

January 4, 2023

Dick Vande Bossche OneOK Rockies Midstream, LLC Western Compressor Station 13800 Montford Dr, Suite 100 Dallas, TX 75244

Sent via email: dick.vandebossche@oneok.com

RE: Final Permit Issuance for MAQP #5274-00

Dear Mr. Vande Bossche:

Montana Air Quality Permit (MAQP) #5274-00 is deemed final as of 1/4/2023, by DEQ. This permit is for OneOK Western Compressor Station, a natural gas compressor station. All conditions of the Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For DEQ,

Julie A. Merkel
Permitting Services Section Supervisor

Julis A Merkel

Air Quality Bureau

(406) 444-3626

Troy M. Burrows Air Quality Scientist Air Quality Bureau (406) 444-1452

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

Montana Air Quality Permit #5274-00

ONEOK Rockies Midstream, LLC Western Compressor Station 13800 Montford Dr, Suite 100 Dallas, TX 75244

January 4, 2023



5274-00 1 Final: 1/4/2023

MONTANA AIR QUALITY PERMIT

Issued To: ONEOK Rockies Midstream, LLC

Western Compressor Station 13800 Montford Dr, Suite 100

Dallas, TX 75244

MAQP: #5274-00

Application Complete: 11/09/2022 Preliminary Determination Issued:

11/29/2022

Department's Decision Issued: 12/16/2022

Permit Final: 1/4/2023

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to ONEOK Rockies Midstream, LLC (ONEOK), pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, et seq., as amended, for the following:

Section I: Permitted Facilities

A. Permitted Equipment

ONEOK proposes to construct and operate a natural gas compressor station known as the Western Compressor Station. ONEOK would operate the following equipment at the Western Compressor Station:

Designation	Name	Pollution Control Device
	1,680-brake horsepower (bhp) Waukesha L7044	Non-selective
C-1, C-2, C-3	GSI natural gas-fired rich burn compressor	catalytic
	engines	reduction
FL-1	Process/volatile organic compound (VOC) flare	N/A
TK-1, TK-2,	400-barrel (bbl) condensate tank	Flare
TK-3	400-barrer (bbi) condensate tank	Thate
WTK-1	400-bbl produced water tank	Flare
TL-1	Condensate truck loading	N/A
MTK-1	400-bbl methanol tank	N/A
FUG	Fugitive emissions	N/A
BD	Miscellaneous venting and blowdowns	N/A

B. Plant Location

The Western Compressor Station is located at the Southwest Quarter of the Southwest Quarter of Section 24, Township 25N, Range 58E in Richland County at 47.8993 degrees latitude and -104.18 degrees longitude. The street address is County Road 350, Fairview, MT 59221 in Richland County.

Section II: Conditions and Limitations

A. Emission Limitations

- 1. ONEOK shall operate no more than three natural gas compressor engines at the Western Compressor Station. The maximum capacity of each compressor engine shall not exceed 1,680 brake horsepower (bhp) (ARM 17.8.749).
- 2. Emissions from each of three (3) 1,680-bhp rich burn Waukesha L7044GSI compressor engines shall be controlled by a non-selective catalytic reduction (NSCR) unit and an air to fuel ratio (AFR) controller. Emissions from each of the engines shall not exceed the following limits (ARM 17.8.752):

Oxides of Nitrogen (NO_x) 3.70 lb/hr Carbon Monoxide (CO) 3.70 lb/hr

- ONEOK shall operate a Process Flare (FL-1) to control emissions from facility blowdowns and volatile organic compounds (VOC) from condensate tanks (ARM 17.8.752).
- 4. ONEOK shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any sources installed after November 23, 1968, the exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304).
- 5. ONEOK 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).
- ONEOK 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 precaution limitation in Section II.A.5 (ARM 17.8.749).
- 7. ONEOK shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart JJJJ; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).
- 8. ONEOK shall comply with any applicable requirements of 40 CFR 60 Subpart OOOOa Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for any affected facilities which are constructed, modified, or reconstructed after September 18, 2015. (ARM 17.8.340 and 40 CFR 60 Subpart OOOOa).

B. Testing Requirements

1. Each of the 1,680 bhp Waukesha compressor engines shall be tested for NO_X and CO, concurrently, to demonstrate compliance with the emissions limits in Section II.A.2. Testing shall occur 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. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
- 3. The DEQ may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. ONEOK 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. ONEOK 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. All records compiled in accordance with this permit must be maintained by ONEOK 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. These records may be stored at a location other than the plant site upon approval by DEQ (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection ONEOK 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), 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 ONEOK fails to appeal as indicated below.

- C. Compliance with Statutes and Regulations Nothing in this permit shall be construed as relieving ONEOK 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 therefor, 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 ONEOK 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 Analysis ONEOK Rockies Midstream, LLC Western Compressor Station MAQP #5274-00

I. Introduction/Process Description

A. Permitted Equipment

ONEOK Rockies Midstream, LLC (ONEOK) – Western Compressor Station natural gas compressor station consisting of the following equipment:

- a. Three (3) 1,680 brake horsepower (bhp) Waukesha 7044 GSI compressor engines for the purpose of natural gas gathering.
- b. Three (3) 400-bbl condensate tanks, one (1) 400-bbl produced water tank, one (1) 400-bbl methanol tank.
- c. One (1) process/VOC flare for controlling emissions from the condensate, produced water, and emergency and relief venting from all equipment.
- d. Miscellaneous support equipment and materials equipment. Associated emission sources include condensate truck loading, fugitive emissions, and miscellaneous vents and blowdowns.

