissions (tpy):

Equipment Type	Equipment Service Category			
	Gas	Heavy Oil (<20° API)	Light Oil (>20° API)	Water/ Light Oil
Connector	--	--	0.09	--
Flange	--	--	0.01	--
Open Ended Line	--	--	0.00	--
Pump	--	--	0.28	--
Valve	--	--	0.63	--
Other	--	--	0.00	--

Total VOC Emissions:	1.01	tpy

HAP Emissions (tpy):

Equipment Type	Equipment Service Category			
	Gas	Heavy Oil (<20° API)	Light Oil (>20° API)	Water/ Light Oil
Connector	--	--	8.50E-04	--
Flange	--	--	1.11E-04	--
Open Ended Line	--	--	0.00E+00	--
Pump	--	--	2.63E-03	--
Valve	--	--	6.07E-03	--
Other	--	--	0.00E+00	--

Total HAP Emissions:	0.01	tpy

Flare Pilot Emissions

Company: Bayou Midstream LLC
Site Name: Bayou Midstream 4-Mile Facility

Produced Gas Data/Emissions Control Information:

Pilot Volume	360	scfd
Heating Value (HV)	2557	Btu/scf

Emission Factors (EF) (Flare Combustion):

Pollutant	Emission Factor (lb/MMBtu)
NO_X	0.14
CO	0.035

Source: C6 S2 O&G Production Facilities Permitting Guidance.

Equations:

$$Emissions_{NO_x,CO} = \frac{Emission\ Factor \times Fuel\ Consumption \times Fuel\ HV}{\frac{2000\ lb}{ton} \times \frac{1{,}000{,}000\ Btu}{MMBtu}}$$

$$Fuel\ Consumption = \frac{Pilot\ Volume \times Annual\ Hours\ of\ Operation}{\frac{24\ hours}{day}}$$

Emissions:

Pollutant	Emissions (tpy)
NO_X	0.02
CO	5.88E-03

V. Existing Air Quality

MAQP #5275-00 is issued for the operation of a crude oil transfer 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

The Department conducted SCREENVIEW, an EPA-approved screening model, using the indicated inputs obtained from the permit application and the emission rates located in Summary of Screen View Model Results, from the proposed Enclosed Combustor. The individual one-hour results for each pollutant were then calculated by multiplying the modeled impact of the different µg/m^3 concentrations by the percentage of each individual HAP, making up the total of the HAP emissions. The maximum 1-hour concentrations were then converted to an annual average and used in the risk assessment. The results are contained in Section VI, Health Risk Assessment, of the permit analysis.

TO Flare: SCREENVIEW Model Run

Simple Terrain Inputs:

Source Type	=	POINT
Emission Rate (lb/hr)	=	7.15×10^{-5}
Stack Height (FT)	=	8.33
Stack Inside Diam (FT)	=	2

Stack Exit Velocity (AFCM)	=	0.00231
Stack Gas Exit Temp (F)	=	1400
Ambient Air Temp (K)	=	293
Receptor Height (M)	=	0.0000
Urban/Rural Option	=	RURAL

DEQ has determined that the risks estimated in the risk assessment for the Combustor Flare are in compliance with the requirement to demonstrate negligible risk to human health and the environment. As documented in the above table and in accordance with the negligible risk requirement, no single HAP concentration results in Cancer Risk greater than 1.00E-06 and the sum of all HAPs results in a Cancer Risk of less than 1.00E-05. Further, the sum of the Chronic Noncancer Reference Exposure Level (CNCREL) hazard quotient is less than 1.0 for all HAP sources, as required to demonstrate compliance with the negligible risk requirement.

VII. Health Risk Assessment

A health risk assessment was conducted to determine if the proposed Combustor Flare complies with the negligible risk requirement of MCA 75-2-215. The emission inventory did not contain sufficient quantities of any pollutant on the Department's list of pollutants for which non-inhalation impacts must be considered; therefore, the Department determined that inhalation risk was the only necessary pathway to consider. Only those hazardous air pollutants for which there were established emission factors were considered in the emission inventory.

