



December 4 , 2023

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

RE: Title V Renewal Application
Northern Border Pipeline Company
Manning Compressor Station (CS-05)
Dunn County
Permit Number: T5-099002

Dear Sir or Madam:

Northern Border Pipeline Company (NBPL) is submitting the enclosed Title V Renewal Application for Manning Compressor Station (CS-05) located in Dunn County, North Dakota. A Permit to Construct application for the Manning Compressor Station was submitted on to NDDEQ on August 22, 2023. The PTC application was for the modification of the existing natural gas pipeline compressor station where certain equipment will be removed and replaced with new equipment as part of a modernization project.

The renewal application is being submitted at least six months prior to the permit expiration date of June 07, 2024.

If you require any additional information, please contact me at hima.draksharam@tcenergy.com or at (832) 320-5616.

Sincerely,
TC Energy Corporation

Hima Bindu Draksharam
Environmental Analyst

c: Suman Kunwar, Part 71 Operating Permits, Air Permitting & Monitoring Branch (MC 8ARD-PM), Air and Radiation Division, US EPA R8, 1595 Wynkoop Street, Denver, Colorado 80202
Tyler Livingston, Environmental Specialist, TC Energy Corporation, via email

Air Title V Operating Permit (AOP) - Renewal

version 2.5

(Submission #: HPY-T9KM-EHWZJ, version 1)

Digitally signed by:
CERIS-ND
Date: 2023.12.05 16:02:01 -06:00
Reason: Submission Data
Location: State of North Dakota

Details

Submission ID HPY-T9KM-EHWZJ

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-28447

Permit Version

5

Issue Date

06/06/2019

Expiration Date

06/07/2024

Permittee

Company Name

Northern Border Pipeline Company

Address

13710 FNB Parkway, Ste 300

Omaha, NE 68154

United States

Responsible Official

Prefix

Mr.

First Name Last Name

Dane Keplin

Title

Area Manager

Phone Type Number Extension

Business 7014457400

Email

dane_keplin@tcenergy.com

Address

10510 11th ST SW

Manning, ND 58642

United States

Contact Person for Air Pollution Matters

Prefix

Ms.

First Name Last Name

Hima Bindu Draksharam

Title

Environmental Analyst

Phone Type Number Extension

Business 8323205616

Email

hima_draksharam@tcenergy.com

Address

700 Louisiana St

Suite 1300

Houston, TX 77030

United States

Section B (Part 1) - Facility Information

Facility Name

Northern Border Pipeline Company - Manning Compressor Station

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

10510 11th St SW

Manning, ND 58642

United States

County

Dunn

Facility Location:

47.25157500000000,-102.71730300000000

10510 11th St SW, Manning, ND

Section B (Part 2) - Additional Location Information**Legal Description of Facility Site**

Qtr Qtr	Qtr	Section	Township	Range
NE	NE	33	144N	95W

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 Transmission Compressor Station	486210-Pipeline Transportation of Natural Gas	4922-Natural Gas Transmission

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 3)**Emission Unit - EU1****Emission Unit ID**

EU1

Emission Unit Description

38,000 HP ISO Cooper Rolls Coberra 3648S DLE Compressor Turbine

Emission Point ID

EU1

Emission Point Description

vertical stack

Emission Process Description

The Manning Compressor Station receives natural gas via pipeline from an upstream compressor station, compress it using the Copper-Rolls Coberra 2648S DLE Compressor Turbine and transmits the compressed gas via pipeline to a downstream station.

Emission Unit Status

Existing, no change

Applicable PTCs

PTC Number

Applicable Federal Air Programs

Program Code
New Source Performance Standards

NSPS Air Program Subparts

Subpart
Subpart A - GENERAL PROVISIONS
Subpart GG - STATIONARY GAS TURBINES

Applicable State Regulations

Regulation
33.1-15-02-04. Ambient air quality standards.
33.1-15-12. Standards of Performance for New Stationary Sources.
33.1-15-14-06. Title V Permit to Operate.
33.1-15-23. Fees.
33.1-15-03-01. Visible Emissions. Restrictions applicable to existing installations.
33.1-15-14-02. Permit to Construct Required.

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

NONE PROVIDED
Comment
 Existing Unit. No Change.

Section D - Process Equipment Information (2 of 3)

Emission Unit - EU2

Emission Unit ID

EU2

Emission Unit Description

245kW (325HP) Waukesha F18GL Emergency Generator

Emission Point ID

EU2

Emission Point Description

vertical stack

Emission Process Description

emergency generator, emissions are based on 500 hours per year of operation.

Emission Unit Status

Existing, no change

Applicable PTCs

PTC Number

Applicable Federal Air Programs

Program Code
40 CFR Part 63 Area Sources

Area Source MACT Air Program Subparts

Subpart
Subpart A - GENERAL PROVISIONS
Subpart ZZZZ - STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES (RICE)

Applicable State Regulations

Regulation
33.1-15-03-01. Visible Emissions. Restrictions applicable to existing installations.
33.1-15-22. Emissions Standards for Hazardous Air Pollutants for Source Categories.

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

NONE PROVIDED

Comment

Existing Unit. No Change

Section D - Process Equipment Information (3 of 3)**Emission Unit - EU3****Emission Unit ID**

EU3

Emission Unit Description

1.67 MMBtu/hr Hydronic Boiler

Emission Point ID

EU3

Emission Point Description

vertical stack

Emission Process Description

boiler is used for building heat and fuel gas heater

Emission Unit Status

Existing, no change

Applicable PTCs

PTC Number

Applicable Federal Air Programs

Program Code

Applicable State Regulations

Regulation

33.1-15-03-01. Visible Emissions. Restrictions applicable to existing installations.

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

NONE PROVIDED

Comment

Existing Unit. No Change.

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	235.56	NONE PROVIDED
CO	98.92	NONE PROVIDED
VOCs	13.26	NONE PROVIDED
SO2	9.05	NONE PROVIDED
PM	9.14	NONE PROVIDED
PM10	6.52	NONE PROVIDED
PM2.5	2.67	NONE PROVIDED
Total HAPs	1.81	NONE PROVIDED

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

NONE PROVIDED

Comment

See renewal application in General Document Upload (section L).

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

[T5O99002_4_0.docx - 12/05/2023 03:42 PM](#)

Comment

No changes (redline) are made to the current issued permit.

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

[NBPL Manning CS - Title V Renewal Application.pdf - 12/05/2023 03:49 PM](#)

Comment

NONE PROVIDED

Additional Forms

NONE PROVIDED

Agreements and Signature(s)

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.

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.

Signed
By Hima Bindu Draksharam on 12/05/2023 at 3:59 PM

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1. Introduction

Northern Border Pipeline Company (NBPL) is submitting this Title V Renewal Application for Manning Compressor Station (CS-05) located in Dunn County, North Dakota. The Manning Compressor Station currently operates under Title V Permit Number T5-099005 issued on June 6, 2019. The station is Title V major for Nitrogen Oxides (NO_x). There are no current changes to the station equipment and there are no new requirements that apply to this compressor station. As noted previously a Permit to Construct application was submitted to NDDEQ on August 22, 2023 to modernize the compressor station.