B. Source Description

ONEOK proposes to install and operate a natural gas compressor station located at the Southwest Quarter of the Southwest Quarter of Section 24, Township 25N, Range 58E in Richland County at 47.8993 degrees latitude and -104.18 degrees longitude. The facility is known as the Western Compressor Station.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility.

The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department of Environmental Quality (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. <u>ARM 17.8.101 Definitions</u>. 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.

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- 3. <u>ARM 17.8.106 Source Testing Protocol</u>. 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).
 - ONEOK 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. <u>ARM 17.8.110 Malfunctions</u>. (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. <u>ARM 17.8.111 Circumvention</u>. (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 PM₁₀

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

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. 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. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (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. (2) Under this rule, ONEOK 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. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. 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. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this rule.
- 7. 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.
- 8. ARM 17.8.340 Standard of Performance for New Stationary Sources and Emission Guidelines for Existing Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). ONEOK is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
 - a. <u>40 CFR 60, Subpart A General Provisions</u> apply to all equipment or facilities subject to an NSPS Subpart as listed below:
 - b. 40 CFR 60, Subpart JJJJ Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (SI ICE). The proposed compressor engines were manufactured after July 1, 2010; therefore, they will be subject to the Stage 2 emissions limitations of this subpart.
 - c. 40 CFR 60 Subpart OOOOa Standards of Performance for Crude Oil and Natural Gas Production, Transmissions, and Distribution is applicable for affected units for which Construction, Modification, or Reconstruction Commenced after September 18, 2015.
- 9. <u>ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories</u>. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:

- a. <u>40 CFR 63, Subpart A General Provisions</u> apply to all equipment or facilities subject to NESHAP Subpart(s) as listed below:
- b. 40 CFR 63 Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary RICE at a major or area source of HAP emissions is subject to this subpart, except if the stationary RICE is being tested at a stationary RICE test cell/stand. Therefore, ONEOK is subject to this subpart.
- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an 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. A permit application and fee were received by DEQ.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. 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.
- E. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a person to obtain an air quality permit 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 of any pollutant. ONEOK has a PTE greater than 25 tons per year of NO_x, CO, and VOC; therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. 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. ONEOK 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. ONEOK submitted an affidavit of publication of public notice for the 4/27/2022 issue of the Sidney Herald, a newspaper of general circulation in the Town of Fairview in Richland County, as proof of compliance with the public notice requirements.
- 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by 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. <u>ARM 17.8.755 Inspection of Permit</u>. 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 ONEOK 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 17.8.762 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 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.
- 11. <u>ARM 17.8.763 Revocation of Permit</u>. 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).
- 12. <u>ARM 17.8.764 Administrative Amendment to Permit</u>. 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.

- 13. <u>ARM 17.8.765 Transfer of Permit</u>. 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.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. 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.
- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (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 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 particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) in a serious PM_{10} 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 MAQP #5274-00 for ONEOK, 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 PM₁₀ nonattainment area.
- d. This facility is subject to current NSPS (40 CFR 60 Subparts A and OOOOa).
- e. This facility is subject to current NESHAP (40 CFR 63 Subparts A, HH, and ZZZZ).
- f. This source is not a Title IV affected source.
- g. This source in not a solid waste combustion unit.
- h. This source is not an EPA designated Title V source.

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

III. BACT Analysis

A BACT determination is required for each new or modified source. ONEOK 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 submitted by ONEOK in permit application #5274-00, addressing some available methods of controlling NOx, CO, and VOC emissions from the natural gasfired engines.

The site includes three four-stroke rich-burn compressor engines. Because of this style of engine combustion, the most effective technology is non-selective catalytic reduction (NSCR) technology (or three-way catalyst), which is the same technology used to reduce emissions from motor vehicle gasoline engines and has been used on rich-burn stationary engines for numerous years, employs a catalyst that reduces the emissions of NOx, CO, and VOC. Three-way catalyst promotes the chemical reduction of NOx in the presence of CO and VOC to produce oxygen and nitrogen. The three-way catalyst also contains materials that promote the oxidation of VOC and CO to form carbon dioxide and water vapor. The standard catalyst typically achieves 90 percent reduction in NOx, 50 percent reduction in VOC, and 80 percent reduction in CO. An electronic controller, which includes an oxygen sensor and feedback mechanism, is necessary to maintain the proper air/fuel ratio because rich-burn engines use nearly an equal mixture of air and fuel for effective combustion. Each of the three compressor engines is equipped with a three-way catalyst for the reduction of CO, VOC, and NOx emissions. Because this is the most effective means to reduce the three primary pollutants produced by the engines, a cost-per-ton analysis was not conducted for the pollutants. ONEOK proposed the following BACT limits for the engines:

	BACT emission	Maximum
Dollytont	limit (grams per	Allowable
Pollutant	brake horsepower-	Emissions (pounds
	hour)	per hour)
NOx	1.00	3.7
CO	1.00	3.7
VOC	0.70	2.6

DEQ concurs that these limits satisfy BACT for the three engines. Because CO and VOC are reduced via similar mechanism, compliance with CO will generally serve as a surrogate for compliance with VOC.

