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Air Title V Operating Permit (AOP) - Renewal

version 2.8

(Submission #: HQN-17PJ-V4FBF, version 1)

Details

Submission ID HQN-17PJ-V4FBF

Status In Process

Form Input

Form Instructions

In accordance with 33.1-15-14-04.c. of the North Dakota Air Pollution Control Rules, a Title V permit renewal application must be submitted to the Department at least six months, but no more than eighteen months, prior to the expiration date. Permit renewal applications are incomplete unless all information requested in SFN 52824 is supplied. The current Title V permit will be the baseline reference for a renewal. The requirements (40 CFR 70.5(c) & NDAC 33.1-15-14-06.4.c) to include a citation and description of all applicable requirements and a description of or reference to any applicable test method for determining compliance with each applicable requirement may be met by accomplishing either or both of the following: 1) provide an annotated (red-lined) copy of the current permit indicating all changes needed to reflect the current facility configuration, applicable requirements and test methods; 2) provide a narrative that conveys all changes needed to the current permit to reflect the current facility configuration, all applicable requirements and test methods.

FOR ACID RAIN UNITS ONLY ♦ Submit with the Title V permit renewal application all Acid Rain renewal applications (the Acid Rain Permit Application, the Phase II NOx Compliance Plan, and if applicable, the Phase II NOx Averaging Plan).

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.

Section A - Permit Information

Permit Number

AOP-28426

Permit Version

6

Issue Date

12/21/2021

Expiration Date

12/26/2026

Permittee

Company Name

ONEOK Rockies Midstream, L.L.C.

Address

100 W Fifth Street

Tulsa, OK 74103

United States

Responsible Official

Prefix

Mr.

First Name

Dick

Last Name

Vande Bossche

Title

Vice President - Rocky Mountain Operations

Phone Type**Number****Extension**

Business

406-433-8710

Email

dick.vandebossche@oneok.com

Address

100 W Fifth St.

Tulsa, OK 74103

United States

Contact Person for Air Pollution Matters

Prefix

Mr.

First Name

Jeremy

Last Name

Chrobak

Title

Environmental Professional II

Phone Type**Number****Extension**

Business

9188003917

Email

jeremy.chrobak@oneok.com

Address

100 W Fifth St.

Tulsa, OK 74103

United States

Section B (Part 1) - Facility Information

Facility Name

ONEOK Rockies Midstream, L.L.C. - Grasslands Gas Plant

Have you added, removed, or made any modifications to equipment since your last operating permit issuance?

No

Is this source subject to Title IV Acid Rain regulations?

No

Is this a portable source?

No

Facility Location

SE 1/4, Sec. 36, T148, R105W

Alexander, ND 58831

United States

County

McKenzie

Click the link below to use Google Maps to find the lat/long for a given address

[Google Maps](#)

Facility Location:

47.591200000000001,-103.99700000000000

SE 1/4, Sec. 36, T148, R105W, Alexander, ND

Section B (Part 2) - Additional Location Information

Legal Description of Facility Site

Qtr Qtr	Qtr	Section	Township	Range
NONE PROVIDED	SE	36	148N	105W

Land area at facility site (indicate whether measurement is in acres or sq. ft.)

NONE PROVIDED

MSL elevation at facility

NONE PROVIDED

Section C - Nature of Business

General Nature of Business

Describe Nature of Business	NAICS Code	SIC Code
Natural Gas Processing	211130-Natural Gas Extraction	1321-Natural Gas Liquids

Actual Start of Construction Date

NONE PROVIDED

Actual End of Construction Date

NONE PROVIDED

Facility Startup Date

NONE PROVIDED

Section D - Process Equipment Information (1 of 1)

Emission Unit - TL-1

Emission Unit ID

TL-1

Emission Unit Description

Truck Loading

Emission Point ID

TL-1

Emission Point Description

NONE PROVIDED

Emission Process Description

Condensate/Natural Gas Truck Loading

Emission Unit Status

Existing, modification

Applicable PTCs

PTC Number

Applicable Federal Air Programs

Program Code

Applicable State Regulations

Regulation

Emission Unit form

Download the emission unit form linked here, complete it, and upload it to this application using the attachment control below.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.

[EMISSION UNIT FOR TITLE V PERMIT TO OPERATE \(SFN61006\)](#)

Attach Emission Unit Form

[Grasslands_App2b_SF61006_PRINT_SIGNED.pdf](#) - 06/11/2026 02:45 PM

Comment

Changes being incorporated from an email communication received on April 13, 2026, allowing the truck loading change to include the flare as an additional control device for truck loading operations. Change is noted in the redlined permit attached in Section K of this application. No additional emission changes.

Section F - Facility-Wide Applicable Regulations and Potential to Emit (PTE)**Applicable Federal Air Programs**

Program Code

Applicable State Regulations

Regulation

Potential to Emit (PTE)

Pollutant	Tons Per Year Without Fugitives	Tons Per Year With Fugitives
NOx	116.61	116.61
CO	126.93	126.93
VOCs	53.89	155.43
SO2	0.65	0.65
PM	8.25	8.25
PM10	8.25	8.25
PM2.5	8.25	8.25
Total HAPs	2.73	9.1

Emission Calculations Document Upload

Using the attachment control below, upload emission calculations documents.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.

Attach Emission Calculations Documents

[Grasslands_App3_EmEst_2026-0422.pdf](#) - 06/11/2026 02:53 PM

Comment

NONE PROVIDED

Section G - Compliance Schedule

Will your facility be in compliance with all applicable requirements effective at the time of permit issuance?

Yes

Will your facility be in compliance with all applicable requirements effective after the time of permit issuance?

Yes

Section H - Flexible Permits

Are you requesting a flexible permit?

No

Section I - Compliance Assurance Monitoring (CAM)

To determine if your facility is subject to CAM, review the information provided at the following link.

[Compliance Assurance Monitoring \(CAM\) Guidance](#)

Is the facility identified in this application in compliance with applicable monitoring and compliance certification requirements?

Compliance Assurance Monitoring (CAM) not applicable.

Section K - Redline Permit Upload

Use the attachment control below to upload a redline version of your existing permit document, showing any changes.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.

Attach redline version of permit here

[Grasslands_App4_AOP28426v6_0_Redline.pdf - 06/11/2026 02:58 PM](#)

Comment

NONE PROVIDED

Section L - General Document Upload

File Upload

Use the attachment control below to upload any other information necessary for application review, such as plot plans, process diagrams, maps, etc.

When completing the online application, if uploaded files are provided in each section (when indicated), do not include those same files in the General Document Upload/File Upload section. If uploading the application files in the General Document Upload/File Upload section, only fill out the required (asterisked) sections of the online application.

Attachments

[Grasslands_1_TVR_FINAL.pdf - 06/11/2026 03:00 PM](#)

Comment

Includes signed SFN52824 Form. Other applicable forms and documents have been entered in previous sections.

Additional Forms

NONE PROVIDED

Attachments

Date	Attachment Name	Context	Confidential?	User
6/11/2026 3:00 PM	Grasslands_1_TVR_FINAL.pdf	Attachment	No	Jeremy Chrobak
6/11/2026 2:58 PM	Grasslands_App4_AOP28426v6_0_Redline.pdf	Attachment	No	Jeremy Chrobak
6/11/2026 2:53 PM	Grasslands_App3_EmEst_2026-0422.pdf	Attachment	No	Jeremy Chrobak
6/11/2026 2:45 PM	Grasslands_App2b_SFN61006_PRINT_SIGNED.pdf	Attachment	No	Jeremy Chrobak

Status History

	User	Processing Status
4/23/2026 8:38:55 AM	Jeremy Chrobak	Draft
6/12/2026 10:53:41 AM	Jeremy Chrobak	Signing
6/12/2026 10:53:41 AM	Jeremy Chrobak	Submitting
6/12/2026 10:54:50 AM	Jeremy Chrobak	Submitted
6/12/2026 10:54:52 AM	Jeremy Chrobak	In Process

Agreements and Signature(s)

Certification Statement

I certify under penalty of law that the enclosed documents and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I also certify that the source(s) identified in this application is/are in compliance with all applicable requirements except those requirements for which a compliance schedule has been submitted in the Compliance Schedule Form or Compliance Schedule Section of the application. I understand that failure to comply with any term of a compliance schedule is considered to be a violation of regulation NDAC 33.1-15-14-06.1.e. The source will continue to comply with the current applicable requirements with which it is in compliance. The source will meet, on a timely basis, any applicable requirement, which becomes effective during the permit term. The source is properly implementing any required risk management plan in accordance with section 112(r) of the federal clean air act, if appropriate.

I certify, as the Responsible Official, that I have read and understood the above requirements and conditions applicable to my source/facility and that the information and attachments provided in this application are true, accurate, and complete to the best of my knowledge." Further, I agree to comply with the provisions of Chapter 23.1-06 of the North Dakota Century Code and all rules and regulations of the Department, or revisions thereof. I also understand a permit is nontransferable and, if granted a permit, I will promptly notify the Department upon sale or legal transfer of this permitted establishment.

Note: This certification must be signed by a "responsible official" as defined in NDAC 33.1-15-14-06.1.

Submission Agreements

- ☒ I am the owner of the account used to perform the electronic submission and signature.
- ☒ I have the authority to submit the data on behalf of the facility I am representing.
- ☒ I agree that providing the account credentials to sign the submission document constitutes an electronic signature equivalent to my written signature.
- ☒ I have reviewed the electronic form being submitted in its entirety, and agree to the validity and accuracy of the information contained within it to the best of my knowledge.

Signed By Jeremy Chrobak on 06/12/2026 at 10:53 AM
r8l8TUSu1k8i+SRps2jXuJkK5f2jIRr464ROBSle+KJNqerqy+lw5usqqqu48Yg6m6HSZSmo/crGeFWlwHIsdA==



Submitted Electronically via CERIS-ND

June 11, 2026

Mr. James Semerad
North Dakota Department of Environmental Quality
Division of Air Quality
918 E. Divide Ave, 2nd Floor
Bismark, ND 58501-1947

**ONEOK ROCKIES MIDSTREAM, L.L.C.
GRASSLANDS GAS PLANT
TITLE V PERMIT TO OPERATE RENEWAL**

Dear Mr. Semerad:

ONEOK Rockies Midstream, L.L.C. (ORM) operates the Grasslands Gas Plant, located in McKenzie County, North Dakota. The facility currently operates under Permit No. AOP-28426 v6.0, which was issued on December 21, 2021, by the North Dakota Department of Environmental Quality (NDDEQ) and will expire on December 26, 2026. In accordance with North Dakota Administrative Code Chapter 33-15-14-06.4a(1)(c), ORM submits this permit application to renew the Title V operating permit. Per agency approval emailed on 04/13/2026, the only change will be revising Truck Loading (TL-1) to include plant flare (1-Flare) as a control device for the loading emissions.

Enclosed with this letter are the required application forms. If you need additional information or have any questions, please contact me at 918-800-3917 or Jeremy.chrobak@oneok.com.

Sincerely,

Jeremy Chrobak
Environmental Professional II

Enclosures

xc: C. Clausen/J. Pongratz/L. Weltikol/E. Klein/S. Gendreau/C. Northrop/D. Vande Bossche/J. Hills (.pdf)
Tulsa Environmental Files – Grasslands Gas Plant – Permit Actions
ACTS

Title V Permit to Operate Renewal Application

Grasslands Gas Plant

ONEOK Rockies Midstream, L.L.C.



**Submitted to NDDEQ Division of Air Quality
June 2026**

ONEOK Rockies Midstream, L.L.C.
Grasslands Gas Plant
June 2026

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ONEOK Rockies Midstream, L.L.C.
Grasslands Gas Plant
June 2026

Introduction

ONEOK Rockies Midstream, L.L.C. (ORM) operates the Grasslands Gas Plant, located in McKenzie County, North Dakota. The facility currently operates under Permit No. AOP-28426 v6.0, which was issued on December 21, 2021, by the North Dakota Department of Environmental Quality (NDDEQ) and will expire on December 26, 2026. In accordance with North Dakota Administrative Code Chapter 33-15-14-06.4a(1)(c), ORM submits this permit application to renew the Title V operating permit. Per agency approval emailed on 04/13/2026, the only change will be revising Truck Loading (TL-1) to include plant flare (1-Flare) as a control device for the loading emissions.

