



NORTH DAKOTA
DEPARTMENT of HEALTH

ENVIRONMENTAL HEALTH SECTION
Gold Seal Center, 918 E. Divide Ave.
Bismarck, ND 58501-1947
701.328.5200 (fax)
www.ndhealth.gov



February 23, 2010

Mr. Terry Graumann
Manager, Environmental Services
OtterTail Power Company
P.O. Box 496
Fergus Falls, MN 56538-0496

Re: BART Permit to Construct

Dear Mr. Graumann:

The North Dakota Regional Haze State Implementation Plan (SIP) will require the OtterTail Power Company to reduce NO_x emissions at the Coyote Station, which is located near the City of Beulah in Mercer County. Enclosed is Permit to Construct No. 10008, which establishes the revised NO_x emission limit for the Coyote Station. A public comment period was held regarding the SIP from December 8, 2009 to January 8, 2010, during which comments were received by the Department and considered in our determination. Please note that Condition II.A.2 requires installation of the equipment necessary to meet the new NO_x limit by July 1, 2018 and compliance with the limit by July 1, 2019.

If you have any questions, please contact me at (701)328-5188.

Sincerely,

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

TLO/CDT:saj

Enc:

xc/enc: Gail Fallon, EPA - Region 8
Custer District Health Unit, Mandan



**AIR POLLUTION CONTROL
PERMIT TO CONSTRUCT**

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), a Permit to Construct is hereby issued for modifications at the following source:

I. General Information:

A. **Permit to Construct Number:** PTC10008

B. **Source:**

1. **Name:** Coyote Station
2. **Location:** Sec. 10, S½ of S ½ of Sec. 3 and W½ of Sec. 11, T143N, R88W, North Dakota, Mercer County
3. **Source Type:** Fossil-fuel fired steam electric unit with a nominal heat input of 5,800 million British thermal units per hour (10⁶ Btu/hr).

C. **Owner Names:** Montana-Dakota Utilities Co.
NorthWestern Public Service Company
Northern Municipal Power Agency
(Minnkota Power Cooperative, Inc.)
Otter Tail Power Company

D. **Operator:**

1. **Name:** Otter Tail Power Company
2. **Address:** 215 South Cascade Street
P.O. Box 496
Fergus Falls, MN 56538-0496

II. **Permit Conditions:**

This Permit to Construct establishes a revised nitrogen oxide (NO_x) emission limit for the main boiler at the Coyote Station (EUI 1) if, and when, EPA approves that limit as part of the Regional Haze SIP. The permit allows the construction and initial operation of new or modified air pollution control equipment and process modifications at the source to comply with the revised NO_x limit. If new emissions units are created, then a new Permit to Construct may be required in accordance with NDAC 33-15-14-02. The source shall be operated in accordance with the terms of this Permit to Construct and the Title V Permit to Operate until a revised Title V Permit to Operate is issued. The source is subject to all applicable rules, regulations, and orders now or hereafter in effect to the North Dakota Department of Health and to the conditions specified below:

A. **Special Conditions:**

1. **Emission Limits:** The term "12-month rolling average," as used in this permit to demonstrate compliance with the limit in Condition II.A.1.a. shall be determined by calculating an arithmetic average of all operating hourly outlet NO_x emissions rates as measured and calculated by the CEMS for the current month and the previous 11 months. A new 12-month rolling average shall be calculated by the 30th day following the end of each month. Each 12-month rolling average rate shall include start-up, shutdown, emergency and malfunction periods unless those periods are exempt by this permit.
 - a. The permittee shall not discharge or cause the discharge of nitrogen oxides (NO_x) into the atmosphere from EUI 1 (main boiler) in excess of 0.50 pounds per million British thermal units (lb/10⁶ Btu) on a 12-month rolling average basis.
 - b. The NO_x emission limit applies at all times including startup, shutdown, emergency and malfunction.
2. **Compliance Date:** Installation of the new or modified equipment shall be completed by July 1, 2018. Compliance with the revised NO_x emission limit shall begin by July 1, 2019.
3. **Continuous Emission Monitoring (CEM):** The emissions from EUI 1 shall be measured by continuous emission monitors (CEM) for NO_x and CO₂. The monitoring requirements under Condition II.A.4 shall be the compliance determination method for NO_x.