The facility also will operate three condensate storage tanks along with an associated produced water tank. 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 will be equipped with a flare with a 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 control options selected have controls and control costs comparable to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

IV. Emission Inventory

ONEOK Rockies Midstream, L.L.C. Western Compressor Station Facility Emissions Summary - Annual

Unit ID	Description	NOx	со	voe	SO2	PM	нсно	HAP	CO2e
	1.1.	TPY	TPY	TPY	TPY	TPY	TPY	TPY	TPY
C-1	2,492-hp Waukesha P9394GSI S5 Engine	20.78	15.16	1.20	0.05	1.53	0.72	1.19	14,062.49
C-2	2,492-hp Waukesha P9394GSI S5 Engine	20.78	15.16	1.20	0.05	1.53	0.72	1.19	14,062.49
C-3	2,492-hp Waukesha P9394GSI S5 Engine	20.78	15.16	1.20	0.05	1.53	0.72	1.19	14,062.49
FL-1	ProcessNOC Flare	1.06	2.56	4.65	<0.01	0.05	<0.01	0.03	1,524.66
TK-1	400-bbl Condensate Tank	-	-	4.10	-	-		0.22	9.12
TK-2	400-bbl Condensate Tank	-	-	0.58	-	-	-	0.22	9.12
TK-3	400-bbl Condensate Tank		-	0.58	-	-	-	0.22	9.12
WTK-1	400-bbl Produced Water Tank	1	-	0.02	-	-		<0.01	0.05
TL-1	Condensate Truck Loading	-	-	14.55	-	-	-	0.77	0.02
MTK-1	400-bbl Methanol Tank	-	-	0.34	-	-	-	0.34	-
FUG	Fugitive Emissions	-	-	11.71		-		1.18	185.26
ВО	Miscellaneous Ventin and Slowdowns to Atmosphere	-		5.80	-	-		0.11	144.66
	Total=	64.46	50.60	50.57	0.15	4.67	2.17	6.68	45,594.14

Notes:

¹⁾ Tank emissions are routed to the ProcessNOC Flare which is a single stack. Unburned VOC and HAP reported at the tanks.

²⁾ ORM requests a federally enforceable limits of 5.99 tons per year per each condensate tank and produced water tank.

¹⁾ Miscellaneous venting and blowdowns to atmosphere include, but are not limited to, miscellaneous planned and unplanned venting to atmosphere from pressure relief valves, startup, shut-down, maintenance, compressor blowdowns, pigging actions, and/or pneumatic controllers.

ONEOK Rockies Midstream, L.L.C. Western Compressor Station Facility Emissions Summary - Hourly

Unit ID	Description	NOx	со	voe	SO ₂	PM	нсно	HAP	CO₂e
	p	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
C-1	2,492-hp Waukesha P9394GSI S5 Engine	4.74	3.46	0.27	0.01	0.35	0.16	0.27	3,210.61
C-2	2,492-hp Waukesha P9394GSI S5 Engine	4,74	3.46	0.27	0.01	0,35	0.16	0.27	3,210.61
C-3	2,492-hp Waukesha P9394GSI S5 Engine	4.74	3.46	0.27	0.01	0.35	0.16	0.27	3,210.61
FL-1	ProcessNOC Flare	0.40	1.32	1.93	<0.01	0.01	<0.01	0.02	649.67
TK-1	400-bbl Condensate Tank	-	-	0.94	-	-	-	0.05	2.08
TK-2	400-bbl Condensate Tank	-	-	0.13	-	-	-	0.05	2.08
TK-3	400-bbl Condensate Tank	-	-	0.13	-	-	-	0.05	2.08
WTK-1	400-bbl Produced Water Tank	-	-	<0.01	-	-	-	<0.01	0.01
TL-1	Condensate Truck Loading	-	-	3.32	-	-	-	0.18	<0.01
MTK-1	400-bbl Methanol Tank	ı	-	0.08	ı	ı	-	0.08	-
FUG	Fugitive Emissions	1	-	2.67	ı	ı	-	0.27	42.30
BD	Miscellaneous Venting and Slowdowns to Atmosphere	ı	-	ı	1	1	-	-	-
	Total=	15.04	13.02	14.78	0.03	1.07	0.49	1.67	10,986.00

ONEOK Rockies Midstream, L.L.C. Western Compressor Station Engine Information and Manufacturer Emission Factors

	Equipment Informa	tion	
	C-1	C-2	C-3
Make	Waukesha	Waukesha	Waukesha
Mode	P9394 GSI Series 5	P9394 GSI Series 5	P9394 GSI Series 5
Desian Ratina (ho	2,492	2,492	2,492
Fuel Consumotion (Btu/ho-hr)		7,205	7,205
Fuel Consumption (scfh)	17,603	17,603	17,603
Fuel Consumption (mmBtu/hr)	17.95	17.95	17.95
Fuel Consumotion (scf/yr)	154,200,562	154,200,562	154,200,562
Fuel Heating Value (Btu/scf)	1,020	1,020	1,020
Desian Class	, 4S-RB	4S-RB	4S-RB
Controls	,	NSCR	NSCR
Operating Hours		8,760	8,760
Stack Height (ft)		30.0	30.0
Stack Diameter (ft'	1 4.5	4.5	4.5
Exhaust Temperature (°F]	1,117	1,117	1,117
Exhaust Flow (acfml	,	10,512	10,512
Exhaust Flow (scfhJ	,	211,173	211,173
Exit Velocity (ft/sJ	11.02	11.02	11.02

Uncontrolled Emission Factors										
C-1 C-2 C-3										
NOx (g/ho-hrl	12.70	12.70	12.70							
CO (g/hp-hr)	6.30	6.30	6.30							
VOE (a/ho-hr	0.10	0.10	0.10							
Formaldehyde (g/hp-hrl	0.05	0.05	0.05							
CO ₂ (g/hp-hr)	584.00	584.00	584.00							

Control Efficiency								
	C-1	C-2	C-3					
NOx	93.20%	93.20%	93.20%					
co	90.00%	90.00%	90.00%					
VOE	50.00%	50.00%	50.00%					
Formaldehvde	40.00%	40.00%	40.00%					

Post-Control Emission Factors										
C-1 C-2 C-3										
NOx (g/hp-hrJ	0.86	0.86	0.86							
CO (g/ho-hrl	0.63	0.63	0.63							
VOE (a/ho-hr	0.05	0.05	0.05							
Formaldehyde (g/hp-hrl	0.03	0.03	0.03							
CO₂ (g/hp-hr)	584.00	584.00	584.00							

Notes:

¹⁾ Emission factors based on manufacturer specifications.

