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Air Title V Operating Permit (AOP) - Renewal

version 2.5

(Submission #: HQ7-TK3W-PETM0, version 1)

Details

Submission ID HQ7-TK3W-PETM0

Status In Process

Form Input

Form Instructions

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

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

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

Section A - Permit Information

Permit Number

AOP-28368

Permit Version

5

Issue Date

05/06/2020

Expiration Date

05/12/2025

Permittee

Company Name

Minnkota Power Cooperative, Inc.

Address

3401 - 24th Street SW

Center, ND 58530

United States

Responsible Official**Prefix***NONE PROVIDED***First Name**

Shannon

Last Name*Mikula***Title***NONE PROVIDED***Phone Type**

Business

Number

7017954211

Extension**Email**

Smikula@minnkota.com

Address

3401 24th Street SW

Center, ND 58530

United States

Contact Person for Air Pollution Matters**Prefix***NONE PROVIDED***First Name**

Jon

Last Name*Madison***Title***NONE PROVIDED***Phone Type**

Business

Number

7017947266

Extension**Email**

Jmadison@minnkota.com

Address

3401 24th Street SW

Center, ND 58530

United States

Section B (Part 1) - Facility Information**Facility Name**

Minnkota Power Cooperative, Inc. - Milton R. Young 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?

Yes

Is this a portable source?

No

Facility Location

3401 - 24th St. SW

Center, ND 58530

United States

County

Oliver

Facility Location:
47.06573717947015,-101.2143588066101

3401 - 24th St. SW, Center, ND

Section B (Part 2) - Additional Location Information

Legal Description of Facility Site				
Qtr Qtr	Qtr	Section	Township	Range
NONE PROVIDED	NE	5	141N	83W

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
Electric Steam Generating Unit	221112-Fossil Fuel Electric Power Generation	4911-Electric Services

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 2)

Emission Unit - EU1

Emission Unit ID
EU1

Emission Unit Description
Babcock & Wilcox Boiler

Emission Point ID
1

Emission Point Description
NONE PROVIDED

Emission Process Description
NONE PROVIDED

Emission Unit Status
Existing, no change

Applicable PTCs
PTC Number

Applicable Federal Air Programs

Program Code

Applicable State Regulations

Regulation

Emission Unit form

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

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

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

Attach Emission Unit Form

NONE PROVIDED
Comment
NONE PROVIDED

Section D - Process Equipment Information (2 of 2)

Emission Unit - EU2

Emission Unit ID

EU2

Emission Unit Description

Babcock & Wilcox Boiler

Emission Point ID

2

Emission Point Description

NONE PROVIDED

Emission Process Description

NONE PROVIDED

Emission Unit Status

Existing, no change

Applicable PTCs

PTC Number

Applicable Federal Air Programs

Program Code

Applicable State Regulations

Regulation

Emission Unit form

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

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

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

Attach Emission Unit Form

NONE PROVIDED

Comment

NONE PROVIDED

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	NONE PROVIDED	NONE PROVIDED
CO	NONE PROVIDED	NONE PROVIDED
VOCs	NONE PROVIDED	NONE PROVIDED
SO2	NONE PROVIDED	NONE PROVIDED
PM	NONE PROVIDED	NONE PROVIDED
PM10	NONE PROVIDED	NONE PROVIDED
PM2.5	NONE PROVIDED	NONE PROVIDED
Total HAPs	NONE PROVIDED	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

NONE PROVIDED

Section G - Compliance Schedule

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

Yes

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

Yes

Section H - Flexible Permits

Are you requesting a flexible permit?

No

Section I - Compliance Assurance Monitoring (CAM)

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

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

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

Yes, the facility IS in compliance with applicable monitoring and compliance certification requirements.

Section J - Title IV - Acid Rain

Download the applicable EPA Acid Rain form(s) linked here, complete, and upload 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.

[EPA Acid Rain Application](#)

Attach completed Acid Rain form(s) here

Acid_rain_permit_application_final.pdf - 11/01/2024 12:30 PM

Comment

NONE PROVIDED

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

MINNKOTA - TV PERMIT T5F76009_4_0_Redline NDDEQ_Final.pdf - 11/01/2024 12:30 PM

Comment

NONE PROVIDED

Section L - General Document Upload

File Upload

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

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

Attachments

T5 renewal app cover letter NDDEQ.pdf - 11/01/2024 12:31 PM

Unit 1 Truck Dump Fugitive Coal Dust Emission Control Plan_2024_Final.pdf - 11/01/2024 12:31 PM

Comment

NONE PROVIDED

Additional Forms

NONE PROVIDED

Attachments

Date	Attachment Name	Context	User
11/1/2024 12:31 PM	Unit 1 Truck Dump Fugitive Coal Dust Emission Control Plan_2024_Final.pdf	Attachment	Jon Madison
11/1/2024 12:31 PM	T5 renewal app cover letter_NDDEQ.pdf	Attachment	Jon Madison
11/1/2024 12:30 PM	MINNKOTA - TV PERMIT T5F76009_4_0_Redline NDDEQ_Final.pdf	Attachment	Jon Madison
11/1/2024 12:30 PM	Acid_rain_permit_application_final.pdf	Attachment	Jon Madison

Status History

	User	Processing Status
11/1/2024 12:16:51 PM	Jon Madison	Draft
11/1/2024 12:42:49 PM	Jon Madison	Signing
11/1/2024 2:38:26 PM	Shannon Mikula	Submitting
11/1/2024 2:38:32 PM	Shannon Mikula	Submitted
11/1/2024 2:38:42 PM	Shannon Mikula	In Process

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 Jon Madison on 11/01/2024 at 12:46 PM



Milton R. Young Station
3401 24th Street SW
Center, ND 58530-0127
Phone 701.794.8711
www.minnkota.com

October 31, 2024

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

RE: Minnkota Power Cooperative, Inc. (Milton R. Young Station) - Title V Permit Renewal Application (T5-F76009)

Dear Ms. Schneider:

Enclosed is an application requesting renewal of Minnkota Power Cooperatives (Minnkota) Title V Air Quality Operating Permit Number (T5-F76009, Renewal No. 4, Revision No. 0) for Milton R. Young Station. This application is being submitted in accordance with North Dakota Administrative Code (NDAC) 33.1-15-14.

Included in this submittal is a red line version of the current Title V permit and applicable Title V permit renewal forms. The last Title V renewal was issued on May 6, 2020.

Minnkota completed a North Dakota air quality regulation review of the regulations found in NDAC 33.1-15 to determine if any new or updated requirements since the date of the most recent Title V operating permit. Upon review, updates to the regulations in which Minnkota is already subject were not affected by any additional permit conditions, methods of compliance demonstrations, recordkeeping or reporting requirements for the facility.

Per your request, Minnkota has sent a copy of the Milton R. Young Station's operating permit renewal application and applicable forms to the U.S. Environmental Protection Agency, Office of Partnerships & Regulatory Assistance.

If you have any questions or require additional information for this renewal application, please contact me at 701-795-4211 or Smikula@minnkota.com

Sincerely,

Shannon Mikula
Environmental Manager – Special Projects Counsel

Cc: Wayne Haag
Andrew Freidt
Scott Hopfauf
Jon Madison
EPA Region 8 w/attachments
File: 101.150

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: ☐ new ☐ revised ☒ for ARP permit renewal

STEP 1

**Identify the facility name,
State, and plant (ORIS) code.**

Facility (Source) Name	Milton R. Young Station	State	ND	Plant Code	2823
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STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a."

[illegible]

Facility (Source) Name (from STEP 1)

STEP 3**Permit Requirements****Read the standard requirements.**

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.**Excess Emissions Requirements**

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Facility (Source) Name (from STEP 1)

STEP 3, Cont'd.**Effect on Other Authorities**

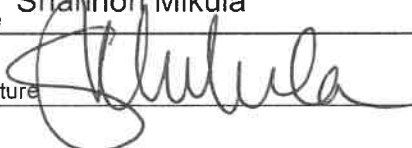
No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; provided, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4**Certification**

Read the certification statement, sign, and date.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Shannon Mikula	
Signature		Date 11/1/2024



Instructions for the Acid Rain Program Permit Application

The Acid Rain Program requires the designated representative to submit an Acid Rain permit application for each source with an affected unit. A complete Certificate of Representation must be received by EPA before the permit application is submitted to the Title V permitting authority. A complete Acid Rain permit application, once submitted, is binding on the owners and operators of the affected source and is enforceable in the absence of a permit until the Title V permitting authority either issues a permit to the source or disapproves the application.

Please type or print. If assistance is needed, contact the Title V permitting authority.

STEP 1 A Plant Code is a 4- or 5-digit number assigned by the Department of Energy's (DOE) Energy Information Administration (EIA) to facilities that generate electricity. For older facilities, "Plant Code" is synonymous with "ORISPL" and "Facility" codes. If the facility generates electricity but no Plant Code has been assigned, or if there is uncertainty regarding what the Plant Code is, send an email to the EIA. The email address is EIA-860@eia.gov.

STEP 2 In column "a," identify each unit at the facility by providing the appropriate unit identification number, consistent with the identifiers used in the Certificate of Representation and with submissions made to DOE and/or EIA. Do not list duct burners. For new units without identification numbers, owners and operators must assign identifiers consistent with EIA and DOE requirements. Each Acid Rain Program submission that includes the unit identification number(s) (e.g., Acid Rain permit applications, monitoring plans, quarterly reports, etc.) should reference those unit identification numbers in exactly the same way that they are referenced on the Certificate of Representation.

Submission Deadlines

For new units, an initial Acid Rain permit application must be submitted to the Title V permitting authority 24 months before the date the unit commences operation. Acid Rain permit renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a Title V permit, or such longer time as provided for under the Title V permitting authority's operating permits regulation.

Submission Instructions

Submit this form to the appropriate Title V permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional Acid Rain contact, or call EPA's Clean Air Markets Hotline at (202) 343-9620.

Paperwork Burden Estimate

This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2060-0258). Responses to this collection of information are mandatory (40 CFR 72.30 and 72.31). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information is estimated to be 8 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

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

Permittee: Name: Minnkota Power Cooperative, Inc.	Permit Number: T5-F76009
Address: 3401 - 24 th Street SW Center, ND 58530-0127	Source Name: Milton R. Young Station
Source Location: 3401 - 24 th Street SW Sec. 4, T141N, R83W Oliver County, North Dakota	Source Type: Electric Generating Unit; Coal
Expiration Date: May 12, 2025	

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

Renewal No. 4: 5/6/20
Revision No. 0: _____

James L. Semerad
Director
Division of Air Quality

Milton R. Young Station
Title V Permit to Operate
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3. Applicable Standards, Restrictions and Miscellaneous Conditions	6
4. Emission Unit Limits	10
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10. Phase II Acid Rain Provisions	38
11. State Enforceable Only Conditions (not Federally enforceable)	43
Attachment A - Compliance Assurance Monitoring (CAM) Plan	
Attachment B - Fugitive Coal Dust Emission Control Plan for the Unit 1 Truck Dump	

Permit Shield

Compliance with the terms and conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

- Such applicable requirements are included and are specifically identified in this permit; or
- The Department, in acting on the permit application or revisions, determines in writing that other requirements specifically identified are not applicable to the source, and the determination, or a concise summary thereof, is included in this permit.