4. **Monitoring Requirements and Conditions:**

a. Requirements:

Testing and monitoring protocols used to demonstrate compliance with the emission limits of Condition II.A.1 above shall be as follows:

Table 1
Monitoring Requirements by Pollutant/Parameter

Pollutant/Parameter	Monitoring Requirement (Method)	Condition Number (II.A. ...)
NO _x (lb/10 ⁶ Btu)	CEM	4.b.(1), 4.b.(2), 4.b.(3) & 4.b.(4)
CO ₂	CEM	4.b.(1), 4.b.(2), 4.b.(3) & 4.b.(4)

b. Emission Monitoring Conditions:

- (1) The monitoring shall be in accordance with the applicable requirements of the Acid Rain Program, 40 CFR 72 and 40 CFR 75. Emissions are calculated using 40 CFR Part 75.
- (2) The Department may require additional performance audits of the CEM systems.
- (3) When a failure of a continuous emission monitoring system occurs, an alternative method, acceptable to the Department, for measuring or estimating emissions must be undertaken as soon as possible. The procedures outlined in 40 CFR 75, Subpart D for substitution are considered an acceptable method for the emission rate limit. Timely repair of the emission monitoring system must be made.
- (4) The permittee shall maintain and operate air pollution control monitoring equipment in a manner consistent with the manufacturer's recommended equipment in a manner consistent with the manufacturer's recommended procedures on a site-specific QA/QC Plan required by 40 CFR 75. The permittee shall have the QA/QC Plan available on-site and provide the Department with a copy when requested.

5. **Recordkeeping Requirements:** The permittee shall maintain compliance monitoring records for Unit 1 as outlined in Table 2 – Monitoring Records that includes the following information:

- a. A copy of the sample analysis report(s), including the date that the sample

analysis was performed; the company, entity, or person that performed the analysis; and the testing techniques or methods used.

- b. The records of quality assurance for emissions measuring systems including but not limited to quality control activities, audits and calibration drifts as required by the applicable test method.
- c. A copy of all field data sheets from the emissions testing.
- d. A record shall be kept of all major maintenance activities conducted on the emissions units or air pollution control equipment.

Table 2
Monitoring Records

Pollutant/Parameter	Compliance Monitoring Record
NO _x (lb/10 ⁶ Btu)	CEM Data
CO ₂	CEM Data

- e. In addition to requirements outlined in Condition II.A.5, recordkeeping for EUI 1 shall be in accordance with the applicable requirements of the North Dakota Air Pollution Control Rules and the Acid Rain Program, 40 CFR 72 and 40 CFR 75.
- f. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least five years from the date of the compliance monitoring sampling, measurement, report, or application. Support information includes all maintenance records of the emission units and all original strip-chart recordings/computer printouts and calibrations of the continuous compliance monitoring instrumentation, and copies of all reports required by the permit.

6. Reporting:

- a. Reporting for Unit 1 shall be in accordance with the applicable requirements of the North Dakota Air Pollution Control Rules and the Acid Rain Program, 40 CFR 72 and 40 CFR 75.
- b. Quarterly excess emissions reports for Unit 1 shall be submitted no later than the 30th day of the following the end of each calendar quarter. Excess emissions are defined as emissions which exceed the emission limit for EUI 1 as outlined in Condition II.A.1.a. Excess emissions shall be reported for the following:

<u>Parameter</u>	<u>Reporting Period</u>
NO _x lb/10 ⁶ Btu	12-month rolling average

- c. The permittee shall submit a semi-annual report for all monitoring records required under Condition II.A.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 45 days after June 30 and December 31 of each year.
- d. 1) The permittee shall submit an annual compliance certification report within 45 days after December 31 of each year on forms supplied or approved by the Department.
- 2) For emissions units where the method of compliance monitoring is demonstrated by either an EPA Test Method or portable analyzer, the test report shall be submitted to the Department within 60 days after completion of the test.
- 3) 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.
- 4) The permittee shall notify the Department within 15 days of the actual startup date of the equipment required to meet the NO_x permit limit.

B. General Conditions:

1. The permit shall in no way permit or authorize the maintenance of a public nuisance or danger to public health or safety.
2. The permittee shall comply with all State and Federal environmental laws and rules. In addition, the permittee shall comply with all local building, fire, zoning, and other applicable ordinances, codes, rules and regulations.
3. All reasonable precautions shall be taken by the permittee to prevent and/or minimize fugitive emissions during the construction period.
4. The permittee shall at all times, including periods of startup, shutdown, malfunction, maintain and operate EUI 1 and all other emission units including associated air pollution equipment and fugitive dust suppression

operations in a manner consistent with good air pollution control practices for minimizing emissions.

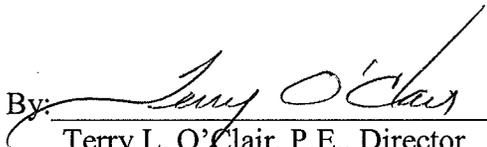
5. Any duly authorized officer, employee or agent of the North Dakota Department of Health may enter and inspect any property, premise or place at which the source listed in Item I.B. of this permit is or will be located at any time for the purpose of ascertaining the state of compliance with the North Dakota Air Pollution Control Rules and the conditions of this permit.
6. The conditions of this permit herein become, upon the effective date of this permit, enforceable by the Department pursuant to any remedies it now has or may in the future have, under the North Dakota Air Pollution Control Law, NDCC Chapter 23-25. Each and every condition of this permit is a material part thereof, and is not severable.

FOR THE NORTH DAKOTA
DEPARTMENT OF HEALTH

Date: _____

2/23/10

By: _____


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