The Department determined that the risks estimated in the risk assessment for the Combustor Flare are in compliance with the requirement to demonstrate negligible risk to human health and the environment. As documented in the above table and in accordance with the negligible risk requirement, no single HAP concentration results in Cancer Risk greater than 1.00E-06 and the sum of all HAPs results in a Cancer Risk of less than 1.00E-05. Further, the sum of the Chronic Noncancer Reference Exposure Level (CNCREL) hazard quotient is 2.197×10^{-7}, which is less than 1.0 as required to demonstrate compliance with the negligible risk requirement.

VIII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, DEQ conducted the following private property taking and damaging assessment which is discussed in the attached Environmental Assessment.

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: John P. Proulx
Date: June 17, 2022

Bayou Midstream Bakken, LLC.

Draft EA Environmental Assessment for the

Preliminary Determination Montana Air Quality Permit #5275-00

Montana Department of Environmental Quality
Air Quality Bureau
Air Permitting Services Section
ENVIRONMENTAL ASSESSMENT

APPLICANT: Bayou Midstream Bakken, LLC.		
SITE NAME: 4-Mile Facility		
PROPOSED PERMIT NUMBER: Montana Air Quality Permit Number 5275-00		
APPLICATION DATE: May 23, 2022		
APPLICATION COMPLETE DATE: May 23, 20222		
LOCATION: Section 8, Township 25 North, Range 59 East		**COUNTY: Richland**
PROPERTY OWNERSHIP:	**FEDERAL ____ STATE ____ PRIVATE _X___**	
EA PREPARER:	**John P. Proulx – Environmental Scientist 2**	
EA Draft Date	**EA Final Date**	**Permit Final Date**
June 22, 2022	**July 27, 2022**	**August 12, 2022**

COMPLIANCE WITH THE MONTANA ENVIRONMENTAL POLICY ACT

The Montana Department of Environmental Quality (DEQ) prepared this Environmental Assessment (EA) in accordance with requirements of the Montana Environmental Policy Act (MEPA). An EA functions to determine the need to prepare an EIS through an initial evaluation and determination of the significance of impacts associated with the proposed action. However, an agency is required to prepare an EA whenever statutory requirements do not allow sufficient time for the agency to prepare an EIS. This document may disclose impacts over which DEQ has no regulatory authority.

COMPLIANCE WITH THE CLEAN AIR ACT OF MONTANA

The state law that regulates air quality permitting in Montana is the Clean Air Act of Montana (§ 75-2-201, et seq., Montana Code Annotated (MCA). DEQ may not approve a proposed project contained in an application for an air quality permit unless the project complies with the requirements set forth in the Clean Air Act of Montana and the administrative rules adopted thereunder. DEQ's approval of an air quality permit application does not relieve the Bayou Midstream Bakken, LLC. (Bayou), from complying with any other applicable federal, state, or county laws, regulations, or ordinances. Bayou is responsible for obtaining any other permits, licenses, approvals, that are required for any part of the proposed project. DEQ will decide whether to approve the permit in accordance with the requirements of the Clean Air Act of Montana. DEQ may not withhold, deny, or impose conditions on the permit based on the information contained in this Environmental Assessment. § 75-1-201(4), MCA.

SUMMARY OF THE PROPOSED ACTION: Bayou has applied for a new Montana air quality permit under the Clean Air Act of Montana for the installation of four (4) 1,000-barrel (bbl) crude oil storage tanks, one Combustor Flare, and associated equipment. The proposed action would be located in Section 8, Township 25 North, Range 59 East, Richland County, 47.9259°N, latitude and -104.1348°W, longitude. All information included in the EA is derived from the permit application, discussions with the applicant, analysis of aerial photography, topographic maps, and other research tools.

