

September 5, 2024

Dick Vande Bossche  
ONEOK Rockies Midstream, LLC.  
Charlie Creek Compressor Station  
P.O. Box 871  
Tulsa, OK 74012

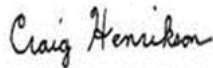
Sent via email: [dick.vandebossche@oneok.com](mailto:dick.vandebossche@oneok.com)

**RE: Final Permit Issuance for MAQP #3330-04**

Dear Mr. Vande Bossche:

Montana Air Quality Permit (MAQP) #3330-04 is deemed final as of August 31, 2024, by DEQ. This permit is for ONEOK Rockies, Midstream, 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 AIR QUALITY PERMIT

Issued To: ONEOK Rockies Midstream, LLC  
Charlie Creek Compressor Station  
PO Box 871  
Tulsa, OK 74102-0871

MAQP: #3330-04  
Application Complete: 06/10/2024  
Preliminary Determination Issued: 07/10/2024  
DEQ Decision Issued: 08/14/2024  
Permit Final: 08/31/2024

A Montana Air Quality Permit, with conditions, is hereby granted to ONEOK Rockies Midstream, LLC, Charlie Creek Compressor Station (ORM), 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. Location

ORM operates a natural gas compressor station located approximately 20 miles northwest of Sidney, Montana, in the SW<sup>1</sup>/<sub>4</sub> of the SE<sup>1</sup>/<sub>4</sub> of Section 14, Township 24 North, Range 55 East, in Richland County, Montana. A complete list of the permitted equipment is contained in Section I.A of the permit analysis.

### B. Current Permit Action

On May 24, 2024, the Department of Environmental Quality (DEQ) received an application from ORM to modify the Charlie Creek Compressor Station. The modification redesignated the “emergency” flare as a “process flare”.

## SECTION II: Conditions and Limitations

### A. Emission Limitations

1. ORM shall not operate more than three natural gas compressor engines at any given time (ARM 17.8.749).
2. ORM shall not operate more than one natural gas compressor engine with a maximum rated design capacity of 1340-bhp (ARM 17.8.749).
3. The compressor engine described in Section II.A.2 shall be a lean-burn engine with a catalytic oxidation unit and an air-to-fuel ratio (AFR) controller. The pound per hour (lb/hr) emission limits for the engine shall be determined using the following equation and pollutant specific grams per horsepower-hour (g/bhp-hr) emission factors (ARM 17.8.752):

#### Equation

Emission Limit (lb/hr) = Emission Factor (g/bhp-hr) \* maximum rated design capacity of engine (bhp) \* 0.002205 lb/g

Emission Factors

Oxides of Nitrogen (NO <sub>x</sub> ):	1.5 g/bhp-hr
Carbon Monoxide (CO):	0.5 g/bhp-hr
Volatile Organic Compounds (VOC):	0.5 g/bhp-hr

- ORM shall not operate more than two natural gas compressor engines with a maximum rated design capacity of 1680-bhp per engine (ARM 17.8.749).
- Each compressor engine described in Section II.A.4 shall be a rich-burn engine with an NSCR unit and an AFR controller. The lb/hr emission limits for each of the engines shall be determined using the following equation and pollutant specific g/bhp-hr emission factors (ARM 17.8.752):

Equation

Emission Limit (lb/hr) = Emission Factor (g/bhp-hr) \* maximum rated design capacity of engine (bhp) \* 0.002205 lb/g

Emission Factors

NO <sub>x</sub> :	1.0 g/bhp-hr
CO:	2.0 g/bhp-hr
VOC:	0.5 g/bhp-hr

- ORM 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).
- ORM 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).
- ORM shall treat all unpaved portions of the haul roads, access roads, parking lots, or general plant area with water and/or chemical dust suppressant as necessary to maintain compliance with the reasonable precautions limitation in Section II.A.7 (ARM 17.8.749).
- ONEOK shall operate a Process Flare (FL-1) to control emissions from facility blowdowns and volatile organic compounds (VOCs) from condensate tanks (ARM 17.8.752).

B. Testing Requirements

- The 1340-bhp capacity lean-burn compressor engine described in Section II.A.2 shall be initially tested for NO<sub>x</sub> and CO, concurrently, to demonstrate compliance with the emission limits as calculated in Sections II.A.3. The initial source testing shall be conducted within 180 days of the initial start-up date of the engine.

After the initial source test, additional testing shall continue on an every 4-year basis or according to another testing/monitoring schedule as may be approved by DEQ (ARM 17.8.105 and ARM 17.8.749).

2. ORM shall test the 1680-bhp capacity compressor engines described in Sections II.A.4 for NO<sub>x</sub> and CO, concurrently, to demonstrate compliance with the NO<sub>x</sub> and CO emission limits contained in Section II.A.5. Each engine shall be tested on an every 4-year basis or according to another testing/monitoring schedule as approved by DEQ (ARM 17.8.105 and ARM 17.8.749).
3. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
4. DEQ may require further testing (ARM 17.8.105).

### C. Operational Reporting Requirements

1. ORM 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. ORM shall notify DEQ of any construction or improvement project conducted pursuant to ARM 17.8.745, that would include a 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 or the addition of a new emission unit. The notice must be submitted to DEQ, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
3. All records compiled in accordance with this permit must be maintained by ORM 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 DEQ, and must be submitted to DEQ upon request (ARM 17.8.749).
4. ORM shall document, by month, the hours of operation of the emergency flare. By the 25<sup>th</sup> day of each month, ORM shall total the flare operating hours during the previous 12 months to verify compliance with the limitation in Section II.A.9. A written report of the compliance verification shall be submitted along with the annual emission inventory (ARM 17.8.749).

5. ORM shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emission inventory information (ARM 17.8.1204 and ARM 17.8.1207).

### SECTION III: General Conditions

- A. Inspection – ORM 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 (e.g., Continuous Emission Monitoring System (CEMS), Compliance Emission Rate Monitoring System (CERMS)) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver – The permit and the terms, conditions, and matters stated herein shall be deemed accepted if ORM fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations – Nothing in this permit shall be construed as relieving ORM of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, et seq. (ARM 17.8.756).
- D. Enforcement – Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties, or other enforcement action as specified in Section 75-2-401, et seq., MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by 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 at the location of the source.
- G. Permit Fee – Pursuant to Section 75-2-220, MCA, failure to pay the annual operation fee by ORM 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  
ONEOK Rockies Midstream, LLC  
Charlie Creek Compressor Station  
MAQP #3330-04

I. Introduction/Process Description

ONEOK Rockies Midstream, LLC. – Charlie Creek Compressor Station (ORM) is permitted for the operation of a natural gas compressor station located in the Southeast ¼ of the Southwest ¼ of Section 14, Township 24 North, Range 55 East, in Richland County, Montana.

A. Permitted Equipment

The facility consists of the following equipment:

- A Caterpillar G3516LE lean-burn natural gas fired compressor engine with a maximum rated design capacity equal to or less than 1340-brake horsepower (bhp)
- Two Waukesha 7044 GSI rich-burn natural gas fired compressor engines with a maximum rated design capacity equal to or less than 1680-bhp per engine
- A glycol reboiler unit rated at 0.50 million British thermal units per hour (MMBtu/hr) capacity
- A still vent
- Two 0.25 MMBtu/hr heaters (Line and Building Heaters)
- Three 400-barrel (bbl) condensate storage tanks
- A process flare

B. Source Description

The Charlie Creek compressor station compresses and transports natural gas from nearby gas fields. The natural gas-fired compressor engines compress the gas for transmission through the pipeline.

C. Permit History

On July 24, 2004, BPE was issued final air quality Permit **#3330-00** for the installation and operation of five Waukesha H24 GL natural gas fired compressor engines with a maximum rated design capacity of 530-bhp per engine, two building heaters, and three condensate storage tanks.

On October 28, 2004, the Montana Department of Environmental Quality (DEQ) issued a final permit modification to BPE for the addition of two 1680-bhp Waukesha 7044 GSI rich-burn natural gas compressor engines utilizing non-selective catalytic reduction (NSCR) units and air-to-fuel ratio (AFR) controllers and the addition of a 0.50 MMBtu/hr glycol reboiler and still vent. Permit **#3330-01** replaced Permit #3330-00.

On January 25, 2007, DEQ received a complete application for permit modification from Bear Paw. Specifically, Bear Paw requested the removal of five permitted 530-bhp capacity Waukesha H24GL lean-burn natural gas compressor engines and the addition of a 1340-bhp Caterpillar G3516LE lean-burn natural gas compressor engine. Permit **#3330-02** replaced Permit #3330-01.