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

1. Emission Unit Identification:

The emission units regulated by this permit are as follows:

A. Point Sources:

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Babcock & Wilcox cyclone-fired boiler with a nominal rated heat input capacity of 3,200 x 10 ⁶ Btu/hr (Unit 1)	1	1	Electrostatic Precipitator (ESP), wet scrubber flue gas desulfurization system (FGD), advanced separated over-fire air (ASOFA) and selective non-catalytic reduction (SNCR), mercury control (Post-Combustion Sorbent Injection) fuel-additive and post-combustion activated carbon injection)
Babcock & Wilcox cyclone-fired boiler with a nominal rated heat input capacity of 6,300 x 10 ⁶ Btu/hr (Unit 2)	2	2	ESP, FGD, ASOFA and SNCR, and mercury control (Post-Combustion)
Cleaver Brooks auxiliary boiler (78 x 10 ⁶ Btu/hr) fired with distillate oil	3	3	None
Caterpillar (237 bhp) diesel engine-driven fire pump for Unit 1	5	5	Catalytic Converter
Cummins (190 bhp) diesel engine-driven fire pump for Unit 2	6	6	Catalytic Converter
Cummins (2,205 bhp) Model 1500DQGAB diesel engine-driven emergency generator (manuf. 5/16/09)	7	7	None
Unit 1 crusher house and Conveyor 1C	M1	M1	Rotoclone

Commented [JM1]: This section was re-worded for clarification purposes.

Commented [JM2]: This section was re-worded for clarification purposes.

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Unit 1 coal silos	M2	M2	Rotoclone
Unit 2 crusher house	M3	M3	Rotoclone
Unit 2 coal silos	M4	M4	Rotoclone
Unit 1 fly ash silo (vent)	M5	M5*	None
Unit 1 fly ash silo (rotary unloader)	M5	M10	Water Spray
Unit 2 fly ash silo (vent)	M6	M6*	Fabric Filter
Unit 2 fly ash silo (rotary unloader)	M6	M11	Water Spray
Unit 2 lime storage silo	M7	M7	Fabric Filter
Unit 2 truck dump	M9	M9	None
Water treatment plant lime storage silo	M12	M12	Fabric Filter
Unit 1 Lime Storage Silo	M13	M13	Fabric Filter

* See Condition 3.B

B. Insignificant or Fugitive Emission Sources (no specific emission limit):

- 1) Fuel and Waste Oil Storage Tanks
- 2) Urea Storage Tanks
- 3) Miscellaneous Chemical Storage and Use (cleaning equipment, solvent parts washer, etc.)
- 4) Miscellaneous Material Handling Systems for Coal, Activated Carbon, Lime and Ash
 - a) Unit 2 fly ash silo with telescopic chute
 - b) Activated carbon silo with fabric filter
 - c) Unit 1 truck dump with fogging system
 - d) Coal storage piles (active and inactive)

C. Continuous Emission Monitoring Systems (CEMS):

- 1) The flue gas from Unit 1 and Unit 2 is emitted through separate stacks. Each stack is monitored by a sulfur dioxide analyzer, nitrogen oxides analyzer, particulate matter monitor, carbon dioxide analyzer, ultrasonic continuous flow monitor and mercury CEMS analyzer or sorbent trap system.
- 2) The flue gas from Unit 1 is routed through one flue gas desulfurization absorber module and the flue gas from Unit 2 is routed through two flue gas desulfurization absorber modules. Each inlet duct to the three, flue gas desulfurization absorber modules is equipped with a sulfur dioxide analyzer and carbon dioxide analyzer.

2. **Alternative Operating Scenarios:**

A. Fuels/Wastes:

- 1) Unit 1 and Unit 2 shall be operated using primarily lignite coal. Distillate oil may be utilized during periods of startup as well as to deslag the cyclone burners. ~~Halides are utilized on the lignite to control the emissions of mercury. Activated carbon is injected into the flue gas prior to the ESP as needed to control emissions of mercury. A proprietary chemical is added to the coal to improve cyclone ash viscosity, improving the staging of the ASOFA resulting in improved NO_x control.~~
- 2) The auxiliary boiler shall be operated utilizing distillate oil containing no more than 0.0015 percent sulfur by weight. During startup, propane may be utilized.
- 3) Fuels other than those listed above may be burned if approved in advance by the Department and compliance with the applicable emission limits is maintained.

All the applicable requirements listed in Conditions 4 and 5 and the requirements for monitoring, recordkeeping, and reporting listed in Conditions 6-8 apply to these scenarios [2.A.1, 2A.2 & 2.A.3].

- 4) EUs 5, 6 and 7 are restricted to combusting only distillate oil with no more than 0.0015 percent sulfur by weight.

Applicable Requirements: NDAC 33.1-15-14-06.5.b (1) & PTC09044

- B. Fly Ash Silos: The Unit 1 and Unit 2 fly ash silos ~~normally~~ vent immediately upstream of the Unit 1 or Unit 2 ~~electrostatic precipitator~~ ESP^s. ~~The filter for Emission Unit Unit -- M5 & M6 each utilize bin vent filters is used~~ when both ESPs are off-line or ~~when~~ the ESP to which the Unit ~~1 or Unit 2~~ fly ash silo is venting₁ is off-line for a short period of time (malfunction or maintenance).

The rotary unloaders are located at the bottom of the fly ash silos. When operated, water spray is injected into the unloader and mixed with the fly ash prior to loading the ash into trucks. The Unit 2 fly ash silo includes a telescopic chute located at the bottom of the silo. The telescopic chute is utilized when loading pneumatic trailers and into ash trucks for short periods when the rotary unloader malfunctions.

The applicable requirements regarding these alternative operating scenarios are listed in Conditions 3 and 4. Monitoring, recordkeeping and reporting shall be conducted in accordance with Conditions 5-7 when the scenario occurs.

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

Commented [JM3]: Minnkota is proposing to remove the specificity of the product because the product is not currently used but the process remains the same and if a future product is used but the process for compliance remains the same we would like to reduce undue regulatory burden on the agency of amending the Operating Permit. We do not believe that removal of the product details diminishes or modifies the compliance requirements.

Commented [JM4]: This section was re-worded for clarification purposes.

3. **Applicable Standards, Restrictions and Miscellaneous Conditions:**

- A. The permittee shall comply with the following plant-wide SO₂ emission limitations for the Milton R. Young Station:

- 1) Beginning January 1, 2014, and each year thereafter, the permittee shall not emit more than 8,500 tons of SO₂ per year based on a plant-wide tonnage for the annual average of two calendar years.

Applicable Requirement: PTC12003, Amend. 1

- B. The permittee shall continuously operate each FGD at all times that the unit it serves is in operation, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the FGDs, for minimizing emissions to the extent practicable. The permittee need not operate an FGD system during periods of malfunction of the FGD, or during periods of malfunction of the unit that have a significant adverse impact on the operation of the FGD, provided that the permittee satisfies the requirements for a malfunction as set forth in PTC12003, Amend. 1.

Applicable Requirement: PTC12003, Amend. 1

- C. The permittee shall continuously operate all NO_x control technology installed on the Milton R. Young Units at all times that the unit served is in operation, consistent with the technological limitations, manufacturers' specifications to the extent practicable, and good engineering and maintenance practices for the NO_x control technology. The permittee need not operate NO_x control technology during periods of malfunction of the NO_x control technology, or during periods of malfunction of the unit that have a significant adverse impact on the operation of the NO_x control technology, provided that the permittee satisfies the requirements for malfunction events as set forth in PTC12003, Amend. 1.

Applicable Requirement: PTC12003, Amend. 1

D. **ESP Operation:**

- 1) The permittee shall continuously operate each ESP at the Milton R. Young Station at all times that each unit the ESP serves is combusting fossil fuel, consistent with good engineering practices for PM control, to minimize PM emissions to the extent practicable. The permittee need not operate the ESP during periods of malfunction of the ESP, or during periods of malfunction of the unit that have a significant adverse impact on the operation of the ESP, provided that the permittee satisfies the requirements for malfunction events as set forth in PTC12003, Amend. 1.
- 2) The permittee shall continuously operate each PM control device on the Milton R. Young Station Units to maximize the PM emission reductions, consistent with the operational and maintenance limitations of the units. Specifically, the permittee shall at a minimum:

- a) energize each section of the ESP for each unit, regardless of whether that action is needed to comply with opacity limits;
- b) maintain the energy or power levels delivered to the ESP for each Unit to achieve the greatest possible removal of PM;
- c) make best efforts to expeditiously repair and return to service transformer-rectifier sets when they fail;
- d) inspect for, and schedule for repair, any openings in ESP casings and ductwork to minimize air leakage;
- e) optimize for Unit 1 the plate-cleaning and discharge-electrode cleaning systems for the ESP by varying the cycle time, cycle frequency, rapper-vibrator intensity, and number of strikes per cleaning event; and
- f) optimize for Unit 2 the plate-cleaning system for the ESP by varying the cycle time and frequency of the cycle.

Applicable Requirements: PTC12003, Amend. 1 & NDAC 33.1-15-14-06.5.b(1)

E. General SO₂ Provisions:

- 1) In determining emission rates for SO₂, the permittee shall use the continuous emission monitoring system (CEMS)/continuous emission rate monitoring system (CERMS) in accordance with the reference methods specified in 40 CFR 75.
- 2) For the purpose of calculating the 30-day rolling average removal efficiency, the outlet SO₂ emission rate and the inlet SO₂ emission rate shall be determined based on the data generated in accordance with 40 CFR 75 (using CEMS data from both the inlet and outlet of the control device). In the event the inlet monitor fails the Bias test as required by 40 CFR 75, the Bias Adjustment Factor shall be 1.0.
- 3) If any construction allows any flue gas to by-pass the SO₂ pollution control equipment, the outlet 30-day rolling average emission rate shall be determined from SO₂ CEMS located after the by-pass return, and the inlet 30-day rolling average emission rate shall be determined from SO₂ CEMS located before the by-pass.

4) Surrender of SO₂ Allowances:

- a) For purposes of this condition, the "surrender of allowances" means permanently surrendering allowances from the accounts administered by EPA for Unit 1 and Unit 2 - so that such SO₂ allowances can never be used to meet any compliance requirements under the Clean Air Act or the North Dakota State Implementation Plan.

- b) For each year specified below, the permittee shall surrender to EPA, SO₂ allowances that have been allocated to the Milton R. Young Station for the specified calendar year:

Calendar Year	Amount
2020 and each calendar year thereafter	17,886 Allowances

The permittee shall make such surrender annually, within forty-five (45) days of their receipt from EPA of the Annual Deduction Reports for SO₂. Any surrender need not include the specific SO₂ allowances that were allocated to the permittee, so long as the permittee surrenders SO₂ allowances that are from the same year or an earlier year and that are equal to the number required to be surrendered under this condition. The permittee's retirement of SO₂ allowances are permanent injunctions not subject to any termination provision of this permit.

- c) For all SO₂ allowances surrendered to EPA, the permittee shall first submit an SO₂ allowance transfer request form to EPA's Office of Air and Radiation's Clean Air Markets Division directing the transfer of such SO₂ allowances to the EPA Enforcement Surrender Account or to any other EPA account that EPA may direct in writing. As part of submitting these transfer requests, the permittee shall irrevocably authorize the transfer of these SO₂ allowances and identify – by name of account and any applicable serial or other identification numbers or station names – the source and location of the SO₂ allowances being surrendered.