PURPOSE AND BENEFIT FOR PROPOSED ACTION: DEQ's purpose in conducting this environmental review is to act upon Bayou's air quality permit application to authorize four (4) 1,000 bbl crude oil storage tanks along with associated equipment and a combustor flare at the 4-Mile Facility. DEQ's action on the permit application is governed by the Clean Air Act of Montana, § 75-2-201, et seq., MCA and the Administrative Rules of Montana (ARM) 17.8.740, *et seq*.

The benefits of the proposed action include: The proposed facility is a crude oil transfer and storage facility. The benefits of the proposed action include on-site storage when there is no transfer availability for the crude oil.

REGULATORY RESPONSIBILITIES: In accordance with ARM 17.4.609(3)(c), DEQ must list any federal, state, or local authorities that have concurrent or additional jurisdiction or environmental review responsibility for the proposed action and the permits, licenses, and other authorizations required.

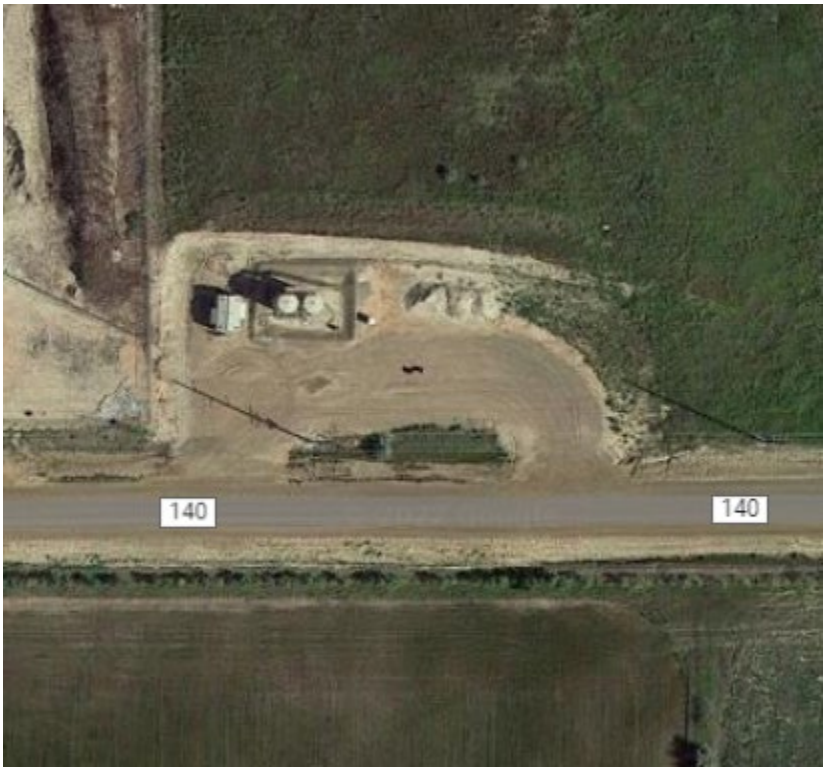
Bayou must conduct its operations according to the terms of its permit. Bayou further agrees to be legally bound by the permit, The Clean Air Act of§ 75-2-201, et seq., MCA and ARM 17.8.740, *et seq*.

Bayou must cooperate fully with, and follow the directives of any federal, state, or local entity that may have authority over Bayou's generating operations. These permits, licenses, and other authorizations may include Richland County and DEQ AQB (air quality).