DEQ received notification on June 18, 2012, from Bear Paw Energy, LLC., requesting an amendment to MAQP #3330-02 to change their name to ONEOK Rockies Midstream, LLC. All permit references to the facility’s name with the exception of the permit history were changed throughout this document. **MAQP #3330-03** replaced MAQP #3330-02.

D. Current Permit Action

On May 25, 2024, DEQ received an application from ONEOK Rockies Midstream, LLC., to modify their Montana Air Quality Permit. During review of other, more recent ONEOK permits, it was determined that the emergency flare aligned more with a process flare and was redesignated from “Emergency Flare” to “Process Flare - FL-1”. The modification included removal of the hourly limit for the flare and updating the emission factors for the flare to reflect current gas analysis. As a result of the gas analysis and change in flare emissions, the facilities Potential To Emit (PTE), based on 8,760 hours per year, has reduced the facilities PTE to below Title V permitting thresholds which changes the Charlie Creek Compressor Station from a synthetic minor source of emissions to a true minor source of emissions. The modification also updated the permit to current naming conventions. **MAQP #3330-04** replaces MAQP #3330-03.

E. Response to Public Comment (if received)

Person/Group Commenting	Permit Reference	Comment	DEQ Response
<b>No Public Comments Received</b>			

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 Administrative Rules of Montana (ARM) and are available, upon request, from DEQ. Upon request, DEQ will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 – General Provisions, including but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of 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).

ORM shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from 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 of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

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

1. ARM 17.8.204 Ambient Air Monitoring
2. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
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<sub>10</sub>

ORM must maintain compliance with the applicable ambient air quality standards.

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

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne Particulate Matter (PM).

(2) Under this rule, ORM shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.

3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this rule.
4. ARM 17.8.310 Particulate Matter, Industrial Process. This rule requires that no person shall cause, allow, or permit to be discharged into the atmosphere particulate matter in excess of the amount set forth in this rule.
5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. (4) Commencing July 1, 1972, no person shall burn liquid or solid fuels containing sulfur in excess of 1 pound of sulfur per million Btu fired. (5) Commencing July 1, 1971, no person shall burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions. ORM will utilize natural gas in its fuel burning equipment, which will meet this limitation.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR 60, Standards of Performance for New Stationary Sources (NSPS). This facility is not an NSPS affected source because it does not meet the definition of any NSPS subpart defined in 40 CFR 60.

The Charlie Creek compressor station is not subject to 40 CFR 60, Subpart KKK, because it does not meet the definition of a natural gas processing plant as defined in this subpart. In addition, 40 CFR 60, Subpart LLL is not applicable to the compressor station because the facility does not utilize a sweetening unit to process sour gas.

8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. Owners or operators of oil and natural gas production facilities, as defined and applied in 40 CFR Part 63, shall comply with standards and provisions of 40 CFR Part 63, Subpart HH. The Charlie Creek Compressor Station is not a National Emission Standards for Hazardous Air Pollutants (NESHAP) affected source because the facility is not a major source of Hazardous Air Pollutants (HAPs).

Owners or operators of natural gas transmission or storage facilities, as defined and applied in 40 CFR Part 63, shall comply with the standards and provisions of 40 CFR Part 63, Subpart HHH. The Charlie Creek Compressor Station is not a NESHAP affected source because the facility does not have a glycol dehydration unit. In addition, the source is not a major source of HAPs.

Owners or operators of facilities that utilize reciprocating internal combustion engines (RICE) and that are a major source of HAPs, as defined and applied in 40 CFR Part 63, shall comply with the standards and provisions of 40 CFR Part 63, Subpart ZZZZ. The Charlie Creek Compressor Station is not subject to the provisions of 40 CFR 63, Subpart ZZZZ because the facility is not a major source of HAPs.

D. ARM 17.8, Subchapter 4 – Stack Height and Dispersion Techniques, including, but not limited to:

1. ARM 17.8.401 Definitions. This rule includes a list of definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.402 Requirements. ORM must demonstrate compliance with the ambient air quality standards with a stack height that does not exceed Good Engineering Practices (GEP). The proposed height of the new or altered stacks for the Charlie Creek Compressor Station is below the allowable 65-meter GEP stack height.

E. ARM 17.8, Subchapter 5 – Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an 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. ORM 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. The air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an 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.

F. 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 air quality permit or permit alteration to construct, alter or use any air contaminant sources that have the Potential to Emit (PTE) greater than 25 tons per year of any pollutant.

ORM has a PTE greater than 25 tons per year of oxides of nitrogen (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOC); therefore, an air quality permit is required.

3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements.  
(1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. ORM 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. ORM submitted an affidavit of publication of public notice for the June 1, 2024, edition of the Sidney Herald, a newspaper of general circulation in the Town of Sidney, in Richland County, Montana as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by 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 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 ORM 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 air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the

permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.

12. ARM 17.8.763 Revocation of Permit. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
14. ARM 17.8.765 Transfer of Permit. This rule states that an air quality permit may be transferred from one person to another if written notice of Intent to Transfer, including the names of the transferor and the transferee, is sent to DEQ.

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

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications--Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification, with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source since this facility is not a listed source and the facility's PTE is below 250 tons per year of any pollutant (excluding fugitive emissions).

H. 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 source having:
  - a. PTE > 100 tons/year of any pollutant;
  - b. PTE > 10 tons/year of any one 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<sub>10</sub> in a serious PM<sub>10</sub> nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program. (1) Title V of the FCAA amendments of 1990 requires that all sources, as defined in ARM 17.8.1204(1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #3330-04 for ORM, 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 tons/year for any one HAP and less than 25 tons/year for all HAPs.
  - c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
  - d. This facility is not subject to any current NSPS.
  - e. This facility is not subject to any current NESHAP standards.
  - f. This source is not a Title IV affected source, nor a solid waste combustion unit.
  - g. This source is not an EPA designated Title V source.

### III. BACT Determination

A BACT determination is required for any new or modified source. ORM shall install on the new or modified source the maximum air pollution control capability that is technologically practicable and economically feasible, except that BACT shall be utilized.

The modification removed the hourly limit from the flare and redesignated it from “emergency flare” to “process flare”. The tanks are sources of VOC emissions in which the most effective control device for control of the emissions is through combustion of the vapors. The facility is equipped with a flare with a design of 98% destruction efficiency which is the maximum level of control for VOC emissions from fixed roof storage tanks. This level of control efficiency is also more stringent than the control device destruction efficiency requirement of 95% within the NSPS Subpart OOOOa regulations for emissions at storage vessels.

The use of a process flare for the control of VOC emissions from the tanks and vent stills constitutes BACT.

#### Emission Inventory

Source	ton/year				
	PM <sub>10</sub>	NO <sub>x</sub>	VOC	CO	SO <sub>x</sub>
1340-bhp Caterpillar 3516LE Compressor Engine	0.003	19.41	6.47	6.47	0.02
1680-bhp Waukesha Compressor Engine	0.55	16.22	8.11	32.44	0.03
1680-bhp Waukesha Compressor Engine	0.55	16.22	8.11	32.44	0.03

Glycol Reboiler Unit (0.50 MMBtu/hr)	0.02	0.22	0.18	0.01	0.001
Still Vent	0.00	0.00	25.84	0.00	0.00
0.25 MMBtu/hr Building Heater	0.01	0.09	0.00	0.04	0.00
0.25 MMBtu/hr Line Heater	0.01	0.09	0.00	0.04	0.00
400 bbl Condensate Storage Tank #1	0.00	0.00	3.54	0.00	0.00
400 bbl Condensate Storage Tank #2	0.00	0.00	3.54	0.00	0.00
400 bbl Condensate Storage Tank #3	0.00	0.00	3.54	0.00	0.00
Process Flare (including flare pilot emissions)	0.00	0.46	1.37	2.04	0.18
<b>Total</b>	<b>1.14</b>	<b>52.71</b>	<b>60.7</b>	<b>73.48</b>	<b>0.26</b>

### **1340-bhp Compressor Engine**

Brake Horsepower: 1340-bhp  
Hours of Operation: 8760 hr/yr

#### PM<sub>10</sub> Emissions

Emission Factor: 7.71E-05 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)  
Fuel Consumption: 7.55 MMBtu/hr (Maximum Design – Company Information)  
Calculations: 7.55 MMBtu/hr \* 7.71E-05 lb/MMBtu = 0.00058 lb/hr  
0.00058 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 0.003 ton/yr

#### NO<sub>x</sub> Emissions

Emission factor: 1.50 gram/bhp-hour (BACT Determination)  
Calculations: 1.50 gram/bhp-hour \* 1340-bhp \* 0.002205 lb/gram = 4.43 lb/hr  
4.43 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 19.41 ton/yr