1.1 Site Location

Manning Compressor Station is located approximately 3.04 miles north-east of the town of Manning.

Latitude/Longitude: 47.255897, -102.718075

1.2 Facility Equipment

Manning Compressor Station currently operates the following equipment:

- Unit EU-1, a 38,000 HP (ISO) Copper-Rolls Coberra 2648S DLE Compressor Turbine,
- Unit EU-2, a 245kW (325 HP) Waukesha F18GL Emergency Generator, and
- Unit EU-3, a 1.67 MMBtu/hr Hydronic Boiler.

Additional equipment at the facility consists of fugitive leaks, blowdowns, pigging operations, and pneumatic devices.

1.3 Process Description

The Manning Compressor Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) 4922. Pipeline transmission of natural gas requires that the gas be compressed. The Manning Compressor Station receives natural gas via pipeline from an upstream compressor station, compress it using the Copper-Rolls Coberra 2648S DLE Compressor Turbine and transmits the compressed gas via pipeline to a downstream station.

1.4 Emission Calculations

1.4.1 Compressor Turbine

The emissions for the 38,000 HP (ISO) Copper-Rolls Coberra 2648S DLE Compressor Turbine were estimated using emission factors from the vendor for NO_x, CO, and VOC; EPA AP-42, Chapter 3.1 Stationary Gas Turbines, Tables 3.1-2a and 3.1-3. Turbine emission calculations estimated 650 hours per year of operation in Non-DLE mode and 8,110 hours per year of operation in DLE. Dry-low emission (DLE) turbines reduce emissions by operating in lean-burn operation.

1.4.2 Emergency Generator

The emissions for the 245kW (325 HP) Waukesha F18GL Emergency Generator were estimated using the emission factors from EPA AP-42, Chapter 3.2 Gas Fired Reciprocating Engines, Table 3.2-2 for 4-Stroke Lean Burn Engines. The emergency generator emissions are based on 500 hours per year of operation.

1.4.3 Boiler

The emissions for the 1.67 MMBtu/hr Hydronic Boiler were estimated using the emission factors from EPA AP-42, Chapter 1.4 Natural Gas Combustion, Tables 1.4-1, 1.4-2, and 1.4-3. The boiler emissions are based on 8,760 hours per year of operation.

2. Regulatory Applicability

This section outlines the State and Federal air quality rules that could be reasonably expected to apply to the Manning Compressor Station and makes an applicability determination for each rule based on activities conducted at the site and the emissions of regulated air pollutants.

2.1 North Dakota Air Quality Rules

2.1.1 Ambient Air Standards (NDAC 33.1-15-02)

The purpose of this rule is to set forth levels of air quality for the maintenance of public health and welfare and to provide guidance to governmental and other parties interested in abating air pollution. Since the ambient air in North Dakota is generally cleaner than these standards, the standards are not a permit for the unnecessary degradation of air quality. Section 4 of this rule establishes standards to define the limits of air contamination by particulates and gases. Any air contaminant which exceeds these limits is hereby declared to be unacceptable and requires air pollution control measures. The limits include normal background levels of particulates and gases.

Manning CS will comply with the applicable requirements of this section.

2.1.2 Restriction of Emission of Visible Air Contaminants (NDAC 33.1-15-03)

The purpose of this rule is to establish opacity standards from emission sources. These restrictions apply to existing and new installations, as well as fugitive sources of emissions. Methods of measurement include Method 9 and Method 22.

The emission units at Manning combust pipeline quality natural gas as fuel and are not expected to emit air contaminants with an opacity greater than twenty percent.

2.1.3 Emissions of Particulate Matter Restricted (NDAC 33.1-15-05)

NDAC 33.1-15-05-01 applies to any operation, process, or activity from which particulate matter is emitted except the burning of fuel for indirect heating in which the products of combustion do not come into direct contact with process materials, the burning of refuse, and the processing of salvable material by burning.

The boiler is a fuel burning equipment, as defined in 33.1-15-01-04.13; therefore, it is not subject to the particulate matter restrictions under this section.

NDAC 33.1-15-05-02 applies to installations in which fuel is burned for the primary purpose of producing steam, hot water, hot air, or other indirect heating of liquids, gases, or solids, and in the course of doing so, the products of combustion do not come into direct contact with process materials.

The boiler apparatus is a fuel burning equipment and is subject to the conditions of this section. The turbine and the emergency generator are used for compression and power generation, respectively, and not for indirect heating; therefore, they are not subject to this section.

NDAC 33.1-15-05-02.2 includes the emission limitations for new and existing installations. Existing or new installations, with a heat input of not more than ten million British thermal units per hour and sources with multiple boilers with a total aggregate heat input of not more than ten million British thermal units per hour, shall be exempt from the applicable allowable emission rate set forth in subdivision a or in table 4, respectively. These sources shall be subject to visible emission and ambient air quality standards.

The boiler is an existing equipment, smaller than 10 million British thermal units per hour (MMBtu/hr) and is exempt from the limitations of this section.

2.1.4 Emissions of Sulfur Compounds Restricted (NDAC 33.1-15-06)

This chapter does not apply to installations that burn pipeline quality natural gas or A.S.T.M. commercial propane alone or in combination with each other. Installations that burn pipeline quality natural gas or A.S.T.M. commercial propane in combination with other fuels are subject to the requirements of this chapter.

The emission units at Manning CS combust pipeline quality natural gas as fuel; therefore, are exempt from the requirements of this chapter.

2.1.5 Standards of Performance for New Stationary Sources (NDAC 33.1-15-12)

The subparts and appendices of Title 40, Code of Federal Regulations, Part 60, as they exist on July 1, 2019, which are listed under section 33.1-15-12-02 are incorporated into this chapter by reference. Any changes to the standards of performance are listed below the title of the standard. Reference to Part 60 within the subparts means this chapter.

A discussion of applicable federal regulations is included in Section 2.2.

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

The purpose of this rule is to outline the permitting procedures for designated air contaminant sources in the state of North Dakota. This rule establishes that a permit to construct is required and the application procedures.

NBPL will comply with the applicable requirements of this chapter.

2.1.7 Prevention of Significant Deterioration of Air Quality (NDAC 33.1-15-15)

The purpose of this rule is to adopt by reference federal provisions for the prevention of significant deterioration program in North Dakota. The department will continue to implement the prevention of significant deterioration program as part of the state implementation plan.

Manning CS site-wide emissions are less than the 250 tons per year applicability threshold; therefore, the Manning Compressor Station is not a PSD-major source.

2.1.8 Restriction of Odorous Air Contaminants (NDAC 33.1-15-16)

This rule establishes restrictions on odorous air contaminants. The rule defines an objectionable odor and the procedures for making the determination.