Table 1: Proposed Action Details

Summary of Proposed Action	
General Overview	Bayou's air quality permit application consists of the following equipment: • Four (4) 1,000 bbl crude oil storage tanks • One (1) Combustor Flare • Associated equipment The facility would be permitted to operate until Bayou requested permit revocation or until the permit were revoked by DEQ due to gross non-compliance with the permit conditions.
Proposed Action Estimated Disturbance	
Disturbance	Minimal disturbance is estimated with the current permit action.
Proposed Action	
Duration	**Construction:** Construction or commencement would start within three years of issuance of the final air quality permit. **Construction Period:** The construction period could begin as soon as the air quality permit (and any other permits identified in this EA) were in place. **Operation Life:** Until permit is either revoked at the request of the permittee or the Department has determined the need for revocation.
Construction Equipment	Cranes, delivery trucks, various other types of smaller equipment
Personnel Onsite	**Construction:** Various number of installation personnel depending on which piece of equipment is being installed. **Operations:** Current number of employees.
Location and Analysis Area	**Location**: Section 8, Township 25 North, Range 59 East, in Richland County, MT **Analysis Area**: The area being analyzed as part of this environmental review includes the immediate project area (Figure 1), as well as neighboring lands surrounding the analysis area, as reasonably appropriate for the impacts being considered.
Air Quality	This EA will be attached to the Air Quality Permit which would include all enforceable conditions for operation of the emitting units
Conditions incorporated into the Proposed Action	The conditions developed in the Preliminary Determination of the Montana Air Quality Permit dated June 22, 2022, set forth in Sections II.A-D, and updated in the Decision Air Quality Permit if needed.

Figure 1: Map of general location of the proposed project.



EVALUATION AND SUMMARY OF POTENTIAL IMPACTS TO THE PHYSICAL AND HUMAN ENVIRONMENT IN THE AREA AFFECTED BY THE PROPOSED PROJECT:

The impact analysis will identify and evaluate direct and secondary impacts. Direct impacts are those that occur at the same time and place as the action that triggers the effect. Secondary impacts mean "a further impact to the human environment that may be stimulated or induced by or otherwise result from a direct impact of the action." ARM 17.4.603(18). Where impacts are expected to occur, the impacts analysis estimates the duration and intensity of the impact.

The duration of an impact is quantified as follows:

- **Short-term**: Short-term impacts are defined as those impacts that would not last longer than the proposed operation of the site.
- **Long-term**: Long-term impacts are defined as impacts that would remain or occur following shutdown of the proposed facility.

The severity of an impact is measured using the following:

- **No impact**: There would be no change from current conditions.
- **Negligible**: An adverse or beneficial effect would occur but would be at the lowest levels of detection.
- **Minor**: The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- **Moderate**: The effect would be easily identifiable and would change the function or integrity of the resource.
- **Major**: The effect would alter the resource.

1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Direct Impacts:

Proposed Action: Negligible impacts to topography, geology, stability, and moisture would be expected because the proposed project would occur near an already existing facility with minor disturbances due to equipment installation and site preparation.

Secondary Impacts:

Proposed Action: No secondary impacts to topography, geology, stability, and moisture are anticipated with the proposed action.

2. WATER QUALITY, QUANTITY, AND DISTRIBUTION:

Direct Impacts:

Proposed Action: No primary impacts to water quality, quantity, and distribution would be expected because the proposed project would occur near an already existing facility. Water is not required for normal operation of the proposed equipment.

Secondary Impacts:

Proposed Action: No secondary impacts are anticipated with the proposed action.

3. AIR QUALITY:

Direct Impacts:

Proposed Action: Minor impacts to air quality would be expected with the proposed action due to the facility's potential to emit air pollutants with temporary air quality impacts of particulate matter due to construction activities.

Secondary Impacts:

Proposed Action: Negligible impacts could be expected with the proposed action in the event of equipment malfunction.

4. VEGETATION COVER, QUANTITY AND QUALITY:

Direct Impacts:

Proposed Action: Minor impacts are expected with the proposed permit action due to installation of new equipment near an existing facility. The proposed project is expected to disturb already developed land on private property.

Secondary Impacts:

Proposed Action: Negligible impacts to land disturbance at the site may result in propagation of noxious weeds.

5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Direct Impacts:

Proposed Action: No primary impacts are anticipated for aquatic life because there are no aquatic habitats. Minor impacts are anticipated for terrestrial and avian habitats because the area was used for agricultural purposes.

Secondary Impacts:
Proposed Action: No secondary impacts to terrestrial, avian and aquatic life and habitats stimulated or induced by the direct impacts analyzed above would be anticipated for the proposed action.