ONEOK Rockies Midstream, L.L.C. Western Compressor Station Engine Emissions Calculations

Unit ID: C-1

Pollutant	Emissio	n Factor		Сар	acity		Convers	ion		Hourly Er	nissions	Ор	rating Hou	ırs	Conve	ersion		Annual Er	nissions
NOx	8.64E-01	g/hp-hr	Х	2,492	hp	Х	0.00220462	lb/gr	=	4.74	lb/hr	Х	8,760	Х	0.0005	ton/lb	11	20.78	TPY
co	6.30E-01	g/hp-hr	Χ	2,492	hp	Х	0.00220462	lb/gr	=	3.46	lb/hr	Х	8,760	Х	0.0005	ton/lb	П	15.16	TPY
voe	5.00E-02	g/hp-hr	Х	2,492	hp	Х	0.00220462	lb/gr	=	0.27	lb/hr	Х	8,760	Х	0,0005	ton/lb	=	1.20	TPY
so,	5.BBE-04	lb/mmBtu	Х	17.95	mmBtu/hr	Х			=	0.01	lb/hr	Х	8,760	Х	0,0005	ton/lb	=	0.05	TPY
PM,0,2	9.50E-03	lb/mmBtu	Х	17 95	mmBtu/hr	Х			=	0.17	lb/hr	Х	8,760	Х	0.0005	ton/lb	=	0.75	TPY
PMcoNo	9.91E-03	lb/mmBtu	Х	17.95	mmBtu/hr	Х	-	-	=	0.18	lb/hr	Х	8,760	Х	0.0005	ton/lb	=	0.78	TPY
PMror	1.94E-02	lb/mmBtu	Χ	17.95	mmBtu/hr	Х		-	=	0.35	lb/hr	Х	8,760	Х	0.0005	ton/lb	=	1.53	TPY
Acetaldehyde	1.40E-03	lb/mmBtu	Х	17.95	mmBtu/hr	Х	-	*	=	0.03	lb/hr	Х	8,760	Х	0,0005	ton/lb	=	0.11	TPY
Acrolein	1.32E-03	lb/mmBtu	Х	17.95	mmBtu/hr	Х			=	0.02	lb/hr	Х	8,760	Х	0.0005	ton/lb	ı.	0.10	TPY
Benzene	7.90E-04	lb/mmBtu	Х	17,95	mmBtu/hr	Х		-	=	0.01	lb/hr	Х	8,760	Х	0,0005	ton/lb	Ш	0.06	TPY
Ethylbenzene	1 24E-05	lb/mmBtu	Х	17.95	mmBtu/hr	Х			=	< 0.01	lb/hr	Х	8,760	Х	0.0005	ton/lb	ıř	< 0.01	TPY
Formaldehyde	3 OOE-02	g/hp-hr	Х	2,492	hp	Х	0.00220462	lb/gr	=-	0.16	lb/hr	Х	8,760	Х	0.0005	ton/lb	=	0.72	TPY
Methanol	1.53E-03	lb/mmBtu	Χ	17.95	mmBtu/hr	Х			=	0.03	lb/hr	Х	8,760	Х	0,0005	ton/lb	=	0.12	TPY
Toluene	2.79E-04	lb/mmBtu	Х	17 95	mmBtu/hr	Х			=	0.01	lb/hr	Х	8,760	Х	0,0005	ton/lb	=	0.02	TPY
Xylenes	9 75E-05	lb/mmBtu	Х	17.95	mmBtu/hr	Х			=	< 0.01	lb/hr	Х	8,760	Х	0,0005	ton/lb	=	0.01	TPY
Other HAP	5.40E-04	lb/mmBtu	Х	17,95	mmBtu/hr	Х			"	0.01	lb/hr	Х	8,760	Х	0.0005	ton/lb		0.04	TPY
co,	5.84E+02	g/hp-hr	Х	2,492.00	hp	Х	0.00220462	lb/gr	=	3,208.45	lb/hr	Х	8,760	Х	0,0005	ton/lb	=	14,052.99	TPY
CH.	1.00E-03	kg/mmBtu	Х	17.95	mmBtu/hr	Х	2,20462	lb/kg	=	0.04	lb/hr	Х	8,760	Х	0,0005	ton/lb	=	0.17	TPY
N ₂ 0	1.00E-04	kg/mmBtu	Χ	17.95	mmBtu/hr	Х	2.20462	lb/kg	=	<0.01	lb/hr	Х	8,760	Х	0,0005	ton/lb	=	0.02	TPY

ONEOK Rockies Midstream, L.L.C. Western Compressor Station Engine Emissions Calculations