NBPL will comply with the applicable requirements of this chapter.

2.1.9 Restriction of Fugitive Emissions (NDAC 33.1-15-17)

This rule establishes requirements for fugitive emissions of particulates and gaseous emissions. The rule provides for reasonable precautions for abating and preventing fugitive particulate and gaseous emissions.

NBPL will comply with the applicable requirements of this chapter.

2.1.10 Visibility Protection (NDAC 33.1-15-19)

This rule applies to major stationary sources of major modifications, whose construction or modification commenced after August 12, 1985.

The Manning CS not a PSD-major source; therefore, this rule does not apply.

2.1.11 Emissions Standards for Hazardous Air Pollutants for Source Categories (NDAC 33.1-15-22)

This purpose of this rule is to incorporate the subparts and appendices of Title 40 Code of Federal Regulations Part 63. Regarding 40 CFR 63 Subpart ZZZZ, only the requirements that are applicable to major sources of hazardous air pollutants are adopted.

A discussion of applicable federal regulations is included in Section 2.2.

2.1.12 Fees (NDAC 33.1-15-23)

This rule establishes the fees associated with permit applications and processing. Additionally, this rule establishes annual permit to operate fees.

NBPL will comply with the applicable requirements of this chapter.

2.2 Federal Air Quality Regulations

2.2.1 Standards of Performance for New Stationary Sources-40 CFR 60

<p>Subpart A - General Provisions</p>	<p><i>Manning CS operates equipment that are subject to 40 CFR 60; therefore, this subpart applies. NBPL will comply with the applicable requirements of this subpart.</i></p>
<p>Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The provisions of this subpart are applicable to steam generating units for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h).</p>	<p><i>Boiler EU3 has maximum design heat input of 1.67 MMBtu/hr; therefore, this subpart does not apply.</i></p>
<p>Subpart GG - Standards of Performance for Stationary Gas Turbines. The provisions of this subpart are applicable to stationary gas turbines with a heat input at peak load equal to or greater than 10.7 gigajoules (10 million Btu) per hour, based on the lower heating value of the fuel fired, and commences construction, modification, or reconstruction after October 3, 1977.</p>	<p><i>Compressor turbine EU1 was installed in 1998 and is subject to this subpart. NBPL will comply with the applicable requirements of this subpart.</i></p>
<p>Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines. The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE).</p>	<p><i>NSPS JJJJ is applicable for SI-ICE units that commence construction on or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP). The emergency generator EU2 was manufactured pre 6/12/2006, prior to the applicability date; therefore, this subpart does not apply.</i></p>

<p>Subpart KKKK - Standards of Performance for Stationary Combustion Turbines. This subpart establishes emission standards and compliance schedules for the control of emissions from stationary combustion turbines that commenced construction, modification, or reconstruction after February 18, 2005.</p>	<p><i>Compressor turbine EU1 was installed in 1998, prior to the applicability date; therefore, it is not subject to this subpart.</i></p>
<p>Subpart 0000 - Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification, or Reconstruction Commenced After August 23, 2011, and on or Before September 18, 2015.</p>	<p><i>Manning CS is a natural gas transmission source category, constructed prior to the applicability date, there has been no modification nor reconstruction of the facility since the implementation of this subpart; therefore, this subpart does not apply.</i></p>
<p>Subpart 0000a - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015.</p>	<p><i>Manning CS is a natural gas transmission source category, constructed prior to the applicability date, there has been no modification nor reconstruction of the facility since the implementation of this subpart; therefore, this subpart does not apply currently. If in future, if the facility is modified or reconstructed, an applicability determination will be made as part of the new source review.</i></p>
<p>Subpart 0000b - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced After November 15, 2021 (Proposed).</p>	<p><i>Manning CS is a natural gas transmission source category, constructed prior to the applicability date; therefore, this subpart does not apply currently. If in future, if the facility is modified or reconstructed, an applicability determination will be made as part of the new source review.</i></p>

2.2.2 National Emissions Standards for Hazardous Air Pollutants for Source Categories-40 CFR 63

<p>Subpart A - General Provisions</p>	<p><i>Manning CS operates equipment that are subject to 40 CFR 63; therefore, this subpart applies. NBPL will comply with the applicable requirements of this subpart.</i></p>
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<p>Subpart HH - National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities.</p> <p>Facilities that are major or area sources of hazardous air pollutants (HAP). Facilities that process, upgrade, or store hydrocarbon liquids. Facilities that process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. For the purposes of this subpart, natural gas enters the natural gas transmission and storage source category after the natural gas processing plant, when present. If no natural gas processing plant is present, natural gas enters the natural gas transmission and storage source category after the point of custody transfer.</p>	<p><i>Manning CS is not a major source for HAPs and does not process, upgrade, or store hydrocarbon liquids or store natural gas; therefore, this subpart does not apply.</i></p>
<p>Subpart HHH - National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities.</p> <p>The provisions of this subpart apply to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions.</p>	<p><i>Manning CS is not a major source for HAPs and does not operate a glycol dehydration unit; therefore, this subpart does not apply.</i></p>
<p>Subpart YYYY - National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines.</p> <p>The provisions of this subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emissions from stationary combustion turbines located at major sources of HAP emissions, and requirements to demonstrate initial and continuous compliance with the emission and operating limitations.</p>	<p><i>Manning CS is not a major source for HAPs; therefore, this subpart does not apply.</i></p>

<p>Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.</p> <p>The provisions of this subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.</p>	<p><i>Manning CS is an area source for HAPs and the emergency generator EU2, is an existing RICE < 500 HP; therefore, will comply with the applicable requirements of this subpart.</i></p>
<p>Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial for Institutional, Commercial, and Industrial Boilers and Process Heaters.</p> <p>The provisions of this subpart establishes national emission limitations and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and work practice standards.</p>	<p><i>Manning CS is not a major source for HAPs; therefore, this subpart does not apply.</i></p>

ATTACHMENT A: NDDEQ APPLICATION FORM



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>Northern Border Pipeline Company</u>	
Facility Name <u>Manning Compressor Station</u>	
Name of Person Completing Application <u>Hima Bindu Draksharam</u>	Phone <u>(832) 320-5616</u>
Title <u>Environmental Analyst</u>	Email <u>hima_draksharam@tcenergy.com</u>
Current Operating Permit Number <u>T5-O99002</u>	
Expiration Date of Current Operating Permit <u>06</u> / <u>07</u> / <u>2024</u>	

PART 2. COMPLIANCE CERTIFICATION

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

Frequency of Submittal <u>Annual</u>	Date Beginning (month/day/year) <u>06/06/2019</u>
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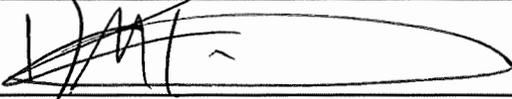
B. Statement of Compliance with Compliance Assurance Monitoring (CAM) and Compliance Certification Requirements

The facility identified in this application is in compliance with applicable monitoring and compliance certification requirements.	
<input type="checkbox"/>	Yes
<input type="checkbox"/>	No - Describe below which requirements are not being met:
<input checked="" type="checkbox"/>	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 	Date 12-05-2023
Typed Name Dane Keplin	

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

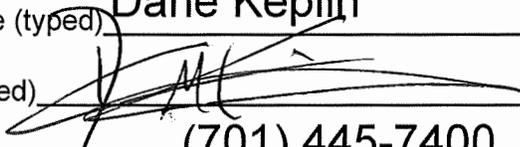
If yes, complete and submit appropriate sections of Title V Permit to Operate application forms.

