

July 3, 2024

H. A. True, Executive Partner
Bridger Pipeline, LLC.
4-Mile Station
455 Poplar Street
Casper, WY 82601

Sent via email: tad.true@truecos.com

RE: Final Permit Issuance for MAQP #5275-01

Dear Mr. True:

Montana Air Quality Permit (MAQP) #5275-01 is deemed final as of June 28, 2024, by DEQ. This permit is for Bridger Pipeline, LLC. All conditions of the Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For DEQ,



Craig Henrikson
Permitting Services Section Supervisor
Air Quality Bureau
(406) 444-6711



John P. Proulx
Air Quality Engineer
Air Quality Bureau
(406) 444-5391

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

Montana Air Quality Permit #5275-01

Bridger Pipeline, LLC.
4-Mile Facility
Section 8, Township 25 North, Range 59 East
455 Poplar Street
Casper WY, 82601

June 28, 2024



MONTANA AIR QUALITY PERMIT

Issued To: Bridger Pipeline, LLC.
4-Mile Facility
455 Poplar Street
Casper, WY 82601

MAQP: #5275-01
Administrative Amendment (AA)
Request Received: 06/03/2024
DEQ's Decision on AA: 06/12/2024
Permit Final: 06/28/2024

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Bridger Pipeline, LLC. (Bridger), 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

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.

B. Current Permit Action

On June 3, 2024, The Department of Environmental Quality (DEQ) received an Administrative Amendment request to transfer ownership of the 4-Mile Facility from Bayou Midstream Bakken, LLC., to Bridger Pipeline, LLC.

Section II: Conditions and Limitations

A. Operational and Emission Limitations

1. Bridger 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. Bridger 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. Bridger 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. Bridger 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. Bridger 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. Bridger 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. Bridger shall comply with all applicable standards, testing, reporting, recordkeeping, and monitoring requirements of Title 40 Code of Federal Regulations (CFR) 60, Subpart OOOOa, *Standards 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. Bridger shall (ARM 17.8.105 and ARM 17.8.752):
 - 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. Bridger shall document the inspections, indicating the date of the inspection and the results (ARM 17.8.749).
2. Bridger 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 Bridger 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 DEQ and must be submitted to DEQ upon request (ARM 17.8.749).

D. Testing Requirements

1. DEQ 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. Bridger 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. Bridger 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. Bridger shall document, by month, the total combined throughput through tanks 01-04. By the 25th day of each month, Bridger 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. Bridger shall document, by month, the combined throughput of crude oil to the three outbound pipelines. By the 25th day of each month, Bridger 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 – Bridger 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 Bridger fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving Bridger 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 DEQ 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 Bridger 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
Bridger Pipeline, LLC.
4-Mile Facility
MAQP #5275-01

I. Introduction/Process Description

Bridger Pipeline, LLC. (Bridger), operates 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

Bridger 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.

C. Permit History

On August 12, 2022, **Montana Air Quality Permit (MAQP) #5275-00** was deemed final by DEQ.

D. Current Permit Action

On June 3, 2024, DEQ received an Administrative Amendment request to transfer ownership of the 4-Mile Facility from Bayou Midstream Bakken, LLC., to Bridger Pipeline, LLC. **MAQP #5275-01** replaces MAQP #5275-00.

E. Response to Public Comment

The current permit action is considered an administrative change and does not require a public comment period.

F. Additional Information

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

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the 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). Bridger 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) DEQ must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation, or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner that a public nuisance is created.

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

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility

9. ARM 17.8.222 Ambient Air Quality Standard for Lead
10. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀
11. ARM 17.8.230 Fluoride in Forage

Bridger 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, Bridger 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 Bridger 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 Bridger 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. Bridger 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. Bridger 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. DEQ 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 tons per year (TPY) of any pollutant. Bridger 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. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by 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 Bridger 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 PM₁₀ in a serious PM₁₀ nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #5275-01 for Bridger the following conclusions were made:
 - a. The facility's PTE is less than 100 tons/year for any pollutant.
 - b. The facility's PTE is less than 10 TPY for any single HAP and less than 25 TPY of combined HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to a current NSPS (40 CFR 60, Subpart A and 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. Bridger 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.

A BACT analysis was not required for the current permit action because the current permit action is considered an administrative permit action.

IV. Emission Inventory

An emissions inventory was calculated using Tanks 4.09d and provided with MAQP 5275-00.

The summary of the four tanks is included below.
The entire inventory is on file with DEQ.

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 ₂ S 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: CE 52 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:

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

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:

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

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

Emissions:

Pollutant	Emissions (tpy)
NO _x	0.02
CO	5.88E-03

V. Existing Air Quality

MAQP #5275-00 was 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

DEQ determined that there will be no impacts from this permitting action because this permitting action is considered an administrative action. Therefore, DEQ believes this action will not cause or contribute to a violation of any ambient air quality standard.

VII. Health Risk Assessment

A health risk assessment was conducted for MAQP 5275-00 to determine if the proposed Combustor Flare complies with the negligible risk requirement of MCA 75-2-215 and is still valid because the current permit action is considered an administrative change to the permit.

VIII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, DEQ conducted a private property taking and damaging assessment which is located in the attached environmental assessment and is located in the attached environmental assessment.

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

YES	NO	
	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)

IX. Environmental Assessment

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