



August 30, 2016

Ms. Ruth Jensen
Environmental Specialist
Northern Border Pipeline Company
13710 FNB Parkway, Ste 300
Omaha, NE 68154-5200

Re: Air Pollution Control
Title V (Renewal)
Permit to Operate

Dear Ms. Jensen:

Pursuant to the Air Pollution Control Rules of the State of North Dakota, the Department of Health has reviewed your permit applications dated April 30, 2016, for the Northern Border Pipeline Company Compressor Stations (CS) 4, 6 and 8 located in the respective North Dakota counties of McKenzie, Morton and McIntosh.

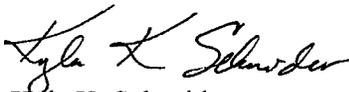
Enclosed are copies of the Department's draft/proposed Title V Permits to Operate and statements of basis for the facilities. Before making final determinations on the permit applications, the Department of Health must solicit public comment by means of the enclosed public notices, to be immediately followed by 45-day Environmental Protection Agency (EPA) review periods. As indicated in the notices, the 30-day public comment periods will begin September 19, 2016 and end October 19, 2016 for all three facilities.

If any changes are subsequently made to the draft permits, then review copies of the proposed permits reflecting those changes will be provided to EPA prior to the start of a 45-day EPA review period. The 45-day EPA review periods will begin October 20, 2016 and end December 5, 2016 for all three facilities.

All comments received will be considered in the final determination concerning issuance of the permits. The Department will take final action on the permit applications following the public comment periods and the EPA review periods. You will be notified in writing of our final determination.

If you have any questions, please contact me at (701)328-5188 or email kkschneider@nd.gov.

Sincerely,



Kyla K. Schneider
Environmental Scientist
Division of Air Quality

KKS:saj

Enc:

xc/enc: Mike Owens, EPA R8 (email; one per permit)

NOTICE OF INTENT TO ISSUE AN
AIR POLLUTION CONTROL
TITLE V PERMIT TO OPERATE

Take notice that the North Dakota Department of Health (NDDoH) proposes to issue a renewal Air Pollution Control Permit to Operate to Northern Border Pipeline Company for operation of the Compressor Station No. 4 in accordance with the ND Air Pollution Control Rules. The facility is located at 2461 – 136th Avenue NW, Arnegard, ND in McKenzie County. The facility compresses natural gas for pipeline delivery to market. The Northern Border Pipeline Company mailing address is 13710 FNB Parkway, Ste 300, Omaha, NE 68154. The draft renewal permit reflects administrative changes only and does not increase permitted emissions.

A thirty-day public comment period for the draft permit will begin September 19, 2016 and end October 19, 2106. Direct comments in writing to the NDDoH, Division of Air Quality, 918 E Divide Avenue, Bismarck, ND 58501-1947. Comments must be received by the end of the public comment period to be considered in the final permit determination. A public hearing regarding issuance of the permit will be held if a significant degree of public interest exists as determined by the NDDoH. Requests for a public hearing must be received in writing by the NDDoH before the end of the public comment period.

The notice, draft permit, statement of basis and application are available for review at the NDDoH address, at the McKenzie County Auditor's office in Watford City, and on the Division of Air Quality website at <http://www.ndhealth.gov/AQ/PublicCom.aspx>. A copy of these documents may be obtained by writing to the Division of Air Quality or contacting Kyla Schneider at (701)328-5188 or emailing kkschneider@nd.gov.

Dated this 6th day of September 2016.

Terry L. O'Clair, P.E.
Director
Division of Air Quality



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-O84001 Source Name: Natural Gas Pipeline Compressor Station No. 4
Source Location: SE¼, NE¼, Sec. 32, T150N, R100W 2461 - 136 th Avenue NW, Arnegard McKenzie County, North Dakota	Source Type: Compressor Station
Expiration Date: December 31, 2021	

Pursuant to Chapter 23-25 of the North Dakota Century Code, and the Air Pollution Control Rules of the State of North Dakota, Article 33-15 of the North Dakota Administrative Code (NDAC), and in reliance on statements and representations heretofore made by the permittee 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 Health 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: TBD
 Revision No. 0: _____

 Terry L. O'Clair, P.E.
 Director
 Division of Air Quality

Compressor Station No. 4
Title V Permit to Operate
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DRAFT