#### VOC Emissions

Emission factor: 0.50 gram/bhp-hour (BACT Determination)  
Calculations: 0.50 gram/bhp-hour \* 1340-bhp \* 0.002205 lb/gram = 1.48 lb/hr  
1.48 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 6.47 ton/yr

#### CO Emissions

Emission factor: 0.50 gram/bhp-hour (BACT Determination)  
Calculations: 0.50 gram/bhp-hour \* 1340-bhp \* 0.002205 lb/gram = 1.48 lb/hr  
1.48 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 6.47 ton/yr

#### SO<sub>2</sub> Emission

Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)  
Fuel Consumption: 7.55 MMBtu/hr (Maximum Design – Company Information)  
Calculations: 7.55 MMBtu/hr \* 5.88E-04 lb/MMBtu = 0.004 lb/hr  
0.004 lb/hr \* 8760 hr/yr \* 0.0005 ton/lb = 0.02 ton/yr

### **1680-Hp Compressor Engines (2 Engines)**

Brake Horsepower: 1680-bhp  
Hours of Operation: 8760 hr/yr

#### PM<sub>10</sub> Emissions

Emission Factor: 9.50E-03 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)  
Fuel Consumption: 13.23 MMBtu/hr (Maximum Design – Company Information)

Calculations:  $13.23 \text{ MMBtu/hr} \times 9.5\text{E-}03 \text{ lb/MMBtu} = 0.13 \text{ lb/hr}$   
 $0.13 \text{ lb/hr} \times 8760 \text{ hr/yr} \times 0.0005 \text{ ton/lb} = 0.55 \text{ ton/yr}$

#### NO<sub>x</sub> Emissions

Emission factor: 1.00 gram/bhp-hour (BACT Determination)

Calculations:  $1.00 \text{ gram/bhp-hour} \times 1680\text{-bhp} \times 0.002205 \text{ lb/gram} = 3.70 \text{ lb/hr}$

$3.70 \text{ lb/hr} \times 8760 \text{ hr/yr} \times 0.0005 \text{ ton/lb} = 16.22 \text{ ton/yr}$

#### VOC Emissions

Emission factor: 0.50 gram/bhp-hour (BACT Determination)

Calculations:  $0.50 \text{ gram/bhp-hour} \times 1680\text{-bhp} \times 0.002205 \text{ lb/gram} = 1.85 \text{ lb/hr}$

$1.85 \text{ lb/hr} \times 8760 \text{ hr/yr} \times 0.0005 \text{ ton/lb} = 8.11 \text{ ton/yr}$

#### CO Emissions

Emission factor: 2.0 gram/bhp-hour (BACT Determination)

Calculations:  $2.0 \text{ gram/bhp-hour} \times 1680\text{-bhp} \times 0.002205 \text{ lb/gram} = 7.41 \text{ lb/hr}$

$7.41 \text{ lb/hr} \times 8760 \text{ hr/yr} \times 0.0005 \text{ ton/lb} = 32.44 \text{ ton/yr}$

#### SO<sub>2</sub> Emission

Emission factor: 5.88E-04 lb/MMBtu (AP-42, Chapter 3, Table 3.2-2, 7/00)

Fuel Consumption: 13.23 MMBtu/hr (Maximum Design – Company Information)

Calculations:  $13.23 \text{ MMBtu/hr} \times 5.88\text{E-}04 \text{ lb/MMBtu} = 0.008 \text{ lb/hr}$

$0.008 \text{ lb/hr} \times 8760 \text{ hr/yr} \times 0.0005 \text{ ton/lb} = 0.3 \text{ ton/yr}$

### **Glycol Reboiler**

Reboiler Heat Out-Put: 0.50 MMBtu/hr

Hours of Operation: 8760 hr/yr

Fuel Heating Value: 0.001 MMScf/MMBtu

Fuel Consumption:  $0.5 \text{ MMBtu/hr} \times 0.001 \text{ MMScf/MMBtu} \times 8760 \text{ hr/yr} = 4.38 \text{ MMScf/yr}$

#### PM<sub>10</sub> Emissions

Emission Factor: 7.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 03/98)

Calculations:  $7.6 \text{ lb/MMScf} \times 4.38 \text{ MMScf/yr} \times 0.0005 \text{ ton/lb} = 0.017 \text{ ton/yr}$

#### NO<sub>x</sub> Emissions

Emission Factor: 100 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 03/98)

Calculations:  $100 \text{ lb/MMScf} \times 4.38 \text{ MMScf/yr} \times 0.0005 \text{ ton/lb} = 0.219 \text{ ton/yr}$

#### VOC Emissions

Emission Factor: 5.5 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 03/98)

Calculations:  $5.5 \text{ lb/MMScf} \times 4.38 \text{ MMScf/yr} \times 0.0005 \text{ ton/lb} = 0.012 \text{ ton/yr}$

#### CO Emissions

Emission Factor: 84 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 03/98)

Calculations:  $84 \text{ lb/MMScf} \times 4.38 \text{ MMScf/yr} \times 0.0005 \text{ ton/lb} = 0.184 \text{ ton/yr}$

#### SO<sub>x</sub> Emissions

Emission Factor: 0.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 03/98)



Calculations:  $0.6 \text{ lb/MMScf} * 4.38 \text{ MMScf/yr} * 0.0005 \text{ ton/lb} = 0.001 \text{ ton/yr}$

### **Dehydrator Still Vent**

Hours of Operation: 8760 hr/yr

Emission Factor: 5.90 lb/hr (GRI-GLYcalc, EPA Approved Still Vent Emission Estimation Program)

Calculations:  $5.90 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 25.84 \text{ ton/yr}$

### **0.25 MMBtu/hr Heaters (2 Heaters)**

Maximum Capacity: 0.25 MMBtu/hr

Hours of Operation: 8760 hr/yr

Max Fuel Usage:  $0.25 \text{ MMBtu/hr} * 0.001 \text{ MMScf/1 MMBtu} = 0.00025 \text{ MMScf/hr}$

### **PM<sub>10</sub> Emissions**

Emission Factor: 7.60 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)

Calculations:  $7.60 \text{ lb/MMScf} * 0.00025 \text{ MMScf/hr} = 0.002 \text{ lb/hr}$

$0.002 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.01 \text{ ton/yr}$

### **NO<sub>x</sub> Emissions**

Emission factor: 94 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)

Calculations:  $94 \text{ lb/MMScf} * 0.00025 \text{ MMScf/hr} = 0.02 \text{ lb/hr}$

$0.02 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.09 \text{ ton/yr}$

### **VOC Emissions**

Emission factor: 5.5 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)

Calculations:  $5.5 \text{ lb/MMScf} * 0.00025 \text{ MMScf/hr} = 0.001 \text{ lb/hr}$

$0.001 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.00 \text{ ton/yr}$

### **CO Emissions**

Emission factor: 40 lb/MMScf (AP-42, Chapter 1, Table 1.4-1, 7/98)

Calculations:  $40 \text{ lb/MMScf} * 0.00025 \text{ MMScf/hr} = 0.01 \text{ lb/hr}$

$0.01 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.04 \text{ ton/yr}$

### **SO<sub>2</sub> Emission**

Emission factor: 0.6 lb/MMScf (AP-42, Chapter 1, Table 1.4-2, 7/98)

Calculations:  $0.6 \text{ lb/MMScf} * 0.00025 \text{ MMScf/hr} = 0.0002 \text{ lb/hr}$

$0.0002 \text{ lb/hr} * 8760 \text{ hr/yr} * 0.0005 \text{ ton/lb} = 0.00 \text{ ton/yr}$

### **400 bbl Condensate Storage Tanks (3 Tanks)**

#### **VOC Emissions**

Emission Factor: 7074.94 lb/yr (EPA Tanks, Version 4.0)

Calculations:  $7074.94 \text{ lb/yr} * 0.0005 \text{ ton/lb} = 3.54 \text{ ton/yr}$

Process Flare - FL-1

Equipment Information	
	FL-1
Description	Flare
VOC to Flare (lb/hr)	47.41
Stream Heat Content (Btu/scf)	1,631
Stream Net Btu Value (Btu/hr)	1,497,772
Operating Hours	8,760
Control Efficiency	98%
Pilot Stream Heat Content (Btu/scf)	1,026
Pilot Gas Flow Rate (scfh)	25.00
Pilot Gas Capacity (mmBtu/hr)	0.026
Pilot Operating Hours	8,760