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) Dane Keplin

(Signed)  Date 12 / 05 / 2023

Telephone Number (701) 445-7400

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

ATTACHMENT B: EMISSIONS CALCULATIONS

**MANNING COMPRESSOR STATION (NO. 5)
NORTHERN BORDER PIPELINE COMPANY
EMISSIONS SUMMARY**

Emission Source ID	Emission Source	Air Contaminant	Emission Rates	
			(lb/hr)	(tpy)
EU1	38,800 HP Cooper-Rolls Coberra 6562-DLE Compressor Turbine	NOx (DLE)	51	206.81
		NOx (Non-DLE)	78	25.35
		CO	22	98.11
		VOC	3.00	13.14
		SO2	2.07	9.05
		PM	2.07	9.08
		PM10	2.07	6.46
		PM2.5	2.07	2.61
		CH2O		0.98
		HAPs		1.74
		CO2e		161,051
		CO2		160,885
		CH4		3.03
		N2O		0.30
EU2	328 HP, 4SLB Waukesha F18GL Emergency Generator	NOx	10.77	2.69
		CO	0.84	0.21
		VOC	0.3115	0.0779
		SO2	0.0016	0.0004
		PM	0.0262	0.0065
		PM10	0.0002	0.0001
		PM2.5	0.0002	0.0001
		CH2O		0.0000
		HAPs		0.0502
		CO2e		77.29
		CO2		77.21
		CH4		0.0015
N2O		0.0001		
EU-3	1.67 MMBtu/hr Hydronic Boiler	NOx	0.16	0.7171
		CO	0.14	0.6024
		VOC	0.01	0.0394
		SO2	0.00	0.0043
		PM	0.01	0.0545
		PM10	0.01	0.0545
		PM2.5	0.01	0.0545
		CH2O		0.0005
		HAPs		0.0135
		CO2e		857
		CO2		855.66
		CH4		0.0161
		N2O		0.0016

Air Contaminant	Site-wide Emission Rates	
	(lb/hr)	(tpy)
NOx	139.93	235.56
CO	23.37	98.92
VOC	3.32	13.26
SO2	2.07	9.05
PM	2.11	9.14
PM10	2.09	6.52
PM2.5	2.09	2.67
CH2O		0.98
HAPs		1.81
CO2e		161,985
CO2		161,818
CH4		3.04
N2O		0.30

MANNING COMPRESSOR STATION (NO. 5)
 NORTHERN BORDER PIPELINE COMPANY
 TURBINE EMISSION CALCULATIONS

Unit ID	Unit Description	Non-DLE Hours of Operation	DLE Hours of Operation	Unit Rating	Max Heat Input	Fuel HHV	Air Contaminant	Emission Factor		Emission Factor Source	Hourly Emissions	Annual Emissions
		hr/yr	hr/yr	hp (ISO)	MMBtu/hr	btu/scf		lb/MMBtu	lb/hr		lb/hr	tpy
EU1	Cooper-Rolls Coberra 2648S-DLE Compressor Turbine	650	8,110	38,000	314	1,100	NOx (DLE)		51	Manufacturer data	51	206.81
							NOx (Non-DLE)		78	Manufacturer data	78	25.35
							CO		22.4	Manufacturer data	22.4	98.11
							VOC		3	Manufacturer data	3.00	13.14
							SO2	0.94		Tariff Fuel Spec - 2gr/100scf (0.007 wt%) & AP-42 Table 3.1-2a	2.07	9.05
							PM	0.0066		AP-42 Table 3.1-2a	2.0724	9.08
							PM(cond)	0.0047		AP-42 Table 3.1-2a	1.4758	6.46
							PM(filterable)	0.0019		AP-42 Table 3.1-2a	0.5966	2.61
	HAPs	see HAP calculations		AP-42 Table 3.1-3		1.74						

Sample Calculation
 SO2:

$$\frac{2 \text{ grains S}}{100 \text{ scf}} \times \frac{1 \text{ lb}}{7000 \text{ grains S}} \times \frac{385 \text{ scf}}{1 \text{ mole}} \times \frac{1 \text{ S}}{16 \text{ gas}} = 0.007 \text{ wt\% S}$$

$$\frac{0.9400 \text{ lb S}}{\text{MMBtu}} \times \frac{0.007 \text{ wt\% S}}{314 \text{ MMBtu/hr}} = \frac{2.07 \text{ lb}}{\text{hr}} \text{ SO2}$$

NOx:

$$\frac{51 \text{ lb}}{\text{hr}} \times \frac{8110 \text{ hr}}{\text{yr}} \times \frac{1 \text{ ton}}{2000 \text{ lb}} = \frac{206.81 \text{ ton}}{\text{yr}} \text{ NOx}$$

PM:

$$\frac{0.0066 \text{ lb}}{\text{MMBtu}} \times \frac{314 \text{ MMBtu}}{\text{hr}} \times \frac{8760 \text{ hr}}{\text{yr}} \times \frac{1 \text{ ton}}{2000 \text{ lb}} = \frac{9.08 \text{ ton}}{\text{yr}} \text{ PM}$$

**MANNING COMPRESSOR STATION (NO. 5)
NORTHERN BORDER PIPELINE COMPANY
TURBINE EMISSION CALCULATIONS**

HAP Emission Calculation

Air Contaminant	Emission Factor	Hourly Emissions	Annual Emissions
	lb/MMBtu	lb/hr	tpy
Acetaldehyde	0.0000400	0.0126	0.0550
Acrolein	0.0000064	0.0020	0.0088
Benzene	0.0000120	0.0038	0.0165
Benzo(a)anthracene	0.0000030	0.0009	0.0041
1,3-Butadiene	0.0000004	0.0001	0.0006
Cadmium	0.0000069	0.0022	0.0095
Chromium	0.0000132	0.0041	0.0182
Ethylbenzene	0.0000320	0.0100	0.0440
Fluoranthene	0.0000012	0.0004	0.0017
Formaldehyde	0.0007100	0.2229	0.9765
Manganese	0.0000802	0.0252	0.1103
Mercury	0.0000066	0.0021	0.0091
Naphthalene	0.0000013	0.0004	0.0018
Nickel	0.0001150	0.0361	0.1582
Phenol	0.0000127	0.0040	0.0175
PAH	0.0000022	0.0007	0.0030
Propylene Oxide	0.0000290	0.0091	0.0399
Toluene	0.0001300	0.0408	0.1788
Xylene	0.0000640	0.0201	0.0880
Total HAP			1.7414