Applicable Requirements: NDAC 33.1-15-21-08.1 & PTC12003, Amend. 1

F. General NO_x Provisions:

- 1) In determining emission rates for NO_x, the permittee shall use CEMS/CERMS in accordance with the reference methods specified in 40 CFR 75.

Applicable Requirement: PTC12003, Amend. 1

G. Fuel Restriction: The auxiliary boiler (EU 3) and engines (EU 5, EU 6 and EU 7) are restricted to combusting only distillate oil with no more than 0.0015 percent sulfur by weight (≤ 15 ppm sulfur).

Applicable Requirement: NDAC 33.1-15-12-02, Subpart IIII, NDAC 33.1-15-14-06.5.b(1) and NDAC 33.1-15-22-03, Subpart ZZZZ

H. New Source Performance Standards: The permittee shall comply with the following subparts of 33.1-15-12-02 and 40 CFR 60 in addition to complying with Subpart A – General Provisions.

- 1) Subpart D - Standards of Performance for Fossil-Fuel Fired Steam Generators (EU 2).

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

- 2) Subpart Y - Standards of Performance for Coal Preparation and Processing Plants (Fugitive emission source Unit 1 truck dump).

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

- 3) Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (EU 7).

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

I. **Maximum Achievable Control Technology:** The permittee shall comply with the following subparts of 33.1-15-22-03 and 40 CFR 63 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 (EUs 5, 6 and 7).

Note 1: ~~For~~ For engines to be considered emergency stationary RICE under 40 CFR 63, Subpart ZZZZ, engine operations must comply with applicable hour limits as specified in 40 CFR §63.6640(f)

Applicable Requirement: NDAC 33.1-15-22-03, Subpart ZZZZ

- 2) Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional and Process Heaters (EU 3).

- a) EU 3 (auxiliary boiler) is classified as a *limited-use boiler*. In order to maintain *limited-use boiler* classification as defined by 40 CFR 63 Subpart DDDDD, the boiler shall be limited to an average annual capacity factor of no more than 10 percent as defined in 40 CFR 63.7575. ~~–~~ The capacity factor shall be based on the quantity of fuel combusted in EU 3 and shall not exceed 476,087 gallons per year.

Applicable Requirements: & NDAC 33.1-15-14-06.5.b(1) & NDAC 33.1-15-22-03, Subpart DDDDD

- 3) Subpart UUUUU - National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units. EU 1 and EU 2 are affected sources under this subpart and are categorized by EPA as coal-fired electric generating units designed for the low rank virgin coal subcategory (78 Fed. Reg. 27,386, May 10, 2013).

Applicable Requirement: NDAC 33.1-15-22-03, Subpart UUUUU

J. **Like-Kind Engine Replacement:** This permit allows the permittee to replace the existing engines with like-kind engines. Replacement is subject to the following conditions:

- 1) The Department must be notified at least 30 days prior to the proposed change-out. The permittee must also comply with all applicable notification requirements of 40 CFR 60 and 40 CFR 63 (see 3.H.3 and 3.I.1).
- 2) The replacement engine shall operate in the same manner, provide no increase in throughput and have equal or less emissions than the engine it is replacing.
- 3) The date of manufacture of the replacement engine must be included in the notification. The facility must comply with any applicable Federal standards (e.g. NSPS, NESHAP, MACT) triggered by the replacement.
- 4) The replacement engine is subject to the same State emission limits as the existing engine in addition to any NSPS or MACT emission limit that is applicable.

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

4. Emission Unit Limits:

A. Emission Limits:

Emission Unit Description	EU	EP	Pollutant/Parameter	Emission Limit/Parameter	NDAC Applicable Requirement
Babcock & Wilcox boiler (Unit 1)	1	1	PM (filterable)	0.10 lb/10 ⁶ Btu ^{a, f} 0.030 lb/10 ⁶ Btu ^{a, f, k} 0.03 lb/10 ⁶ Btu ^k	33.1-15-12, Subpart D, PTC 12003 PTC12003, Amend. 1 & 33.1-15-22-03, Subpart UUUUU
			PM ₁₀ (filterable)	160.3 lb/hr ^a	33.1-15-14-06.5.b(1)
			SO ₂	3.0 lb/10 ⁶ Btu ^b , 7,500 lb/hr ^b & 95% removal ^c	33.1-15-06-01.2, 33.1-15-14-06.5.b(1) & PTC12003, Amend. 1
			NO _x	0.36 lb/10 ⁶ Btu ^c & 2,070.2 lb/hr ^g	PTC12003, Amend. 1
			HCl	SO ₂ Surrogate 0.2 lb/10 ⁶ Btu ^k	33.1-15-22-03, Subpart UUUUU
			Hg	4.0 lb/TBtu ^k	33.1-15-22-03, Subpart UUUUU
			Opacity	Cond. 4.B.1 & 4.B.2	33.1-15-03-01.2 & ND SIP §8.3.2

Commented [JM5]: Minnkota requested an administrative revision and conditional termination of the Consent Decree language which resulted in the issuance of a revised Title V operating permit in 2019.

PTC 12003, Amend 1, Condition 2, does not specify an averaging period for particulate matter emission limit, therefore, for clarification purposes, Minnkota is proposing an administrative amendment to the PM Filterable emission limit of 0.030 lb/MMBtu(3hra) to a 30 day rolling average to remain consistent with MATS 5U averaging period.

PTC, 12003, Amend 1, Condition 10, references NSPS Subpart D 60.42. Minnkota also proposes an administrative amendment to incorporate the 0.10 lb/MMBtu. Minnkota proposes a an emission averaging period on a 3-hour rolling average basis.

Emission Unit Description	EU	EP	Pollutant/Parameter	Emission Limit/Parameter	NDAC Applicable Requirement
Babcock & Wilcox boiler (Unit 2)	2	2	PM (filterable)	0.10 lb/10 ⁶ Btu ^{a, f} 0.030 lb/10 ⁶ Btu ^{a, f, g} 0.03 lb/10 ⁶ Btu ^k	33.1-15-12, Subpart D, PTC 12003 PTC12003, Amend. 1 & 33.1-15-22-03, Subpart UUUUU
			PM ₁₀ (filterable)	315.1 lb/hr ^a	33.1-15-14-06.5.b(1)
			SO ₂	1.20 lb/10 ⁶ Btu ^{b, d, f} , 5,635.2 lb/hr & Footnote i	33.1-15-12, Subpart D, 33.1-15-14-06.5.b(1), PTC12003, Amend. 1 & PTC10007
			NO _x	0.35 lb/10 ⁶ Btu ^e & 3995.6 lb/hr ^g	PTC12003, Amend. 1
			HCl	SO ₂ Surrogate 0.2 lb/10 ⁶ Btu ^k	33.1-15-22-03, Subpart UUUUU
			Hg	4.0 lb/TBtu ^k	33.1-15-22-03, Subpart UUUUU
			Opacity	Cond. 4.B.3	33.1-15-12, Subpart D & 33.1-15-03-02
Cleaver Brooks auxiliary boiler	3	3	PM	0.80 lb/10 ⁶ Btu ^e & 3.0 lb/hr ^e	33.1-15-05-02.2.a & 33.1-15-02
			SO ₂	3.0 lb/10 ⁶ Btu	33.1-15-06-01.2
			Opacity	Cond. 4.B.1	33.1-15-03-02
			Annual Capacity	Cond. 3.I.2)a ^j	33.1-15-22-03, Subpart DDDDD
Caterpillar diesel engine (237 bhp)	5	5	CO	230 ppm	33.1-15-22-03, Subpart ZZZZ
			Opacity	Cond. 4.B.1	33.1-15-03-02
Cummins diesel engine (190 bhp)	6	6	CO	230 ppm	33.1-15-22-03, Subpart ZZZZ
			Opacity	Cond. 4.B.1	33.1-15-03-02
Cummins diesel engine (2,205 bhp)	7	7	Opacity	Cond. 4.B.1 ^h	33.1-15-03-02
Unit 1 crusher house and Conveyor 1C	M1	M1	PM	74.0 lb/hr	33.1-15-05-01
			PM ₁₀	4.3 lb/hr	33.1-15-14-06.5.b(1)
			Opacity	Cond. 4.B.1	33.1-15-03-02

Commented [JM6]: Minnkota requested an administrative revision and conditional termination of the Consent Decree language which resulted in the issuance of a revised Title V operating permit in 2019.

PTC 12003, Amend 1, Condition 2, does not specify an averaging period for particulate matter emission limit, therefore, for clarification purposes, Minnkota is proposing an administrative amendment to the PM Filterable emission limit of 0.030 lb/MMBtu(3hra) to a 30 day rolling average to remain consistent with MATS 5U averaging period.

PTC, 12003, Amend 1, Condition 10, references NSPS Subpart D 60.42. Minnkota also proposes an administrative amendment to incorporate the 0.10 lb/MMBtu. Minnkota proposes a an emission averaging period on a 3-hour rolling average basis.

Emission Unit Description	EU	EP	Pollutant/Parameter	Emission Limit/Parameter	NDAC Applicable Requirement
Unit 1 coal silos	M2	M2	PM	66.3 lb/hr	33.1-15-05-01
			PM ₁₀	7.5 lb/hr	33.1-15-14-06.5.b(1)
			Opacity	Cond. 4.B.1	33.1-15-03-02
Unit 2 crusher house	M3	M3	PM	82.0 lb/hr	33.1-15-05-01
			PM ₁₀	18.7 lb/hr	33.1-15-14-06.5.b(1)
			Opacity	Cond. 4.B.1	33.1-15-03-02
Unit 2 coal silos	M4	M4	PM	74.7 lb/hr	33.1-15-05-01
			PM ₁₀	18.5 lb/hr	33.1-15-14-06.5.b(1)
			Opacity	Cond. 4.B.1	33.1-15-03-02
Unit 1 fly ash silo (vent)	M5	M5	PM	42.5 lb/hr	33.1-15-05-01
			PM ₁₀	2.2 lb/hr	33.1-15-14-06.5.b(1)
			Opacity	Cond. 4.B.1	33.1-15-03-02
Unit 1 fly ash silo (rotary unloader)	M5	M10	PM	55.4 lb/hr	33.1-15-05-01
			Opacity	Cond. 4.B.4	33.1-15-03-03
Unit 2 fly ash silo (vent)	M6	M6	PM	42.5 lb/hr	33.1-15-05-01
			PM ₁₀	2.2 lb/hr	33.1-15-14-06.5.b(1)
			Opacity	Cond. 4.B.1	33.1-15-03-02
Unit 2 fly ash silo (rotary unloader)	M6	M11	PM	59.8 lb/hr	33.1-15-05-01
			Opacity	Cond. 4.B.4	33.1-15-03-03
Unit 2 lime storage silo	M7	M7	PM	46.9 lb/hr	33.1-15-05-01
			Opacity	Cond. 4.B.1	33.1-15-03-02
Unit 1 truck dump	Fug.	Fug.	Opacity	Cond. 3.H.2	33.1-15-12-02, Subpart Y
Unit 2 truck dump	M9	M9	PM	83.8 lb/hr	33.1-15-05-01
			Opacity	Cond. 3.H.2	33.1-15-12-02, Subpart Y
Water treatment plant lime storage silo	M12	M12	PM	4.4 lb/hr	33.1-15-05-01
			Opacity	Cond. 4.B.1	33.1-15-03-02
Unit 1 Lime Silo	M13	M13	PM	46.9 lb/hr	33.1-15-05-01
			Opacity	Cond. 4.B.1	33.1-15-03-02

^a 3-hour rolling average.