AP-42/EPA Emission Factors			
	Flare Stream		Pilot Gas
NOx (lb/mmBtu)	0.068	NOx (lb/mmscf)	100.0
CO (lb/mmBtu)	0.31	CO (lb/mmscf)	84.0
VOC	Mass Balance	VOC (lb/mmscf)	5.5
SO <sub>2</sub>	Stoichiometric	SO <sub>2</sub> (lb/mmscf)	0.6
PM <sub>10/2.5</sub>	--	PM <sub>10/2.5</sub> (lb/mmscf)	1.9
PM <sub>COND</sub>	--	PM <sub>COND</sub> (lb/mmscf)	5.7
PM <sub>TOT</sub>	--	PM <sub>TOT</sub> (lb/mmscf)	7.6
Formaldehyde	--	Formaldehyde (lb/mmscf)	7.50E-02
n-Hexane	Mass Balance	n-Hexane (lb/mmscf)	1.80E+00
Benzene	Mass Balance	Benzene (lb/mmscf)	2.10E-03
Toluene	Mass Balance	Toluene (lb/mmscf)	3.40E-03
Ethylbenzene	Mass Balance	Ethylbenzene	--
Xylenes	Mass Balance	Xylenes	--
Other HAP	Mass Balance	Other HAP (lb/mmscf)	1.90E-03
Carbon Dioxide (CO <sub>2</sub> ) (kg/mmBtu)	53.06/Mass Balance	Carbon Dioxide (CO <sub>2</sub> ) (kg/mmBtu)	53.06
Methane (CH <sub>4</sub> ) (kg/mmBtu)	0.001/Mass Balance	Methane (CH <sub>4</sub> ) (kg/mmBtu)	1.00E-03
Nitrous Oxide (N <sub>2</sub> O) (kg/mmBtu)	1.00E-04	Nitrous Oxide (N <sub>2</sub> O) (kg/mmBtu)	1.00E-04

Notes:

1) NOx and CO emission factors (lb/mmBtu), flare stream: AP-42, Table 13.5-1 (2/2018). Pilot criteria and HAP emission factors (lb/mmscf): AP-42, Table 1.4-1, -2 (7/98). GHG emission factors (kg/mmBtu): 40 CFR 98.

Unit ID: FL-1

Total: Stream + Pilot

Pollutant	Hourly Emissions	Annual Emissions
NO <sub>x</sub>	0.10 lb/hr	0.46 TPY
CO	0.47 lb/hr	2.04 TPY
VOC	0.31 lb/hr	1.37 TPY
SO <sub>2</sub>	0.04 lb/hr	0.18 TPY
PM <sub>102.5</sub>	<0.01 lb/hr	<0.01 TPY
PM <sub>COND</sub>	<0.01 lb/hr	<0.01 TPY
PM <sub>101</sub>	<0.01 lb/hr	<0.01 TPY
Formaldehyde	<0.01 lb/hr	<0.01 TPY
n-Hexane	<0.01 lb/hr	<0.01 TPY
Benzene	<0.01 lb/hr	<0.01 TPY
Toluene	<0.01 lb/hr	<0.01 TPY
Other HAP	<0.01 lb/hr	<0.01 TPY
CO <sub>2</sub>	181.98 lb/hr	797.08 TPY
CH <sub>4</sub>	0.31 lb/hr	1.34 TPY
N <sub>2</sub> O	<0.01 lb/hr	<0.01 TPY

Stream Emissions

Pollutant	Emission Factor	Capacity	Conversion	Hourly Emissions	Operating Hours	Conversion	Annual Emissions
NO <sub>x</sub>	6.80E-02 lb/mmBtu	X 1.50E+00 mmBtu/hr	X - -	= 0.10 lb/hr	X 8,760	X 0.0005 ton/lb	= 0.45 TPY
CO	3.10E-01 lb/mmBtu	X 1.50E+00 mmBtu/hr	X - -	= 0.46 lb/hr	X 8,760	X 0.0005 ton/lb	= 2.03 TPY
VOC	- -	- -	- -	= 0.31 lb/hr	X 8,760	X 0.0005 ton/lb	= 1.37 TPY
SO <sub>2</sub>	- -	- -	- -	= 0.04 lb/hr	X 8,760	X 0.0005 ton/lb	= 0.18 TPY
CO <sub>2</sub>	5.31E+01 kg/mmBtu	X 1.50E+00 mmBtu/hr	X 2.20462 lb/kg	= 175.21 lb/hr	X 8,760	X 0.0005 ton/lb	= 767.40 TPY
CO <sub>2</sub>	- -	- -	- -	= 3.78 lb/hr	X 8,760	X 0.0005 ton/lb	= 16.54 TPY
CH <sub>4</sub>	1.00E-03 kg/mmBtu	X 1.50E+00 mmBtu/hr	X 2.20462 lb/kg	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= 0.01 TPY
CH <sub>4</sub>	- -	- -	- -	= 0.30 lb/hr	X 8,760	X 0.0005 ton/lb	= 1.33 TPY
N <sub>2</sub> O	1.00E-04 kg/mmBtu	X 1.50E+00 mmBtu/hr	X 2.20462 lb/kg	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= <0.01 TPY

Pilot Emissions

Pollutant	Emission Factor	Capacity	Conversion	Hourly Emissions	Operating Hours	Conversion	Annual Emissions
NO <sub>x</sub>	1.00E+02 lb/mmscf	X 2.50E-05 mmscf/hr	X - -	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= 0.01 TPY
CO	8.40E+01 lb/mmscf	X 2.50E-05 mmscf/hr	X - -	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= 0.01 TPY
VOC	5.50E+00 lb/mmscf	X 2.50E-05 mmscf/hr	X - -	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= <0.01 TPY
SO <sub>2</sub>	6.00E-01 lb/mmscf	X 2.50E-05 mmscf/hr	X - -	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= <0.01 TPY
PM <sub>102.5</sub>	1.90E+00 lb/mmscf	X 2.50E-05 mmscf/hr	X - -	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= <0.01 TPY
PM <sub>COND</sub>	5.70E+00 lb/mmscf	X 2.50E-05 mmscf/hr	X - -	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= <0.01 TPY
PM <sub>101</sub>	7.60E+00 lb/mmscf	X 2.50E-05 mmscf/hr	X - -	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= <0.01 TPY
Formaldehyde	7.50E-02 lb/mmscf	X 2.50E-05 mmscf/hr	X - -	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= <0.01 TPY
n-Hexane	1.80E+00 lb/mmscf	X 2.50E-05 mmscf/hr	X - -	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= <0.01 TPY
Benzene	2.10E-03 lb/mmscf	X 2.50E-05 mmscf/hr	X - -	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= <0.01 TPY
Toluene	3.40E-03 lb/mmscf	X 2.50E-05 mmscf/hr	X - -	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= <0.01 TPY
Other HAP	1.80E-03 lb/mmscf	X 2.50E-05 mmscf/hr	X - -	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= <0.01 TPY
CO <sub>2</sub>	5.31E+01 kg/mmBtu	X 2.57E-02 mmBtu/hr	X 2.20462 lb/kg	= 3.00 lb/hr	X 8,760	X 0.0005 ton/lb	= 13.14 TPY
CH <sub>4</sub>	1.00E-03 kg/mmBtu	X 2.57E-02 mmBtu/hr	X 2.20462 lb/kg	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= <0.01 TPY
N <sub>2</sub> O	1.00E-04 kg/mmBtu	X 2.57E-02 mmBtu/hr	X 2.20462 lb/kg	= <0.01 lb/hr	X 8,760	X 0.0005 ton/lb	= <0.01 TPY

Notes:

1) Dehydration unit still vent emissions are routed to the combustor. Unburned VOC and HAP reported at the dehydration unit. Pilot and miscellaneous blowdown VOC and HAP reported at the combustor.

#### IV. Existing Air Quality

The compressor station is located in the SW<sup>1</sup>/<sub>4</sub> of the SE<sup>1</sup>/<sub>4</sub> of Section 14, Township 24 North, Range 55 East, in Richland County, Montana. The air quality of this area is classified as either Better than National Standards or Unclassifiable/Attainment for the National Ambient Air Quality Standards (NAAQS).

V. Air Quality Impacts

This permit contains conditions and limitations that would protect air quality for the site and surrounding area.

VI. Ambient Air Impact Analysis

DEQ determined that the impact from this permitting action is minor. DEQ believes the facility, operating under the limits and conditions included in this permit, will not cause or contribute to a violation of any applicable ambient air quality standard.

VII. Taking or Damaging Implication Analysis

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

VIII. Human Health Risk Assessment

A health risk assessment was conducted to determine if the proposed crematorium complies with the negligible risk requirement of MCA 75-2-215. The environmental effects unrelated to human health were not considered in determining compliance with the negligible risk standard but were evaluated as required by the Montana Environmental Policy Act, in determining compliance with all applicable rules or other requirements requiring protection of public health, safety, welfare, and the environment.