6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Impacts:
Proposed Action: According to a Montana Natural Heritage Program, there are one (1) species of concern; Whooping Crane (bird). The area being developed is small when compared to an industrial scale and would likely not have the species of bird as a permanent presence.

7. HISTORICAL AND ARCHAEOLOGICAL SITES:

Impacts:
Proposed Action: According to the State Historical Preservation Society, there have been no previously recorded sites within the project area. No impacts to historical and archaeological sites are anticipated with the proposed action.

8. SAGE GROUSE EXECUTIVE ORDER:

The current permit action is not located in the Greater Sage Grouse habitat area.

9. AESTHETICS:

Direct Impacts:
Proposed Action: Negligible impacts may be associated with the current permit application due to the installation of new equipment near an already existing facility with temporary impacts to aesthetics due to construction activities. The site is located in a rural area next to a larger facility.

Secondary Impacts:
Proposed Action: No secondary impacts to aesthetics and noise are anticipated with the proposed action.

10. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Direct Impacts:
Proposed Action: Negligible impacts to air and energy resources associated with the operational needs of the proposed equipment are anticipated. Minor impacts to land and water are expected with the proposed permitting action due to new disturbances of existing agricultural land.

Secondary Impacts:
Proposed Action: No secondary impacts to land, water, air or energy resources are anticipated with the proposed action.

11. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:

Direct Impacts:
Proposed Actions: No primary impacts to other environmental resources are anticipated as a result of the proposed action.

Secondary Impacts:
Proposed Action: No secondary impacts to other environmental resources are anticipated as a result of the proposed action.

12. HUMAN HEALTH AND SAFETY:

Direct Impacts:
Proposed Action: Impacts to human health and safety are anticipated to be short-term and minor as a result of this project. The proposed equipment will be installed with Best Available Control Technology to minimize emissions from the new equipment.

Secondary Impacts:
Proposed Action: No secondary impacts to human health and safety are anticipated as a result of the proposed action.

13. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION:

Direct Impacts:
Proposed Action: Minor industrial impacts are anticipated due to construction and installation of new equipment. No impacts to commercial and agricultural activities are anticipated.

Secondary Impacts:
Proposed Action: No secondary impacts to industrial, commercial, water conveyance structures, and agricultural activities and production are anticipated as a result of the proposed action.

14. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Direct Impacts:
Proposed Action: No impacts to quantity and distribution of employment are anticipated for the proposed action because the site is used to store and transfer crude oil and is monitored remotely.

Secondary Impacts:
Proposed Action: Negligible increases in in distribution of employment are anticipated as a result of the proposed action.

15. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Direct Impacts:
Proposed Action: Local, state and federal governments would be responsible for appraising the property, setting tax rates, collecting taxes, from the companies, employees, or landowners benefitting from this operation.

Secondary Impacts:
Proposed Action: No secondary impacts to local and state tax base and tax revenues are anticipated as a result of the proposed action.

16. DEMAND FOR GOVERNMENT SERVICES:

Direct Impacts:
Proposed Action: Minor impacts are anticipated for demand for government services. The air quality permit and physical site associated with the current permit action would require inspections from state government representatives to ensure the facility is operating within the limits and conditions listed in the air quality permit.

Secondary Impacts:
Proposed Action: No secondary impacts are anticipated with the proposed action.

17. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

Direct Impacts:
Proposed Action: No primary impacts to the locally adopted environmental plans and goals are anticipated as a result of the proposed action.

Secondary Impacts:
Proposed Action: No secondary impacts to the locally adopted environmental plans and goals are anticipated as a result of the proposed action.

18. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Direct Impacts:
Proposed Action: No primary impacts to access and quality of recreational and wilderness activities are anticipated as a result of the proposed action. The proposed area is near an existing oil and gas well site with no recreational areas in the immediate area.