Unit ID: C-2

Pollutant	Emissio	n Factor		Сара	acity		Convers	ion		Hourly Er	nissions	Ор	rating Hou	ırs	Conve	rsion		Annual Em	issions
NOx	8.64E-01	g/hp-hr	X	2,492	hp	X	0 00220462	lb/gr	=	4.74	lb/hr	X	8,760	X	0,0005	ton/lb	=	20.78	TPY
co	6.30E-01	g/hp-hr	X	2,492	hp	X	0 00220462	lb/gr	=	3.46	lb/hr	X	8,760	X	0.0005	ton/lb	Ш	15.16	TPY
voe	5.00E-02	g/hp-hr	X	2,492	hp	X	0.00220462	lb/gr	=	0.27	lb/hr	X	8,760	X	0,0005	ton/lb	П	1.20	TPY
so,	5.BBE-04	lb/mmBtu	X	17.95	mmBtu/hr	X	-	-	=	0.01	lb/hr	X	8,760	X	0.0005	ton/lb	=	0.05	TPY
PM,012.,	9.50E-03	lb/mmBtu	X	17 95	mmBtu/hr	X	-	-	=	0.17	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.75	TPY
PMcoND	9.91E-03	lb/mmBtu	X	17.95	mmBtu/hr	X	-	-	=	0.18	lb/hr	X	8,760	X	0.0005	ton/lb	=	0.78	TPY
PM, ₀₁	1.94E-02	lb/mmBtu	X	17,95	mmBtu/hr	X	-	-	=	0.35	lb/hr	X	8,760	X	0,0005	ton/lb	=	1.53	TPY
Acetaldehyde	1.40E-03	lb/mmBtu	X	17.95	mmBtu/hr	X	-	-	=	0.03	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.11	TPY
Acrolein	1,32E-03	lb/mmBtu	X	17.95	mmBtu/hr	X	-	-	=	0.02	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.10	TPY
Benzene	7.90E-04	lb/mmBtu	X	17.95	mmBtu/hr	X	-	-	=	0.01	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.06	TPY
Ethylbenzene	1.24E-05	lb/mmBtu	X	17 95	mmBtu/hr	X	-	-	=	<0.01	lb/hr	X	8,760	X	0.0005	ton/lb	=	<0.01	TPY
Formaldehyde	3,00E-02	g/hp-hr	X	2,492	hp	X	0,00220462	lb/gr		0.16	lb/hr	X	8,760	X	0.0005	ton/lb	=	0.72	TPY
Methanol	1.53E-03	lb/mmBtu	X	17.95	mmBtu/hr	X	-	-	=	0.03	lb/hr	X	8,760	X	0,0005	ton/lb	"	0.12	TPY
Toluene	2,79E-04	lb/mmBtu	X	17.95	mmBtu/hr	X	-	-	=	0.01	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.02	TPY
Xylenes	9.75E-05	lb/mmBtu	X	17.95	mmBtu/hr	X	-	-	=	<0.01	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.01	TPY
Other HAP	5.40E-04	lb/mmBtu	X	17 95	mmBtu/hr	Х	-	-	=	0.01	lb/hr	X	8,760	X	0.0005	ton/lb	=	0.04	TPY
co,	5.B4E+02	g/hp-hr	X	2,492.00	hp	X	0.00220462	lb/gr	=	3,208.45	lb/hr	X	8,760	X	0,0005	ton/lb	=	14,052.99	TPY
СН	1.00E-03	kg/mmBtu	X	17.95	mmBtu/hr	X	2.20462	lb/kg	=	0.04	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.17	TPY
N₂0	1,00E-04	kg/mmBtu	X	17.95	mmBtu/hr	X	2.20462	lb/kg	=	<0.01	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.02	TPY

ONEOK Rockies Midstream, L.L.C. Western Compressor Station Engine Emissions Calculations