Facility Equipment

Grasslands Gas Plant consists of one (1) 800-hp Caterpillar G-399NA gas-fired emergency generator, two (2) 43.75 MMBtu/hr hot oil heaters, one (1) 45.8 MMBtu/hr hot oil heater, three (3) 2.73 MMBTU/hr regeneration gas heaters, one (1) 5.14 MMBtu/hr regeneration gas heater, two (2) 21.0 MMBtu/hr gas auxiliary steam boilers, two (2) 17.75 MMBtu/hr inert gas generators, one (1) 0.94 MMBtu/hr glycol regeneration boiler, one (1) 28.75 MMBtu/hr gas-fired steam boiler, one (1) 400-bbl produced water/slop oil storage tank, one (1) 250-bbl amine tank, one (1) amine gas sweetening unit, one(1) TEG dehydrator, one (1) 200-bbl methanol storage tanks, and one (1) acid gas/process/emergency flare. Associated emission sources include produced water truck loading, purity product truck loading, fugitive emissions and miscellaneous vents and blowdowns.

Process Description

Raw, sour field gas enters the plant via pipeline and condensate is removed. The sour gas then is filtered through the amine sweetening unit to remove the acidic gases and then dehydrated through the TEG dehydrator to remove water vapor that would freeze in the cryogenic processing. A cryogenic turbo expander separates the natural gas liquids (NGL) from the gas stream, thereby separating the methane from the NGL product. Each of these main product streams leaves the plant via pipeline. Several electric driven compressors are used to compress overheads, methane product and propane refrigerant.

Hot oil heaters are used to heat the oil which is used as a heat transfer medium throughout the facility. The mole sieves are regenerated using heat from the small regeneration heaters that heat natural gas, which passes through the mole sieves to release moisture. Produced water, methanol, lube oil, and used oil are stored in atmospheric storage tanks which are equipped with small electric heaters. NGL product is stored in high pressure storage tanks and leaves the plant by pipeline. Condensate/natural gasoline is stored in high pressure storage tanks and leaves the plant by pipeline. Condensate/natural gasoline is stored in low pressure condensate tanks and is then transferred to trucks to leave the plant. A flare system is used for safety, maintenance, emergencies and process flaring on an as needed basis.

Regulatory Applicability

The facility is a natural gas compressor station that falls under the North American Industrial Classification System (NAICS) code 211130 (formerly Standard Industrial Classification (SIC) 1311).

New Source Performance Standards 40 CFR Part 60 Subpart KKK, Equipment Leaks of VOC from Onshore Natural Gas Processing Plants. This subpart sets standards for natural gas processing plants which are defined as any site engaged in the extraction of natural gas liquids from field gas, fractionation of natural gas liquids, or both. The gas plant was originally constructed after January 20, 1984. The contract for construction for the plant was signed prior to August 23, 2011, and signifies the commencement of construction of the gas plant. Therefore, the plant is subject to this subpart.

ONEOK Rockies Midstream, L.L.C.
Grasslands Gas Plant
June 2026

New Source Performance Standards 40 CFR Part 60 Subpart Dc, Standards of Performance for Heaters. The Hot Oil Heater (HE-3800) is between 10 and 100 MMBTU/hr and was constructed after 1984; as such it is an affected facility under this subpart. As the heater only burns natural gas, the only applicable requirements are the initial notification under 40 CFR 60.7 and a monthly record of fuel type and amount combusted per 40 CFR 60.48c(g)(2). All other heaters are less than 10 MMBTU/hr and/or constructed pre-1984 and are not covered by any NSPS.

New Source Performance Standards 40 CFR Part 60 Subpart JJJJ, Stationary Spark Ignition Internal Combustion Engines (SI-ICE) promulgates emission standards for all new SI engines ordered after June 12, 2006, and all SI engines modified or reconstructed after June 12, 2006, regardless of size. Specific emission standards (either in g/hp-hr or as a concentration limit) vary based on engine class, engine power rating, lean-burn or rich-burn, fuel type, duty (emergency or non-emergency), and numerous manufacture dates. The 800-hp Caterpillar G-399NA emergency generator was manufactured before June 12, 2006, and is not subject to this subpart.

New Source Performance Standards 40 CFR Part 60 Subpart OOOO, Crude Oil and Natural Gas Production, Transmission and Distribution, establishes emission standards for the following equipment that commences construction, modification, or reconstruction after August 23, 2011, and on or before September 18, 2015, at crude oil and natural gas production, transmission or distribution facilities:

1. Each single gas well;
2. Single centrifugal compressors using wet seals located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment;
3. Single reciprocating compressors located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment;
4. Single continuous bleed natural gas driven pneumatic controllers with a natural gas bleed rate greater than 6 SCFH, located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment and not located at a natural gas processing plant;
5. Single continuous bleed natural gas driven pneumatic controllers located at a natural gas processing plant;
6. Single storage vessels located in the oil and natural gas production segment, natural gas processing segment, or natural gas transmission and storage segment with the potential for VOC emissions equal to or greater than 6 tons per year;
7. All equipment, except compressors, within a process unit at an onshore natural gas processing plant;
8. Sweetening units located at onshore natural gas processing plants.

Construction commenced prior to August 23, 2011, and therefore the compressors associated with the emergency generator and the tanks at the facility are not subject to this subpart.

New Source Performance Standards 40 CFR Part 60 Subpart OOOOa, Crude Oil and Natural Gas Facilities, establishes emission standards for the following equipment that commences construction, modification or reconstruction after September 18, 2015, at crude oil and natural gas production, transmission or distribution facilities:

1. Each single oil or gas well that conducts a completion following hydraulic fracturing or refracturing;
2. Single centrifugal compressors using wet seals that are not located at a well site;
3. Single reciprocating compressors not located at a well site;
4. Single continuous bleed natural gas driven pneumatic controllers with a natural gas bleed rate greater than 6 SCFH, not located at a natural gas processing plant;
5. Single continuous bleed natural gas driven pneumatic controllers located at a natural gas processing plant;
6. Single storage vessels with the potential for VOC emissions equal to or greater than 6 tons per year;

ONEOK Rockies Midstream, L.L.C.
Grasslands Gas Plant
June 2026

7. The group of all equipment within a process unit;
8. The group of fugitive emissions equipment at a compressor station;
9. The group of fugitive emissions equipment at a well site;
10. Sweetening units located at onshore natural gas processing plants;
11. Pneumatic pumps at natural gas processing plants and well sites.

All potentially affected equipment at the plant were constructed before September 18, 2015, and are not subject to this subpart.

New Source Performance Standards 40 CFR Part 60 Subpart OOOOb, Crude Oil and Natural Gas Facilities, establishes emission standards for the following equipment that commences construction, modification or reconstruction after December 6, 2022, at crude oil and natural gas facilities:

1. Each single oil or gas well;
2. Single centrifugal compressors using wet or dry seals that are not located at a well site;
3. Single reciprocating compressors not located at a well site;
4. Each collection of natural gas-driven process controllers at a well site, centralized production facility, onshore natural gas processing plant, or compressor station;
5. Storage vessel batteries with either the potential for VOC emissions equal to or greater than 6 tons per year or the potential for methane emissions equal to or greater than 20 tons per year;
6. The group of all equipment within a process unit at an onshore natural gas processing plant;
7. Sweetening units;
8. The group of all natural gas-driven pumps at a well site, centralized production facility, onshore natural gas processing plant, or compressor station;
9. The group of fugitive emissions equipment at a well site, centralized production facility or compressor station;

All potentially affected equipment at the plant were constructed before December 6, 2022, and are not subject to this subpart.

National Emission Standards for Hazardous Air Pollutants 40 CFR Part 63 Subpart ZZZZ, Reciprocating Internal Combustion Engines (RICE), affects any existing, new or reconstructed stationary RICE located at a major or area source of HAP emissions. Owners and operators of new or reconstructed engines at area sources must meet the requirements of Subpart ZZZZ by complying with either 40 CFR Part 60 Subpart IIII (for CI engines) or 40 CFR Part 60 Subpart JJJJ (for SI engines). Based on emission calculations, this facility is a minor source of HAP. The emergency engine at the facility was manufactured before June 12, 2006; therefore, it is subject to this subpart.

National Emission Standards for Hazardous Air Pollutants 40 CFR Part 63 Subpart DDDDD, Industrial, Commercial and Institutional Boilers and Process Heaters. This subpart establishes national emission limitations and work practice standards from HAP emitted from industrial, commercial, and institutional boilers and process heaters located at major source of HAP. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards. This facility is not a major source of HAP.

National Emission Standards for Hazardous Air Pollutants 40 CFR Part 63 Subpart HH, Oil and Natural Gas Production Facilities. This subpart establishes national emission limitations and work practice standards from HAP emitted from oil and natural gas production facilities at area sources of HAP. The TEG dehydrator (EU 2 Dehy) is subject to monitoring, calculation, and reporting requirements for benzene for this subpart.

National Emission Standards for Hazardous Air Pollutants 40 CFR Part 63 Subpart JJJJJ, Industrial, Commercial, and Institutional Boilers Area Sources. This subpart establishes national emission limitations and

ONEOK Rockies Midstream, L.L.C.
Grasslands Gas Plant
June 2026

work practice standards for HAP emitted from industrial, commercial and institutional boilers at area sources of HAP. Natural gas-fired boilers are exempt from this subpart. All fuel burning equipment at this facility is fueled by natural gas; therefore, this subpart does not apply.

State Requirements

Applicability of regulations within Article 15 - Air Pollution Control Rules under the North Dakota Administrative Code were evaluated for the facility.

33.1-15-03-02. Restrictions applicable to new installations and all incinerators.

The facility will operate in a manner to not discharge into the ambient air from any single source of emission whatsoever any air contaminant which exhibits an opacity greater than twenty percent except that a maximum of forty percent opacity is permissible for not more than one six-minute period per hour.

33.1-15-03-03.1. Restrictions applicable to flares.

The facility will operate in a manner to not discharge into the ambient air from any single source of emission whatsoever any air contaminant which exhibits an opacity greater than twenty percent except that a maximum of sixty percent opacity is permissible for not more than one six-minute period per hour.

33.1-15-05 Emissions of Particulate Matter Restricted

The facility is an insignificant source of particulate matter emissions and does not fall within the source categorizations listed in this subpart.

33.1-15-06 Emissions of Sulfur Compounds Restricted

The facility combusts pipeline quality natural gas and is therefore exempt from this subpart (33.1-15-06-01.e).

33.1-15-07 Control of Organic Compounds Emissions

Storage tanks at the facility will be equipped with submerged fill pipes (33.1-15-07-01.2). Any loading of volatile organic compounds will not exceed 20,000 gallons per day (33.1-15-07-01.4). With the exception of emergency vapor blowdowns or safety relief valves, emissions of organic compounds will be routed to flare or an equally effective control device (33.1-15-07-02.1). Any flares located at the facility will be equipped with an automatic igniter or a continuous burning pilot (33.1-15-07-02.3). Any storage tanks in excess of 6 ton per year of VOC at the facility will be controlled and therefore meets the requirements of the May 27, 2015 NDDEQ guidance memorandum for storage vessels at oil and gas non-production facilities.

33.1-15-08 Control of Air Pollution From Vehicles and Other Internal Combustion Engines

Any internal combustion engines located at the facility will not emit any unreasonable and excessive smoke, obnoxious or noxious gases, fumes or vapor (33.1-15-08-01). The facility will not intentionally remove, alter, or otherwise render inoperative, exhaust emission control, crankcase ventilation, or any other air pollution control device which has been installed as a requirement of federal law or regulation (33.1-15-08-02.1).

33.1-15-11 Prevention of Air Pollution Emergency Episodes

The facility is not a source category listed in Table 7 of this subpart. The facility will comply with any requirements that are instituted during an air pollution emergency issued by the Department.

33.1-15-12 Standards of Performance for New Stationary Sources

33.1-15-13 Emission Standards for Hazardous Air Pollutants

33.1-15-22 Emission Standards for Hazardous Air Pollutants for Source Categories

ONEOK Rockies Midstream, L.L.C.
Grasslands Gas Plant
June 2026

NSPS and NESHAP applicability is addressed above in the Federal Requirements.

33.1-15-14 Designated Air Contaminant Sources, Permit to Construct, Minor Source Permit to Operate, Title V Permit to Operate

Through submittal of this application for a permit, the facility is complying with this subpart.

33.1-15-15 Prevention of Significant Deterioration of Air Quality

The facility is not classified as a major stationary source under the PSD rules and therefore this standard is not applicable to this facility.

33.1-15-16 Restriction of Odorous Air Contaminants

The facility will comply with the general provisions of the Department's odor restrictions (33.1.15-16-01) and will not exceed the maximum hydrogen sulfide concentrations to be considered a violation (33.1-15-16-02.1).

33.1-15-17 Restriction of Fugitive Emissions

The facility will take reasonable precautions to prevent fugitive emissions as defined under 33.1-15-17-01.2 in regards to ambient air quality standards and opacity limitations.

33.1-15-18 Stack Heights

Stack heights at the facility will not exceed good engineering practice (GEP) stack heights as defined under 33.1-15-18-01.2.d.