Secondary Impacts:
Proposed Action: No secondary impacts to access and quality of recreational and wilderness activities are anticipated as a result of the proposed action.

19. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Direct Impacts:
Proposed Action: No primary impacts to density and distribution of population and housing are anticipated as a result of the proposed action.

Secondary Impacts:
Proposed Action: No secondary impacts to density and distribution of population and housing are anticipated as a result of the proposed action.

20. SOCIAL STRUCTURES AND MORES:

Direct Impacts:
Proposed Action: No primary impacts anticipated to social structures and mores are anticipated as a result of the proposed action.

Secondary Impacts:
Proposed Action: No secondary impacts to social structures and mores are anticipated as a result of the proposed action.

21. CULTURAL UNIQUENESS AND DIVERSITY:

Direct Impacts:
Proposed Action: No primary impacts anticipated to cultural uniqueness and diversity are anticipated from the proposed action.

Secondary Impacts:
Proposed Action: No secondary impacts to cultural uniqueness and diversity are anticipated as a result of the proposed action.

22. PRIVATE PROPERTY IMPACTS:

The proposed action would take place on privately owned property and is not expected impact other privately owned properties. The analysis below in response to the Private Property Assessment Act indicates no impact. DEQ does not plan to deny the application or impose conditions that would restrict the regulated person's use of private property. Further, if the application is complete, DEQ must take action on the permit pursuant to § 75-2-218(2), MCA. Therefore, DEQ does not have discretion to take the action in another way that would have less impact on private property—its action is bound by a statute.

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)

YES	NO	
	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, DEQ determined there are no taking or damaging implications associated with this permit action.

23. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Due to the nature of the proposed action, no further direct or secondary impacts are anticipated from this project.

ADDITIONAL ALTERNATIVES CONSIDERED:

No Action Alternative: In addition to the proposed action, DEQ is considering a "no action" alternative. The "no action" alternative would deny the approval of the proposed action. The applicant would lack the authority to conduct the proposed activity. Any potential impacts that would result from the proposed action would not occur. The no action alternative forms the baseline from which the impacts of the proposed action can be measured.

If the applicant demonstrates compliance with all applicable rules and regulations as required for approval, the "no action" alternative would not be appropriate. Pursuant to, § 75-1-201(4)(a), (MCA) DEQ "may not withhold, deny, or impose conditions on any permit or other authority to act based on" an environmental assessment.

CUMULATIVE IMPACTS:

Cumulative impacts are the collective impacts on the human environment within the borders of Montana of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location and generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through preimpact statement studies, separate impact statement evaluation, or permit processing procedures. This environmental review analyzes the proposed action submitted by the Bayou.

DEQ considered potential impacts related to this project and potential secondary impacts. Due to the limited activities in the analysis area, cumulative impacts related to this project would be minor and short-term.

PUBLIC INVOLVEMENT:

Scoping for this proposed action consisted of internal efforts to identify substantive issues and/or concerns related to the proposed operation. Internal scoping consisted of internal review of the environmental assessment document by DEQ Air Permitting staff.

Internal efforts also included queries to the following websites/ databases/ personnel:
- Montana State Historic Preservation Office
- Montana Department of Environmental Quality (DEQ)
- Montana Natural Heritage Program

OTHER GOVERNMENTAL AGENCIES WITH JURSIDICTION:

The proposed project would be fully located on privately-owned land. All applicable local, state, and federal rules must be adhered to, which, at some level, may also include other local, state, federal, or tribal agency jurisdiction. Other governmental agencies which may have overlapping or sole jurisdiction include, but may not be limited to: Richland County, OSHA (worker safety), DEQ AQB (air quality) and Water Protection Bureau (groundwater and surface water discharge; stormwater), DNRC (water rights), and MDT (road access).