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 2648S Avon GG/RT 48 power natural gas-fired turbine with a nominal rating of 20,000 hp (constructed post-10/3/77 but pre-2/18/05)	CE1	1	None
Caterpillar G-398 natural gas-fired emergency generator engine (500 hp nominal rating, constructed pre-6/12/06)	EG1 ^A	2	None
Natural gas-fired fuel gas heater (2.0 x 10 ⁶ Btu/hr nominal rating)	HE1 ^B	3	None
Natural gas-fired building heater (1.0 x 10 ⁶ Btu/hr nominal rating)	HE2 ^B	4	None

^A The potential to emit for an emergency stationary reciprocating internal combustion engine (RICE) is based on operating no more hours per year, for other than emergency situations, than is allowed by the subpart (40 CFR 63, Subpart ZZZZ). 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.

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

2. 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 (Emission Unit CE1). 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 171 ppm is requested by the permittee.

Applicable Requirement: NDAC 33-15-12-02 (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 33-15-14-06.5.b(1)

- B. **Like-Kind Engine/Turbine Replacement:** This permit allows the permittee to replace the existing engine/turbine 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 33-15-14-03.6

- C. **40 CFR 63, Subpart ZZZZ:** For EU EG1, the permittee shall comply with all applicable requirements of 40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The Department has not adopted the area source provisions this subpart. Please send all reports and documentation to EPA at the following address:

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

Applicable Requirement: 40 CFR 63, Subpart ZZZZ

- D. **40 CFR 60, Subpart GG, Subpart GG:** For EU CE1, the permittee shall comply with all applicable requirements of 40 CFR 60, Subpart GG – Standards of Performance for Stationary Gas Turbines, as incorporated into NDAC 33-15-12-02, Subpart GG.

Applicable Requirement: NDAC 33-15-12-02, Subpart GG

3. **Emission Unit Limits:**

Emission Unit Description	EU	EP	Pollutant/ Parameter	Emission Limit	NDAC Applicable Requirement
Cooper-Rolls turbine	CE1	1	NO _x	66.8 lb/hr and 171 ppm ^A	33-15-02-04.1 and 33-15-12-02 (40 CFR 60, Subpart GG)
			Opacity	20% ^B	33-15-03-01.2

Emission Unit Description	EU	EP	Pollutant/ Parameter	Emission Limit	NDAC Applicable Requirement
			SO ₂	See Cond. 2.A.2	33-15-14-06.5.b(1)
Caterpillar emergency generator engine	EG1	2	Opacity	20% ^B	33-15-03-01.2
Natural gas-fired heater (2.0 x 10 ⁶ Btu/hr nominal rating)	HE1	3	Opacity	20% ^B	33-15-03-01.2
Natural gas-fired heater (1.0 x 10 ⁶ Btu/hr nominal rating)	HE2	4	Opacity	20% ^B	33-15-03-01.2

^A The more stringent limit applies. Limits apply at 15% oxygen and ISO standard day conditions. ISO standard day conditions means 288 degrees Kelvin, 60% relative humidity and 101.3 kilopascals pressure.

^B 40% opacity is permissible for not more than one 6-minute period per hour.

4. **Monitoring Requirements and Conditions:**

A. Requirements

Emission Unit Description	Pollutant/ Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
Cooper-Rolls turbine (CE1)	NO _x	Emissions Test	4.B.1	33-15-14-06.5.a(3)(a)
	SO ₂	Fuel Monitoring, Recordkeeping	4.B.3	33-15-14-06.5.a(3)(a)
	Opacity	Recordkeeping	4.B.2	33-15-14-06.5.a(3)(a)
Caterpillar emergency generator engine (EG1)	Opacity	Recordkeeping	4.B.2	33-15-14-06.5.a(3)(a)

B. Monitoring Conditions

- 1) Once every year not to exceed 13 months between 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.
- 2) For purposes of compliance monitoring, burning of gaseous fuel as outlined in Condition 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 for evidence of compliance or noncompliance with any applicable opacity limit in the event of enforcement action.

- 3) 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/100 scf or less is credible evidence of compliance with Cond. 2.A.2 and NDAC 33-15-12-02, Subpart GG.