33.1-15-19 Visibility Protection

The facility is not classified as a major stationary source under the PSD rules and therefore this standard is not applicable to this facility.

33.1-15-21 Acid Rain Program

The acid rain provisions of the Air Pollution Control Rules are not applicable to the facility.

33.1-15-24 Standards for Lead-Based Paint Activities

There will be no lead-based paint utilized at the facility and therefore not applicable to the facility.

33.1-15-25 Regional Haze Requirements

The facility is currently not subject to regulation under a regional haze program. Therefore, this subpart is not applicable.

ONEOK Rockies Midstream, L.L.C.
Grasslands Gas Plant
June 2026

Application Forms

Form SFN 52824 – Title V Permit to Operate – Renewal Application

Form SFN 61006 – Emission Unit for Title V Permit to Operate



TITLE V PERMIT TO OPERATE - RENEWAL APPLICATION
 NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY
 DIVISION OF AIR QUALITY
 SFN 52824 (9-2021)

In accordance with 33.1-15-14-04.c. of the North Dakota Air Pollution Control Rules, a Title V permit renewal application must be submitted to the Department at least six months, but no more than eighteen months, prior to the expiration date. Permit renewal applications are incomplete unless all information requested herein is supplied. The current Title V permit will be the baseline reference for this renewal. The requirements (40 CFR 70.5(c) & NDAC 33.1-15-14-06.4.c) to include a citation and description of all applicable requirements and a description of or reference to any applicable test method for determining compliance with each applicable requirement may be met by accomplishing either or both of the following: 1) enclose an annotated (red-lined) copy of the current permit indicating all changes needed to reflect the current facility configuration, applicable requirements and test methods; 2) enclose a narrative that conveys all changes needed to the current permit to reflect the current facility configuration, all applicable requirements and test methods.

FOR ACID RAIN UNITS ONLY – Submit with the Title V permit renewal application all Acid Rain renewal applications (the Acid Rain Permit Application, the Phase II NO_x Compliance Plan, and if applicable, the Phase II NO_x Averaging Plan).

PART 1. GENERAL APPLICATION INFORMATION

Owner's Name <u>ONEOK Rockies Midstream, L.L.C.</u>	
Facility Name <u>Grasslands Gas Plant</u>	
Name of Person Completing Application <u>Jeremy Chrobak</u>	Phone <u>(918) 800-3917</u>
Title <u>Environmental Professional II</u>	Email <u>jeremy.chrobak@oneok.com</u>
Current Operating Permit Number <u>AOP-28426 v6.0</u>	
Expiration Date of Current Operating Permit <u>12</u> / <u>26</u> / <u>2026</u>	

PART 2. COMPLIANCE CERTIFICATION

A. Schedule for Submission of Compliance Certifications During the Term of the Permit

Frequency of Submittal <u>Annually</u>	Date Beginning (month/day/year) <u>02/14/2027</u>
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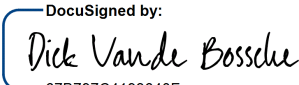
B. Statement of Compliance with Compliance Assurance Monitoring (CAM) and Compliance Certification Requirements

The facility identified in this application is in compliance with applicable monitoring and compliance certification requirements.	
☐	Yes
☐	No - Describe below which requirements are not being met:
☒	CAM not applicable

C. Certification of Compliance with all Applicable Requirements

This certification must be signed by a "responsible official" as defined in NDAC 33.1-15-14-06.1. Forms without a signed certification will be returned as incomplete.

Except for requirements identified in Compliance Schedule and Plan (Section G) of Title V Permit to Operate application forms for which compliance is not achieved, I hereby certify that, based on information and belief formed after reasonable inquiry, the air contaminant source identified in this form is in compliance with all applicable requirements.

Signed  DocuSigned by: Dick Vande Bossche 67B797C4193640F...	Date 6/5/2026
Typed Name Dick Vande Bossche	

PART 3. STATUS OF SOURCE

Has there been any change to the source since the most recent initial or renewal permit application, minor permit modification, significant modification or administrative permit amendment?

☐ No ☒ Yes

If yes, complete and submit appropriate sections of Title V Permit to Operate application forms.

PART 4. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS

Note: This certification must be signed by a "responsible official" as defined in NDAC 33.1-15-14-06.1. Applications without a signed certification will be returned as incomplete.

I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete.

Name (typed) **Dick Vande Bossche**

(Signed) 
DocuSigned by:
Dick Vande Bossche
67B797C4193640F... Date **6/5/2026** /

Telephone Number **(406) 433-8710**

Send original renewal application to:

North Dakota Department of Environmental Quality
Division of Air Quality
4201 Normandy Street, 2nd Floor
Bismarck, ND 58503-1324
(701)328-5188

Send copy of renewal application to:

Air Program (8P-AR)
Office of Partnerships & Regulatory
Assistance
US EPA Region 8
1595 Wynkoop Street
Denver, CO 80202-1129



EMISSION UNIT FOR TITLE V PERMIT TO OPERATE
NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY
 SFN 61006 (3-2019)

SECTION A – EQUIPMENT INFORMATION

Type of Unit or Process (rotary dryer, cupola furnace, crusher, pelletizer, engine, etc.) Truck Loading	Emission Unit Number: TL-1	Emission Point Number: TL-1
Make -	Model -	Installation or manufacture date
Capacity (manufacturer's or designer's guaranteed maximum)	Operating Capacity (specific units) -	
Brief description of operation of unit or process: Condensate/Natural Gas Truck Loading		
Brief description of alternative operating scenario (see Section M1 & M2 to elaborate): -	Alternative Emission Point: -	

SECTION B –OPERATING SCHEDULE

Are you agreeing to a limit on the operating schedule for this unit? ☐ Yes ☒ No				
Hours Per Day 24	Days Per Week 7	Weeks Per Year 52	Peak Production Season (if any) N/A	Dates of Annual Shutdown N/A

SECTION C – PRODUCTION RATES (THROUGHPUT LIMITS)

Are you agreeing to a limit on the production for this unit? ☐ Yes ☐ No (If No, show normal operating schedule.)				
Material	Process Time Frame			Specify Units (tons, Btu, Gal., etc)
	Hour	Week	Year	
Condensate	82	13737	714286	bbl

SECTION D1 – APPLICABLE REQUIREMENTS

Generally describe all applicable requirements.					
Regulations (i.e. SIP, NESHAP, PSD, NSPS, etc)	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements	Testing Requirements	Applicable Emission Standards (include units)
-	-	-		-	-

SECTION D2 – IDENTIFICATION OF AIR CONTAMINANTS

Has emission unit testing been done at the facility? ☐ Yes ☒ No			
Emission Unit ID	Last Date when a Testing Program was Completed	If Program is Continuous, Give Approximate Testing Frequency	Regulation requiring frequency (NSPS, MACT, Permit Requirement-list permit number)

Add additional pages if necessary

SECTION E – PRODUCTS OF UNIT OR PROCESS

Include all, even those not usable because they do not meet specifications					
Material	Hourly Process Weight (Pounds Per Hour)			Average Annual (Specify Units)	Intermittent Operation Only (Average Hours Per Week)
	Average	Maximum	Minimum		
N/A					

SECTION F – FUELS USED

Coal (Tons/Yr)	% Sulfur	% Ash	Oil (Gal/Yr)	% Sulfur	Grade No.
Natural Gas (Thousand CF/Yr)		LP Gas (Gal/Yr)		Other (Specify)	

SECTION G – STACK PARAMETERS

List each pollutant separately.					
Pollutant (use CAS for HAPs)	Stack Height (ft)	Stack Diameter (ft at top)	Gas Volume (ACFM)	Exit Temp (°F)	Gas Velocity (fps)
Stack Base UTM Coordinate X:			Stack Base UTM Coordinate Y:		

SECTION H – ALTERNATIVE STACK PARAMETERS

List each pollutant separately.					
Pollutant (use CAS for HAPs)	Stack Height (ft)	Stack Diameter (ft at top)	Gas Volume (ACFM)	Exit Temp (°F)	Gas Velocity (fps)
N/A					
Stack Base UTM Coordinate X:			Stack Base UTM Coordinate Y:		

SECTION I – AIR CONTAMINANTS EMITTED

Known or Suspected - Use emission rates after control equipment.			
Pollutant (use CAS for HAPs)	Amount		Basis of Estimate (AP-42, testing, engineering estimate, etc)
	Pounds/Hr	Tons/Yr	
VOC	2.01	8.83	AP-42

SECTION J1 – AIR POLLUTION CONTROL EQUIPMENT

Type: ☐ Cyclone ☐ Multiclone ☐ Baghouse ☐ Electrostatic Precipitator ☐ Wet Scrubber ☐ Spray Dryer ☐ None ☒ Other – Specify: <u>Flare</u>				
Name of Manufacturer		Model Number		Date to Be Installed
Application: ☐ Boiler ☐ Kiln ☐ Engine ☐ Other – Specify: _____				
Pollutants Removed	VOC	HAP		
Design Efficiency (%)	99.9% Capture/ 98% Control	99.9% Capture/		

Operating Efficiency (%)	99.9% Capture / 98% Control	99.9% Capture		
Describe method used to determine operating efficiency:				

SECTION J2 – GAS CONDITIONS

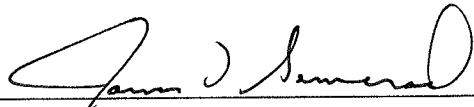
Gas Conditions	Inlet		Outlet	
Gas Volume (SCFM; 68°F; 14.7 psia)	N/A			
Gas Temperature (°F)				
Gas Pressure (in. H ₂ O)				
Gas Velocity (ft/sec)				
Pollutant Concentration (Specify pollutant and unit of concentration)	Pollutant	Unit of Concentration	Inlet	Outlet
Pressure drop through gas cleaning device (in. H ₂ O)				

**AIR POLLUTION CONTROL
TITLE V PERMIT TO OPERATE**

Permittee: Name: ONEOK Rockies Midstream, L.L.C. Address: 100 West Fifth Street Tulsa, OK 74103-4298	Permit Number: AOP-28426 v6.0 Source Name: Grasslands Gas Plant
Source Location: Alexander, ND 58831 SE¼, Sec. 36, T148N, R105W 47.5922 Lat., -104.0008 Long. McKenzie County	Source Type: Natural Gas Processing
Expiration Date: December 26, 2026	

Pursuant to Chapter 23.1-06 of the North Dakota Century Code (NDCC), and the Air Pollution Control Rules of the State of North Dakota, Article 33.1-15 of the North Dakota Administrative Code (NDAC), and in reliance on statements and representations heretofore made by the permittee (i.e., owner) designated above, a Title V Permit to Operate is hereby issued authorizing such permittee to operate the emissions units at the location designated above. This Title V Permit to Operate is subject to all applicable rules and orders now or hereafter in effect of the North Dakota Department of Environmental Quality (Department) and to any conditions specified on the following pages. All conditions are enforceable by EPA and citizens under the Clean Air Act unless otherwise noted.