^b 3-hour rolling average. More restrictive standard applies. The emission rate shall be calculated in accordance with the procedures of 40 CFR 60.

- ^c 30-day rolling average. The emission rate shall be calculated in accordance with the procedures of PTC12003, Amend. 1. The limit for NO_x does not include startup.
- ^d 3-hour rolling average. The emission rate shall be calculated in accordance with the procedures of 40 CFR 60.
- ^e More restrictive standard applies.
- ^f This standard does not apply during startup, shutdown or malfunction.
- ^g Startup 24-hour rolling average. Startup is the period of time from initial fuel combustion to the point in time when the measured heat input to the boiler on a 6-hour rolling average basis is greater than or equal to 2500 x 10⁶ Btu/hr for Unit 1 and 4800 x 10⁶ Btu/hr for Unit 2. For purposes of determining compliance, startup cannot exceed 61 hours for Unit 1 and 115 hours for Unit 2.
- ^h 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 60, Subpart IIII and 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 [40 CFR 63, Subpart ZZZZ, §63.6640(f)].
- ⁱ 30-day rolling average. The emission rate shall be calculated in accordance with the procedures of PTC12003, Amend. 1. In accordance with PTC10007 (BART Permit), the permittee shall achieve an emission rate of 0.15 lb/10⁶ Btu and 90% removal of SO₂, or as an alternative 95% removal.
- ^j See 40 CFR 63, Subpart DDDDD for additional, equally acceptable methods of demonstrating compliance which are not listed here for brevity.
- ^k 30 Boiler operating day rolling average (BODRA). The emission rate shall be calculated in accordance with 40 CFR 63, Subpart UUUUU.

B. Opacity Limits: The emission units listed in Condition 4.A shall not exceed the following opacity limits.

- 1) All emission units, excluding Condition 4.B.3 for EU2 /EP 2 and Condition 4.B.4 for fugitive emissions: 20 percent (six-minute average), except that a maximum of forty percent (six-minute average) is permissible for not more than one six-minute period per hour. This standard applies at all times.

Applicable Requirement: NDAC 33.1-15-03-02

- 2) Emission Point 1 - PM emissions are limited to 0.062 lb/MMBtu (3-hour average) to ensure equivalency of monitoring methods and compliance with the opacity limit.

Applicable Requirement: ND SIP §8.3.2

- 3) Emission Point 2 - In addition to the opacity limit specified in Condition 4.B.1, 20 percent (six-minute average), except that a maximum 27 percent (six-minute average) is permissible for not more than one six-minute period per hour. This standard does not apply during startup, shutdown and malfunction.

Applicable Requirements: NDAC 33.1-15-12, Subpart A & Subpart D

- 4) Fugitive Emissions: The permittee shall not discharge into the ambient air any air contaminant which exhibits opacity greater than 40 percent for more than one six-minute period per hour. Such visible emissions shall have been visibly transported off the property of emission origination and remains visible to an observer positioned off said property when sighting along a line which does not cross the property of emission origination.

Applicable Requirement: NDAC 33.1-15-03-03

5. **Monitoring Requirements and Conditions:**

Emission Unit Description	EP	Pollutant/Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
Babcock & Wilcox boiler (Unit 1)	1	PM/PM ₁₀ (filterable)	PM CEMS, O&M & Emissions Test	5.B.2, 5.B.3, 5.B.4.a, 5.B.6, 5.B.7, & 5.B.11	33.1-15-14-06.5.a(3)(a), PTC12003, Amend. 1 & 33.1-15-22-03, Subpart UUUUU
		SO ₂	CEMS/CERMS & O&M	5.B.1, 5.B.3, 5.B.4.b & 5.B.6	33.1-15-14-06.5.a(3)(a) & 33.1-15-21
		NO _x	CEMS/CERMS & O&M	5.B.1, 5.B.3, 5.B.4.b & 5.B.6	33.1-15-21 & 33.1-15-14-06.5.a(3)(a)
		HCl	SO ₂ CEMS & O&M	5.B.1, 5.B.3, 5.B.4.b, 5.B.6 & 5.B.15	33.1-15-22-03, Subpart UUUUU
		Hg	CEMS & O&M	5.B.1, 5.B.3, 5.B.4.b, 5.B.6 & 5.B.15	33.1-15-22-03, Subpart UUUUU
		Opacity	Visible Emissions (VE) Evaluation & PM CEMS	5.B.1, 5.B.2 & 5.B.9	33.1-15-14-06.5.a(3)(a), ND SIP §8.3.2, 33.1-15-21 & PTC12003, Amend. 1
		CO ₂	CEMS & O&M	5.B.1, 5.B.3, 5.B.4.b & 5.B.6	33.1-15-21
		Flow	Flow Monitor	5.B.1, 5.B.3 & 5.B.4.b	33.1-15-21

Emission Unit Description	EP	Pollutant/Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
Babcock & Wilcox boiler (Unit 2)	2	PM/PM ₁₀ (filterable)	PM CEMS, O&M & Emissions Test	5.B.2, 5.B.3, 5.B.4.a, 5.B.6, 5.B.7, & 5.B.11	<u>33.1-15-12, Subpart D</u> 33.1-15-14-06.5.a(3)(a), PTC12003, Amend. 1 & 33.1-15-22-03, Subpart UUUUU
		SO ₂	CEMS/CERMS & O&M	5.B.1, 5.B.3, 5.B.4.b & 5.B.6	33.1-15-12, Subpart D & 33.1-15-21
		NO _x	CEMS/CERMS & O&M	5.B.1, 5.B.3, 5.B.4.b & 5.B.6	33.1-15-14-06.5.a(3)(a) & 33.1-15-21
		HCl	SO ₂ CEMS & O&M	5.B.1, 5.B.3, 5.B.4.b, 5.B.6 & 5.B.15	33.1-15-22-03, Subpart UUUUU
		Hg	CEMS & O&M	5.B.1, 5.B.3, 5.B.4.b, 5.B.6 & 5.B.15	33.1-15-22-03, Subpart UUUUU
		Opacity	VE Evaluation & PM CEMS	5.B.1, 5.B.2 & 5.B.9	33.1-15-12, Subpart D, 33.1-15-21 & PTC12003, Amend. 1
		CO ₂	CEMS & O&M	5.B.1, 5.B.3, 5.B.4.b & 5.B.6	33.1-15-12, Subpart D & 33.1-15-21
		Flow	Flow Monitor	5.B.1, 5.B.3 & 5.B.4.b	33.1-15-12, Subpart D & 33.1-15-21
Cleaver Brooks auxiliary boiler	3	PM	Recordkeeping	5.B.5	33.1-15-14-06.5.a(3)(a)
		SO ₂	Recordkeeping	5.B.5 & 5.B.8	33.1-15-14-06.5.a(3)(a)
		Opacity	Recordkeeping	5.B.5	33.1-15-14-06.5.a(3)(a)
		Annual Capacity	Recordkeeping	5.B.12, 5.B.13	33.1-15-22-03, Subpart DDDDD
Caterpillar diesel engine (237 bhp)	5	CO	Recordkeeping	3.I.1	33.1-15-22-03, Subpart ZZZZ
		Opacity	Recordkeeping	5.B.5, 5.B.8 & 5.B.14	33.1-15-14-06.5.a(3)(a)
Cummins diesel engine (190 bhp)	6	CO	Recordkeeping	3.I.1	33.1-15-22-03, Subpart ZZZZ
		Opacity	Recordkeeping	5.B.5, 5.B.8 & 5.B.14	33.1-15-14-06.5.a(3)(a)
Cummins diesel engine (2,205 bhp)	7	Opacity	Recordkeeping	5.B.5, 5.B.8 & 5.B.14	33.1-15-14-06.5.a(3)(a)
Unit 1 crusher house and Conveyor 1C	M1	PM/PM ₁₀ /Opacity	CAM	5.B.10	33.1-15-14-06.10
Unit 1 coal silos	M2	PM/PM ₁₀ /Opacity	CAM	5.B.10	33.1-15-14-06.10

Emission Unit Description	EP	Pollutant/Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
Unit 2 crusher house	M3	PM/PM ₁₀ /Opacity	CAM	5.B.10	33.1-15-14-06.10
Unit 2 coal silos	M4	PM/PM ₁₀ /Opacity	CAM	5.B.10	33.1-15-14-06.10
Unit 1 fly ash silo (vent)	M5	PM/PM ₁₀ /Opacity	O&M & VE Evaluation	5.B.6, 5.B.9	33.1-15-14-06.5.a(3)(a)
Unit 2 fly ash silo (vent)	M6	PM/PM ₁₀ /Opacity	O&M, VE Evaluation & CAM	5.B.6, 5.B.9 & 5.B.10	33.1-15-14-06.5.a(3)(a) & 33.1-15-14-06.10
Unit 2 lime storage silo	M7	PM/Opacity	CAM	5.B.10	33.1-15-14-06.10
Unit 2 truck dump	M9	PM/Opacity	VE Evaluation	5.B.9	33.1-15-14-06.5.a(3)(a)
Unit 1 fly ash silo (rotary unloader)	M10	PM/Opacity	VE Evaluation	5.B.9	33.1-15-14-06.5.a(3)(a)
Unit 2 fly ash silo (rotary unloader)	M11	PM/Opacity	VE Evaluation	5.B.9	33.1-15-14-06.5.a(3)(a)
Water treatment plant lime storage silo	M12	PM/Opacity	CAM	5.B.10	33.1-15-14-06.10
Unit 1 lime storage Silo	M13	PM/Opacity	CAM	5.B.10	33.1-15-14-06.10

B. Monitoring Conditions:

- 1) The monitoring shall be in accordance with the following applicable requirements of Chapter 33.1-15-06, Chapter 33.1-15-12, Chapter 33.1-15-21, and Chapter 33.1-15-22 of the North Dakota Air Pollution Control Rules (NDAC). Emissions are calculated using 40 CFR 75, Appendix F and 40 CFR 60, Appendix A. For the purpose of calculating the 30-Day Rolling Average Removal Efficiency, the outlet SO₂ Emission Rate and inlet SO₂ Emission Rate shall be determined based on the data generated in accordance with 40 CFR 75 (using SO₂ and CO₂ CEMS data from both the inlet and outlet of the control device).
 - a) NDAC 33.1-15-06-04, Monitoring Requirements.
 - b) NDAC 33.1-15-12 and 40 CFR 60, Subpart A, §60.13, Monitoring Requirements (applicable to Unit 2 only).
 - c) NDAC 33.1-15-12-02 and 40 CFR 60, Subpart D, §60.45, Emission and Fuel Monitoring (applicable to Unit 2 only).
 - d) NDAC 33.1-15-21-09, Monitoring Requirements.