For the modeling analyses at the facility, ORM used AERMOD to estimate the maximum ground level concentrations for each of the pollutants evaluated. Specifically, Lakes AERMOD View Version 11.2 was used in modeling the emissions on an annual averaging time. Meteorological data was obtained from Glasgow, Montana for both the surface data the upper air data. Terrain data was imported from the National Elevation Dataset (NED) using a 1-degree resolution.

The following table lists the stack parameters for the flare which are also included under section 4.0 for the flare within the construction permit application

Unit ID	Unit Name	UTM – E (km)	UTM – N (km)
FL-1	Emergency Flare	528099.8	5297948.2

Unit ID	Release Height (ft)	Temp (°F)	Stack Diameter (ft)	Exit Gas Flow Rate (ft <sup>3</sup> /min)
FL-1	50.0	1,816	0.5	1,000

For the analysis, the fence line consists of receptors spaced at 25 meters. Beyond the fence line, the analysis consisted of a discrete grid with receptors placed 50 meters apart out to 2,500 meters in order to evaluate concentrations in the ambient air. Additionally, an analysis of the surrounding area showed that there were no residential or commercial areas within the radius of analysis.

The assessment was conducted on an annual basis for each of the pollutants in which emissions were provided to align with the incinerator requirements under §17.8.770. Additionally, toxicity values were obtained from the same MPCA code and used to compare to the results. The following table provides the pollutants that were included in the analysis, the concentrations that resulted, and the levels provided in both Table 1 and Table 2 of §17.8.770. Note that in the permit application, the emission rates are shown as down to two decimal places and may be represented as “<0.01”. For the purpose of this analysis, the actual values were used in the modeling software to obtain an accurate concentration.

Pollutant	Emission Rate (lb/hr)	Table 1 Concentration (mg/m <sup>3</sup> )	Table 2 Concentration (mg/m <sup>3</sup> )		1 <sup>st</sup> Highest Annual Result (mg/m <sup>3</sup> )
			Chronic	Acute	
Formaldehyde	2.00 x e <sup>-6</sup>	7.69 x e <sup>-3</sup>	3.60 x e <sup>-2</sup>	3.70	< 1.00 x e <sup>-5</sup>
Hexane	6.48 x e <sup>-3</sup>	-	2.00	-	3.15 x e <sup>-3</sup>
Benzene	2.26 x e <sup>-2</sup>	1.20 x e <sup>-2</sup>	7.10 x e <sup>-1</sup>	-	1.10 x e <sup>-2</sup>
Toluene	1.93 x e <sup>-2</sup>	-	4.00	-	9.39 x e <sup>-3</sup>
Ethylbenzene	1.13 x e <sup>-3</sup>	-	10.0	-	5.50 x e <sup>-4</sup>
Xylene	6.72 x e <sup>-3</sup>	-	3.00	44.0	3.27 x e <sup>-3</sup>

As shown in the above table, resulting concentrations for each of the pollutants analyzed are well below any of the toxicity thresholds. The results in the above table combined with a lack of residential or commercial structures within a large radius around the facility demonstrate that there is no human health concerns that result from the project.

#### IX. Montana Environmental Policy Act

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



**FINAL ENVIRONMENTAL ASSESSMENT**

**ONEOK Rockies Midstream – Charlie Creek Compressor Station**

**Air Quality Bureau**

**Air, Energy, and Mining Division**

## Table of Contents

<b>Project Overview</b> .....	3
<b>Location</b> .....	3
<b>Compliance with the Montana Environmental Policy Act</b> .....	3
<b>Proposed Action</b> .....	3
<b>Purpose and Need</b> .....	3
<b>EVALUATION OF AFFECTED ENVIRONMENT AND IMPACT BY RESOURCE:</b> .....	7
1. <b>Geology and Soil Quality, Stability, and Moisture</b> .....	8
2. <b>Water Quality, Quantity, and Distribution</b> .....	8
3. <b>Air Quality</b> .....	8
4. <b>Vegetation Cover, Quantity, and Quality</b> .....	9
5. <b>Terrestrial, Avian, and Aquatic Life and Habitats</b> .....	9
6. <b>Unique, Endangered, Fragile, or Limited Environmental Resources</b> .....	9
7. <b>Historical and Archaeological Sites</b> .....	10
8. <b>Aesthetics</b> .....	10
9. <b>Demands on Environmental Resources of Land, Water, Air, or Energy</b> .....	11
10. <b>Impacts on Other Environmental Resources</b> .....	11
11. <b>Human Health and Safety</b> .....	11
12. <b>Industrial, Commercial, and Agricultural Activities and Production</b> .....	12
13. <b>Quantity and Distribution of Employment</b> .....	12
14. <b>Local and State Tax Base and Tax Revenues</b> .....	12
15. <b>Demand for Government Services</b> .....	13
16. <b>Locally Adopted Environmental Plans and Goals</b> .....	13
17. <b>Access to and Quality of Recreational and Wilderness Activities</b> .....	13
18. <b>Density and Distribution of Population and Housing</b> .....	14
19. <b>Social Structures and Mores</b> .....	14
20. <b>Cultural Uniqueness and Diversity</b> .....	15
21. <b>Private Property Impacts</b> .....	15
22. <b>Other Appropriate Social and Economic Circumstances</b> .....	16
23. <b>Greenhouse Gas Assessment</b> .....	16
<b>PROPOSED ACTION ALTERNATIVES</b> .....	18
<b>CONSULTATION</b> .....	18
<b>PUBLIC INVOLVEMENT</b> .....	18
<b>OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION</b> .....	18
<b>NEED FOR FURTHER ANALYSIS AND SIGNIFICANCE OF POTENTIAL IMPACTS</b> .....	18
<b>CONCLUSIONS AND FINDINGS</b> .....	19

## Project Overview

COMPANY NAME: ONEOK Rockies Midstream  
EA DATE: June 10, 2024  
SITE NAME: Charlie Creek Compressor Station  
MAQP#: 3330-04  
Application Received Date: May 24, 2024  
Additional Information Received Date:

## Location

Township Section 14, Township 24 North, Range 55 East

County: Richland

PROPERTY OWNERSHIP: FEDERAL      STATE      PRIVATE X

## Compliance with the Montana Environmental Policy Act

Under the Montana Environmental Policy Act (MEPA), Montana agencies are required to prepare an environmental review for state actions that may have an impact on the human environment. The proposed action is considered to be a state action that may have an impact on the human environment and, therefore, the Department of Environmental Quality (DEQ) must prepare an environmental review. This Environmental Assessment (EA) will examine the proposed action and alternatives to the proposed action and disclose potential impacts that may result from the proposed and alternative actions. DEQ will determine the need for additional environmental review based on consideration of the criteria set forth in Administrative Rules of Montana (ARM) 17.4.608. DEQ may not withhold, deny, or impose conditions on the Permit based on the information contained in this EA (§ 75-1- 201(4), MCA).

## Proposed Action

ONEOK Rockies Midstream (ORM) will continue to operate a process flare to control still vent vapors. There are no changes to the human environment, emitting units, or operational environment associated with this permit action.

## Purpose and Need

Under MEPA, Montana agencies are required to prepare an environmental review for state actions that may have an impact on the human environment. The Proposed Action is considered to be a state action that may have an impact on the human environment and, therefore, DEQ must prepare an environmental review. This EA will examine the proposed action and alternatives to the proposed action and disclose potential impacts that may result from the proposed and alternative actions. DEQ will determine the need for additional environmental review based on consideration of the criteria set forth in ARM 17.4.608.