Renewal: 12/21/21


James L. Semerad
Director
Division of Air Quality

4201 Normandy Street | Bismarck ND 58503-1324 | Fax 701-328-5200 | deq.nd.gov

Director's Office
701-328-5150

Division of
Air Quality
701-328-5188

Division of
Municipal Facilities
701-328-5211

Division of
Waste Management
701-328-5166

Division of
Water Quality
701-328-5210

Division of Chemistry
701-328-6140
2635 East Main Ave
Bismarck ND 58501

Agency Watermark
AOP-28426 v6.0
Approved
Issued On: 12/21/2021
Expires On: 12/26/2026

Grasslands Gas Plant
Title V Permit to Operate
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1. Emission Unit Identification:

The emission units regulated by this permit are as follows:

Emission Unit Description	Emission Unit (EU) ^A	Emission Point (EP)	Air Pollution Control Equipment
Natural gas-fired regeneration heater rated at 2.73 x 10 ⁶ Btu/hr	1 (Reg) [H-101]	1	None
Natural gas-fired regeneration heater rated at 2.73 x 10 ⁶ Btu/hr	2 (Reg) [H-402]	2	None
Natural gas-fired regeneration heater rated at 2.73 x 10 ⁶ Btu/hr	3 (Reg) [H-404]	3	None
Natural gas-fired regeneration heater rated at 5.14 x 10 ⁶ Btu/hr	4 (Reg) [HE-15.07]	22	None
Natural gas-fired hot oil heater rated at 43.75 x 10 ⁶ Btu/hr (1981)	1 (Hot oil) [H-401]	4A, 4B	None
Natural gas-fired hot oil heater rated at 43.75 x 10 ⁶ Btu/hr (1981)	2 (Hot oil) [H-405]	5	None
Natural gas-fired hot oil heater rated at 45.8 x 10 ⁶ Btu/hr (2007, Dc)	4 (Hot oil) [HE-3800]	21	None
Natural gas-fired auxiliary steam boiler rated at 21.0 x 10 ⁶ Btu/hr (pre-1989)	1 (Auxiliary) [BO-402]	7	None
Natural gas-fired auxiliary steam boiler rated at 21.0 x 10 ⁶ Btu/hr (pre-1989)	2 (Auxiliary) [BO-403]	8	None
Natural gas-fired inert gas generator (boiler) rated at 17.75 x 10 ⁶ Btu/hr (pre-1989)	1 (Inert) [BO-701]	9	None
Natural gas-fired inert gas generator (boiler) rated at 17.75 x 10 ⁶ Btu/hr (pre-1989)	2 (Inert) [BO-702]	10	None
Caterpillar G-399NA (4SRB) natural gas-fired emergency generator engine rated at 800 bhp (pre-2007) (ZZZZ)	1 (Gen) ^B [1-Gen]	11	None
Acid gas/process/emergency flare (130 ft)	1 (Flare) [1-Flare]	13	None
Bulk engine oil tank with a capacity of 210 barrels	1 (Oil) ^C [UTK-2]	14	None
Bulk used oil tank with a capacity of 300 barrels	[USED OIL] ^C	--	None
Slop water tank with a capacity of 414 400 barrels	TK-103 ^C [TK-1]	--	None
Amine (DEA) tank with a capacity of 250 barrels	1 (DEA) ^C	16	None
TEG dehydrator (HH)	2 (Dehy)	4A, 4B ^D	Heater (1 Hot oil) ^D

Emission Unit Description	Emission Unit (EU) ^A	Emission Point (EP)	Air Pollution Control Equipment
Natural/inlet gas-fired glycol regeneration boiler rated at 0.94×10^6 Btu/hr	2 (Glycol) [H-7801]	17	None
Natural gas-fired steam boiler rated at 28.75×10^6 Btu/hr (pre-1989)	1 (Boiler) [H-602]	18	None
Methanol storage tank with a capacity of 200 barrels	1 (Methanol) ^C [TK-M1]	0	None
Truck loading of produced water at approximately 2.0 MM gallons/year	PW (Loading) ^C [TL-4]	Fugitive	None
Truck loading of purity products rated at ~110.0 MM gallons/year	PP (Loading) ^C [TL-1 through TL-3]	Fugitive	Pressurized Loading And Flare
Amine gas sweetening unit	Amine gas sweetening unit	^E	Acid Gas Injection Well or Flare
FUGKKK (subject to NSPS KKK)	FUGKKK ^C [FUG2]	Fugitive VOC	LDAR Program
FUGOOOO (subject to NSPS OOOO)	FUGOOOO ^C [FUG5]	Fugitive VOC	LDAR Program
FUG (exempt from NSPS KKK/OOOO)	FUG ^C [FUG1]	Fugitive VOC	None

^A Bracketed text is the on-site unit identification.

^B The potential to emit for an emergency stationary reciprocating internal combustion engine (RICE) is based on operating no more hours per year than is allowed by the applicable subpart (40 CFR 63, Subpart ZZZZ) except for emergency situations. For engines to be considered emergency stationary RICE under the RICE rules, engine operations must comply with non-emergency operating hour limits as specified in the applicable subpart. There is no limit on the use of an emergency stationary RICE in emergency situations [40 CFR 63, Subpart ZZZZ, §63.6640(f)].

^C Insignificant or fugitive emission source (no specific emission limit).

^D The regenerator vent/still vent vapors are routed to EU 1 (Hot oil) from EU 2 (Dehy). The flash tank vent is routed to the plant inlet gas stream for reprocessing. Emissions are controlled through recirculation rather than a dedicated control device.

^E Acid gas from the amine gas sweetening unit is directed to the acid gas injection well. In the event of maintenance or a malfunction, the acid gas will be directed to the flare, EU 1 (Flare).

2. Applicable Standards, Restrictions and Miscellaneous Conditions:

A. Fuel Restrictions:

- 1) All emission units except 1 (Flare), 1 (Hot oil) and 2 (Glycol) shall be operated using only gaseous fuel containing no more than 2.0 grains of sulfur per 100 standard cubic feet. This fuel restriction ensures compliance with NDAC 33.1-15-06-01.2.

- 2) 1 (Hot oil) shall be operated using only gaseous fuel containing no more than 2.0 grains of sulfur per 100 standard cubic feet and/or regenerator vent/still vent vapors from EU 2 (Dehy). This fuel restriction ensures compliance with NDAC 33.1-15-06-01.2.

Applicable Requirements: Air Construction Permit (ACP)-17137 v1.1 & NDAC 33.1-15-14-06.5.b(1)

- B. The TEG dehydration unit [EU 2 (Dehy)] regenerator vent/still vent vapors are routed to EU 1 (Hot oil) to be used as fuel and the flash tank vapors shall be routed to the plant inlet gas stream for reprocessing.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(3)(a) & NDAC 33.1-15-14-06.5.b(1)

C. **Flaring Restrictions:**

- 1) When it is necessary to operate the flare, EU 1 (Flare), during an emergency, malfunction or maintenance, all precautions shall be taken to minimize emissions and maintain compliance with the applicable ambient air quality standards as outlined in NDAC 33.1-15-02 and the opacity standard of 20% not to exceed 60% for more than one six-minute period per hour.
- 2) The stack height for the flare shall be at least 130 feet above ground level.
- 3) Processing equipment at the facility shall be operated in such a manner to minimize flaring as much as possible. Operations at the facility must be in accordance with the application for permit revision dated April 11, 2002, which specifies the following:
 - a) Acid gas injection replaces the sulfur recovery unit.
 - b) Operation of the CEM has ceased.
- 4) Flaring may also be used for maintenance and combustion of normal processes including:
 - a) Maintenance on the acid gas injection compressors and miscellaneous maintenance related blowdowns.
 - b) Combustion of the TEG flash gas.
 - c) Combustion of residue purge gas.
 - d) Daily backwashing of the amine filter into the backwash accumulator and then to the flare.
 - e) Potential equipment leaks from relief valves in the closed position that are routed to the flare.

f) Condensate & Natural Gas Truck Loading Emissions

- ~~f~~ g) During maintenance of the acid gas injection well, the permittee will reduce the flow of high H₂S gas to the plant, if necessary, to remain within the SO₂ lb/hr emission limit for the flare. To the extent practicable, this maintenance will be planned to occur during planned plant shutdowns to minimize emissions.
- 5) The backup acid gas compressor will be maintained to help ensure its reliability when needed. Note: The acid gas compressor is electric and, therefore, not identified as an emission unit in the Condition 1 table.

Applicable Requirements: ACP-17137 v1.1 & NDAC 33.1-15-14-06.5.b(1)

D. **New Source Performance Standards (NSPS):** The permittee shall comply with all applicable requirements of the following NDAC 33.1-15-12-02 and 40 CFR 60 subparts in addition to complying with Subpart A - General Provisions.

- 1) Subpart Dc - Standards of Performance for Small Industrial Commercial-Institutional Steam Generating Units recordkeeping and reporting requirements [EU 4 (Hot Oil)].
- 2) Subpart KKK - Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants (EU FUGKKK).
 - a) 40 CFR 60.18, General Control Device Requirements applies to EU 1 (Flare) when FUGKKK component potential leak emissions are directed to EU 1 (Flare).
- 3) Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after August 23, 2011 and on or before September 18, 2015.

Applicable Requirements: NDAC 33.1-15-12-02, Subparts A, Dc, KKK and OOOO

E. **Maximum Achievable Control Technology (MACT):** The permittee shall comply with all applicable requirements of the following NDAC 33.1-15-22-03 and 40 CFR 63 subparts in addition to complying with Subpart A - General Provisions.

- 1) Subpart HH - National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities [EU 2 (Dehy)]. The North Dakota Department of Environmental Quality has not adopted the area source provisions of this subpart. Please send all documentation to EPA at the following address.

U.S. EPA Region 8
1595 Wynkoop Street
Mail Code 8ENF-AT
Denver, CO 80202-1129

- 2) Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [EU 1 (Gen)]. The North Dakota Department

of Environmental Quality has not adopted the area source provisions of this subpart. Please send all documentation to EPA at the address in Condition No. 2.E.1.

Applicable Requirements: NDAC 33.1-15-22-03, Subpart A, 40 CFR 63, Subparts HH and ZZZZ

F. **Like-Kind Engine Replacement:** This permit allows the permittee to replace the existing engine(s) with a like-kind engine. Replacement is subject to the following conditions.

- 1) The Department must be notified within 10 days after change-out of the engine.
- 2) The replacement engine shall operate in the same manner, provide no significant increase in throughput and have equal or less emissions than the engine it is replacing.
- 3) The date of manufacture of the replacement engine must be included in the notification. The facility must comply with any applicable federal standards (e.g. NSPS, NESHAP, MACT) triggered by the replacement.
- 4) The replacement engine is subject to the same state emission limits as the existing engine in addition to any NSPS or MACT emission limit that is applicable.

Applicable Requirement: NDAC 33.1-15-14-06.5.b(1)

3. Emission Unit Limits:

Emission Unit Description	EU	EP	Pollutant/Parameter	Emission Limit	NDAC Applicable Requirement
Regeneration heater	1 (Reg)	1	Opacity	20% ^A	33.1-15-03-02
Regeneration heater	2 (Reg)	2	Opacity	20% ^A	33.1-15-03-02
Regeneration heater	3 (Reg)	3	Opacity	20% ^A	33.1-15-03-02
Regeneration heater	4 (Reg)	22	Opacity	20% ^A	33.1-15-03-02
Hot oil heater	1 (Hot oil)	4A, 4B	Opacity	20% ^A	33.1-15-03-02
Hot oil heater	2 (Hot oil)	5	Opacity	20% ^A	33.1-15-03-02
Hot oil heater	4 (Hot oil)	21	Opacity	20% ^A	33.1-15-03-02 & 33.1-15-12, Subpart Dc
Auxiliary steam boiler	1 (Auxiliary)	7	Opacity	20% ^A	33.1-15-03-02
Auxiliary steam boiler	2 (Auxiliary)	8	Opacity	20% ^A	33.1-15-03-02
Inert gas generator (boiler)	1 (Inert)	9	Opacity	20% ^A	33.1-15-03-02
Inert gas generator (boiler)	2 (Inert)	10	Opacity	20% ^A	33.1-15-03-02
Caterpillar emergency generator engine	1 (Gen)	11	Opacity	20% ^A	33.1-15-03-02

Emission Unit Description	EU	EP	Pollutant/Parameter	Emission Limit	NDAC Applicable Requirement
Acid gas/process/emergency flare	1 (Flare)	13	SO ₂	14,730 lb/hr ^B (1-hr average)	33.1-15-06-01.2
			Opacity	20% ^C	33.1-15-03-02.1 & 33.15-15-12, Subpart KKK
TEG dehydrator	2 (Dehy)	4A, 4B	Benzene	<0.99 tpy [total for all EU 2 (Dehy) emission points]	33.1-15-14-06.5 & 33.1-15-22, Subpart HH
		Plant inlet			
Glycol regenerator	2 (Glycol)	17	Opacity	20% ^A	33.1-15-03-02
Steam boiler	1 (Boiler)	18	Opacity	20% ^A	33.1-15-03-02
FUGKKK	FUGKKK (Subject to KKK)	Fugitive VOC	Equipment Leaks of VOC	See Cond. 3	33.1-15-12, Subpart OOOO
FUGOOOO	FUGOOOO (Subject to OOOO)	Fugitive VOC	Equipment Leaks of VOC	See Cond. 3	33.1-15-12 Subpart KKK

^A 40% opacity is permissible for not more than one six-minute period per hour.

^B The amount of sweet (residue) gas to be added when flaring acid gas is 5.0 times the acid gas volume.