- e) NDAC 33.1-15-22-03 and 40 CFR 63, Subpart UUUUU, §63.10020, Continuous Compliance Requirements.
 - f) 40 CFR 72 and 40 CFR 75
- 2) PM CEMS:
- a) On Unit 1 and Unit 2, the permittee shall maintain, in an electronic database, the hourly average emission values of all PM CEMS in lb/10⁶ Btu. The permittee shall use reasonable efforts to keep the PM CEMS running and producing data whenever Unit1 and/or Unit 2 is operating. The permittee shall operate the PM CEMS in accordance with the approved Quality Assurance/Quality Control protocol (approved June 16, 2008).
 - b) The permittee may use the PM CEMS on Units 1 & 2 in lieu of the continuous opacity monitoring system (COMS) required by NDAC 33.1-15-12-02, Subpart D (40 CFR 60, Subpart D) and PTC12003, Amend. 1 provided the following conditions are met:
 - [1] The PM CEMS installed are appropriate to the stack conditions at both Units 1 and 2;
 - [2] The PM CEMS are installed, operated and maintained in accordance with the manufacturer's recommendations, the applicable requirements of 40 CFR 60.40 *et seq.* and the General Provisions at 40 CFR 60.7-60.13;
 - [3] The PM CEMS are certified in accordance with Performance Specification 11 (PS-11) at 40 CFR 60, Appendix A;
 - [4] Quality assurance/quality control requirements must be performed in accordance with 40 CFR 60, Appendix F, Procedure 2;
 - [5] Compliance with the applicable PM emission limits at 40 CFR 60.42(a) must be based on continuous three-hour rolling average periods during source operation;
 - [6] The permittee must meet all applicable reporting, recordkeeping and operational requirements under 40 CFR 60.40 *et seq.* and the General Provisions under 40 CFR 60.7-60.13. Quarterly excess emissions of PM must be reported based on a three-hour rolling average during source operations;
 - [7] The permittee must demonstrate compliance with the applicable opacity limit by taking weekly visible emissions readings in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 readings must be taken for at least one hour each week, for six consecutive weeks during regular source

operation. If continuous compliance with the opacity limit is demonstrated for six consecutive weeks, the permittee can begin taking monthly Method 9 readings.

- [8] Monthly Method 9 readings must be taken for at least one hour each consecutive month but may be performed in no less than 30-minute intervals during regular source operation;
 - [9] Records of Method 9 readings that document an exceedance of the applicable opacity standard must be submitted with the quarterly excess emission reports required for the PM CEMS;
 - [10] If excess emissions of opacity are identified, the permittee shall revert back to weekly Method 9 readings for six consecutive weeks, or until continuous compliance with the opacity limit is demonstrated, whichever is longer; and
 - [11] All Method 9 readings must be taken by a certified observer.
- 3) The Department may require additional performance audits of each CEMS and CERMS.
 - 4) CEMS/CERMS:
 - a) When a failure of a continuous emission monitoring system occurs, an alternative method, acceptable to the Department, for measuring or estimating emissions. Timely repair of the emission monitoring system must be made.
 - b) When a failure of a CEMS or CERMS 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 data substitution are considered an acceptable alternative method. Timely repair of the emission monitoring system must be made.
 - 5) For purposes of compliance monitoring, burning of fuel in compliance with Condition 3.G shall be considered credible evidence of compliance with any applicable opacity, particulate matter and SO₂ emission limits. 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 distillate oil for evidence of compliance or noncompliance with any applicable opacity, particulate matter and SO₂ emission limit in the event of enforcement action.
 - 6) The permittee shall maintain and operate emission sources and air pollution control equipment in a manner consistent with good air pollution control practice for maintaining continuous compliance. 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 on-site and provide the Department with a copy when requested.

7) Units 1 and 2 PM Stack Tests:

- a) The permittee shall conduct annual PM performance testing on Milton R. Young Station Units 1 and 2.
- b) In determining the PM emission rate, the permittee shall use the reference methods specified in 40 CFR 60, Appendix A, Method 5 (filterable portion only), using stack tests, or alternative methods that are requested by the permittee and approved by EPA or the Department. The permittee shall also calculate the PM emissions rate from annual stack tests in accordance with 40 CFR §60.8(f). In addition, the permittee shall submit all the results of each PM stack test to the Department within sixty (60) days of completion of each test.

- 8) The sulfur content of the fuel used shall be analyzed with each shipment using ASTM or Department approved methods. The sulfur analysis for the fuel may be conducted by the permittee or by the source where the fuel is purchased. When distillate oil is combusted, an annual statement from the fuel supplier that the sulfur content of the fuel oil does not exceed 0.0015% by weight will satisfy the analysis requirement. The permittee shall calculate sulfur dioxide emission rates from the sulfur content of the fuel using EPA emission factors or other methods approved by the Department.

- 9) Once per month in which the emission unit is operated, a certified visible emissions reader shall conduct a formal visible emissions evaluation using EPA Reference Method 9. If the visible emissions evaluation indicates emissions to be less than or equal to the allowable opacity limit, the date, time and readings shall be recorded and no further action is required.

If the visible emissions evaluation indicates emissions to be greater than the allowable opacity limit, the permittee must investigate the problem within eight hours. Any problems that are discovered must be corrected as soon as possible. If the correction of the emissions is expected to take longer than 24 hours, the permittee shall follow procedures as outlined in Condition 8.G. Following corrective maintenance, a formal visible emissions evaluation shall be made.

All investigations of malfunctions and visible emissions shall be recorded. The permittee shall comply with the visible emissions and particulate emission limits and nothing in this condition shall be construed as authorizing otherwise.

- 10) For M1, M2, M3, M4, M6, M7, M12 and M13, the permittee shall conduct the monitoring, recordkeeping and reporting as required by the applicable subparts of 40 CFR 64 and monitoring shall be conducted in accordance with the applicable Compliance Assurance Monitoring (CAM) Plan in Attachment A of this permit.
- 11) The monitoring shall be in accordance with the applicable requirements of 40 CFR 60, Performance Specification 11, and the Amendments to Standards of performance for New Stationary Sources: Monitoring Requirements, 69 Fed. Reg. 1786 (January 12, 2004).

- 12) The permittee shall monitor and record the type and amount of fuel used by the Auxiliary Boiler (EU 3). By the 15th day of each January, the permittee shall calculate and record the annual capacity factor as defined in §63.7575 for the limited use boiler. These records shall be retained by the permittee for a period of five years and made available to the Department upon request. If the annual capacity factor exceeds 10 percent, the permittee shall notify the Department within 15 days after making the calculation. The quantity and type of fuel used for a calendar year shall be reported with the annual compliance certification report (Condition 7.F).
- 13) Complete a boiler (EU 3) tune-up once every 60 months as specified in §63.7540 of 40 CFR 63, Subpart DDDDD.
- 14) A monthly log shall be kept of the hours of operation for each engine (EU 5, EU 6 and EU 7) and the total hours of operation on a calendar year basis using a non-resettable hour meter. Records shall be maintained to differentiate annual emergency vs. non-emergency hours of operation.

For certified engines, collect operational and maintenance data to demonstrate that the facility complies with the engine manufacturer's emission-related written instructions [40 CFR 60.4211(a)].
- 15) Conduct a tune-up on each existing coal fired boiler (EU 1 and EU 2) at least each 36 calendar months, or each 48 calendar months if neural network combustion optimization software is employed, in accordance with 40 CFR 63, Subpart UUUUU (§63.10021(e)).

6. **Recordkeeping Requirements:**

- A. The permittee shall maintain compliance monitoring records as outlined in the Monitoring Records table that include the following information.
 - 1) The date, place (as defined in the permit) and time of sampling or measurement.
 - 2) The date(s) testing was performed.
 - 3) The company, entity, or person that performed the testing.
 - 4) The testing techniques or methods used.
 - 5) The results of such testing.
 - 6) The operating conditions that existed at the time of sampling or measurement.

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

Monitoring Records

Emission Unit Description	EP	Pollutant/ Parameter	Compliance Monitoring Record
Babcock & Wilcox boiler (Unit 1)	1	PM/PM ₁₀ (filterable)	PM CEMS, O&M & Emissions Test Data
		SO ₂	CEMS/CERMS & O&M Data
		NO _x	CEMS/CERMS & O&M Data
		HCl	SO ₂ CEMS & O&M Data
		Hg	CEMS & O&M Data
		Opacity	VE Evaluation & PM CEMS Data
		CO ₂	CEMS & O&M Data
Babcock & Wilcox boiler (Unit 2)	2	Flow	Flow Monitor Data
		PM/PM ₁₀ (filterable)	PM CEMS, O&M & Emissions Test Data
		SO ₂	CEMS/CERMS & O&M Data
		NO _x	CEMS/CERMS & O&M Data
		HCl	SO ₂ CEMS & O&M Data
		Hg	CEMS & O&M Data
		Opacity	VE Evaluation & PM CEMS Data
Cleaver Brooks auxiliary boiler	3	CO ₂	CEMS & O&M Data
		Flow	Flow Monitor Data
		PM	Type of Fuel Usage
		SO ₂	Type of Fuel Usage Fuel Oil Sulfur Content
		Opacity	Type of Fuel Usage
		HAP/Annual Capacity Factor	Fuel Quantity Used & Tune-up Records

Emission Unit Description	EP	Pollutant/ Parameter	Compliance Monitoring Record
Caterpillar diesel engine (237 bhp)	5	CO Opacity Hours	Initial Emissions Test Data & Maintenance Plans/Records Type of Fuel Usage Hours of Operation Data
Cummins diesel engine (190 bhp)	6	CO Opacity Hours	Initial Emissions Test Data & Maintenance Plans/Records Type of Fuel Usage Hours of Operation Data
Cummins diesel engine (2,205 bhp)	7	Opacity Hours	Type of Fuel Usage Hours of Operation Data
Unit 1 crusher house and Conveyor 1C	M1	PM/PM ₁₀ /Opacity	CAM Data
Unit 1 coal silos	M2	PM/PM ₁₀ /Opacity	CAM Data
Unit 2 crusher house	M3	PM/PM ₁₀ /Opacity	CAM Data
Unit 2 coal silos	M4	PM/PM ₁₀ /Opacity	CAM Data
Unit 1 fly ash silo (vent)	M5	PM/PM ₁₀ /Opacity	O&M & VE Evaluation Data
Unit 2 fly ash silo (vent)	M6	PM/PM ₁₀ /Opacity	O&M, VE Evaluation Data & CAM Data
Unit 2 lime storage silo	M7	PM/Opacity	CAM Data
Unit 2 truck dump	M9	PM/ Opacity	VE Evaluation Data
Unit 1 fly ash silo (rotary unloader)	M10	PM/Opacity	VE Evaluation Data
Unit 2 fly ash silo (rotary unloader)	M11	PM/Opacity	VE Evaluation Data
Water treatment plant lime storage silo	M12	PM/Opacity	CAM Data
Unit 1 Lime Storage Silo	M13	PM/Opacity	CAM Data

B. In addition to requirements outlined in Condition 6.A, recordkeeping for Unit 1 and Unit 2 shall be in accordance with the applicable requirements of Chapter 33.1-15-06, Chapter 33.1-15-12, Chapter 33.1-15-21 and Chapter 33.1-15-22 of the North Dakota Air Pollution Control Rules:

- 1) NDAC 33.1-15-06-05, Reporting and Recordkeeping Requirements (applicable to Unit 1 only).
- 2) NDAC 33.1-15-12 and 40 CFR 60, Subpart A, §60.7, Notification and Recordkeeping (applicable to Unit 2 only).

- 3) NDAC 33.1-15-21-09, 40 CFR 72 and 40 CFR 75 - Recordkeeping Requirements.
- 4) NDAC 33.1-15-22 and 40 CFR 63, Subpart UUUUU, §63.10032 and §63.10033, Notification, Reports and Records.

Applicable Requirements: NDAC 33.1-15-06, NDAC 33.1-15-12, NDAC 33.1-15-21, NDAC 33.1-15-22, 40 CFR 72 and 40 CFR 75

- C. Recordkeeping for EPs M1, M2, M3, M4, M6, M7, M12 and M13 shall be in accordance with NDAC 33.1-15-14 and 40 CFR 64, §64.9 - Reporting and Recordkeeping Requirements, Paragraph (b), General Recordkeeping Requirements.