GHG Emission Calculation

Air Contaminant	Emission Factor	Emission Factor Units	GWP	Emissions		
				lb/hr	tpy	CO ₂ e tpy
CO ₂	116.98	lb/MMBTU	1	36,732	160,885	160,885
Methane	0.00220	lb/MMBTU	25	0.69	3.03	75.64
N ₂ O	0.00022	lb/MMBTU	298	0.07	0.30	90.17
Total CO₂e						161,051

**MANNING COMPRESSOR STATION (NO. 5)
 NORTHERN BORDER PIPELINE COMPANY
 EMERGENCY GENERATOR EMISSION CALCULATIONS**

Unit ID	Unit Description	Hours of Operation hr/yr	Unit Rating		Max Heat Input MMBtu/hr	Fuel HHV btu/scf	Air Contaminant	Emission Factor lb/MMBtu	Emission Factor Source	Hourly Emissions lb/hr	Annual Emissions tpy
			kW	hp							
EU2	Waukesha F18GL, 4SLB Emergency Generator	500	245	328	2.64	1,100	NOx	4.080	AP-42 Table 3.2-2	10.77	2.6928
							CO	0.317	AP-42 Table 3.2-2	0.8369	0.2092
							VOC	0.118	AP-42 Table 3.2-2	0.3115	0.0779
							SOx	0.000588	AP-42 Table 3.2-2	0.0016	0.0004
							PM	0.009910	AP-42 Table 3.2-2	0.0262	0.0065
							PM10/PM2.5	0.000077	AP-42 Table 3.2-2	0.0002	0.0001
HAPs	see HAP calculation	AP-42 Table 3.2-2		0.0502							

Sample Calculation
 NOx:

$$\frac{4.08 \text{ lb}}{\text{mmbtu}} \times \frac{2.64 \text{ mmbtu}}{\text{hr}} \times \frac{500 \text{ hr}}{\text{yr}} \times \frac{1 \text{ ton}}{2000 \text{ lb}} = 2.6928 \frac{\text{ton}}{\text{yr}}$$

MANNING COMPRESSOR STATION (NO. 5)
 NORTHERN BORDER PIPELINE COMPANY
 EMERGENCY GENERATOR EMISSION CALCULATIONS

HAP Emission Calculation

Air Contaminant	Emission Factor	Hourly Emissions	Annual Emissions
	lb/MMBtu	lb/hr	tpy
1,1,2,2-Tetrachloroethane	0.0000400	1.06E-04	2.64E-05
1,1,2-Trichloroethane	0.0000318	8.40E-05	2.10E-05
1,3-Butadiene	0.0002670	7.05E-04	1.76E-04
1,3-Dichloropropene	0.0000264	6.97E-05	1.74E-05
2,2,4-Trimethylpentane	0.0002500	6.60E-04	1.65E-04
2-Methylnaphthalene	0.0000332	8.76E-05	2.19E-05
Acenaphthene	0.0000013	3.30E-06	8.25E-07
Acenaphthylene	0.0000055	1.46E-05	3.65E-06
Acetaldehyde	0.0083600	2.21E-02	5.52E-03
Acrolein	0.0051400000	1.36E-02	3.39E-03
Benzene	0.0004400	1.16E-03	2.90E-04
Benzo(b)fluoranthene	0.0000002	4.38E-07	1.10E-07
Benzo(e)pyrene	0.0000004	1.10E-06	2.74E-07
Benzo(g,h,i)perylene	0.0000004	1.09E-06	2.73E-07
Biphenyl	0.0002120	5.60E-04	1.40E-04
Carbon Tetrachloride	0.0000367	9.69E-05	2.42E-05
Chlorobenzene	0.0000304	8.03E-05	2.01E-05
Chloroform	0.0000285	7.52E-05	1.88E-05
Chrysene	0.0000007	1.83E-06	4.57E-07
Ethylbenzene	0.0039700	1.05E-02	2.62E-03
Ethylene Dibromide	0.0000443	1.17E-04	2.92E-05
Fluoranthene	0.0000011	2.93E-06	7.33E-07
Fluorene	0.0000057	1.50E-05	3.74E-06
Formaldehyde	0.0528000	1.39E-01	3.48E-02
Methanol	0.0025000	6.60E-03	1.65E-03
Methylene Chloride	0.0000200	5.28E-05	1.32E-05
Naphthalene	0.0000744	1.96E-04	4.91E-05
n-Hexane	0.0011100	2.93E-03	7.33E-04
PAH	0.0000269	7.10E-05	1.78E-05
Phenanthrene	0.0000104	2.75E-05	6.86E-06
Phenol	0.0000240	6.34E-05	1.58E-05
Pyrene	0.0000014	3.59E-06	8.98E-07
Styrene	0.0000236	6.23E-05	1.56E-05
Tetrachloroethane	0.0000025	6.55E-06	1.64E-06
Toluene	0.0004080	1.08E-03	2.69E-04
Vinyl Chloride	0.0000149	3.93E-05	9.83E-06
Xylene	0.0001840	4.86E-04	1.21E-04
Total HAPs			0.0502

GHG Emission Calculation

Air Contaminant	Emission Factor	Emission Factor Units	GWP	Emissions		
				lb/hr	tpy	CO2e tpy
CO ₂	116.98	lb/MMBTU	1	308.83	77.21	77.21
Methane	0.00220	lb/MMBTU	25	0.0058	0.0015	0.04
N ₂ O	0.00022	lb/MMBTU	298	0.0006	0.0001	0.04
Total CO2e						77

**MANNING COMPRESSOR STATION (NO. 5)
NORTHERN BORDER PIPELINE COMPANY
BOILER EMISSION CALCULATIONS**

Unit ID	Unit Description	Max Heat Input	Fuel HHV	Maximum Gas Usage Rate	Annual Hours of Operation	Air Contaminant	Emission Factors	Emission Factor Source [(AP-42 Factor) * (Actual btu/scf) / (1020 btu/scf)]	Hourly Emissions	Annual Emissions
		MMBtu/hr	btu/scf	MMscf/hr	hr/yr		lb/MMscf	lb/hr	tpy	
EU-3	Hydronic Natural Gas Boiler	1.67	1,100	0.0015	8,760	NOx	108	AP-42 table 1.4-1	0.1637	0.7171
						CO	91	AP-42 table 1.4-1	0.1375	0.6024
						VOC	5.9	AP-42 table 1.4-2	0.0090	0.0394
						SOx	0.6	Tariff Fuel Spec - 2gr/100scf (0.007 wt%) & AP-42 Table 1.4-2	0.0010	0.0043
						PM	8.2	AP-42 table 1.4-2	0.012443	0.0545
						PM (condensable)	6.1	AP-42 table 1.4-2	0.009332	0.0409
						PM (filterable)	2.0	AP-42 table 1.4-2	0.003111	0.0136
HAPs	see HAP calculations	AP-42 Table 1.4-3		0.0135						