5. Recordkeeping Requirements:

A. The permittee shall maintain compliance monitoring records as outlined in the Monitoring Records table below 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 the 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 33-15-14-06-5.a(3)(b)[1]

Monitoring Records

Emission Unit	Pollutant/ Parameter	Compliance Monitoring Record
Cooper-Rolls turbine (CE1)	NO _x lb/hr	Emissions Test Data
	Total sulfur in fuel	Contract or Tariff Sheet
	Opacity	Type of Fuel Usage
Caterpillar emergency generator engine (EG1)	Opacity	Type of Fuel Usage

B. In addition to the requirements outlined in Condition 6.A, recordkeeping for EU CE1 shall be in accordance with 40 CFR 60, Subpart A, 60.7 Notification and Recordkeeping.

- 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 for continuous monitoring instrumentation, and copies of all reports required by the permit.

Applicable Requirement: NDAC 33-15-14-06-5.a(3)(b)[2]

6. Reporting:

- A. Reporting for EU CE1 shall be in accordance with 40 CFR 60, Subpart A, Section 60.7 Notification and Recordkeeping.

Applicable Requirement: NDAC 33-15-12-02, Subpart A, Section 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 33-15-14-06.5.a(3)(c)[1] and [2] and NDAC 33-15-12-02, Subpart GG

- C. The permittee shall submit an annual compliance certification report in accordance with NDAC 33-15-14-06.5.c(5) within 45 days after December 31 of each year on forms supplied or approved by the Department.

Applicable Requirement: NDAC 33-15-14-06.5.c(5)

- D. For emission units where the method of compliance monitoring is demonstrated by either 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 33-15-14-06.5.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 calendar year. Insignificant units/activities listed in this permit do not need to be included in the annual emission inventory report.

Applicable Requirements: NDAC 33-15-14-06.5.a(7) and NDAC 33-15-23-04

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 33-15-02 at any place beyond the premises on which the source is located.
- 2) Radioactive substances. The permittee shall not release into the ambient air any radioactive substances exceeding the concentrations specified in NDAC 33-10.
- 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 Requirement: NDAC 33-15-02-04

- B. **Fugitive Emissions:** The release of fugitive emissions shall comply with the applicable requirements in NDAC 33-15-17.

Applicable Requirement: NDAC 33-15-17

- 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 33-15-04-02 and may not conduct, cause, or permit the conduct of a salvage operation by open burning. Any permissible open burning under NDAC 33-15-04-02 must comply with the requirements of that section.

Applicable Requirement: NDAC 33-15-04

- D. **Asbestos Renovation or Demolition:** Any asbestos renovation or demolition at the facility shall comply with emission standard for asbestos in NDAC 33-15-13.

Applicable Requirement: NDAC 33-15-13-02

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

- 1) The owner/operator shall incinerate, flare or treat in an equally effective manner any organic compounds, gases and vapors which are generated as wastes as the result of storage, refining, or process operations and which contain hydrogen sulfide before being released to the ambient air.

- 2) Each flare must be equipped and operated with an automatic ignitor or a continuous burning pilot.

Applicable Requirement: NDAC 33-15-07-02

- 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 33-15-07-01.5

- 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 twenty-four 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 33-15-01-13.1

- 2) **Malfunctions.**
 - a) When a malfunction in any installation occurs that can be expected to last longer than twenty-four 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 twenty-four-hour state radio emergency number 1-800-472-2121. If calling from out of state, the twenty-four-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 thirty days of the end of the calendar quarter in which the malfunction occurred or within thirty 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 33-15-01-13.2

- 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 33-15-21 (40 CFR 75, Acid Rain Program).

Applicable Requirement: NDAC 33-15-01-13.3

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

- b) 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 33-15-14-06.5.g

- I. **Air Pollution from Internal Combustion Engines:** The permittee shall comply with all applicable requirements of NDAC 33-15-08-01 – Internal Combustion Engine Emissions Restricted.

Applicable Requirement: NDAC 33-15-08-01

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

- 1) The permittee shall not permit or cause air pollution, as defined in NDAC 33-15-01-04.
- 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 33-15-01-15

- 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 23-25. 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 Health 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 holes in 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 33-15-01-12

- 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. 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 33-15-14-06.5.a(3)(a), NDAC 33-15-12-02 Subpart A (40 CFR 60.8), NDAC 33-15-13-01.2 Subpart A (40 CFR 61.13), NDAC 33-15-22-03 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 33-15-10.