NEED FOR FURTHER ANALYSIS AND SIGNIFICANCE OF POTENTIAL IMPACTS

Under ARM 17.4.608, DEQ is required to determine the significance of impacts associated with the proposed action. This determination is the basis for the agency's decision concerning the need to prepare an environmental impact statement and also refers to DEQ's evaluation of individual and cumulative impacts. DEQ is required to consider the following criteria in determining the significance of each impact on the quality of the human environment:

1. The severity, duration, geographic extent, and frequency of the occurrence of the impact;

   "Severity" is analyzed as the density of the potential impact while "extent" is described as the area where the impact is likely to occur. An example could be that a project may propagate ten noxious weeds on a surface area of 1 square foot. In this case, the impact may be a high severity over a low extent. If those ten noxious weeds were located over ten acres there may be a low severity over a larger extent.

   "Duration" is analyzed as the time period in which the impact may occur while "frequency" is analyzed as how often the impact may occur. For example, an operation that occurs throughout the night may have impacts associated with lighting that occur every night (frequency) over the course of the one season project (duration).

2. The probability that the impact will occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;

3. Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;

4. The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values;

5. The importance to the state and to society of each environmental resource or value that would be affected;

6. Any precedent that would be set as a result of an impact of the proposed action that would commit the department to future actions with significant impacts or a decision in principle about such future actions; and

7. Potential conflict with local, state, or federal laws, requirements, or formal plans.

The significance determination is made by giving weight to these criteria in their totality. For example, impacts with moderate or major severity may be determined to be not significant if the duration of the impacts is considered to be short-term. As another example, however, moderate or major impacts of short-term duration may be considered to be significant if the quantity and quality of the resource is limited and/or the resource is considered to be unique or fragile. As a final example, moderate or major impacts to a resource may be determined to be not significant if the quantity of that resource is high or the quality of the resource is not unique or fragile.

Pursuant to ARM 17.4.607, preparation of an environmental assessment is the appropriate level of environmental review under MEPA if statutory requirements do not allow sufficient time for an agency to prepare an environmental impact statement. An agency determines whether sufficient time is available to prepare an environmental impact statement by comparing statutory requirements that establish when the agency must make its decision on the proposed action with the time required to obtain public review of an environmental impact statement plus a reasonable period to prepare a draft environmental review and, if required, a final environmental impact statement.

SIGNIFICANCE DETERMINATION

The severity, duration, geographic extent and frequency of the occurrence of the impacts associated with the proposed action would be limited. Bayou proposes to construct and operate the proposed action on private land located in Section 24, Township 25 North, Range 58 East, in Richland County**,** Montana.

DEQ has not identified any significant impacts associated with the proposed action for any environmental resource. Approving Bayou's Air Quality Application would not set precedent that commits DEQ to future actions with significant impacts or a decision in principle about such future actions. If Bayou submits another permit application, DEQ is not committed to approve those applications. DEQ would conduct a new environmental review for any subsequent air quality permit applications sought by Bayou. DEQ would make a decision on Bayou's subsequent application based on the criteria set forth in the Clean Air Act of Montana.

DEQ's issuance of an Air Quality Permit to Bayou for this proposed operation does not set a precedent for DEQ's review of other applications, including the level of environmental review. The level of environmental review decision is made based on a case-specific consideration of the criteria set forth in ARM 17.4.608.

DEQ does not believe that the proposed action has any growth-inducing or growth-inhibiting aspects or that it conflicts with any local, state, or federal laws, requirements, or formal plans. Based on a consideration of the criteria set forth in ARM 17.4.608, the proposed state action is not predicted to significantly impact the quality of the human environment. Therefore, at this time, preparation of an environmental assessment is determined to be the appropriate level of environmental review under

the Montana Environmental Protection Act.

Environmental Assessment and Significance Determination Prepared By:

John P. Proulx	**Environmental Scientist 2**
Name	**Title**

EA Reviewed By:

Craig Henrikson, P.E.	**Engineering Scientist**
Name	**Title**

Responses to Substantive Comments are located in the Permit Analysis Section of the Air Quality Permit.

References

Montana Air Quality Permit Application – 5275-00_2022_05_23_APP

https://mtnhp.org/mapviewer