^C 60% opacity is permissible for not more than one six-minute period per hour; applies at all times. FUGKKK component potential leak emissions that are directed to EU 1 (Flare) shall comply with the requirements of §60.18: 0% opacity, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

4. Monitoring Requirements and Conditions:

A. Requirements:

Emission Unit Description	EU	Pollutant/Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
Regeneration heater	1 (Reg)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Regeneration heater	2 (Reg)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Regeneration heater	3 (Reg)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Regeneration heater	4 (Reg)	Opacity	Recordkeeping	4.B.1	33.1-14-14-06.5.a(3)(a)
Hot oil heater	1 (Hot oil)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Hot oil heater	2 (Hot oil)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Hot oil heater	4 (Hot oil)	Opacity	Recordkeeping	4.B.1	33.1-15-12, Subpart Dc
Auxiliary steam boiler	1 (Auxiliary)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Auxiliary steam boiler	2 (Auxiliary)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)

Emission Unit Description	EU	Pollutant/Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
Inert gas generator (boiler)	1 (Inert)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Inert gas generator (boiler)	2 (Inert)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Caterpillar emergency generator engine	1 (Gen)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
		Operating Hours	Recordkeeping	4.B.4	33.1-15-22-03, Subpart ZZZZ
Acid gas/process/emergency flare	1 (Flare)	SO ₂	Calculation	4.B.2	33.1-15-14-06.5.a(3)(a)
		Opacity	Visible Emissions Evaluation	4.B.2	33.1-15-14-06.5.a(3)(a)
TEG dehydrator	2 (Dehy)	Benzene	Recordkeeping	4.B.3 & 4.C.6	33.1-15-22, Subpart HH
Glycol regenerator	2 (Glycol)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a) & 33.1-15-22-03, Subpart HH
Steam boiler	1 (Boiler)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
FUGKKK	FUGKKK (Subject to KKK)	VOC	LDAR Program	4.C.3	33.1-15-12-02, Subpart KKK
FUGOOOO	FUGOOOO (Subject to OOOO)	VOC	LDAR Program	4.B.5 & 4.C.4	33.1-15-12-02, Subpart OOOO

B. Monitoring Conditions:

- 1) For purposes of compliance monitoring, burning of gaseous fuel as outlined in Condition 2.A, shall be considered credible evidence of compliance with the opacity limit. However, results from tests conducted in accordance with the test methods in 40 CFR 50, 51, 60, 61, or 75 will take precedence over burning of gaseous fuel as outlined in Condition 2.A, for evidence of compliance or noncompliance with any applicable opacity, particulate and SO₂ emission limit, in the event of enforcement action.
- 2) Flaring:
 - a) The presence of a flame shall be monitored using a thermocouple or any other equivalent device approved by the Department.
 - b) During each occurrence of acid gas flaring, the permittee shall calculate and record the SO₂ emission rate (lb/hr) based on the H₂S content and amount of acid gas flared, and record the amount of fuel gas added. Emissions from emergency flaring

will be differentiated from other flaring (process, scheduled maintenance, etc.) when reported on the Annual Emission Inventory Report. Any calculated exceedances of the SO₂ emissions rate for the flare shall be reported to the Department within 10 working days.

- c) If the flaring lasts longer than 24 hours, the permittee shall conduct a formal visible emissions evaluation of the flare to determine if the emissions are in compliance with the applicable opacity standard. Opacity readings shall consist of three consecutive six-minute periods per day of flaring using EPA Reference Method 9 and conducted by a certified visible emissions reader.
- 3) Benzene emissions from the TEG dehydration unit [EU 2 (Dehy)] still vent and flash tank shall be determined at least annually using average glycol circulation rate, average gas process rate, and GRI-GLYCalc emissions model, Version 3.0 or equivalent. In accordance with 40 CFR 63, Subpart HH, records of benzene emissions shall be kept to demonstrate and maintain exemption from MACT control requirements.
- 4) Engine:
 - a) A non-resettable hours meter shall be installed on the emergency engine to ensure maintenance requirements are being performed as required per 40 CFR 63, Subpart ZZZZ.
 - 1] Maintenance requirements include but may not be limited to: change oil and filter or analyze oil every 500 hours of operation or annually; inspect spark plugs every 1,000 hours of operation or annually; and inspect hoses and belts every 500 hours of operation or annually whichever comes first, and replace as necessary.
 - b) A log shall be kept of the total hours of operation on a calendar year basis for the engine. Records shall be maintained to differentiate annual emergency vs. non-emergency/maintenance/etc. hours of operation.
- 5) For all equipment subject to the standard, the permittee shall comply with the inspection, monitoring and maintenance requirements of 40 CFR 60, Subpart OOOO, §60.5400, as applicable.
- C. In addition to the monitoring outlined in Conditions 4.A and 4.B, monitoring shall be in accordance with the following requirements of the North Dakota Air Pollution Control Rules (NDAC) 33.1-15-12 and 40 CFR 63, as applicable.
 - 1) NDAC 33.1-15-12-02, Subpart Dc, §60.46c and §60.47c, Emission Monitoring
 - 2) NDAC 33.1-15-12-02, Subpart KKK, §60.632, Standards
 - 3) NDAC 33.1-15-12-02, Subpart OOOO, §60.5415, §60.5416, and §60.5417, Continuous Compliance and Monitoring Requirements

4) 40 CFR 63, Subpart HH, §63.773, Monitoring Requirements

Applicable Requirements: NDAC 33.1-15-12 and 40 CFR 63, Subpart HH

5. Recordkeeping Requirements:

A. The permittee shall maintain compliance monitoring records as outlined in the Monitoring Records table that include the following information.

- 1) The date, place (as defined in the permit) and time of sampling or measurement.
- 2) The date(s) testing was performed.
- 3) The company, entity, or person that performed the testing.
- 4) The testing techniques or methods used.
- 5) The results of such testing.
- 6) The operating conditions that existed at the time of sampling or measurement.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(3)(b)[1]

Monitoring Records

Emission Unit Description	EU	Pollutant/ Parameter	Compliance Monitoring Record
Regeneration heater	1 (Reg)	Opacity	Type of Fuel Usage Data
Regeneration heater	2 (Reg)	Opacity	Type of Fuel Usage Data
Regeneration heater	3 (Reg)	Opacity	Type of Fuel Usage Data
Regeneration heat	4 (Reg)	Opacity	Type of Fuel Usage Data
Hot oil heater	1 (Hot oil)	Opacity	Type of Fuel Usage Data
Hot oil heater	2 (Hot oil)	Opacity	Type of Fuel Usage Data
Hot oil heater	4 (Hot oil)	Opacity	Type of Fuel Usage Data & Heater Rating per NDAC 33.1-15-12, Subpart Dc
Auxiliary steam boiler	1 (Auxiliary)	Opacity	Type of Fuel Usage Data
Auxiliary steam boiler	2 (Auxiliary)	Opacity	Type of Fuel Usage Data
Inert gas generator (boiler)	1 (Inert)	Opacity	Type of Fuel Usage Data
Inert gas generator (boiler)	2 (Inert)	Opacity	Type of Fuel Usage Data
Caterpillar emergency generator engine	1 (Gen)	VOC	Rod Packing Monitoring Data
		Opacity	Type of Fuel Usage Data
		Operating Hours	Hours of Operation Data

Emission Unit Description	EU	Pollutant/ Parameter	Compliance Monitoring Record
Acid gas/process/emergency flare	1 (Flare)	SO ₂	Calculation Data - H ₂ S Content & Amount of Acid Gas Flared
		Opacity	Visible Emissions Evaluation Data
TEG dehydrator	2 (Dehy)	Benzene	Benzene Emissions & Calculation Data
Glycol regenerator	2 (Glycol)	Opacity	Type of Fuel Usage Data
Steam boiler 1	1 (Boiler)	Opacity	Type of Fuel Usage Data
FUGKKK	FUGKKK (Subject to KKK)	LDAR Records	LDAR Inspection, Monitoring & Maintenance Records Data
FUGOOOO	FUGOOOO (Subject to OOOO)	LDAR Records	LDAR Inspection, Monitoring & Maintenance Records Data

B. In addition to requirements outlined in Condition 5.A, recordkeeping shall be in accordance with the following requirements of NDAC 33.1-15-12 and 33.1-15-22 and 40 CFR 63, as applicable:

- 1) NDAC 33.1-15-12:
 - a) Subpart A, §60.7, Notification and Recordkeeping
 - b) Subpart Dc, §60.48c, Reporting and Recordkeeping Requirements
 - c) Subpart KKK, §60.635, Recordkeeping Requirements
 - d) Subpart OOOO, §60.5420 and §60.5421, Notification, Reporting, and Recordkeeping Requirements and Additional Recordkeeping Requirements
- 2) NDAC 33.1-15-22 and 40 CFR 63:
 - a) Subpart A, §63.10, Recordkeeping and Reporting Requirements
 - b) Subpart HH, §63.774, Recordkeeping Requirements
 - c) Subpart ZZZZ, §63.6645 through §63.6660, Notifications, Reports and Records

Applicable Requirements: NDAC 33.1-15-12, NDAC 33.1-15-22 and 40 CFR 63, Subparts HH and ZZZZ

C. The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sampling, measurement, report, or application. Support information includes all calibration and maintenance records and all original

strip-chart recordings/computer printouts of continuous monitoring instrumentation, and copies of all reports required by the permit.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(3)(b)[2]

6. Reporting:

A. Reporting shall be in accordance with the following requirements of NDAC 33.1-15-12 and 33.1-15-22 and 40 CFR 63, as applicable.

- 1) NDAC 33.1-15-12:
 - a) Subpart A, §60.7, Notification and Recordkeeping
 - b) Subpart Dc, §60.48c, Reporting and Recordkeeping Requirements
 - c) Subpart KKK, §60.636, Reporting Requirements
 - d) Subpart OOOO, §60.5420, §60.5421, §60.5422 and §60.5423, Notification, Reporting, and Recordkeeping Requirements and Additional Reporting Requirements
- 2) NDAC 33.1-15-22 and 40 CFR 63:
 - a) Subpart A, §63.10, Recordkeeping and Reporting Requirements
 - b) Subpart HH, , §63.775, Reporting Requirements
 - c) Subpart ZZZZ, §63.6645 through §63.6660, Notification, Reports and Records

Applicable Requirements: NDAC 33.1-15-12, NDAC 33.1-15-22 and 40 CFR 63, Subparts HH and ZZZZ

B. The permittee shall submit a semi-annual monitoring report for all monitoring records required under Condition 5 in a format provided or approved by the Department. All instances of deviations from the permit must be identified in the report. A monitoring report shall be submitted within 45 days after June 30 and December 31 of each year.

- 1) The semi-annual monitoring report shall also include the following information regarding each acid gas flaring incident:
 - a) Reason for flaring of acid gas.
 - b) Date and length of time that acid gas flaring occurred.
 - c) Amount of acid gas flared (ft³) and H₂S content.

- d) Calculated average SO₂ lb/hr.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(3)(c)[1] and [2]

- C. The permittee shall submit an annual compliance certification report in accordance with NDAC 33.1-15-14-06.5.c(5) within 45 days after December 31 of each year in a format provided or approved by the Department.

Applicable Requirement: NDAC 33.1-15-14-06.5.c(5)

- D. For emission units where the method of compliance monitoring is demonstrated by an EPA Test Method or a portable analyzer test, the test report shall be submitted to the Department within 60 days after completion of the test.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(6)(e)

- E. The permittee shall submit an annual emission inventory report in a format provided or approved by the Department. This report shall be submitted by March 15 of each year. Insignificant units/activities listed in this permit do not need to be included in the report.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(7) and NDAC 33.1-15-23-04

7. Facility Wide Operating Conditions:

A. Ambient Air Quality Standards:

- 1) Particulate and gases. The permittee shall not emit air contaminants in such a manner or amount that would violate the standards of ambient air quality listed in Table 1 of NDAC 33.1-15-02, external to buildings, to which the general public has access.
- 2) Radioactive substances. The permittee shall not release into the ambient air any radioactive substances exceeding the concentrations specified in NDAC 33.1-10.
- 3) Other air contaminants. The permittee shall not emit any other air contaminants in concentrations that would be injurious to human health or well-being or unreasonably interfere with the enjoyment of property or that would injure plant or animal life.
- 4) Disclaimer. Nothing in any other part or section of this permit may in any manner be construed as authorizing or legalizing the emission of air contaminants in such manner that would violate the standards in Paragraphs 1), 2) and 3) of this condition.

Applicable Requirements: NDAC 33.1-15-02-04 and 40 CFR 50.1(e)

- B. **Fugitive Emissions:** The release of fugitive emissions shall comply with the applicable requirements in NDAC 33.1-15-17.

Applicable Requirement: NDAC 33.1-15-17

- C. **Open Burning:** The permittee may not cause, conduct, or permit open burning of refuse, trade waste, or other combustible material, except as provided for in Section 33.1-15-04-02 and may not conduct, cause, or permit the conduct of a salvage operation by open burning. Any permissible open burning under NDAC 33.1-15-04-02 must comply with the requirements of that section.

Applicable Requirement: NDAC 33.1-15-04

- D. **Asbestos Renovation or Demolition:** Any asbestos renovation or demolition at the facility shall comply with emission standard for asbestos in NDAC 33.1-15-13.

Applicable Requirement: NDAC 33.1-15-13-02

- E. **Requirements for Organic Compounds Gas Disposal:**

- 1) Any organic compounds, gases and vapors which are generated as wastes as the result of storage, refining or processing operations and which contain hydrogen sulfide shall be incinerated, flared or treated in an equally effective manner before being released into the ambient air.
- 2) Each flare must be equipped and operated with an automatic ignitor or a continuous burning pilot.