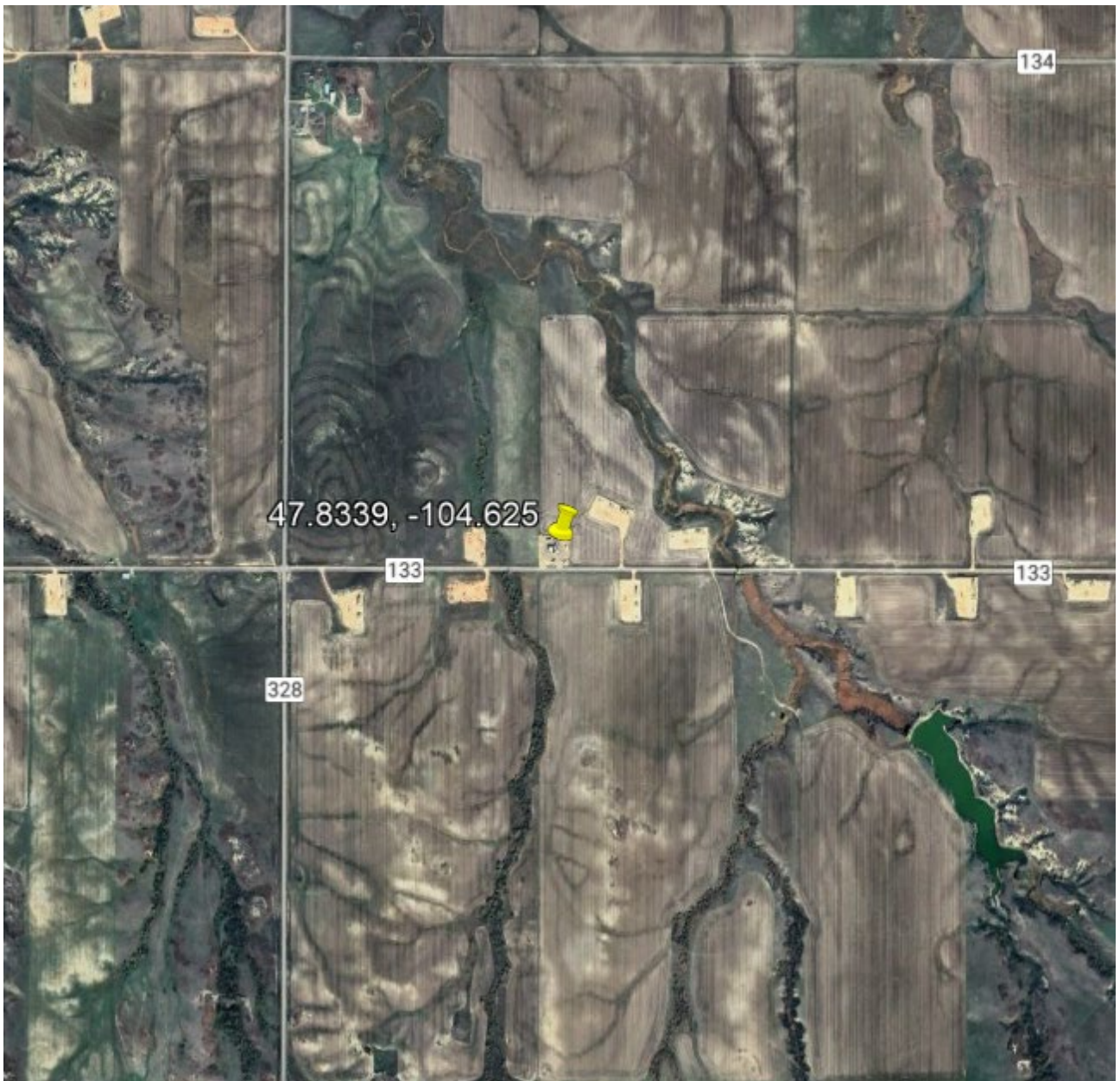
**TABLE 1: SUMMARY OF ACTIVITIES PROPOSED IN APPLICATION**

<b>Table 1. Summary of Proposed Activities in Application</b>	
<b>General Overview</b>	ORM submitted an application to modify MAQP #3330-03. The modification removed hourly limits for the “emergency flare” and redesignated the flare as an “process flare” (FL-1). ORM will continue operating the process flare to control tank and still vent emissions.
<b>Duration and Timing</b>	Construction: No construction associated with the current permit action. Operation: The flare will operate whenever emissions are generated from the tanks and still vents. Demobilization will consist of removing all necessary components associated with the process flare.
<b>Estimated Disturbance</b>	There would be no disturbance to existing land as the flare currently occupies an already existing facility.
<b>Equipment</b>	One (1) process flare.
<b>Location</b>	Location: Section 14, Township 24 North, Range 55 East. See Figure 1.
<b>Personnel on-site</b>	Construction: No construction associated with the current permit action. Operation: No additional personnel are expected to be needed to operate the unit.
<b>Location and Analysis Area</b>	The site is currently used as a natural gas compressor station.
<b>Air Quality</b>	The Applicant is required to comply with the applicable local, county, state, and federal requirements pertaining to air quality.
<b>Water Quality</b>	This project would not affect water quality because water is not part of the daily operation of the engines.
<b>Erosion Control and Sediment Transport</b>	This project is on property currently in use as a natural gas compressor station and it would not contribute to additional erosion or sediment transport. The Applicant is required to comply with all applicable local, county, state, and federal requirements pertaining to erosion control and sediment transport.
<b>Solid Waste</b>	This project would have no effect on solid waste in the area. The Applicant is required to comply with the applicable local, county, state, and federal requirements pertaining to solid waste.

<b>Cultural resources</b>	The property is already in use as a natural gas compressor station and there would be no effects on cultural resources. The Applicant is required to comply with the applicable local, county, state, and federal requirements pertaining to cultural resources.
<b>Aesthetics</b>	The property is already in use as a natural gas compressor station with not change to the aesthetics of the area.
<b>Hazardous Substances</b>	This project does not contribute any hazardous substances to the facility. The Applicant is required to comply with the applicable local, county, state, and federal requirements pertaining to hazardous substances.
<b>Weed Control</b>	The Applicant is required to comply with the applicable local, county, state, and federal requirements pertaining to weed control.
<b>Reclamation Plans</b>	The property is already in use as commercial property and would not require reclamation at the end of the projects lifespan.

Cumulative Impact Considerations	
<b>Past Actions</b>	This is an existing site used as a natural gas compressor station.
<b>Present Actions</b>	Continues operation of a process flare.
<b>Related Future Actions</b>	No future actions are foreseen at this site.

Figure 1. Location for the flare.



## EVALUATION OF AFFECTED ENVIRONMENT AND IMPACT BY RESOURCE:

The impact analysis will identify and evaluate whether the impacts are direct or secondary impacts to the physical environment and human population in the area to be affected by the proposed project. Direct impacts occur at the same time and place as the action that causes the impact. Secondary impacts are 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 would occur, the impacts will be described.

Cumulative impacts are the collective impacts on the human environment within the borders of Montana that could result from 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 impacts must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures. The activities identified in Table 1 were analyzed as part of the cumulative impacts assessment for each resource.

The duration is quantified as follows:

- Construction Impacts (short-term): These are impacts to the environment during the construction period. When analyzing duration, please include a specific range of time.
- Operation Impacts (long-term): These are impacts to the environment during the operational period. When analyzing duration, please include a specific range of time.

The intensity of the impacts 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. Geology and Soil Quality, Stability, and Moisture

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

### *Direct Impacts:*

There are no direct impacts to topography, geology, stability, and moisture with the proposed action.

### *Secondary Impacts:*

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

### *Cumulative Impacts:*

Since there are no direct and no secondary impacts to topography, geology, stability, and moisture, there are also no cumulative impacts anticipated from this project.

## 2. Water Quality, Quantity, and Distribution

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

The proposed action does not use water in any processes.

### *Direct Impacts:*

There are no direct impacts expected to water quality, quantity, and distribution from this project.

### *Secondary Impacts:*

There are no secondary impacts to water quality, quantity, and distribution expected from this project.

### *Cumulative Impacts:*

There are no cumulative impacts to water quality, quantity, and distribution expected from this project.

## 3. Air Quality

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station. The area where the proposed project is located is classified as attainment/unclassifiable for all pollutants by DEQ. An Emissions Inventory is located in Section IV of the MAQP Analysis.

### *Direct Impacts:*

DEQ determined, based on the amount of allowable emissions, that the impacts from this permitting action will be minor. DEQ believes it will not cause or contribute to a violation of any ambient air quality standard based on the amount of potential emissions and air dispersion characteristics of the area.

### *Secondary Impacts:*

Negligible impacts to air quality could be expected with the proposed action in the event of

equipment malfunction.

***Cumulative Impacts:***

Cumulative impacts to air quality would be negligible based on the hours of operation, Best Available Control Technology for this project, and air dispersion characteristics of the area.

**4. Vegetation Cover, Quantity, and Quality**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

The proposed action does not disturb any new vegetative cover.

***Direct Impacts:***

There are no direct impacts expected to vegetation cover, quantity, and quality from this project.

***Secondary Impacts:***

No secondary impacts to vegetation cover, quantity, and quality are expected as a result of this project.

***Cumulative Impacts:***

Cumulative impacts to vegetation cover, quantity, and quality are minor due to the size and scope of the project.

**5. Terrestrial, Avian, and Aquatic Life and Habitats**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

***Direct Impacts:***

There are no direct impacts expected to terrestrial, aquatic, and avian habitats with the proposed project.

***Secondary Impacts:***

No secondary impacts to terrestrial, avian and aquatic life and habitats would be expected.

***Cumulative Impacts:***

There are no cumulative impacts to terrestrial, avian and aquatic life and habitats expected from this project.