Unit ID: C-3

Pollutant	Emissio	ı Factor		Сар	acity		Convers	ion		Hourly Er	missions	Ope	rating Hou	ırs	Conve	rsion		Annual En	nissions
NOic,	8.64E-01	g/hp-hr	X	2,492	hp	Χ	0 00220462	lb/gr	=	4.74	lb/hr	X	8}60	X	0.0005	ton/lb	=	20.78	TPY
co	6.30E-01	g/hp-hr	X	2,492	hp	X	0,00220462	lb/gr	=	3.46	lb/hr	X	8,760	X	0.0005	ton/lb	=	15.16	TPY
voe	5,00E-02	g/hp-hr	X	2,492	hp	X	0.00220462	lb/gr	=	0.27	lb/hr	X	8,760	X	0,0005	ton/lb	=	1.20	TPY
so,	5.BBE-04	lb/mmBtu	X	17.95	mmBtulhr	X		-	=	0.01	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.05	TPY
PM,o,u	9.50E-03	lblmmBtu	X	17,95	mmBtu/hr	X		-	=	0.17	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.75	TPY
PMcoND	9,91E-03	lb/mmBtu	X	17,95	mmBtu/hr	X	-	-	=	0.18	lb/hr	X	8,760	X	0.0005	ton/lb	=	0.78	TPY
PM, ₀₁	1,94E-02	lb/mmBtu	X	17,95	mmBtu/hr	X	-	-	=	0.35	lb/hr	X	8,760	X	0,0005	ton/lb	=	1.53	TPY
Acetaldehyde	1.40E-03	IblmmBtu	X	17.95	mmBtu/hr	X	-	-	=	0.03	lb/hr	X	8,760	X	0.0005	ton/lb	=	0.11	TPY
Acrolein	1 1 32E-03	lb/mmBtu	X	17.95	mmBtu/hr	X	-	-	=	0.02	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.10	TPY
Benzene	7.90E-04	lb/mmBtu	X	17.95	mmBtu/hr	X	-	-	=	0.01	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.06	TPY
Ethylbenzene	1,24E-05	lb/mmBtu	X	17,95	mmBtu/hr	X	-	-	=	< 0.01	lb/hr	X	8,760	X	0.0005	ton/lb	=	<0.01	TPY
Formaldehyde	3.00E-02	g/hp-hr	X	2,492	hp	X	0.00220462	lb/gr	=	0.16	lb/hr	X	8,760	X	0.0005	ton/lb	=	0.72	TPY
Methanol	1.53E-03	lb/mmBtu	X	17.95	mmBtu/hr	X	-	-	=	0.03	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.12	TPY
Toluene	2 79E-04	lb/mmBtu	X	17.95	mmBtu/hr	X	-	-	=	0.01	lb/hr	X	8,760	X	0,0005	ton/lb	=	0.02	TPY
Xylenes	9,75E-05	lb/mmBtu	X	17.95	mmBtu/hr	X	-	-	=	<0.01	lb/hr	X	8,760	X	0.0005	ton/lb	=	0.01	TPY
Other HAP	5.40E-04	lb/mmBtu	X	17,95	mmBtu/hr	X	-	-	=	0.01	lb/hr	X	8,760	X	0.0005	ton/lb	=	0.04	TPY
CO	5.84E+02	g/hp-hr	X	2,492.00	hp	Х	0.00220462	lb/gr	=	3,208.45	lb/hr	X	8,760	X	0 0005	ton/lb	=	14,052.99	TPY
CH	1.00E-03	kglmmBtu	X	17.95	mmBtu/hr	X	2.20462	lb/kg	=	0.04	lb/hr	Х	8,760	X	0,0005	ton/lb	=	0.17	TPY
N₂0	1,00E-04	kg/mmBtu	X	17.95	mmBtu/hr	Χ	2.20462	lb/kg	=	<0.01	lb/hr	Х	8,760	Х	0,0005	ton/lb	=	0.02	TPY

Health Risk Assessment

ONEOK Rockies Midstream, L.L.C. (ORM) is proposing to construct the Western Compressor Station, a new facility in Richland County. As a part of the project, ORM will construct a flare to destruct vapors from natural gas processes at the facility. Therefore, this serves as a summary of the assumptions, pollutants, and results of the assessment.

For the modeling analyses at the facility, AERMOD was used to estimate the maximum ground level concentrations for each of the pollutants evaluated. Specifically, Lakes AERMOD View Version 9.5 was used in modeling the emissions on an annual averaging time. Meteorological data was obtained from Grand Forks, 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	Process/VOC Flare	561499	5305564

Unit ID	Release Height (ft)	Temp (°F)	Stack Diameter (ft)	Exit Gas Flow Rate (ft ³ /min)
FL-1	100.0	1,500	3.0	10,417

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	Table 2 Concentration (μg/m³)		1 st Highest Annual Result
		$(\mu g/m^3)$	Chronic	Acute	$(\mu g/m^3)$
Formaldehyde	1.05e-4	7.69e-3	3.60e-2	3.70	<1.00e-5
Hexane	1.60e-2	-	2.00	-	9.10e-4
Benzene	1.31e-3	1.20e-2	7.10e-1	-	8.00e-5
Toluene	1.20e-3	-	4.00	-	7.00e-5
Ethylbenzene	9.53e-5	-	10.0	-	<1.00e-5
Xylene	4.02e-4	-	3.00	44.0	2.00e-5

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 demonstrates that there is no human health concerns that result from the project.

V. Existing Air Quality

The facility is located at County Road 350, Fairview, MT 59221 in Richland County. The air quality of the area is classified as either Better than National Standards or unclassified/attainment for the National Ambient Air Quality Standards (NAAQS) for criteria pollutants.

VI. Ambient Air Impact Analysis

DEQ determined, based on amount of allowable emission, 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.

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. Environmental Assessment

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



ONEOK Rockies Midstream, LLC

DRAFT Environmental Assessment for the Proposed Montana Air Quality Permit #5274-00

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

APPLICANT: ONEOK Rockies Midstream, LLC					
SITE NAME: Western Co	mpressor Station				
PROPOSED PERMIT NU	MBER: Montana Air Quality Permit Num	ber 5274-00			
APPLICATION DATE: A	oril 22, 2022				
APPLICATION COMPLETE DATE:					
LOCATION: Southwest Quarter of the Southwest Quarter of Section 24, COUNTY: Richland					
Township 25N, Range 58E in Richland County at 47.8993 degrees latitude					
and -104.18 degrees longitude					
PROPERTY	FEDERAL STATE PRIVATE	TE V			
OWNERSHIP:	FEDERAL STATE PRIVAL	I E _A_			
EA PREPARER:	Troy M. Burrows				
EA Draft Date	EA Final Date	Permit Final Date			
11/29/2022	12/16/2022	1/4/2023			

5274-00 1 Final Permit: 1/4/2023 Final EA: 12/16/2022

COMPLIANCE WITH THE MONTANA ENVIRONMENTAL POLICY ACT

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

COMPLIANCE WITH THE CLEAN AIR ACT OF MONTANA

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

SUMMARY OF THE PROPOSED ACTION: ONEOK has applied for a new Montana air quality permit under the Clean Air Act of Montana for the installation of three (3) 1,680 brake horsepower (bhp) Waukesha L7044 GSI compressor engines, three (3) 400-bbl condensate tanks, one (1) 400-bbl produced water tank, one (1) 400-bbl methanol tank, and one (1) process/VOC flare for controlling the emissions from the condensate, produced water, and emergency and miscellaneous relief venting from all equipment, for a natural gas compressor station. The proposed action would be in the Southwest Quarter of the Southwest Quarter of Section 24, Township 25 North, Range 58 East, Richland County, 47.8993°N, latitude and -104.18°W, longitude. All information included in the EA is derived from the permit application, discussions with the applicant, analysis of aerial photography, topographic maps, and other research tools.