Applicable Requirement: NDAC 33.1-15-07-02

- F. **Rotating Pumps and Compressors:** All rotating pumps and compressors handling volatile organic compounds must be equipped and operated with properly maintained seals designed for their specific product service and operating conditions.

Applicable Requirement: NDAC 33.1-15-07-01.5

- G. **Shutdowns/Malfunction/Continuous Emission Monitoring System Failure:**

- 1) **Maintenance Shutdowns.** In the case of shutdown of air pollution control equipment for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Department at least 24 hours prior to the planned shutdown provided that the air contaminating source will be operated while the control equipment is not in service. Such prior notice shall include the following:
 - a) Identification of the specific facility to be taken out of service as well as its location and permit number.

- b) The expected length of time that the air pollution control equipment will be out of service.
- c) The nature and estimated quantity of emissions of air pollutants likely to be emitted during the shutdown period.
- d) Measures, such as the use of off-shift labor and equipment, that will be taken to minimize the length of the shutdown period.
- e) The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.
- f) Nothing in this subsection shall in any manner be construed as authorizing or legalizing the emission of air contaminants in excess of the rate allowed by this article or a permit issued pursuant to this article.

Applicable Requirement: NDAC 33.1-15-01-13.1

2) Malfunctions.

- a) When a malfunction in any installation occurs that can be expected to last longer than 24 hours and cause the emission of air contaminants in violation of this article or other applicable rules and regulations, the person responsible for such installation shall notify the Department of such malfunction as soon as possible during normal working hours. The notification must contain a statement giving all pertinent facts, including the estimated duration of the breakdown. The Department shall be notified when the condition causing the malfunction has been corrected.
- b) Immediate notification to the Department is required for any malfunction that would threaten health or welfare or pose an imminent danger. During normal working hours the Department can be contacted at 701-328-5188. After hours the Department can be contacted through the 24-hour state radio emergency number 1-800-472-2121. If calling from out of state, the 24-hour number is 701-328-9921.
- c) Unavoidable Malfunction. The owner or operator of a source who believes any excess emissions resulted from an unavoidable malfunction shall submit a written report to the Department which includes evidence that:
 - [1] The excess emissions were caused by a sudden, unavoidable breakdown of technology that was beyond the reasonable control of the owner or operator.
 - [2] The excess emissions could not have been avoided by better operation and maintenance, did not stem from an activity or event that could have been foreseen and avoided, or planned for.

- [3] To the extent practicable, the source maintained and operated the air pollution control equipment and process equipment in a manner consistent with good practice for minimizing emissions, including minimizing any bypass emissions.
- [4] Any necessary repairs were made as quickly as practicable, using off-shift labor and overtime as needed and possible.
- [5] All practicable steps were taken to minimize the potential impact of the excess emissions on ambient air quality.
- [6] The excess emissions are not part of a recurring pattern that may have been caused by inadequate operation or maintenance, or inadequate design of the malfunctioning equipment.

The report shall be submitted within 30 days of the end of the calendar quarter in which the malfunction occurred or within 30 days of a written request by the Department, whichever is sooner.

The burden of proof is on the owner or operator of the source to provide sufficient information to demonstrate that an unavoidable equipment malfunction occurred. The Department may elect not to pursue enforcement action after considering whether excess emissions resulted from an unavoidable equipment malfunction. The Department will evaluate, on a case-by-case basis, the information submitted by the owner or operator to determine whether to pursue enforcement action.

Applicable Requirement: NDAC 33.1-15-01-13.2

- 3) Continuous Emission Monitoring System Failures. When a failure of a continuous emission monitoring system occurs, an alternative method for measuring or estimating emissions must be undertaken as soon as possible. The owner or operator of a source that uses an alternative method shall have the burden of demonstrating that the method is accurate. Timely repair of the emission monitoring system must be made. The provisions of this subsection do not apply to sources that are subject to monitoring requirements in Chapter 33.1-15-21 (40 CFR 75, Acid Rain Program).

Applicable Requirement: NDAC 33.1-15-01-13.3

H. **Noncompliance Due to an Emergency:** The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:

- 1) An emergency occurred, and that the permittee can identify the cause(s) of the emergency;
- 2) The permitted facility was at the time being properly operated;

- 3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and
- 4) The permittee submitted notice of the emergency to the Department within one working day of the time when emission limitations were exceeded longer than 24-hours due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. Those emergencies not reported within one working day, as well as those that were, will be included in the semi-annual report.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

Technology-based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a New Source Performance Standard) rather than those established to attain a health-based air quality standard.

An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of this source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes this source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Applicable Requirement: NDAC 33.1-15-14-06.5.g

- I. **Air Pollution from Internal Combustion Engines:** The permittee shall comply with all applicable requirements of NDAC 33.1-15-08-01 – Internal Combustion Engine Emissions Restricted.

Applicable Requirement: NDAC 33.1-15-08-01

- J. **Prohibition of Air Pollution:**

- 1) The permittee shall not permit or cause air pollution, as defined in NDAC 33.1-15-01-04.
- 2) Nothing in any other part of this permit or any other regulation relating to air pollution shall in any manner be construed as authorizing or legalizing the creation or maintenance of air pollution.

Applicable Requirement: NDAC 33.1-15-01-15

K. Performance Tests:

- 1) The Department may reasonably require the permittee to make or have made tests, at a reasonable time or interval, to determine the emission of air contaminants from any source, for the purpose of determining whether the permittee is in violation of any standard or to satisfy other requirements of NDCC 23.1-06. All tests shall be made, and the results calculated in accordance with test procedures approved or specified by the Department including the North Dakota Department of Environmental Quality Emission Testing Guideline. All tests shall be conducted by reputable, qualified personnel. The Department shall be given a copy of the test results in writing and signed by the person responsible for the tests.
- 2) The Department may conduct tests of emissions of air contaminants from any source. Upon request of the Department, the permittee shall provide necessary and adequate access into stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants.

Applicable Requirement: NDAC 33.1-15-01-12

- 3) Except for sources subject to 40 CFR 63, the permittee shall notify the Department by submitting a Proposed Test Plan, or its equivalent, at least 30 calendar days in advance of any tests of emissions of air contaminants required by the Department. The permittee shall notify the Department at least 60 calendar days in advance of any performance testing required under 40 CFR 63, unless otherwise specified by the subpart. If the permittee is unable to conduct the performance test on the scheduled date, the permittee shall notify the Department as soon as practicable when conditions warrant and shall coordinate a new test date with the Department.

Failure to give the proper notification may prevent the Department from observing the test. If the Department is unable to observe the test because of improper notification, the test results may be rejected.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(3)(a), NDAC 33.1-15-12-02 Subpart A (40 CFR 60.8), NDAC 33.1-15-13-01.2 Subpart A (40 CFR 61.13), NDAC 33.1-15-22-03 Subpart A (40 CFR 63.7)

- L. Pesticide Use and Disposal:** Any use of a pesticide or disposal of surplus pesticides and empty pesticide containers shall comply with the requirements in NDAC 33.1-15-10.

Applicable Requirements: NDAC 33.1-15-10-01 and NDAC 33.1-15-10-02

- M. Air Pollution Emergency Episodes:** When an air pollution emergency episode is declared by the Department, the permittee shall comply with the requirements in NDAC 33.1-15-11.

Applicable Requirements: NDAC 33.1-15-11-01 through NDAC 33.1-15-11-04

N. **Stratospheric Ozone Protection:** The permittee shall comply with any applicable standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to Section 82.156.
- 2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to Section 82.158.
- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to Section 82.161.
- 4) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to Section 82.156.

Applicable Requirement: 40 CFR 82

O. **Chemical Accident Prevention:** The permittee shall comply with all applicable requirements of Chemical Accident Prevention pursuant to 40 CFR 68. The permittee shall comply with the requirements of this part no later than the latest of the following dates:

- 1) Three years after the date on which a regulated substance is first listed under this part; or
- 2) The date on which a regulated substance is first present above a threshold quantity in a process.

Applicable Requirement: 40 CFR 68

P. **Air Pollution Control Equipment:** The permittee shall maintain and operate air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The manufacturer's recommended Operations and Maintenance (O&M) procedures, or a site-specific O&M procedure developed from the manufacturer's recommended O&M procedures, shall be followed to assure proper operation and maintenance of the equipment. The permittee shall have the O&M procedures available onsite and provide the Department with a copy when requested.

Applicable Requirement: NDAC 33.1-15-14-06.5.b(1)

Q. **Prevention of Significant Deterioration of Air Quality** (40 CFR 52.21 as incorporated by NDAC Chapter 33.1-15-15): If this facility is classified as a major stationary source under the Prevention of Significant Deterioration of Air Quality (PSD) rules, a Permit to Construct must be obtained from the Department for any project which meets the definition of a "major modification" under 40 CFR 52.21(b)(2).

If this facility is classified as a major stationary source under the PSD rules and the permittee elects to use the method specified in 40 CFR 52.21(b)(41)(ii)(a) through (c) for calculating the projected actual emissions of a proposed project, then the permittee shall comply with all applicable requirements of 40 CFR 52.21(r)(6).

Applicable Requirement: NDAC 33.1-15-15-01.2

8. **General Conditions:**

- A. **Annual Fee Payment:** The permittee shall pay an annual fee, for administering and monitoring compliance, which is determined by the actual annual emissions of regulated contaminants from the previous calendar year. The Department will send a notice, identifying the amount of the annual permit fee, to the permittee of each affected installation. The fee is due within 60 days following the date of such notice. Any source that qualifies as a "small business" may petition the Department to reduce or exempt any fee required under this section. Failure to pay the fee in a timely manner or submit a certification for exemption may cause this Department to initiate action to revoke the permit.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(7) and NDAC 33.1-15-23-04

- B. **Permit Renewal and Expiration:** This permit shall be effective from the date of its issuance for a fixed period of five years. The permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least six months, but no more than 18 months, prior to the date of permit expiration. The Department shall approve or disapprove the renewal application within 60 days of receipt. Unless the Department requests additional information or otherwise notifies the applicant of incompleteness, the application shall be deemed complete. For timely and complete renewal applications for which the Department has failed to issue or deny the renewal permit before the expiration date of the previous permit, all terms and conditions of the permit, including any permit shield previously granted shall remain in effect until the renewal permit has been issued or denied. The application for renewal shall include the current permit number, description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.

Applicable Requirements: NDAC 33.1-15-14-06.4 and NDAC 33.1-15-14-06.6

- C. **Transfer of Ownership or Operation:** This permit may not be transferred except by procedures allowed in Chapter 33.1-15-14 and is to be returned to the Department upon the destruction or change of ownership of the source unit(s), or upon expiration, suspension or revocation of this permit. A change in ownership or operational control of a source is treated as an administrative permit amendment if no other change in the permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department.

Applicable Requirement: NDAC 33.1-15-14-06.6.d

- D. **Property Rights:** This permit does not convey any property rights of any sort, or any exclusive privilege.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(6)(d)

- E. **Submissions:**

- 1) Reports, test data, monitoring data, notifications, and requests for renewal shall be submitted to the Department using a format provided or approved by the Department. Physical submittals shall be submitted to:

North Dakota Department of Environmental Quality
Division of Air Quality
4201 Normandy Street, 2nd Floor
Bismarck, ND 58503-1324

- 2) Any application form, report or compliance certification submitted shall be certified as being true, accurate, and complete by a responsible official.

Applicable Requirement: NDAC 33.1-15-14-06.4.d

- F. **Right of Entry:** Any duly authorized officer, employee or agent of the North Dakota Department of Environmental Quality may enter and inspect any property, premise or place listed on this permit or where records are kept concerning this permit at any reasonable time for the purpose of ascertaining the state of compliance with this permit and the North Dakota Air Pollution Control Rules. The Department may conduct tests and take samples of air contaminants, fuel, processing material, and other materials which affect or may affect emissions of air contaminants from any source. The Department shall have the right to access and copy any records required by the Department's rules and to inspect monitoring equipment located on the premises.