**6. Unique, Endangered, Fragile, or Limited Environmental Resources**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

A survey of endangered or fragile species was conducted for the area where the proposed project would occur. Four (4) species of concern was identified;

Bird – Loggerhead Shrike, Sprague’s Pipit, Baird’s Sparrow, Chestnut-collared Longspur

Additionally, the proposed project is not in core, general or connectivity sage grouse habitat, as designated by the Sage Grouse Habitat Conservation Program (Program) at:

<http://sagegrouse.mt.gov>. Impacts to sage grouse would not be expected.

***Direct Impacts:***

No impacts to unique, endangered, fragile, or limited environmental resources would be caused by the proposed action.

The Sage Grouse Habitat Conservation Program has stated that the proposed project would not occur in core, general or connectivity sage grouse habitat. Therefore, impacts to sage grouse would not occur.

***Secondary Impacts:***

No secondary impacts to unique, endangered, fragile, or limited environmental resources that could be stimulated or induced by the direct impacts analyzed above would be expected.

***Cumulative Impacts:***

No cumulative impacts to unique, endangered, fragile, or limited environmental resources, or sage grouse would be expected.

## **7. Historical and Archaeological Sites**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

No previously recorded sites within the designated search local were identified.

***Direct Impacts:***

No direct impacts to historical and archaeological sites are expected from this project.

***Secondary Impacts:***

No secondary impacts to historical and archaeological sites are anticipated.

***Cumulative Impacts:***

No cumulative impacts to historical and archeological sites would be expected.

## **8. Aesthetics**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

***Direct Impacts:***

There are no direct impacts expected to aesthetics from this project.

***Secondary Impacts:***

No secondary impacts to aesthetics are anticipated.

***Cumulative Impacts:***

No cumulative impacts to aesthetics would be expected from this project.

## 9. Demands on Environmental Resources of Land, Water, Air, or Energy

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

There is no change to the operation of the site.

### *Direct Impacts:*

There are no direct impacts expected to demands on environmental resources of land, water, air, or energy from this project.

### *Secondary Impacts:*

No secondary impacts to demands on environmental resources of land, water, air, or energy would be anticipated.

### *Cumulative Impacts:*

Negligible cumulative impacts to demands on environmental resources of land, water, air, or energy would be expected.

## 10. Impacts on Other Environmental Resources

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

### *Direct Impacts:*

There are no direct impacts to other environmental resources expected from this project.

### *Secondary Impacts:*

No secondary impacts to other environmental resources are anticipated as a result of the proposed project.

### *Cumulative Impacts:*

No cumulative impacts to other environmental resources would be expected.

## 11. Human Health and Safety

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station. A Human Health Risk Assessment was completed for the project and is located in Section VIII of the MAQP Analysis. The flare being operated must comply with the permit conditions included in MAQP #3330-04, which are protective of human health and safety.

### *Direct Impacts:*

Direct impacts to human health and safety are expected to be negligible for this project. The area is considered rural with good air dispersion characteristics. MAQP #3330-04 has conditions that limit the amount of emissions from the facility.



***Secondary Impacts:***

Based on the Human Health Risk assessment, no secondary impacts to human health and safety would be expected.

***Cumulative Impacts:***

Negligible cumulative impacts to human health and safety are expected from this project.

**12. Industrial, Commercial, and Agricultural Activities and Production**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

***Direct Impacts:***

There are no direct impacts to industrial, commercial, agricultural activities, or production expected from this project.

***Secondary Impacts:***

No secondary impacts to industrial, commercial, and agricultural activities and production would be expected.

***Cumulative Impacts:***

No cumulative impacts to industrial, commercial, and agricultural activities and production are expected as a result of this project.

**13. Quantity and Distribution of Employment**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

***Direct Impacts:***

There are no direct impacts to quantity and distribution of employment expected from this project.

***Secondary Impacts:***

No secondary impacts to quantity and distribution of employment are anticipated as a result this project.

***Cumulative Impacts:***

No cumulative impacts to the quantity and distribution of employment would be expected.

**14. Local and State Tax Base and Tax Revenues**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

***Direct Impacts:***

No direct impacts to the tax base or revenues are anticipated as a result of this project.

***Secondary Impacts:***

No secondary impacts to local and state tax base and tax revenues would be expected.

***Cumulative Impacts:***

No cumulative impacts to local and state tax base and tax revenues would be expected.

**15. Demand for Government Services**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

The site will continue to be inspected by various regulatory agencies.

***Direct Impacts:***

There are no direct impacts to the demand for government services expected from this project.

***Secondary Impacts:***

No secondary impacts to the demand for government services are anticipated as a result of the proposed project.

***Cumulative Impacts:***

No cumulative impacts to the demand for government services are anticipated as a result of this project.

**16. Locally Adopted Environmental Plans and Goals**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

DEQ is not aware of any additional policies and plans.

***Direct Impacts:***

There are no direct impacts expected to locally adopted environmental plans and goals anticipated from this project.

***Secondary Impacts:***

No secondary impacts to locally adopted environmental plans and goals are anticipated as a result of the proposed incinerator.

***Cumulative Impacts:***

No cumulative impacts to locally adopted environmental plans and goals would be expected.

**17. Access to and Quality of Recreational and Wilderness Activities**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

***Direct Impacts:***

There are no direct impacts expected to access to or quality of recreational and wilderness activities from this project.

***Secondary Impacts:***

No secondary impacts to access to or quality of recreational and wilderness activities are anticipated.

***Cumulative Impacts:***

No cumulative impacts to access to or quality of recreational and wilderness activities would be expected.

**18. Density and Distribution of Population and Housing**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

***Direct Impacts:***

No direct impacts to density and distribution of population and housing are anticipated with the proposed project.

***Secondary Impacts:***

No secondary impacts to density and distribution of population and housing are anticipated as a result of the proposed project.

***Cumulative Impacts:***

No cumulative impacts to density and distribution of population and housing are anticipated as a result of this project.

**19. Social Structures and Mores**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station.

DEQ is not aware of any social structures and mores that would be affected by the proposed activity. Based on the information provided by the applicant, it is not anticipated that this project would disrupt traditional lifestyles or communities.

***Direct Impacts:***

No direct impacts to social structures and mores are anticipated as a result of the proposed project.

***Secondary Impacts:***

No secondary impacts to social structures and mores are anticipated as a result of the proposed project.

***Cumulative Impacts:***

No cumulative impacts to social structures and mores would be expected.

**20. Cultural Uniqueness and Diversity**

The proposed project is for continued operation of a process flare located on an already developed location that is currently used as a natural gas compressor station. Based on the information provided by the Applicant, DEQ is not aware of any cultural uniqueness and diversity of the area that would be affected by the proposed activity.

***Direct Impacts:***

No impacts to cultural uniqueness and diversity are anticipated from this project.

***Secondary Impacts:***

No secondary impacts to cultural uniqueness and diversity are anticipated as a result of the proposed project.

***Cumulative Impacts:***

No cumulative impacts to cultural uniqueness and diversity would be expected.

**21. Private Property Impacts**

The proposed action would take place on privately-owned land. 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 so as to constitute a taking. 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)
	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)

The proposed project would take place on private land. DEQ has determined that the permit conditions are reasonably necessary to ensure compliance with applicable requirements under the Montana Clean Air Act. Therefore, DEQ’s approval of MAQP #5306-00 would not have private property-taking or damaging implications.

## 22. Other Appropriate Social and Economic Circumstances

Due to the nature and scope of the proposed project activities, no further direct or secondary impacts would be anticipated from this project.

## 23. Greenhouse Gas Assessment

The proposed project is a modification to remove hourly limits for the “emergency flare” and to redesignate the flare as a “process flare”. ORM will continue operating the process flare to control tank and still vent emissions on an already developed location that is currently used as a natural gas compressor station. The analysis area for this resource is limited to the activities regulated by the issuance of MAQP #3330-04.

For the purpose of this analysis, DEQ has defined greenhouse gas emissions as the following gas species: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and many species of fluorinated compounds. The range of fluorinated compounds includes numerous chemicals which are used in many household and industrial products. Other pollutants can have some properties that also are similar to those mentioned above, but the EPA has clearly identified the species above as the primary Greenhouse Gases (GHGs). Water vapor is also technically a greenhouse gas, but its properties are controlled by the temperature and pressure within the atmosphere, and it is not considered an anthropogenic species.

Montana recently used the EPA State Inventory Tool (SIT) to develop a greenhouse gas inventory. This tool was developed by EPA to help states develop their own greenhouse gas inventories, and this relies upon data already collected by the federal government through various agencies. The inventory specifically deals with CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O and reports the total as CO<sub>2</sub>e.