PURPOSE AND BENEFIT FOR PROPOSED ACTION: DEQ's purpose in conducting this environmental review is to act upon ONEOK's air quality permit application to authorize three (3) 1,680 bhp engines and the air contaminants in connection with the before mentioned equipment. DEQ's action on the permit application is governed by the Clean Air Act of Montana, § 75-2-201, et seq., Montana Code Annotated (MCA) and the Administrative Rules of Montana (ARM) 17.8.740, et seq.

The benefits of the proposed action include: ONEOK is proposing to install the engines for the purpose of compressing natural gas to be transported through the pipeline.

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

5274-00 Final Permit: 1/4/2023 2

ONEOK must conduct its operations according to the terms of its permit. ONEOK further agrees to be legally bound by the permit, The Clean Air Act of \(75-2-201 \), et seq., Montana Code Annotated (MCA) and the Administrative Rules of Montana (ARM) 17.8.740, et seq.

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

Table 1: Proposed Action Details

Table 1: Proposed Action Details				
Summary of Proposed Action				
General Overview	ONEOK's air quality permit application consists of the following equipment: • three (3) 1,680 bhp compressor engines • three (3) 400-bbl condensate tanks • one (1) 400-bbl produced water tank • one (1) 400-bbl methanol tank • one (1) process/VOC flare The facility would be permitted to operate until ONEOK requested permit revocation or until the permit were revoked by DEQ due to gross non-			
	compliance with the permit conditions.			
Proposed Action Estimated Disturbance				
Disturbance	Minimal disturbance is estimated with the current permit action.			
	Proposed Action			
Duration	Construction: Construction or commencement would start within three years of issuance of the final air quality permit. Construction Period: The construction period could begin as soon as the air quality permit (and any other permits identified in this EA) were in place. Operation Life: Until permit is either revoked at the request of the permittee or DEQ has determined the need for revocation.			
Construction Equipment	Cranes, delivery trucks, various other types of smaller equipment			
Personnel Onsite	Construction: Various number of installation personnel depending on which piece of equipment is being installed. Operations: Unmanned facility			
Location and Analysis Area	Location : Section 24, Township 25N, Range 58E, in Richland County, MT Analysis Area : The area being analyzed as part of this environmental review includes the immediate project area, as well as neighboring lands surrounding the analysis area, as reasonably appropriate for the impacts being considered.			
Air Quality	This EA will be attached to the Air Quality Permit which would include all enforceable conditions for operation of the emitting units			
Conditions incorporated into the Proposed Action	The conditions developed in the Preliminary Determination of the Montana Air Quality Permit dated October 18, 2022, set forth in Sections II.A-D.			

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

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

The duration of an impact is quantified as follows:

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

The severity of an impact is measured using the following:

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

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

Proposed Action: Minor impacts to topography, geology, stability, and moisture would be expected because the proposed project would have new disturbances due to equipment installation and groundwork.

Secondary Impacts:

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

2. WATER QUALITY, QUANTITY, AND DISTRIBUTION:

Direct Impacts:

Proposed Action: No primary impacts to water quality, quantity, and distribution would be expected because water is not required for normal operation of the proposed equipment.

Secondary Impacts:

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

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3. AIR QUALITY:

Direct Impacts:

Proposed Action: Minor impacts to air quality would be expected with the proposed action due to the facility emitting air pollutants and minor construction activities during construction activities.

Secondary Impacts:

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

4. VEGETATION COVER, QUANTITY AND QUALITY:

Direct Impacts:

Proposed Action: Minor impacts are expected with the proposed permit action due to installation of new equipment because the site where the proposed compressors would be installed is currently not developed.

Secondary Impacts:

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

5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Direct Impacts:

Proposed Action: Minor impacts to terrestrial, avian, and aquatic life and habitats stimulated or induced by the proposed action. The proposed action is small on an industrial scale and not expected to disturb a large area of land. No primary impacts are expected to avian or aquatic life.

Secondary Impacts:

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

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

Direct Impacts:

Proposed Action: According to a Montana Natural Heritage Program, there is one (1) species of concern; Whooping Crane (bird). The area being developed is small when compared to an industrial scale and would likely not have this species of bird as a permanent presence. There is no water freely flowing through the site and the proposed action would have no impact.

Secondary Impacts:

Proposed Action: No secondary impacts to unique, endangered, fragile, or limited environmental resources stimulated or induced by the direct impacts analyzed above would be anticipated for the proposed action.

7. HISTORICAL AND ARCHAEOLOGICAL SITES:

Impacts:

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

8. SAGE GROUSE EXECUTIVE ORDER:

The current permit action is not located in the Greater Sage Grouse habitat area. No primary or secondary impacts to sage grouse or sage grouse habitat are anticipated with the proposed action.

9. AESTHETICS:

Direct Impacts:

Proposed Action: Negligible impacts may be associated with the current permit application due to the installation of new equipment. The surrounding area is mostly farmland and oil and gas well sites.