Applicable Requirement: NDAC 33.1-15-14-06.10

- D. Recordkeeping for EU 3 (auxiliary boiler) shall be in accordance with 40 CFR 63, Subpart DDDDD, §63.7555 and §63.7560, Notification, Reports and Records.

Applicable Requirement: NDAC 33.1-15-22, Subpart DDDDD

- E. Recordkeeping for the Unit 1 truck dump and Unit 2 truck dump (EU M9) shall be in accordance with NDAC 33.1-15-12 and 40 CFR 60, Subpart A, §60.7, Notification and Recordkeeping and Subpart Y, §60.258, Reporting and Recordkeeping.

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

- F. 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]

7. Reporting:

- A. For Unit 1 and Unit 2, reporting shall be in accordance with the following applicable requirements of Chapter 33.1-15-06, Chapter 33.1-15-12, Chapter 33.1-15-21 and Chapter 33.1-15-22 of the North Dakota Air Pollution Control Rules.

- 1) NDAC 33.1-15-06-05, Reporting and Recordkeeping Requirements (applicable to Unit 1 only).

- 2) NDAC 33.1-15-12 and 40 CFR 60, Subpart A, §60.7, Notification and Recordkeeping (applicable to Unit 2 only).
- 3) NDAC 33.1-15-21-09, 40 CFR 72 and 40 CFR 75 - Recordkeeping Requirements.
- 4) NDAC 33.1-15-22 and 40 CFR 63, Subpart UUUUU, §63.10032 and §63.10033, Notification, Reports and Records.
- 5) Quarterly excess emission reports for Unit 1 and Unit 2 shall be submitted by the 30th day following the end of each calendar quarter. Excess emissions are defined as emissions which exceed the emission limits for Unit 1 and Unit 2 outlined in Condition 4. Excess emissions for Unit 1 and Unit 2 shall be reported for the following:

<u>Parameter</u>	<u>Reporting Period</u>
Particulate lb/10 ⁶ Btu	3-hour rolling average & 30 BODRA
SO ₂ lb/10 ⁶ Btu	3-hour rolling average, 30-day rolling average & 30 BODRA
SO ₂ lb/hr	3-hour rolling average
SO ₂ % removal	30-day rolling average
NO _x lb/10 ⁶ Btu	30-day rolling average
NO _x lb/hr (startup)	24-hour rolling average
Hg lb/10 ¹² Btu	30 BODRA

Applicable Requirements: NDAC 33.1-15-06, NDAC 33.1-15-12, NDAC 33.1-15-21, NDAC 33.1-15-22, 40 CFR 72 and 40 CFR 75

- B. Reporting for EPs M1, M2, M3, M4, M6, M7, M12 and M13 shall be in accordance with 40 CFR 64, §64.9 - Reporting and Recordkeeping Requirements, Paragraph (a) General Reporting Requirements.

Applicable Requirement: NDAC 33.1-15-14-06.10

- C. Reporting for EU 3 (auxiliary boiler) shall be in accordance with 40 CFR 63, Subpart DDDDD, §63.7555 and §63.7560, Notification, Reports and Records.

Applicable Requirement: NDAC 33.1-15-22, Subpart DDDDD

- D. Reporting for the Unit 1 truck dump and Unit 2 truck dump (EU M9) shall be in accordance with NDAC 33.1-15-12 and 40 CFR 60, Subpart A, §60.7, Notification and Recordkeeping and Subpart Y, §60.258, Reporting and Recordkeeping.

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

- E. The permittee shall submit a semi-annual monitoring report for all monitoring records required under Condition 6 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.

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

- F. The permittee shall submit an annual compliance certification report in accordance with NDAC 33.1-15-14-06.5.c(5) within 45 days after December 31 of each year on forms supplied or approved by the Department. For EU 3, the permittee shall submit an annual fuel use report with the annual compliance certification report. The annual fuel use report shall include the quantity and type of fuel used during the previous calendar year.

Applicable Requirements: NDAC 33.1-15-14-06.5.c(5) and NDAC 33.1-15-22-03, Subpart DDDDD

- G. 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)

- H. 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

8. **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

9. **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

10. **Phase II Acid Rain Provisions:**

Affected Source Unit:

Milton R. Young Station
Oris Plant Code: 2823
Boiler ID: B1 and B2

This section incorporates the definition of terms in NDAC Chapter 33.1-15-21 by reference.

A. Permit Requirements:

- 1) The designated representative of each affected source and each affected unit at the source shall:
 - a) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR 72 in accordance with the deadlines specified in NDAC 33.1-15-14-06.4 and 40 CFR 72.30, including application for permit renewal; and
 - b) Submit in a timely manner any supplemental information that the North Dakota Department of Environmental Quality, Division of Air Quality determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit.
- 2) The owners and operators of each affected source and each affected unit at the source shall:
 - a) Operate the unit in compliance with a complete Acid Rain permit application including any application for permit renewal or a superseding Acid Rain permit issued by the North Dakota Department of Environmental Quality, Division of Air Quality and
 - b) Have an Acid Rain permit.

Applicable Requirement: NDAC 33.1-15-21-08.1

B. Monitoring Requirements:

- 1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR 74, 75, and 76.
- 2) The emissions measurements recorded and reported in accordance with 40 CFR 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

- 3) The requirements of 40 CFR 74 and 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Federal Clean Air Act and other provisions of the operating permit for the source.

Applicable Requirement: NDAC 33.1-15-21-08.1, NDAC 33.1-15-21-09 and 40 CFR 76

C. Sulfur Dioxide Requirements:

- 1) The owners and operators of each source and each affected unit at the source shall:
 - a) Hold allowances, as of the allowance transfer deadline, in the units compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - b) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- 2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Federal Clean Air Act.
- 3) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- 4) An allowance shall not be deducted in order to comply with the requirements under Condition 11.C.1)a of this permit prior to the calendar year for which the allowance was allocated.
- 5) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, this Permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- 6) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Applicable Requirement: NDAC 33.1-15-21-08.1, NDAC 33.1-15-21-09 and 40 CFR 73

D. Nitrogen Oxides Requirements:

- 1) **NO_x Emission Limitations:** The owner or operator shall not discharge, or allow to be discharged, emissions of NO_x to the atmosphere in excess of the following:

<u>Boiler ID</u>	<u>NO_x Limitation</u>
B1	0.86 lb/10 ⁶ Btu*
B2	0.86 lb/10 ⁶ Btu*

* annual average

The owner/operator shall also comply with the duty under 40 CFR 76.9(d) to reapply for an NO_x compliance plan prior to expiration of this permit and requirements under 40 CFR 76.13 for calculating excess NO_x emissions.

Applicable Requirements: 40 CFR 76.6(a)(2), 76.7(a)(2), 76.8(a)(1), 40 CFR 76.9(d), 40 CFR 76.13 and NDAC 33.1-15-21-10

- 2) **Liability:** The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners or operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR 77.

Applicable Requirements: 40 CFR 76.8(d)(2) and NDAC 33.1-15-21-10

E. **Excess Emissions Requirements:**

- 1) The designated representative of an affected unit that has excess emissions of SO₂ in any calendar year shall submit a proposed offset plan, to the Administrator as required under 40 CFR 77, with a copy to the North Dakota Department of Environmental Quality, Division of Air Quality.
- 2) The owners and operators of an affected unit that has excess emissions of NO_x or SO₂ in any calendar year shall:
 - a) Pay to the Administrator without demand the penalty required, and pay to the Administrator upon demand the interest on that penalty, as required by 40 CFR 77; and
 - b) Comply with the terms of an approved offset plan for SO₂, as required by 40 CFR 77.

Applicable Requirement: NDAC 33.1-15-21-08.1, NDAC 33.1-15-21-09 and 40 CFR 77

F. Recordkeeping and Reporting Requirements:

- 1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on-site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator of the U.S. EPA or the North Dakota Department of Environmental Quality, Division of Air Quality:
 - a) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on-site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - b) All emissions monitoring information, in accordance with 40 CFR 75, provided that to the extent that 40 CFR 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
 - c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - d) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- 2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 72, Subpart I, NDAC 33.1-15-21-08, and 40 CFR 75.

Applicable Requirement: NDAC 33.1-15-21-08.1 and NDAC 33.1-15-21-09

G. Liability:

- 1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, this Acid Rain Permit, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to Section 113(c) of the Federal Clean Air Act.
- 2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to Section 113(c) of the Federal Clean Air Act and 18 U.S.C. 1001.

- 3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- 4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- 5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- 6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plan) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- 7) Each violation of a provision of NDAC 33.1-15-21-08.1 through NDAC 33.1-15-21-10 and 40 CFR 72, 73, 74, 75, 76 and 77 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Federal Clean Air Act.

Applicable Requirement: NDAC 33.1-15-21-08.1, 33.1-15-21-09, NDAC 33.1-15-21-10 and 40 CFR 73, 74, 76 and 77

H. Effect on Other Authorities:

No provision of the Acid Rain Program, an Acid Rain permit application, this Acid Rain permit condition, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- 1) Except as expressly provided in Title IV of the Federal Clean Air Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Federal Clean Air Act, including the provisions of Title I of the Federal Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- 2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Federal Clean Air Act,

- 3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- 4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- 5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Applicable Requirement: NDAC 33.1-15-21-08.1

I. Permit Shield:

Each affected unit operating in accordance with this permit which is issued in compliance with Title IV of the Federal Clean Air Act, as provided in 40 CFR 72, 73, 75, 77 and 78, and the regulations implementing Section 407 of the Federal Clean Air Act, shall be deemed operating in compliance with the Acid Rain Program, except as provided in 40 CFR 72.9(g)(6). The permit shield does not take effect until the effective date of the Acid Rain permit.

Applicable Requirement: NDAC 33.1-15-21-08.1, NDAC 33.1-15-21-09, and 40 CFR 73, 77 and 78

11. 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

Attachment A
Compliance Assurance Monitoring (CAM) Plan

Milton R. Young Station

Title V Permit to Operate No. T5-F76009

EPs M1, M2, M3, M4, M6, M7, M12 and M13

COMPLIANCE ASSURANCE MONITORING

MINNKOTA POWER COOPERATIVE, INC.
Milton R. Young Station

March 1, 2012

MINNKOTA POWER COOPERATIVE, INC.
Milton R. Young Station
Compliance Assurance Monitoring Plan
Rotoclones

I. Background

A. Emission Units: Coal Handling

Description: Rotoclone

Emission Point: M1 Location: Unit 1 Crusher House and Conveyor 1C

Emission Point: M2 Location: Unit 1 Coal Silos

Emission Point: M3 Location: Unit 2 Crusher House

Emission Point: M4 Location: Unit 2 Coal Silos

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Regulation: Title V Permit Number T5-F76009, NDAC 33.1-15-05-01 & 33.1-15-03-02

Emission Limit:

Opacity 20% for all emission points

Particulate:

M1 - 74.0 lb/hr

M2 - 66.3 lb/hr

M3 - 82.0 lb/hr

M4 - 74.7 lb/hr

PM₁₀:

M1 - 4.3 lb/hr

M2 - 7.5 lb/hr

M3 - 18.7 lb/hr

M4 - 18.5 lb/hr

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1.