The SIT consists of eleven Excel based modules with pre-populated data that can be used as default settings or in some cases, allows states to input their own data when the state believes their own data provides a higher level of quality and accuracy.

Once each of the eleven modules is filled out, the data from each module is exported into a final “synthesis” module which summarizes all of the data into a single file. Within the synthesis file, several worksheets display the output data in a number of formats such as emissions by sector and emissions by type of greenhouse gas. The SIT data is currently updated through the year 2021, as it takes several years to validate and make new data available within revised modules.

The combustion of natural gas at the site would release GHGs primarily being CO<sub>2</sub>, N<sub>2</sub>O, and much smaller concentrations of incomplete combustion of fuel components including

CH<sub>4</sub> and other volatile organic compounds (VOCs).

Additionally, there are no compressed gases, fire suppressants or refrigerants/air conditioning associated with this project which would have been considered Scope 1 emissions.

### ***Direct Impacts***

Operation of process flare for the proposed project would produce exhaust fumes containing GHGs. DEQ has calculated GHG emissions using the EPA Simplified GHG Calculator version May 2023, for the purpose of totaling GHG emissions. This tool totals CO<sub>2</sub>, N<sub>2</sub>O, and CH<sub>4</sub> and reports the total as CO<sub>2</sub> equivalent (CO<sub>2</sub>e) in metric tons CO<sub>2</sub>e. If there are also fluorinated compounds associated with the project those may also be input into the GHG calculator. The calculations in this tool are widely accepted to represent reliable calculation approaches for developing a GHG inventory.

Application information indicates that approximately 13,122 million British thermal units (MMBtu) of natural gas would be utilized per year based on one (1) process flare operating 8,760 hours per year (hr/yr). DEQ has calculated the emissions using the maximum value of the Applicant's estimate, one (1) process flare using 1.498 scf/hr and a heat value of 1020 Btu per scf.

Using the EPA's simplified GHG Emissions Calculator for sources, a maximum of 696.3 metric tons of CO<sub>2</sub>e would be produced per year of operation.

### ***Secondary Impacts***

GHG emissions contribute to changes in atmospheric radiative forcing, resulting in climate change impacts. GHGs act to contain solar energy loss by trapping longer wave radiation emitted from the Earth's surface and act as a positive radiative forcing component (BLM 2021).

Per EPA's website "Climate Change Indicators", the lifetime of carbon dioxide cannot be represented with a single value because the gas is not destroyed over time. The gas instead moves between air, ocean, and land mediums with atmospheric carbon dioxide remaining in the atmosphere for thousands of years, due in part to the very slow process by which carbon is transferred to ocean sediments. Methane remains in the atmosphere for approximately 12 years. Nitrous oxide has the potential to remain in the atmosphere for about 109 years.

The impacts of climate change throughout the Northern Great Plains of Montana include changes in flooding and drought, rising temperatures, and the spread of invasive species (BLM 2021).

### ***Cumulative Impacts***

DEQ has determined that the use of the default data provides a reasonable representation of the GHG inventory for all of the state sectors, and an estimated annual GHG inventory by year. At present, Montana accounts for 47.77 million metric tons of CO<sub>2</sub>e based on the EPA State Inventory Tool for the year 2021. This project may contribute up to 6.963e-4 million metric tons per year of CO<sub>2</sub>e. The estimated emission of 0.0006963 million metric tons of CO<sub>2</sub>e from this project would contribute 0.000156% of Montana's annual CO<sub>2</sub>e emissions.

GHG emissions that would be emitted as a result of the proposed activities would add to GHG emissions from other sources.

## **PROPOSED ACTION ALTERNATIVES**

No Action Alternative: In addition to the proposed action, DEQ must also considered a "no action" alternative. The "no action" alternative would deny the approval of MAQP #3330-04. 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 required for approval, the "no action" alternative would not be appropriate.

Other Reasonable Alternative(s): Other reasonable alternatives were not discussed as part of the current permit action.

No Action – the no action alternative would not have resulted in any different operating scenarios.

Alternatives considered but dismissed from further detailed review: no alternatives were considered as the current permit action makes no physical changes to the permit or the facilities operating environment.

## **CONSULTATION**

DEQ engaged in internal and external efforts to identify substantive issues and/or concerns related to the proposed project. Internal scoping consisted of internal review of the environmental assessment document by DEQ staff.

External scoping efforts also included queries to the following websites/databases/personnel:

MAQP #3330-04 Application, EPA State Inventory Tool, and the EPA GHG Calculator Tool, State Historical Preservation Office (SHPO), and the Montana Natural Heritage Program – Natural resource Investigation System (NRIS).

## **PUBLIC INVOLVEMENT**

The public comment period for this permit action was from 7/10/2024 through 8/9/2024. No public comments were received for the current permit action.

## **OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION**

The proposed project would be located on private land. All applicable state and federal rules must be adhered to, which, at some level, may also include other state, or federal agency jurisdiction.

This environmental review analyzes the proposed project submitted by the Applicant. The project would be negligible and would be fully reclaimed to the permitted postmining land uses at the conclusion of the project and thus would not contribute to the long-term cumulative effects of mining in the area.

## **NEED FOR FURTHER ANALYSIS AND SIGNIFICANCE OF POTENTIAL IMPACTS**

When determining whether the preparation of an environmental impact statement is needed, DEQ is required to consider the seven significance criteria set forth in ARM 17.4.608, which are as follows:

- The severity, duration, geographic extent, and frequency of the occurrence of the impact;
- 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;
- Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts – identify the parameters of the proposed action;
- The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values;
- The importance to the state and to society of each environmental resource or value that would be affected.
- Any precedent that would be set as a result of an impact of the proposed action that would commit DEQ to future actions with significant impacts or a decision in principle about such future actions; and
- Potential conflict with local, state, or federal laws, requirements, or formal plans.

## CONCLUSIONS AND FINDINGS

DEQ finds that this action results in negligible impacts to air quality and GHG emissions in Richland County, Montana. The area where the proposed permit action is located in is an already developed, rural area.

The severity, duration, geographic extent and frequency of the occurrence of the impacts associated with the proposed air quality project are insignificant. The proposed action would not result in any new disturbances.

The Applicant is continuing to operate one (1) process flare at the Charlie Creek Compressor Station as explained in MAQP #3330-00. The site would be permitted to operate the flare year-round.

As discussed in this EA, DEQ has not identified any significant impacts associated with the proposed actions for any environmental resource. DEQ does not believe that the proposed activities by the Applicant would have any growth-inducing or growth-inhibiting aspects, or contribution to cumulative impacts. The proposed site does not appear to contain known unique or fragile resources.

There are unique and known endangered fragile resources in the project area. No new disturbances to are expected with the proposed project.

There would be no impacts to aesthetics as the process flare is already installed and operating.

Demands on the environmental resources of land, water, air, or energy would not be insignificant.

Impacts to human health and safety would not be significant due to the conditions listed in MAQP# 3330-04.

As discussed in this EA, DEQ has not identified any significant impacts associated with the proposed activities on any environmental resource.

Issuance of a Montana Air Quality Permit to the Applicant does not set any precedent that



commits DEQ to future actions with significant impacts or a decision in principle about such future actions. If the Applicant submits another modification or amendment, DEQ is not committed to issuing those revisions. DEQ would conduct an environmental review for any subsequent permit modifications sought by the Applicant that require environmental review. DEQ would make permitting decisions based on the criteria set forth in the Clean Air Act of Montana.

Issuance of the Permit to the Applicant does not set a precedent for DEQ's review of other applications for Permits, including the level of environmental review. The level of environmental review decision is made based on case-specific consideration of the criteria set forth in ARM 17.4.608.

Finally, DEQ does not believe that the proposed air quality permitting action by the Applicant would have any growth-inducing or growth-inhibiting impacts that would conflict 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 operation is not predicted to significantly impact the quality of the human environment. Therefore, preparation of an EA is the appropriate level of environmental review for MEPA.

## REFERENCES

- 3330-04\_2024\_05\_24\_APP – Application received from ONEOK Rockies Midstream on May 24, 2024.
- EPA GHG Calculator Tool <https://www.epa.gov/statelocalenergy/state-inventory-and-projection-tool>
- EPA State Inventory Tool, <https://www.epa.gov/statelocalenergy/state-inventory-and-projection-tool>
- 2021 BLM Specialist Report on Annual Greenhouse Gas Emissions and Climate Trends, <https://www.blm.gov/>
- 3330-04\_2024\_06\_11\_SHPO – State Historical Preservation Office Investigation
- 3330-04\_NRIS – Natural Resource Information System Endangered Species Investigation, <https://mtnhp.org>