Applicable Requirements: NDAC 33.1-15-14-06.5.c(2) and NDAC 33.1-15-01-06

- G. **Compliance:** The permittee must comply with all conditions of this permit. Any noncompliance with a federally-enforceable permit condition constitutes a violation of the Federal Clean Air Act. Any noncompliance with any State enforceable condition of this permit constitutes a violation of NDCC Chapter 23.1-06 and NDAC 33.1-15. Violation of any condition of this permit is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application. Noncompliance may also be grounds for assessment of penalties under the NDCC 23.1-06. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(6)(a) and NDAC 33.1-15-14-06.5.a(6)(b)

- H. **Duty to Provide Information:** The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This includes instances where an alteration, repair, expansion, or change in method of operation of the source occurs. Upon request, the permittee shall also furnish to the

Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such recourse directly to the Department along with a claim of confidentiality. The permittee, upon becoming aware that any relevant facts were omitted, or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. Items that warrant supplemental information submittal include, but are not limited to, changes in the ambient air boundary and changes in parameters associated with emission points (i.e., stack parameters). The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(6)(e), NDAC 33.1-15-14-06.6.b(3) and NDAC 33.1-15-14-06.4.b

I. Reopening for Cause: The Department will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:

- 1) Additional applicable requirements under the Federal Clean Air Act become applicable to the permittee with a remaining permit term of three or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
- 2) The Department or the United States Environmental Protection Agency determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- 3) The Department or the United States Environmental Protection Agency determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 4) Reopenings shall not be initiated before a notice of intent to reopen is provided to the permittee by the Department at least 30 days in advance of the date that this permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency. Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

Applicable Requirement: NDAC 33.1-15-14-06.6.f

J. Permit Changes: The permit may be modified, revoked, reopened, and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(6)(c)

K. Off-Permit Changes: A permit revision is not required for changes that are not addressed or prohibited by this permit, provided the following conditions are met:

- 1) No such change may violate any term or condition of this permit.
- 2) Each change must comply with all applicable requirements.
- 3) Changes under this provision may not include changes or activities subject to any requirement under Title IV or that are modifications under any provision of Title I of the Federal Clean Air Act.
- 4) A Permit to Construct under NDAC 33.1-15-14-02 has been issued, if required.
- 5) Before the permit change is made, the permittee must provide written notice to both the Department and Air Program (8P-AR), Office of Partnerships & Regulatory Assistance, US EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129, except for changes that qualify as insignificant activities in Section 33.1-15-14-06. This notice shall describe each change, the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result.
- 6) The permittee shall record all changes that result in emissions of any regulated air pollutant subject to any applicable requirement not otherwise regulated under this permit, and the emissions resulting from those changes. The record shall reside at the permittee's facility.

Applicable Requirement: NDAC 33.1-15-14-06.6.b(3)

L. **Administrative Permit Amendments:** This permit may be revised through an administrative permit amendment, if the revision to this permit accomplishes one of the following:

- 1) Corrects typographical errors.
- 2) Identifies a change in the name, address or phone number of any person identified in this permit or provides a similar minor administrative change at the source.
- 3) Requires more frequent monitoring or reporting by the permittee.
- 4) Allows for a change in ownership or operational control of the source where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the Department.
- 5) Incorporates into the Title V permit the requirements from a Permit to Construct when the review was substantially equivalent to Title V requirements for permit issuance, renewal, reopenings, revisions and permit review by the United States Environmental Protection Agency and affected state review, that would be applicable to the change if it were subject to review as a permit modification and compliance requirements substantially equivalent to Title V requirements for permit content were contained in the Permit to Construct.

- 6) Incorporates any other type of change which the Administrator of the United States Environmental Protection Agency has approved as being an administrative permit amendment as part of the Department's approved Title V operating permit program.

Applicable Requirement: NDAC 33.1-15-14-06.6.d

M. **Minor Permit Modification:** This permit may be revised by a minor permit modification, if the proposed permit modification meets the following requirements:

- 1) Does not violate any applicable requirement.
- 2) Does not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in this permit.
- 3) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis.
- 4) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include a federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the Federal Clean Air Act; and alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the Federal Clean Air Act.
- 5) Is not a modification under NDAC 33.1-15-12, 33.1-15-13, and 33.1-15-15 or any provision of Title I of the Federal Clean Air Act.
- 6) Is not required to be processed as a significant modification.

Applicable Requirement: NDAC 33.1-15-14-06.6.e(1)

N. **Significant Modifications:**

- 1) Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments. Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions shall be considered significant. Nothing therein shall be construed to preclude the permittee from making changes consistent with this subsection that would render existing permit compliance terms and conditions irrelevant.
- 2) Significant permit modifications shall meet all Title V requirements, including those for applications, public participation, review by affected states, and review by the United States Environmental Protection Agency, as they apply to permit issuance and permit

renewal. The Department shall complete review of significant permit modifications within nine months after receipt of a complete application.

Applicable Requirement: NDAC 33.1-15-14-06.6.e(3)

- O. **Operational Flexibility:** The permittee is allowed to make a limited class of changes within the permitted facility that contravene the specific terms of this permit without applying for a permit revision, provided the changes do not exceed the emissions allowable under this permit, are not Title I modifications and a Permit to Construct is not required. This class of changes does not include changes that would violate applicable requirements; or changes to federally-enforceable permit terms or conditions that are monitoring, recordkeeping, reporting, or compliance certification requirements.

The permittee is required to send a notice to both the Department and Air Program (8P-AR), Office of Partnerships & Regulatory Assistance, US EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129, at least seven days in advance of any change made under this provision. The notice must describe the change, when it will occur and any change in emissions, and identify any permit terms or conditions made inapplicable as a result of the change. The permittee shall attach each notice to its copy of this permit. Any permit shield provided in this permit does not apply to changes made under this provision.

Applicable Requirement: NDAC 33.1-15-14-06.6.b(2)

- P. **Relationship to Other Requirements:** Nothing in this permit shall alter or affect the following:

- 1) The provisions of Section 303 of the Federal Clean Air Act (emergency orders), including the authority of the administrator of the United States Environmental Protection Agency under that section.
- 2) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.
- 3) The ability of the United States Environmental Protection Agency to obtain information from a source pursuant to Section 114 of the Federal Clean Air Act.
- 4) Nothing in this permit shall relieve the permittee of the requirement to obtain a Permit to Construct.

Applicable Requirements: NDAC 33.1-15-14-06.3 and NDAC 33.1-15-14-06.5.f(3)(a), (b) and (d)

- Q. **Severability Clause:** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(5)

- R. **Circumvention:** The permittee shall not cause or permit the installation or use of any device of any means which conceals or dilutes an emission of air contaminants which would otherwise violate this permit.

Applicable Requirement: NDAC 33.1-15-01-08

9. **State Enforceable Only Conditions (not Federally enforceable):**

- A. **General Odor Restriction:** The permittee shall not discharge into the ambient air any objectionable odorous air contaminant which exceeds the limits established in NDAC 33.1-15-16.

Applicable Requirement: NDAC 33.1-15-16

- B. **Hydrogen Sulfide Restriction:** The permittee shall not discharge into the ambient air hydrogen sulfide (H₂S) in concentrations that would be objectionable on land owned or leased by the complainant or in areas normally accessed by the general public. For the purpose of complaint resolution, two samples with concentrations greater than 0.05 parts per million (50 parts per billion) sampled at least 15 minutes apart within a two-hour period and measured in accordance with Section 33.1-15-16-04 constitute a violation.

Applicable Requirement: NDAC 33.1-15-16-04

ONEOK Rockies Midstream, L.L.C.
Grasslands Gas Plant
Facility Emissions Summary - Annual

Unit ID	EU ID	Description	NOx	CO	VOC	SO ₂	PM	H ₂ S	HCHO	HAP	CO ₂ e
			TPY	TPY	TPY	TPY	TPY	TPY	TPY	TPY	TPY
1-GEN	1(Gen)	550-hp Caterpillar G399 NA HCR Compressor Engine	0.46	0.78	0.01	<0.01	<0.01	--	<0.01	0.01	24.47
BO-402	1 (Auxiliary)	21.00-mmBtu/hr Steam Boiler	8.96	7.53	0.49	0.05	0.68	--	0.01	0.17	10,770.67
BO-403	2 (Auxiliary)	21.00-mmBtu/hr Steam Boiler	8.96	7.53	0.49	0.05	0.68	--	0.01	0.17	10,770.67
BO-701	1 (Inert)	17.75-mmBtu/hr Inert Gas Generator	7.58	6.37	0.42	0.05	0.58	--	0.01	0.14	9,103.78
BO-702	2 (Inert)	17.75-mmBtu/hr Inert Gas Generator	7.58	6.37	0.42	0.05	0.58	--	0.01	0.14	9,103.78
H-101	1 (Reg)	2.73-mmBtu/hr Regeneration Heater	1.17	0.98	0.06	0.01	0.09	--	<0.01	0.02	1,400.19
HE-15.07	4 (Reg)	5.14-mmBtu/hr Regeneration Heater	2.19	1.84	0.12	0.01	0.17	--	<0.01	0.04	2,636.25
HE-3800	4 (Hot Oil)	45.80-mmBtu/hr Hot Oil Heater	19.55	16.42	1.08	0.12	1.49	--	0.01	0.37	23,490.32
H-401	1 (Hot Oil)	43.75-mmBtu/hr Hot Oil Heater	18.68	15.69	1.03	0.11	1.42	--	0.01	0.35	22,438.89
H-402	2 (Reg)	2.73-mmBtu/hr Regeneration Heater	1.17	0.98	0.06	0.01	0.09	--	<0.01	0.02	1,400.19
H-404	3 (Reg)	2.73-mmBtu/hr Regeneration Heater	1.17	0.98	0.06	0.01	0.09	--	<0.01	0.02	1,400.19
H-405	2 (Hot Oil)	43.75-mmBtu/hr Hot Oil Heater	18.68	15.69	1.03	0.11	1.42	--	0.01	0.35	22,438.89
H-602	1 (Boiler)	28.75-mmBtu/hr Steam Boiler	12.27	10.31	0.68	0.07	0.93	--	0.01	0.23	14,745.56
H-7801	2 (Glycol)	0.94-mmBtu/hr Glycol Reboiler	0.40	0.34	0.02	<0.01	0.03	--	<0.01	0.01	482.12
TK-103	-	400-bbl Produced Water Tank	--	--	0.04	--	--	--	--	<0.01	0.00
TL-1	PP (Loading)	Natural Gasoline Loading - Revised	--	--	8.83	--	--	--	--	0.47	0.00
TL-2	PP (Loading)	Propane Loading	--	--	2.45	--	--	--	--	0.00	0.00
TL-3	PP (Loading)	Butane Loading	--	--	0.50	--	--	--	--	0.00	0.00
TL-4	PW (Loading)	Produced Water Loading	--	--	0.05	--	--	--	--	<0.01	0.00
1-Flare	1 (Flare)	Plant Flare - Routine Process Flaring	7.79	35.13	35.92	<0.01	0.01	0.00	<0.01	0.07	14,532.49
TK-M1	1 (Methanol)	200-bbl Methanol Tank	--	--	0.14	--	--	--	--	0.14	--
FUG1	FUG	Fugitive Emissions not Subject to NSPS KKK or OOOO	--	--	71.23	--	--	2.07	--	4.60	725.97
FUG2	FUGKKK	Fugitive Emissions Subject to NSPS KKK	--	--	25.68	--	--	0.74	--	1.66	259.40
FUG5	FUGOOOO	Fugitive Emissions Subject to NSPS OOOO	--	--	4.63	--	--	0.33	--	0.11	111.95
Total =			116.61	126.93	155.43	0.65	8.25	3.13	0.09	9.10	145,835.78

Estimated Maximum Emergency Flaring Emissions - For Informational Purposes Only

Unit ID	EU ID	Description	NOx	CO	VOC	SO ₂	PM	H ₂ S	HCHO	HAP	CO ₂ e
			TPY	TPY	TPY	TPY	TPY	TPY	TPY	TPY	TPY
1-Flare	1 (Flare)	Plant Flare - Emergency Flaring	7.79	35.52	26.34	540.37	0.00	5.86	--	0.04	15,563.82

ONEOK Rockies Midstream, L.L.C.
Grasslands Gas Plant
Facility Emissions Summary - Hourly