Applicable Requirements: NDAC 33-15-10-01 and NDAC 33-15-10-02

- 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 33-15-11.

Applicable Requirements: NDAC 33-15-11-01 through NDAC 33-15-11-04

- 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. **Prevention of Significant Deterioration of Air Quality (40 CFR 52.21 as incorporated by NDAC Chapter 33-15-15):** 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 33-15-15-01.2

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 sixty 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 33-15-14-06.5.a(7) and NDAC 33-15-23-04

B. **Permit Renewal and Expiration:** This permit shall be effective from the date of its issuance for a fixed period of 5 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 eighteen months, prior to the date of permit expiration. The Department shall approve or disapprove the renewal application within sixty 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 33-15-14-06.4 and NDAC 33-15-14-06.6

- C. **Transfer of Ownership or Operation:** This permit may not be transferred except by procedures allowed in Chapter 33-15-14 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 33-15-14-06.6.d

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

Applicable Requirement: NDAC 33-15-14-06.5.a(6)(d)

- E. **Submissions:**

- 1) Reports, test data, monitoring data, notifications, and requests for renewal shall be submitted to:

North Dakota Department of Health
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 33-15-14-06.4.d

- F. **Right of Entry:** Any duly authorized officer, employee or agent of the North Dakota Department of Health 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 33-15-14-06.5.c(2) and NDAC 33-15-01-06

- 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 23-25 and NDAC 33-15. 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 23-25. 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 33-15-14-06.5.a(6)(a) and NDAC 33-15-14-06.5.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 33-15-14-06.5.a(6)(e), NDAC 33-15-14-06.6.b(3) and NDAC 33-15-14-06.4.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 not later than eighteen 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.

Applicable Requirement: NDAC 33-15-14-06.6.f(1)(c)

- 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 33-15-14-06.6.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 33-15-14-06.5.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 33-15-14-02 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 33-15-14-06. 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 33-15-14-06.6.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 33-15-14-06.6.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) Are not modifications under NDAC 33-15-12, 33-15-13, and 33-15-15 or any provision of Title I of the Federal Clean Air Act.
- 6) Are not required to be processed as a significant modification.

Applicable Requirement: NDAC 33-15-14-06.6.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 33-15-14-06.6.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 33-15-14-06.6.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 33-15-14-06.3 and NDAC 33-15-14-06.5.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 33-15-14-06.5.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 33-15-01-08

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 33-15-16.

Applicable Requirement: NDAC 33-15-16

- 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 33-15-16-04 constitute a violation.

Applicable Requirement: NDAC 33-15-16-04

Northern Border Pipeline Company
Compressor Station No. 4
Renewal No. 4 of Title V Permit to Operate No. T5-O84001

Statement of Basis

(5/9/16)

Facility Background: The facility consists of a Cooper-Rolls Model Coberra 2648S Avon GG/RT 48 natural gas-fired turbine with a nominal rating of 20,000 hp at ISO conditions. Additional emission units are a Caterpillar G-398 natural gas-fired emergency generator engine rated at 500 hp and two natural gas-fired heaters rated at 2.0×10^6 Btu/hr and 1.0×10^6 Btu/hr. The facility is located at 2461 - 136th Avenue NW near the town of Arnegard in McKenzie County.

The permit application for the facility with the original 16,000 bhp turbine was submitted January 14, 1981. Prevention of Significant Deterioration and Best Available Control Technology were considered. A Permit to Construct was issued August 5, 1981 and operations began August 31, 1982. Permit to Operate No. O84001 was first issued January 25, 1984. Title V Permit to Operate No. T5-O84001 was first issued December 6, 1996, and it reflected the replacement of the 16,000 bhp turbine with the 20,000 bhp turbine. Renewal No. 1 was issued December 3, 2001, Renewal No. 2 was issued January 1, 2007, and Renewal No. 3 was issued November 4, 2011. Revision No. 1 to Renewal No. 3 was issued February 6, 2015 to revise the turbine testing frequency.

Current Action: On May 4, 2016, the Department received a timely application from Northern Border Pipeline Company requesting renewal of North Dakota Air Pollution Control Title V Permit to Operate No. T5-O84001. The changes in the draft renewal permit are administrative in nature. The Department proposes to issue Renewal No. 4 of the permit after the required 30-day public comment period and subsequent 45-day EPA review period. This statement of basis summarizes the relevant information considered during the revision of the Title V permit. The legal basis for each permit condition is stated in the draft permit under the heading of "NDAC Applicable Requirement."