Sample Calculation
SOx:

$$\begin{array}{l}
 \frac{2 \text{ grains S}}{100 \text{ scf}} \quad | \quad \frac{1 \text{ lb}}{7000 \text{ grains S}} \quad | \quad \frac{385 \text{ scf}}{1 \text{ mole}} \quad | \quad \frac{1 \text{ S}}{16 \text{ gas}} \quad = \quad 0.007 \text{ wt\% S} \\
 \\
 \frac{0.6 \text{ lb}}{1 \text{ MMscf}} \quad | \quad \frac{1,100 \text{ btu}}{1 \text{ scf}} \quad | \quad \frac{1 \text{ scf}}{1020 \text{ btu}} \quad = \quad \frac{0.65 \text{ lb}}{\text{MMscf}} \text{ SO}_2 \text{ (site-specific)} \\
 \\
 \frac{0.65 \text{ lb}}{\text{MMscf}} \quad | \quad \frac{0.0015 \text{ MMscf}}{\text{hr}} \quad = \quad \frac{0.0010 \text{ lb}}{\text{hr}}
 \end{array}$$

**MANNING COMPRESSOR STATION (NO. 5)
NORTHERN BORDER PIPELINE COMPANY
BOILER EMISSION CALCULATIONS**

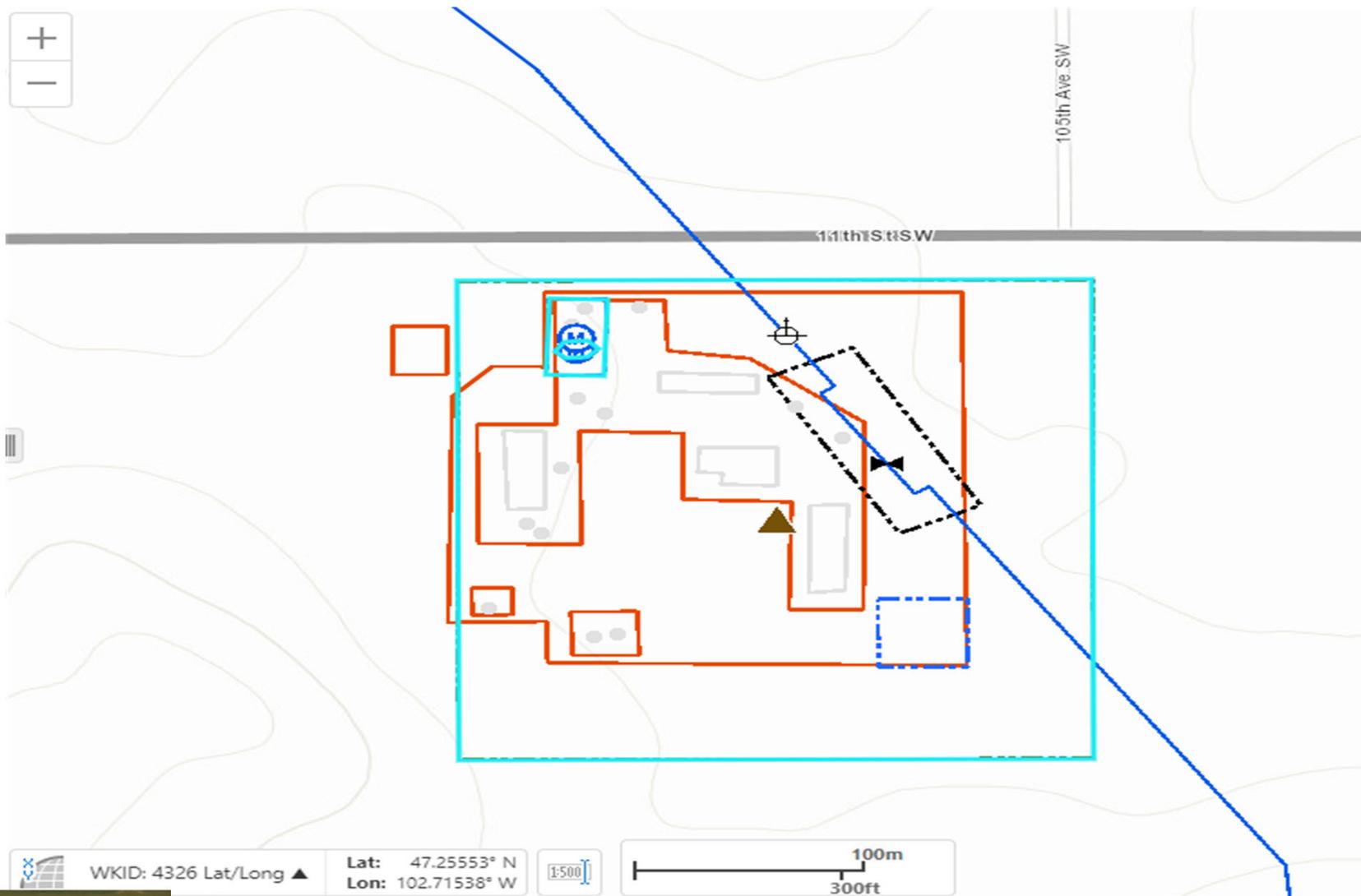
HAP Emission Calculation

Air Contaminant	Emission Factor	Site-Specific Emission Factor	Hourly Emissions	Annual Emissions
	lb/MMscf	lb/MMscf	lb/hr	tpy
2-Methylnaphthalene	0.000024	0.000026	3.93E-08	1.72E-07
3-Methylchloranthrene	0.000002	0.000002	2.95E-09	1.29E-08
7,12-Dimethylbenz(a)anthracene	0.000016	0.000017	2.62E-08	1.15E-07
Acenaphthene	0.000002	0.000002	2.95E-09	1.29E-08
Acenaphthylene	0.000002	0.000002	2.95E-09	1.29E-08
Anthracene	0.000002	0.000003	3.93E-09	1.72E-08
Benz(a)anthracene	0.000002	0.000002	2.95E-09	1.29E-08
Benzene	0.002100	0.002264	3.44E-06	1.51E-05
Benzo(a)pyrene	0.000001	0.000001	1.96E-09	8.61E-09
Benzo(b)fluoranthene	0.000002	0.000002	2.95E-09	1.29E-08
Benzo(g,h,i)perylene	0.000001	0.000001	1.96E-09	8.61E-09
Benzo(k)fluoranthene	0.000002	0.000002	2.95E-09	1.29E-08
Chrysene	0.000002	0.000002	2.95E-09	1.29E-08
Dibenzo(a,h)anthracene	0.000001	0.000001	1.96E-09	8.61E-09
Dichlorobenzene	0.001200	0.001294	1.96E-06	8.61E-06
Fluoranthene	0.000003	0.000003	4.91E-09	2.15E-08
Fluorene	0.000003	0.000003	4.58E-09	2.01E-08
Formaldehyde	0.075000	0.080866	1.23E-04	5.38E-04
Indeno(1,2,3-c,d)pyrene	0.000002	0.000002	2.95E-09	1.29E-08
n-Hexane	1.800000	1.940788	2.95E-03	1.29E-02
Naphthalene	0.000610	0.000658	9.99E-07	4.37E-06
PAH	0.000021	0.000023	3.50E-08	1.53E-07
Phenanthrene	0.000017	0.000018	2.78E-08	1.22E-07
Pyrene	0.000005	0.000005	8.19E-09	3.59E-08
Toluene	0.003400	0.003666	5.57E-06	2.44E-05
Mercury	0.000260	0.000280	4.26E-07	1.86E-06
Total HAP:				0.0135