Table No. 1
Monitoring Approach
Rotoclone for PM Control
Emission Points: M1, M2, M3 & M4

	Indicator No. 1	Indicator No. 2
I. Indicator	Visible Emissions	Inspection/maintenance
Measurement Approach	Visible Emissions Check	Weekly inspection according to checklist: maintenance performed as needed
II. Indicator Range	If any detectable visible emissions are noted the plant employee will notify the appropriate personnel to have the control device repaired	The indicator range is water flow through the control device.
III. Performance Criteria		
QA/QC	Plant personnel perform visible emissions check	Plant personnel perform inspections
Monitoring Frequency	Weekly, if system is operating during the day	Weekly, if system is operating during the day
Corrective Action	Repair as soon as practically possible	Repair as soon as practically possible

MONITORING APPROACH JUSTIFICATION

III. Background

Primary function of the coal handling equipment is coal crushing and delivery.

The monitoring approach outlined here applies to the rotoclones associated with the coal handling equipment. The rotoclones control the particulate emissions associated with the coal handling equipment.

IV. Justification for Selected Performance Indicators

Visible emissions, was selected as a performance indicator based on our experience operating the rotoclones and the need to comply with the particulate emissions limits. Any visible sign of emissions indicates a reduction in the particulate removal efficiency of the rotoclone.

Inspection/maintenance was selected as a performance indicator based on our experience operating the rotoclones and the need to comply with the particulate emissions limits. A plugged drain or a poor spray pattern of water in the rotoclone indicates a reduction in the particulate removal efficiency of the rotoclone.

V. Record Keeping and Reporting Methods

All visible emissions and inspection/maintenance records will be stored in the station file at the plant. These records will include the identification of the emission unit, description of maintenance if needed, date and the name of person completing the inspection.

A semi-annual monitoring/permit deviation report will be submitted to the North Dakota Department of Environmental Quality.

MINNKOTA POWER COOPERATIVE, INC.
Milton R. Young Station
Compliance Assurance Monitoring Plan
Fabric Filters

I. Background

A. Emission Units: Lime Storage & Fly Ash Storage

Description: Fabric Filter

Emission Point: M6 Location: Unit 2 Fly Ash Silo
Emission Point: M7 Location: Unit 2 Lime Storage Silo
Emission Point: M12 Location: Water treatment Plant Lime Storage Silo
Emission Point: M13 Location: Unit 1 Lime Storage Silo

B. Applicable Regulation, Emission Limit and Monitoring Requirements

Regulation: Title V Permit Number T5-F76009, NDAC 33.1-15-05-01 & 33.1-15-03-02

Emission Limit:

Opacity 20% for all emission points

Particulate:

M6 - 42.5 lb/hr
M7 - 25.2 lb/hr
M12 - 4.4 lb/hr
M13 - 46.9 lb/hr

PM₁₀:

M6 - 2.2 lb/hr
M7 - 13.3 lb/hr

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table 1.

Table No. 1
Monitoring Approach
Fabric Filter for PM Control
Emission Points: M6, M7, M12 & M13

	Indicator No. 1
I. Indicator	Visible Emissions
Measurement Approach	Visible Emissions Check
II. Indicator Range	If any detectable visible emissions are noted the plant employee will notify the appropriate personnel to have the control device repaired
III. Performance Criteria	
QA/QC	Plant personnel perform visible emissions check
Monitoring Frequency	Weekly, if system is operating during the day
Corrective Action	Repair as soon as practically possible

MONITORING APPROACH JUSTIFICATION

I. Background

Primary function is the storage of fly ash and lime.

The monitoring approach outlined here applies to the fabric filters associated with the storage of fly ash and lime. The fabric filters control the particulate emissions associated with the storage of fly ash and lime.

II. Justification for Selected Performance Indicators

Visible emissions, was selected as a performance indicator based on our experience operating the fabric filters and the need to comply with the particulate emissions limits. Any visible sign of emissions indicates a reduction in the particulate removal efficiency of the fabric filters.

III. Record Keeping and Reporting Methods

All visible emissions records will be stored in the station file at the plant. These records will include the identification of the emission unit, description of maintenance if needed, date and the name of person completing the inspection. A semi-annual monitoring/permit deviation report will be submitted to the North Dakota Department of Environmental Quality.

Attachment B

Commented [JM7]: Minnkota is proposing to replace existing Fugitive Dust Emission Control Plan with a updated/revised version.

~~Minnkota Power Cooperative, Inc.
Milton R. Young Station~~

~~Fugitive Coal Dust
Emission Control Plan
for the
Unit 1 Truck Dump~~

~~Prepared by
Kevin Thomas, P.E.~~

~~September 2018~~

~~1. Introduction~~

~~The Unit 1 truck dump at the Milton R. Young Station has been modified to increase the hopper capacity from 200 tons to 350 tons. The modification to the Unit 1 truck dump is regulated by 40 CFR 60, Subpart Y (Standards of Performance for Coal Preparation and Processing Plants). This Fugitive Coal Dust Emission Control Plan has been prepared to satisfy the requirements of Subpart Y as it relates to the unloading of coal trucks.~~

~~2. Objective~~

~~The Fugitive Coal Dust Emission Control Plan identifies the control measures and operating practices to control the fugitive coal dust from the Unit 1 truck dump. Since modifications were only made to the Unit 1 truck dump, this plan applies only to coal dust emissions from the Unit 1 truck dump enclosure. The objective of this plan is to address the following items:~~

- ~~Define the fugitive coal dust emission source~~
- ~~Define fugitive coal dust emission levels requiring corrective action~~
- ~~Define procedures required to maintain acceptable fugitive coal dust emission levels~~
- ~~Define all performance tests and monitoring requirements~~
- ~~Define the procedure required for visual observations~~
- ~~Define the recordkeeping and reporting requirements~~

~~3. Fugitive Emission Source~~

~~Unit 1 truck dump receives lignite coal delivered by belly dump trucks. The trucks dump directly into the truck dump hopper, which is attached to the existing primary crusher. The Fugitive Coal Dust Emission Control Plan applies to coal dust emissions from the building that encloses the truck dump.~~

~~4. Emission Control Strategies~~

~~A. The Unit 1 truck dump is enclosed in a building. Within the building is a dry fog system.~~

~~B. Section 60.255 (e) of 40 CFR, 60 Subpart Y states "If any affected coal processing and conveying equipment (e.g. breakers, crushers, screens, conveying systems), coal storage systems, or coal transfer and loading systems that commenced construction, reconstruction, or modification after April 28, 2008, are enclosed in a building, and emissions from the building do not exceed any of the standards in §60.254 that apply to the affected facility, then the facility shall be deemed in compliance with such standards." Minnesota will utilize multiple types of fugitive emission controls to maintain compliance with the requirement to achieve less than 10 percent opacity exiting from the building. The fugitive emission control strategy will utilize the building, dry fog system. The dry fog system has multiple spray zones in the coal hopper and inside the building above ground level. The number of zones utilized will be determined as needed to control the fugitive emissions. When the fugitive emission can be controlled without the dry fog system, it will not be operated.~~

~~5. Performance Testing and Monitoring Requirements~~

~~A. The initial performance test must be completed within 60 days of the Unit 1 truck dump reaching maximum capacity. The initial performance test will be conducted by MPC personnel certified in EPA Method 9. The Method 9 test will be 60 minutes in duration. In the event any six minute average opacity reading in the most recent performance test is five percent or greater, a new performance test must be conducted within 90 operating days of the date the previous performance test was required to be completed. In the event all six-minute average opacity readings in the most recent performance test are less than five percent, new performance~~

~~tests must be conducted within 12 calendar months of the date the previous performance test was required to be completed.~~

~~B. To make sure we operate the Unit 1 truck dump at a capacity greater than 80 percent of maximum, the performance test will begin with trucks lined up and waiting to dump. The Method 9 performance test will begin when the first truck is stationed on the truck dump and the truck begins to unload. Once the first truck is unloaded, the loader will proceed to clean the grizzly. Once the grizzly has been cleaned and the coal in the hopper is at a level which would allow the second truck to unload, the second truck will unload. The process will be repeated for a total duration of one hour with a minimum of 800 tons of coal dumped.~~

~~6. Recordkeeping and Reporting Requirements~~

~~A. The fugitive dust control plan will include a logbook to record the following:~~

- ~~1) The manufacturer's recommended maintenance procedures, the date and time of any maintenance and inspection activities, and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.~~
- ~~2) The date and time of periodic visual observations as well as documentation of any corrective action taken to reduce visible emissions. Results of any corrective action shall be noted.~~
- ~~3) The amount of coal processed each calendar month.~~
- ~~4) A monthly certification that the fugitive dust control plan was implemented as described. Any variance from the plan shall be noted.~~

Unit 1 Truck Dump

The Unit 1 Truck Dump is equipped with a dry fog system and a building enclosure (with doors at both ends) to be utilized to maintain the opacity exiting the enclosure to less than 10 percent when the trucks are unloading.

The dry fog system has multiple spray zones in the coal hopper and inside the building above ground level. Under normal operation, some portion of the dry fog system will be in service. When the fugitive emissions can be controlled to an extent that no emissions are seen exiting the building at any location, the coal truck may dump without the dry fog system; it is not mandatory to operate the dry fog system. Prior to the dry fog system being shut down, the Environmental Department must be contacted for approval. This document can be found at f:\kthomas\Unit 1 Truck Dump.

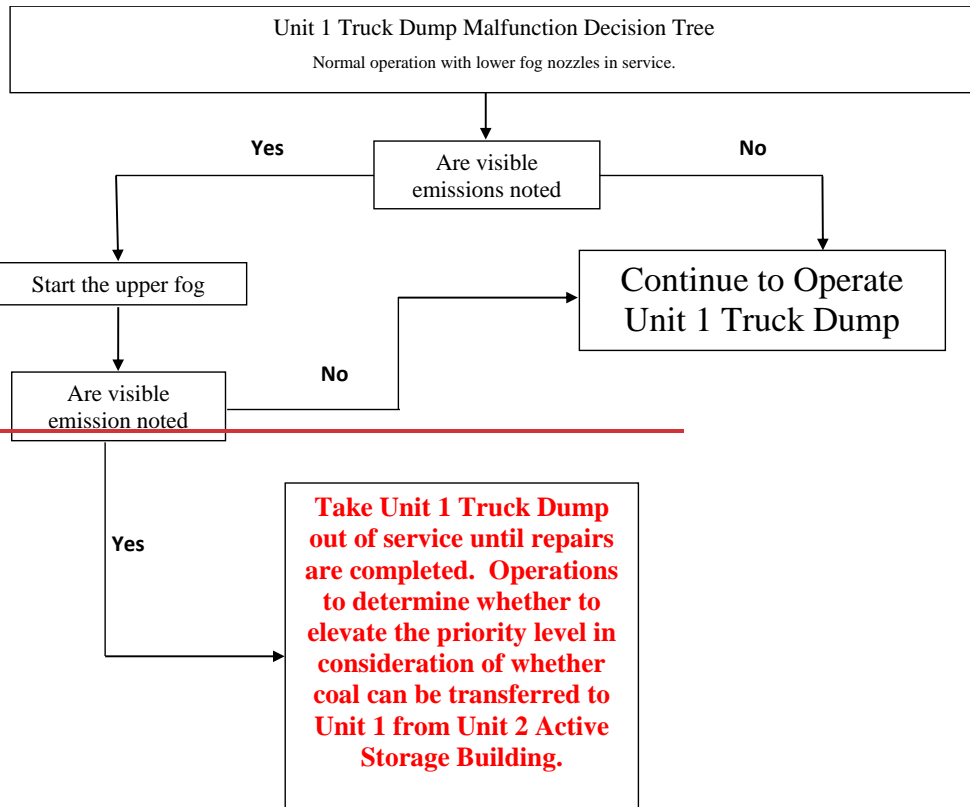
Operations Department Responsibilities

1. Ensure that the fog system is operated when coal trucks are unloading.
2. If the fog system is needed to maintain compliance, the truck dump must be taken out of service until the system can be returned to service.
3. Maintain the Unit 1 Truck Dump Logbook.
4. Daily inspections during operation are required to confirm operation of the system. Record the date and time of any maintenance activities.
5. Daily assessment of any visible emissions from the building during unloading. Record the date and time of any corrective actions.
6. Log the amount of coal processed each month.
7. Monthly certification that the dust control plan was implemented.
8. Log any other variances from the plan.