Applicable Programs/As-Needed Topics:

1. **Title V.** The facility is considered a major source under 40 CFR 70 due to potential emissions of criteria pollutants each above 100 tons per year (NO_x at 296 tpy, and CO at 136 tpy).
2. **New Source Performance Standards (NSPS).** The compressor turbine is subject to 40 CFR 60, Subpart GG (Stationary Gas Turbines) because it was constructed after October 3, 1977 (built in 1981), and it has a heat input at peak load equal/greater than 10 million Btu per hour (actual 211 million Btu per hour).
3. **National Emission Standards for Hazardous Air Pollutants (NESHAP).** No 40 CFR 61 subparts apply to the facility.
4. **NESHAP (MACT).** The facility is a 40 CFR 63 area source of hazardous air pollutant (HAP) emissions because it does not have the potential to emit 10 or more tons per year of a single HAP (formaldehyde 0.66 tpy) or 25 or more tons per year of total HAP (1.23

- tpy). Subpart ZZZZ (stationary reciprocating internal combustion engines) applies to the emergency generator engine.
5. **Acid Rain.** 40 CFR 75 does not apply since the facility is not an electric utility plant.
 6. **Prevention of Significant Deterioration (PSD).** The facility is a major source under 40 CFR 52 because the facility has the potential to emit more than 250 tons per year of a criteria pollutant (NO_x) and it is not one of the 28 named PSD source categories. PSD was considered during approval of the initial permit to operate. Since there are no changes to facility source units to incorporate in this draft and no resultant PSD-significant increases in emissions, a PSD review is not required for this draft permit.
 7. **Best Available Control Technology (BACT).** BACT was considered during approval of the initial permit to operate. Since there are no changes to facility source units to incorporate in this draft and no resultant PSD-significant increases in emissions, a BACT review is not required.
 8. **Gap Filling for Periodic Monitoring.** Gap filling involves periodic stack tests for the turbine NO_x lb/hr limit and opacity monitoring for the turbine and emergency generator engine.
 9. **Streamlining Decisions.** The 40 CFR 60, Subpart GG SO₂ emission limit for the turbine is not represented in the emission limit table because the stated standard ND natural gas sulfur limit (Cond. 2.A.2) is more stringent.
 10. **Compliance Assurance Monitoring (CAM).** Does not apply because there is no add-on air pollution control equipment installed that limits potential emissions to less than the major 40 CFR 70 source threshold.
 11. **Permit Shield.** Does not apply because the permit to operate does not contain a permit shield.
 12. **New Conditions/Limits.** None
 13. **40 CFR 98 -- Mandatory Greenhouse Gas Reporting.** This rule requires sources above certain emission thresholds to calculate, monitor, and report greenhouse gas emissions. According to the definition of "applicable requirement" in 40 CFR 70.2, neither Subpart 98, nor Clean Air Act Section 307(d)(1)(V), the CAA authority under which Subpart 98 was promulgated, are listed as applicable requirements for the purpose of Title V permitting. Although the rule is not an applicable requirement under 40 CFR 70, the source is not relieved from the requirement to comply with the rule separately from compliance with their 40 CFR 70 operating permit. It is the responsibility of each source to determine applicability to the subpart and to comply, if necessary.

Permit Changes by Section in this Draft:

Note: Clerical changes were made to some sections to update to the current North Dakota (ND) format and to correct administrative errors. All of these changes may not be specifically addressed below.

Cover: The facility street address was added and the expiration date was updated

Table of Contents: Page numbers were revised.

1. **Emission Unit Identification:** The table note ^A was added to reflect the current standard ND concept regarding the potential to emit of emergency engines.
2. **Miscellaneous Conditions:** no change
3. **Emission Unit Limits:** no change
4. **Monitoring Requirements and Conditions:** no change
5. **Recordkeeping Requirements:** no change
6. **Reporting:** no change
7. **Facility Wide Operating Conditions:** no change
8. **General Conditions:** no change
9. **State Enforceable Only Conditions (not Federally enforceable):** no change

Comments/Recommendations: It is recommended that Renewal No. 4 to Title V Permit to Operate T5-O84001 be processed and considered for issuance following a 30-day public comment period and a subsequent 45-day EPA review period.