Unit ID	EU ID	Description	NOx	CO	VOC	SO ₂	PM	H ₂ S	HCHO	HAP	CO ₂ e
			lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
1-GEN	1(Gen)	550-hp Caterpillar G399 NA HCR Compressor Engine	9.24	15.55	0.12	<0.01	0.08	--	0.09	0.14	489.47
BO-402	1 (Auxiliary)	21.00-mmBtu/hr Steam Boiler	2.05	1.72	0.11	0.01	0.16	--	<0.01	0.04	2,459.06
BO-403	2 (Auxiliary)	21.00-mmBtu/hr Steam Boiler	2.05	1.72	0.11	0.01	0.16	--	<0.01	0.04	2,459.06
BO-701	1 (Inert)	17.75-mmBtu/hr Inert Gas Generator	1.73	1.45	0.10	0.01	0.13	--	<0.01	0.03	2,078.49
BO-702	2 (Inert)	17.75-mmBtu/hr Inert Gas Generator	1.73	1.45	0.10	0.01	0.13	--	<0.01	0.03	2,078.49
H-101	1 (Reg)	2.73-mmBtu/hr Regeneration Heater	0.27	0.22	0.01	<0.01	0.02	--	<0.01	0.01	319.68
HE-15.07	4 (Reg)	5.14-mmBtu/hr Regeneration Heater	0.50	0.42	0.03	<0.01	0.04	--	<0.01	0.01	601.88
HE-3800	4 (Hot Oil)	45.80-mmBtu/hr Hot Oil Heater	4.46	3.75	0.25	0.03	0.34	--	<0.01	0.08	5,363.09
H-401	1 (Hot Oil)	43.75-mmBtu/hr Hot Oil Heater	4.26	3.58	0.23	0.03	0.32	--	<0.01	0.08	5,123.04
H-402	2 (Reg)	2.73-mmBtu/hr Regeneration Heater	0.27	0.22	0.01	<0.01	0.02	--	<0.01	0.01	319.68
H-404	3 (Reg)	2.73-mmBtu/hr Regeneration Heater	0.27	0.22	0.01	<0.01	0.02	--	<0.01	0.01	319.68
H-405	2 (Hot Oil)	43.75-mmBtu/hr Hot Oil Heater	4.26	3.58	0.23	0.03	0.32	--	<0.01	0.08	5,123.04
H-602	1 (Boiler)	28.75-mmBtu/hr Steam Boiler	2.80	2.35	0.15	0.02	0.21	--	<0.01	0.05	3,366.57
H-7801	2 (Glycol)	0.94-mmBtu/hr Glycol Reboiler	0.09	0.08	0.01	<0.01	0.01	--	<0.01	<0.01	110.07
TK-103	-	400-bbl Produced Water Tank	--	--	0.01	--	--	--	--	<0.01	0.00
TL-1	PP (Loading)	Natural Gasoline Loading - Revised	--	--	2.01	--	--	--	--	0.11	0.00
TL-2	PP (Loading)	Propane Loading	--	--	0.56	--	--	--	--	0.00	0.00
TL-3	PP (Loading)	Butane Loading	--	--	0.11	--	--	--	--	0.00	0.00
TL-4	PW (Loading)	Produced Water Loading	--	--	0.01	--	--	--	--	<0.01	0.00
1-Flare	1 (Flare)	Plant Flare ^{1,2}	1.78	8.02	8.20	See note ¹	<0.01	0.00	<0.01	0.02	3,317.92
TK-M1	1 (Methanol)	200-bbl Methanol Tank	--	--	0.03	--	--	--	--	0.03	--
FUG1	FUG	Fugitive Emissions not Subject to NSPS KKK or OOOO	--	--	16.26	--	--	0.47	--	1.05	165.75
FUG2	FUGKKK	Fugitive Emissions Subject to NSPS KKK	--	--	5.86	--	--	0.17	--	0.38	59.22
FUG5	FUGOOOO	Fugitive Emissions Subject to NSPS OOOO	--	--	1.06	--	--	0.08	--	0.03	25.56
Total =			35.75	44.35	35.61	0.15	1.96	0.72	0.10	2.21	33,779.72

Estimated Maximum Emergency Flaring Emissions - For Informational Purposes Only

Unit ID	EU ID	Description	NOx	CO	VOC	SO ₂	PM	H ₂ S	HCHO	HAP	CO ₂ e
			lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr	lb/hr
1-Flare	1 (Flare)	Plant Flare - Emergency Flaring	1.78	8.11	6.01	See note ¹	0.00	1.34	--	0.01	3,553.38

Notes:

- 1) ORM requests to retain the current hourly limitation on SO₂ of 14,760 lb/hr.
- 2) Hourly representations for the flare are not representative of actual hourly operation, but have been included for totals to reflect an annual hourly average.

**ONEOK Rockies Midstream, L.L.C.
Grasslands Gas Plant
Truck Loading Information**

Equipment Information				
	TL-1	TL-2	TL-3	TL-4
Contents Loaded	Natural Gasoline	Propane	Butane	Produced Water
Fill Method	Submerged	Submerged	Submerged	Submerged
Type of Service	Dedicated	Dedicated	Dedicated	Dedicated
Mode of Operation	Vapor Balance	Vapor Balance	Vapor Balance	Normal
Saturation Factor	1.0	1.0	1.0	0.6
Throughput (1000 gal/yr)	30,000	50,000	30,000	2,000
Throughput (10⁶ gal/yr)	30.000	50.000	30.000	2.000
P=True Vapor Pressure of Liquid Loaded (avg. psia)	14.3	90.0	23.0	0.1741
M=Molecular Weight of Vapor (lb/lb-mol)	79.71	44.10	58.12	20.7468
T= Temperature of Bulk Liquid Loaded (average °F)	47.50	43.67	43.67	43.67
T = Temperature of bulk liquid loaded (°F + 460 = °R)	507.50	503.67	503.67	503.67
Annual Emission Factor (lb/1000 gal)¹	28.04	98.18	33.07	0.05
Control Type	Flare	Closed System	Closed System	None
Control Efficiency	97.90%	99.90%	99.90%	0.00%

Notes:

1) AP-42 5.2-4 Eq.1: Loading Loss (lb/1000 gal) = 12.46 *S*P*M/T.

ONEOK Rockies Midstream, L.L.C.
Grasslands Gas Plant
Natural Gasoline Truck Loading Emissions Calculations

Unit ID: TL-1

Uncontrolled Emissions

Pollutant	Emission Factor			Throughput			Conversion		Annual Emissions			Operating Hours			Conversion		Average Hourly Emissions ¹	
VOC	28.04	lb/1000 gal	X	30,000	1000 gal/yr	X	0.0005	ton/lb	=	420.66	TPY	/	8,760	X	2,000	lb/ton	=	96.04 lb/hr
n-Hexane	-	-	-	-	-	-	-	-	=	6.73	TPY	/	8,760	X	2,000	lb/ton	=	1.54 lb/hr
Benzene	-	-	-	-	-	-	-	-	=	3.79	TPY	/	8,760	X	2,000	lb/ton	=	0.86 lb/hr
Toluene	-	-	-	-	-	-	-	-	=	5.47	TPY	/	8,760	X	2,000	lb/ton	=	1.25 lb/hr
Ethylbenzene	-	-	-	-	-	-	-	-	=	0.42	TPY	/	8,760	X	2,000	lb/ton	=	0.10 lb/hr
Xylenes	-	-	-	-	-	-	-	-	=	2.10	TPY	/	8,760	X	2,000	lb/ton	=	0.48 lb/hr
Other HAP	-	-	-	-	-	-	-	-	=	3.79	TPY	/	8,760	X	2,000	lb/ton	=	0.86 lb/hr

Controlled Emissions

Pollutant	Annual Emissions			Operating Hours			Conversion		Average Hourly Emissions ¹		
VOC	=	8.83	TPY	/	8,760	X	2,000	lb/ton	=	2.01	lb/hr
n-Hexane	=	0.14	TPY	/	8,760	X	2,000	lb/ton	=	0.03	lb/hr
Benzene	=	0.08	TPY	/	8,760	X	2,000	lb/ton	=	0.02	lb/hr
Toluene	=	0.11	TPY	/	8,760	X	2,000	lb/ton	=	0.03	lb/hr
Ethylbenzene	=	0.01	TPY	/	8,760	X	2,000	lb/ton	=	<0.01	lb/hr
Xylenes	=	0.04	TPY	/	8,760	X	2,000	lb/ton	=	0.01	lb/hr
Other HAP	=	0.08	TPY	/	8,760	X	2,000	lb/ton	=	0.02	lb/hr

Estimated HAP Composition (% by Weight)²

Pollutant	Wt%
n-Hexane	1.600%
Benzene	0.900%
Toluene	1.300%
Ethylbenzene	0.100%
Xylenes	0.500%
Other HAP	0.900%
Total HAP =	5.300%

Notes:
1) Due to variable short-term emission rates, average lb/hr rate shown for reference only.
2) Table 11.3-2, "HAP Percent of VOC Emissions," Gasoline Marketing (Stage I and Stage II), EPA Document Revised Final 1/2001.



EMISSION UNIT FOR TITLE V PERMIT TO OPERATE
 NORTH DAKOTA DEPARTMENT OF ENVIRONMENTAL QUALITY
 DIVISION OF AIR QUALITY
 SFN 61006 (3-2019)

SECTION A – EQUIPMENT INFORMATION

Type of Unit or Process (rotary dryer, cupola furnace, crusher, pelletizer, engine, etc.) Truck Loading	Emission Unit Number: TL-1	Emission Point Number: TL-1
Make -	Model -	Installation or manufacture date
Capacity (manufacturer's or designer's guaranteed maximum)	Operating Capacity (specific units) -	
Brief description of operation of unit or process: Condensate/Natural Gas Truck Loading		
Brief description of alternative operating scenario (see Section M1 & M2 to elaborate): -	Alternative Emission Point: -	

SECTION B –OPERATING SCHEDULE

Are you agreeing to a limit on the operating schedule for this unit? ☐ Yes ☒ No				
Hours Per Day 24	Days Per Week 7	Weeks Per Year 52	Peak Production Season (if any) N/A	Dates of Annual Shutdown N/A

SECTION C – PRODUCTION RATES (THROUGHPUT LIMITS)

Are you agreeing to a limit on the production for this unit? ☐ Yes ☐ No (If No, show normal operating schedule.)				
Material	Process Time Frame			Specify Units (tons, Btu, Gal., etc)
	Hour	Week	Year	
Condensate	82	13737	714286	bbl

SECTION D1 – APPLICABLE REQUIREMENTS

Generally describe all applicable requirements.					
Regulations (i.e. SIP, NESHAP, PSD, NSPS, etc)	Monitoring Requirements	Recordkeeping Requirements	Reporting Requirements	Testing Requirements	Applicable Emission Standards (include units)
-	-	-		-	-

SECTION D2 – IDENTIFICATION OF AIR CONTAMINANTS

Has emission unit testing been done at the facility? ☐ Yes ☒ No			
Emission Unit ID	Last Date when a Testing Program was Completed	If Program is Continuous, Give Approximate Testing Frequency	Regulation requiring frequency (NSPS, MACT, Permit Requirement-list permit number)

Add additional pages if necessary

SECTION E – PRODUCTS OF UNIT OR PROCESS

Include all, even those not usable because they do not meet specifications					
Material	Hourly Process Weight (Pounds Per Hour)			Average Annual (Specify Units)	Intermittent Operation Only (Average Hours Per Week)
	Average	Maximum	Minimum		
N/A					

SECTION F – FUELS USED

Coal (Tons/Yr)	% Sulfur	% Ash	Oil (Gal/Yr)	% Sulfur	Grade No.
Natural Gas (Thousand CF/Yr)		LP Gas (Gal/Yr)		Other (Specify)	

SECTION G – STACK PARAMETERS

List each pollutant separately.					
Pollutant (use CAS for HAPs)	Stack Height (ft)	Stack Diameter (ft at top)	Gas Volume (ACFM)	Exit Temp (°F)	Gas Velocity (fps)
Stack Base UTM Coordinate X:			Stack Base UTM Coordinate Y:		

SECTION H – ALTERNATIVE STACK PARAMETERS

List each pollutant separately.					
Pollutant (use CAS for HAPs)	Stack Height (ft)	Stack Diameter (ft at top)	Gas Volume (ACFM)	Exit Temp (°F)	Gas Velocity (fps)
N/A					
Stack Base UTM Coordinate X:			Stack Base UTM Coordinate Y:		

SECTION I – AIR CONTAMINANTS EMITTED

Known or Suspected - Use emission rates after control equipment.			
Pollutant (use CAS for HAPs)	Amount		Basis of Estimate (AP-42, testing, engineering estimate, etc)
	Pounds/Hr	Tons/Yr	
VOC	2.01	8.83	AP-42

SECTION J1 – AIR POLLUTION CONTROL EQUIPMENT

Type: ☐ Cyclone ☐ Multiclone ☐ Baghouse ☐ Electrostatic Precipitator ☐ Wet Scrubber ☐ Spray Dryer ☐ None ☒ Other – Specify: <u>Flare</u>				
Name of Manufacturer		Model Number		Date to Be Installed
Application: ☐ Boiler ☐ Kiln ☐ Engine ☐ Other – Specify: _____				
Pollutants Removed	VOC	HAP		
Design Efficiency (%)	99.9% Capture/ 98% Control	99.9% Capture/		

Operating Efficiency (%)	99.9% Capture / 98% Control	99.9% Capture		
Describe method used to determine operating efficiency:				

SECTION J2 – GAS CONDITIONS

Gas Conditions	Inlet		Outlet	
Gas Volume (SCFM; 68°F; 14.7 psia)	N/A			
Gas Temperature (°F)				
Gas Pressure (in. H ₂ O)				
Gas Velocity (ft/sec)				
Pollutant Concentration (Specify pollutant and unit of concentration)	Pollutant	Unit of Concentration	Inlet	Outlet
Pressure drop through gas cleaning device (in. H ₂ O)				