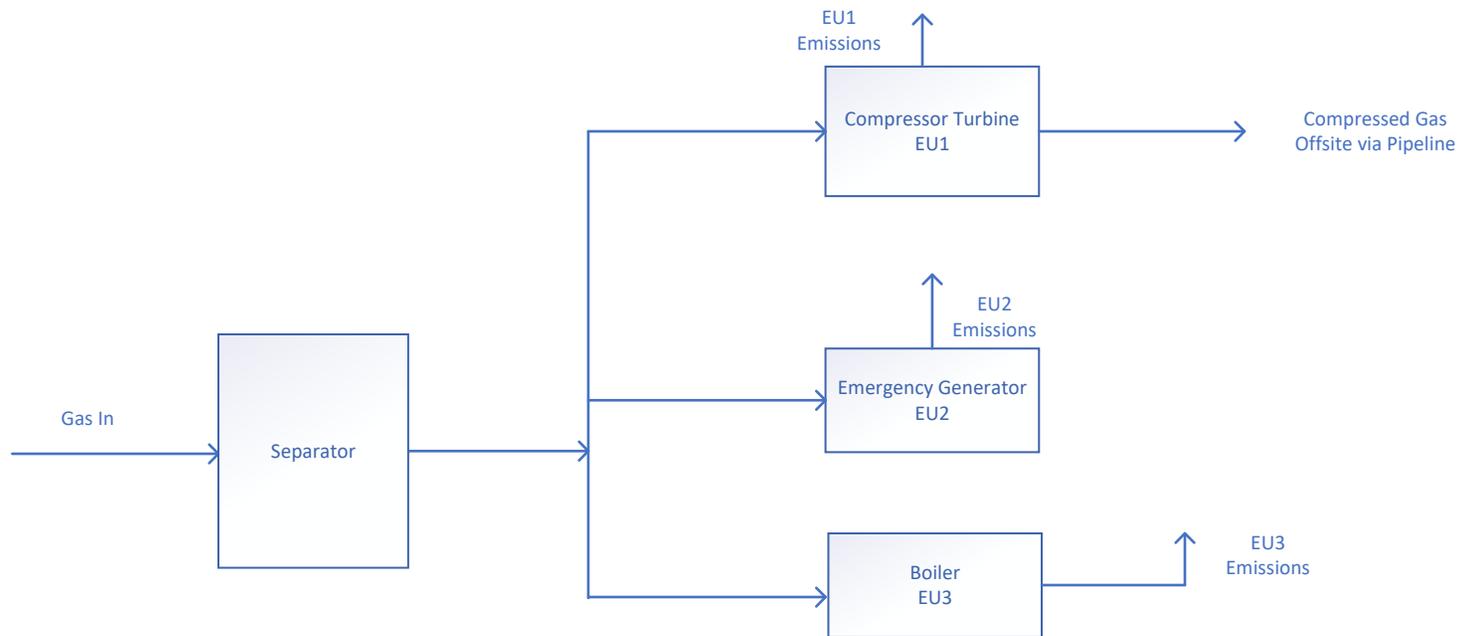
GHG Emission Calculation

Air Contaminant	Emission Factor	Emission Factor Units	GWP	Emissions		
				lb/hr	tpy	CO2e tpy
CO ₂	116.98	lb/MMBTU	1	195.36	855.66	855.66
Methane	0.00220	lb/MMBTU	25	0.00	0.02	0.40
N ₂ O	0.00022	lb/MMBTU	298	0.00	0.00	0.48
Total CO2e						857

ATTACHMENT C: AREA MAP & PROCESS FLOW DIAGRAM



Area Map
Northern Border Pipeline Company
Manning Compressor Station
Dunn County, North Dakota



Process Flow Diagram
Manning Compressor Station
Dunn County, North Dakota

ATTACHMENT D: COPY OF CURRENT PERMIT

AIR POLLUTION CONTROL TITLE V PERMIT TO OPERATE

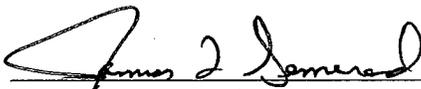
Permittee: Name: Northern Border Pipeline Company Address: 13710 FNB Parkway, Ste. 300 Omaha, NE 68154	Permit Number: T5-O99002 Source Name: Manning Compressor Station
Source Location: NE¼ and NE¼, Sec. 33, T144N, R95W 10510 – 11 th St. SW Manning, ND 58642 Dunn County	Source Type: Compressor Station

Expiration Date:

June 7, 2024

Pursuant to Chapter 23.1-06 of the North Dakota Century Code, 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 No. 4: 6/6/19
 Revision No. 0: _____



 James L. Semerad
 Director
 Division of Air Quality

Manning Compressor Station
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)	Emission Point (EP)	Air Pollution Control Equipment
Cooper-Rolls Model Coberra 6562-DLE natural gas-fired turbine with a nominal rating of 38,000 bhp at ISO conditions (constructed post-10/3/77 & pre-2/18/05)	1	1	Dry Low NO _x Combustion
Natural gas-fired emergency generator engine rated at 245 kW (constructed pre-6/12/06)	2 ^A	2	None
Natural gas-fired hydronic boiler (used for building heat and fuel gas heater) with a maximum rated capacity of 1.67 x 10 ⁶ Btu/hr	3 ^B	3	None

^A 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 subpart (40 CFR 63, Subpart ZZZZ) for other than emergency situations. For engines to be considered emergency stationary RICE under the RICE rules, engine operations must comply with the operating hour limits as specified in the applicable subpart. There is no time limit on the use of emergency stationary RICE in emergency situations, as specified in 40 CFR §63.6640(f).

^B Insignificant or fugitive emission sources (no specific emission limit).