Secondary Impacts:

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

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

Direct Impacts:

Proposed Action: Negligible impacts to air and energy resources associated with the operational needs of the proposed equipment are anticipated. No primary impacts to land and water are expected with the proposed permitting action.

Secondary Impacts:

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

11. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES:

Direct Impacts:

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

Secondary Impacts:

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

12. HUMAN HEALTH AND SAFETY:

Direct Impacts:

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

Secondary Impacts:

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

13. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND **PRODUCTION:**

Direct Impacts:

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

Secondary Impacts:

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

14. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Direct Impacts:

Proposed Action: No impacts to quantity and distribution of employment are anticipated for the proposed action.

Secondary Impacts:

Proposed Action: No secondary impacts to distribution of employment are anticipated as a result of the proposed action.

15. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Direct Impacts:

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

Secondary Impacts:

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

16. DEMAND FOR GOVERNMENT SERVICES:

Direct Impacts:

Proposed Action: Minor impacts are anticipated for demand for government services. The air

quality permit and physical site associated with the current permit action would require inspections from state government representatives to ensure the facility is operating within the limits and conditions listed in the air quality permit.

Secondary Impacts:

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

17. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

Direct Impacts:

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

Secondary Impacts:

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

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

Direct Impacts:

Proposed Action: No primary impacts to access and quality of recreational and wilderness activities are anticipated as a result of the proposed action. There are no recreational sites in the immediate area.

Secondary Impacts:

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

19. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Direct Impacts:

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

Secondary Impacts:

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

20. SOCIAL STRUCTURES AND MORES:

Direct Impacts:

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

Secondary Impacts:

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

21. CULTURAL UNIQUENESS AND DIVERSITY:

Direct Impacts:

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

Secondary Impacts:

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

22. PRIVATE PROPERTY IMPACTS:

The proposed action would take place on privately owned property and there are no private residences in the area of the proposed action. 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?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked

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YES	NO	
		in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6,
		7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

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

23. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

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

ADDITIONAL ALTERNATIVES CONSIDERED:

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

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

CUMULATIVE IMPACTS:

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

This environmental review analyzes the proposed action submitted by the ONEOK. No other permit applications for this facility are currently pending before DEQ. Although additional permits may be necessary for this facility in the future, without a pending permit application containing the requisite information, DEQ cannot speculate about which permits may be necessary or which permits may be granted or denied.

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

PUBLIC INVOLVEMENT:

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

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- Montana State Historic Preservation Office
- Montana Department of Environmental Quality (DEQ)
- Montana Natural Heritage Program

OTHER GOVERNMENTAL AGENCIES WITH JURSIDICTION:

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

Other governmental agencies which may have overlapping, or sole jurisdiction include, but may not be limited to: Richland County, OSHA (worker safety), DEQ AQB (air quality) and Water Protection Bureau (groundwater and surface water discharge; stormwater), DNRC (water rights), and MDT (road access).

NEED FOR FURTHER ANALYSIS AND SIGNIFICANCE OF POTENTIAL IMPACTS

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

- 1. The severity, duration, geographic extent, and frequency of the occurrence of the impact;
 - "Severity" is analyzed as the density of the potential impact while "extent" is described as the area where the impact is likely to occur. An example could be that a project may propagate ten noxious weeds on a surface area of 1 square foot. In this case, the impact may be a high severity over a low extent. If those ten noxious weeds were located over ten acres there may be a low severity over a larger extent.
 - "Duration" is analyzed as the time period in which the impact may occur while "frequency" is analyzed as how often the impact may occur. For example, an operation that occurs throughout the night may have impacts associated with lighting that occur every night (frequency) over the course of the one season project (duration).
- 2. The probability that the impact will occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur;
- 3. Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts;
- 4. The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values;

- 5. The importance to the state and to society of each environmental resource or value that would be affected;
- 6. Any precedent that would be set as a result of an impact of the proposed action that would commit DEQ to future actions with significant impacts or a decision in principle about such future actions; and
- 7. Potential conflict with local, state, or federal laws, requirements, or formal plans.

The significance determination is made by giving weight to these criteria in their totality. For example, impacts with moderate or major severity may be determined to be not significant if the duration of the impacts is short-term.

As another example, however, is that moderate or major impacts of short-term duration may be significant if the quantity and quality of the resource is limited and/or the resource is unique or fragile. As a final example, moderate or major impacts to a resource may be determined to be not significant if the quantity of that resource is high or the quality of the resource is not unique or fragile.

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

SIGNIFICANCE DETERMINATION

The severity, duration, geographic extent, and frequency of the occurrence of the impacts associated with the proposed action would be limited. ONEOK proposes to construct and operate the proposed action on private land located in Section 15, Township 27 North, Range 57 East, in Roosevelt County, Montana.

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

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

DEQ does not believe that the proposed action has any growth-inducing or growth-inhibiting

5274-00 12 Final EA: 12/16/2022 aspects or that it conflicts with any local, state, or federal laws, requirements, or formal plans. Based on a consideration of the criteria set forth in ARM 17.4.608, the proposed state action is not predicted to significantly impact the quality of the human environment. Therefore, at this time, preparation of an environmental assessment is determined to be the appropriate level of environmental review under the Montana Environmental Protection Act.

Environmental Assessment and Sig	ificance Determination Prepared By	•
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	Troy M. Burrows	Environmental Scientist 2
	Name	Title
EA Reviewed By	:	
	Ed Warner	Lead Engineer
	Name	Title
Responses to Sul	ostantive Comments a	re located in the Permit Analysis Section of the Air
Quality Permit.		•

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