What are the Operations and Maintenance Responsibilities when Malfunctions Occur?

Fog System If the fog system is needed to maintain compliance with the 10 percent opacity limitation, callout and overtime maintenance are required. If compliance can be maintained without the fog system, callouts are not required, however, the system should be repaired as soon as possible during normal working hours. **In the event any coal dust is seen exiting the building, compliance with the 10 percent opacity limit must be determined by one of our certified Method 9 visual emissions personnel.**

In the event a malfunction occurs of the dry fog system or any equipment, which controls emissions from the Unit 1 Truck Dump coal handling, will submit a work request.



~~UNIT 1 TRUCK DUMP DAILY INSPECTION LOG~~

The following log must be completed every day the truck dump is in service. The system includes the spray nozzles. In the event a malfunction occurs a work request must be submitted as described in the above decision tree. The last day of the month the log is to be routed to the Environmental Department for review.

[illegible]

~~* If the system is not fully operational describe what is not operational and any measures taken.~~

~~**If any visible emissions were seen exiting the building what additional measures were taken to reduce the emissions?~~

~~Additional Comments~~

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Month _____ Total Amount of Coal Processed _____ tons, water used _____ Gallons
The fugitive dust plan was implemented as required. _____

Attachment B

Minnkota Power Cooperative, Inc.

Milton R. Young Station

Fugitive Coal Dust
Emission Control Plan

for the

Unit 1 Truck Dump

1. Introduction

The Unit 1 truck dump at the Milton R. Young Station has been modified to increase the hopper capacity from 200 tons to 350 tons. The modification to the Unit 1 truck dump is regulated by 40 CFR Part 60, Subpart Y (Standards of Performance for Coal Preparation and Processing Plants).

This Fugitive Coal Dust Emission Control Plan has been prepared to satisfy the requirements of Subpart Y as it relates to the unloading of coal trucks.

2. Objective

The Fugitive Coal Dust Emission Control Plan identifies the control measures and operating practices to control the fugitive coal dust from the Unit 1 truck dump. Since modifications were only made to the Unit 1 truck dump, this plan applies only to coal dust emissions from the Unit 1 truck dump enclosure. The objective of this plan is to address the following items.

- Define the fugitive coal dust emission source
- Define fugitive coal dust emission levels requiring corrective action
- Define procedures required to maintain acceptable fugitive coal dust emission levels
- Define all performance tests and monitoring requirements
- Define the procedure required for visual observations
- Define the recordkeeping and reporting requirements

3. Fugitive Emission Source

Unit 1 truck dump receives lignite coal delivered by belly dump trucks. The trucks dump directly into the truck dump hopper, which is attached to the existing primary crusher. The Fugitive Coal Dust Emission Control Plan applies to coal dust emissions from the building that encloses the truck dump.

4. Emission Control Strategies

The Unit 1 truck dump is enclosed in a building with a multiple level dry fog system.

Section 60.255 (c) of 40 CFR, Part 60 Subpart Y states *"If any affected coal processing and conveying equipment (e.g. breakers, crushers, screens, conveying systems), coal storage systems, or coal transfer and loading systems that commenced construction, reconstruction, or modification after April 28, 2008, are enclosed in a building, and emissions from the building do not exceed any of the standards in § 60.254 that apply to the affected facility, then the facility shall be deemed in compliance with such standards."*

MPC will utilize multiple types of fugitive emission controls to maintain compliance with the requirement to achieve less than 10 percent opacity exiting from the building. The fugitive emission control strategy will utilize the building and dry fog system. The dry fog system has multiple spray zones in the coal hopper and inside the building above ground level. The number of zones utilized will be determined as needed to control the fugitive emissions. When the fugitive emission cannot be controlled without the dry fog system, it will not be operated.

5. Performance Testing and Monitoring Requirements

The initial performance test must be completed within 60 days of the Unit 1 truck dump reaching maximum capacity. The initial performance test will be conducted by MPC personnel certified in EPA Method 9. The Method 9 test will be 60 minutes in duration. In the event any six-minute average opacity reading in the most

recent performance test is five percent or greater, a new performance test must be conducted within 90 operating days of the date the previous performance test was required to be completed. In the event all six-minute average opacity readings in the most recent performance test are less than five percent, new performance tests must be conducted within 12 calendar months of the date the previous performance test was required to be completed.

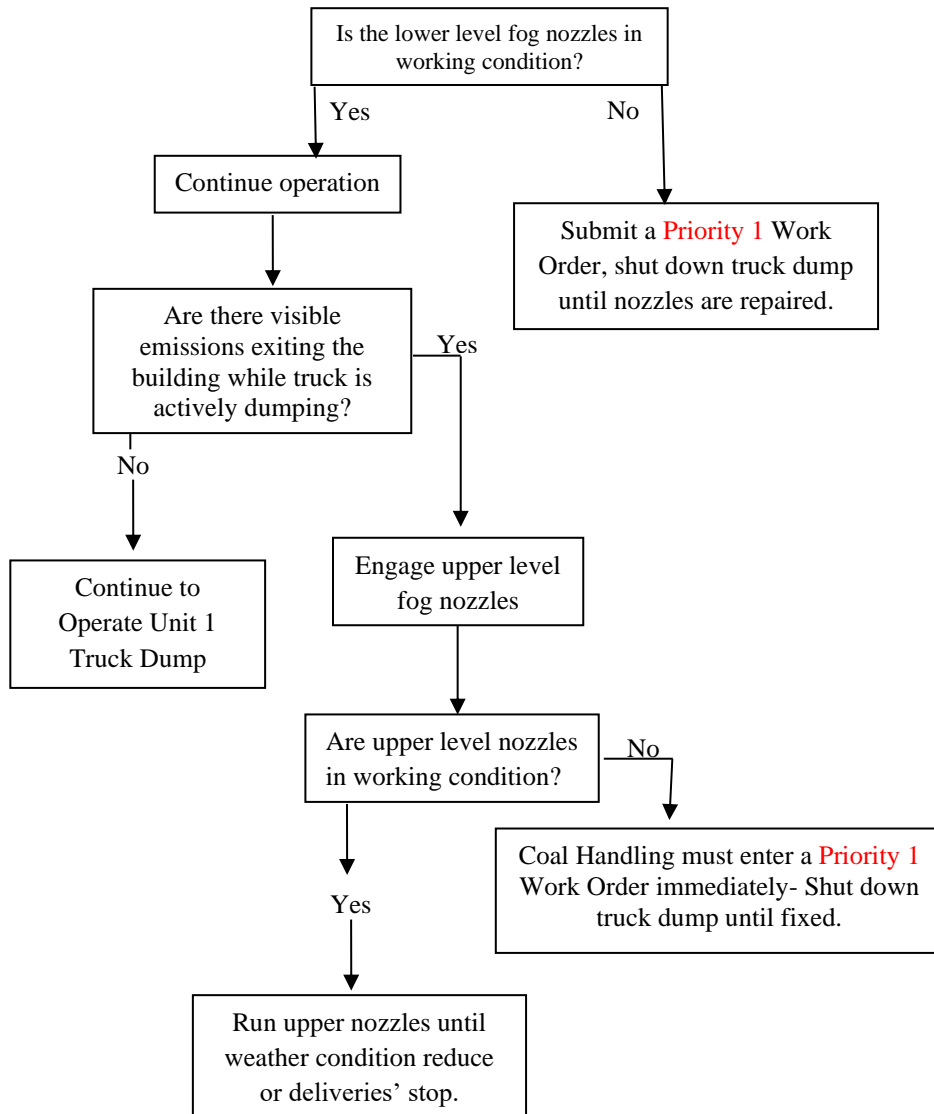
To make sure we operate the Unit 1 truck dump at a capacity greater than 80 percent of maximum, the performance test will begin with trucks lined up and waiting to dump. The Method 9 performance test will begin when the first truck is stationed on the truck dump and the truck begins to unload. Once the first truck is unloaded the loader will proceed to clean the grizzly. Once the grizzly has been cleaned and the coal in the hopper is at a level which would allow the second truck to unload, the second truck will unload. The process will be repeated for a total duration of one hour with a minimum of 800 tons of coal dumped.

6. Recordkeeping and Reporting Requirements

The fugitive dust control plan will include a logbook to record the following:

1. The manufacturer's recommended maintenance procedures, the date and time of any maintenance and inspection activities, and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.
2. The date and time of periodic visual observations as well as documentation of any corrective action taken to reduce visible emissions. Results of any corrective action shall be noted.
3. The amount of coal processed each calendar month.
4. A monthly certification that the fugitive dust control plan was implemented as described. Any variance from the plan shall be noted.

Unit 1 Truck Dump Malfunction Decision Tree



VISIBLE EMISSIONS OBSERVATION FORM

Company: <u>Minnkota Power Cooperative, Inc.</u> Observation Date _____
Stack Name: <u>Unit 1 Coal Truck Unloading</u> APC Permit Number <u>T5-76009</u>
Control Equipment Operating: _____
Number of Trucks _____ Process Rate _____ tons
Plume Background _____ Background Color _____ Sky Condition _____
Observer's Location _____ Feet _____ Of Stack
Wind Direction _____ Wind Speed _____
Describe Plume _____ Color of Plume _____ Ambient Temp. _____ °F
Time Observations Start _____ Time Observations End _____

	0	15	30	45		0	15	30	45		0	15	30	45		0	15	30	45		0	15	30	45
1					13					25					37					49				
2					14					26					38					50				
3					15					27					39					51				
4					16					28					40					52				
5					17					29					41					53				
6					18					30					42					54				
7					19					31					43					55				
8					20					32					44					56				
9					21					33					45					57				
10					22					34					46					58				
11					23					35					47					59				
12					24					36					48					60				

OBSERVER INFORMATION	
Name _____	
Signature _____	Date _____
Agency/Company _____	

UNIT 1 TRUCK DUMP DAILY INSPECTION LOG

The following log must be completed every day the truck dump is in service. The system includes the spray nozzles. In the event a malfunction occurs a work request must be submitted as described in the above decision tree. The last day of the month the log is to be routed to the Environmental Department for review.

[illegible]

* If the system is not fully operational describe what is not operational and any measures taken.

**If any visible emissions were seen exiting the building what additional measures were taken to reduce the emissions?

Additional Comments

Date	
Date	
Date	
Date	
Date	
Date	
Date	
Date	
Date	

Month _____ Total Amount of Coal Processed _____ tons, water used _____ Gallons

The fugitive dust plan was implemented as required. _____