2. **Applicable Regulations, Restrictions and Miscellaneous Conditions:**

A. **Fuel Restrictions:**

- 1) Determination of fuel-bound nitrogen is not required while natural gas is the only fuel fired in the gas turbine (EU 1). The firing of a fuel containing fuel-bound nitrogen will evoke daily fuel nitrogen content monitoring if a relaxation of the NO_x emission limit of 217 ppm is requested by the permittee.

Applicable Requirement: NDAC 33.1-15-12-02 (40 CFR 60), Subpart GG

- 2) All emission units shall be operated using only gaseous fuel containing no more than 2.0 grains of sulfur per 100 standard cubic feet.

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

- B. **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 GG – Standards of Performance for Stationary Gas Turbines (EU 1).

Applicable Requirements: NDAC 33.1-15-12-02, Subparts A and GG

- C. **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 ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (EU 3). 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

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

- D. **PSD review:** This source is exempt from Prevention of Significant Deterioration (PSD) review due to restrictions on the hourly nitrogen oxides emission rate and the 12-month operational restriction on generator hours. Any relaxation in these limits that increases the potential to emit above 250 tons or more in any 12-month period during normal operations will require a full PSD review of the source.

Applicable Requirement: PTC 6/11/97

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

- 1) The Department must be notified within 10 days after change-out of the engine/turbine.
- 2) The replacement engine/turbine shall operate in the same manner, provide no increase in throughput and have equal or less emissions than the engine/turbine it is replacing.
- 3) The date of manufacture of the replacement engine/turbine 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/turbine is subject to the same state emission limits as the existing engine/turbine in addition to any NSPS or MACT emission limit that is applicable. Testing

shall be conducted to confirm compliance with the emission limits within 180 days after start-up of the new engine/turbine.

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
Cooper-Rolls turbine	1	1	NO _x	51.0 lb/hr & 217 ppm ^A	33.1-15-02-04.1 & 33.1-15-12-02, Subpart GG
			SO ₂	See Cond. 2.A.2	33.1-15-14-06.5.b(1)
			Opacity	20% ^B	33.1-15-03-01.2
Emergency generator engine	2	2	NO _x	10.72 lb/hr	PTC 6/11/97
			Opacity	20% ^B	33.1-15-03-01.2
			Operating Hours	See Condition 1 Footnote A ^C	33.1-15-22, Subpart ZZZZ
Natural gas-fired hydronic boiler	3	3	Opacity	20% ^B	33.1-15-03-01.2

^A The more stringent limit applies. The ppm limit applies at 15% oxygen. The 51.0 lb/hr NO_x limit applies when the dry low NO_x (DLE, dry low emissions) combustion system is operating. When the DLE combustion system is not operating, the NO_x limit is 78.0 lb/hr (also, less than or equal to 0.0217 percent by volume at 15% oxygen and on a dry basis). Non-DLE operations are limited to 650 hours per 12-month rolling total.

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

^C Per PTC 6/11/97, EU 2 is also limited to 500 operation hours per rolling 12-month period.

4. **Monitoring Requirements and Conditions:**

A. **Requirements:**

Emission Unit Description	Pollutant/ Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
Cooper-Rolls turbine (EU 1)	NO _x	Emissions Test & Recordkeeping	4.B.1	PTC 6/11/97 & 33.1-15-14-06.5.a(3)(a)
	SO ₂	Fuel Monitoring & Recordkeeping	4.B.4	33.1-15-14-06.5.a(3)(a)
	Opacity	Recordkeeping	4.B.2	33.1-15-14-06.5.a(3)(a)
Emergency generator engine (EU 2)	Opacity	Recordkeeping	4.B.2	33.1-15-14-06.5.a(3)(a)
	NO _x /Operating Hours	Recordkeeping	4.B.3	33.1-15-22, Subpart ZZZZ, 33.1-15-14-06.5.a(3)(a) & PTC 6/11/97

B. **Monitoring Conditions:**

- 1) Once every year (not to exceed 13 months between emissions tests), or when changes are made to the turbine that may increase emission rates, whichever is more frequent, to provide a reasonable assurance of compliance, the permittee shall conduct an emissions test to measure NO_x emissions, using at a minimum, a portable analyzer with quality assurance procedures equivalent to Conditional Test Methods 22 and/or 30 as outlined in EPA's Emission Measurement Center or the Department's Standard Operating Procedures, Use of Portable Analyzer for Title V Semi-Annual Testing. A test shall consist of three runs with each run at least 20 minutes in length.

Calculate and record the previous month's hours of operation in non-DLE mode by the 15th of the month. Also calculate and record the previous 12-months rolling operation in non-DLE mode.

- 2) For purposes of compliance monitoring, burning of gaseous fuel as outlined in Condition 2.A.2 shall be considered credible evidence of compliance with any applicable 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.2 for evidence of compliance or noncompliance with the opacity limit in the event of enforcement action.
- 3) Measured by a non-resettable hour meter, a monthly log shall be kept of the hours of operation.

- a) By the 15th day of each month, the permittee shall calculate and record the total hours of operation for the previous 12-month period. The Department shall be notified immediately if the emergency generator exceeds 500 hours of operation per 12-month period.
- 4) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 2.0 grains or less/100 scf or less is credible evidence of compliance with Cond. 2.A.2 and NDAC 33.1-15-12-02, Subpart GG.

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.
 - 7) Records shall be kept as to the type of fuel used and the sulfur content of the fuel on a daily basis.

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

Monitoring Records

Emission Unit Description	Pollutant/ Parameter	Compliance Monitoring Record
Cooper-Rolls turbine (EU 1)	NO _x (lb/hr)	Emissions Test Data, Non-DLE Operating Hours
	SO ₂ (Total sulfur in fuel)	Contract or Tariff Sheet
	Opacity	Type of Fuel Usage Data
Emergency generator engine (EU 2)	Opacity	Type of Fuel Usage Data
	NO _x /Operating Hours	Hours of Operation Data

- B. In addition to the requirements outlined in Condition 5.A, recordkeeping for EU 1 shall be in accordance with 40 CFR 60, Subpart A, §60.7, Notification and Recordkeeping.

Applicable Requirement : NDAC 33.1-15-12-02, Subpart A

- 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 for EU 1 shall be in accordance with 40 CFR 60, Subpart A, §60.7 Notification and Recordkeeping.

Applicable Requirement: NDAC 33.1-15-12-02, Subpart A, §60.7

- B. The permittee shall submit a semi-annual monitoring report for all monitoring records required under Condition 5 on forms supplied 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 30 days after June 30 and December 31 of each year.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(3)(c)[1] and [2] and NDAC 33.1-15-12-02, Subpart GG

- C. The permittee shall submit an annual compliance certification report in accordance with NDAC 33.1-15-14.06.c(5) within 45 days after December 31 of each year on forms supplied 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 on forms supplied 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 shutdown 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:

North Dakota Department of Environmental Quality
Division of Air Quality
918 E Divide Avenue, 2nd Floor
Bismarck, ND 58501-1947

- 2) Any document 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