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

Take notice that the North Dakota Department of Environmental Quality (NDDEQ) proposes to issue a renewed Air Pollution Control Permit to Operate to Minnkota Power Cooperative, Inc. for operation of the Milton R. Young Station in accordance with the ND Air Pollution Control Rules. The facility is an electric generating power plant located near Center in Oliver County. The Milton R. Young Station mailing address is $3401 - 24^{th}$ street SW, Center, ND 58530-0127. There are no changes in potential emissions.

A thirty-day public comment period for the draft permit will begin June 6, 2025 and end on July 5, 2025. Direct comments in writing to the NDDEQ, Division of Air Quality, 4201 Normandy Street 2nd Floor, Bismarck, ND 58503-1324 or email <u>AirQuality@nd.gov</u>, Re: Public Comment Permit No. AOP-28368 v6.0. Please note that, to be considered, comments submitted by email must be sent to the email address listed; comments sent to any other email address **will not** be considered. Comments must be received by 11:59 p.m. central time on the last day of the public comment period to be considered in the final permit determination. A public hearing regarding issuance of the permit will be held if a significant degree of public interest exists as determined by the NDDEQ. Requests for a public hearing must be received in writing by the NDDEQ before the end of the public comment period.

The notice, draft permit, statement of basis and application are available for review at the NDDEQ address and at the Division of Air Quality website at <u>https://deq.nd.gov/AQ/PublicCom.aspx</u>. A copy of these documents may be obtained by writing to the Division of Air Quality or contacting Kyla Schneider at (701)328-5218 or emailing kkschneider@nd.gov.

The NDDEQ will consider every request for reasonable accommodation to provide an accessible meeting facility or other accommodation for people with disabilities, language interpretation for people with limited English proficiency (LEP), and translations of written material necessary to access programs and information. Language assistance services are available free of charge to you. To request accommodations or language assistance, contact the NDDEQ Non-discrimination/EJ Coordinator at 701-328-5150 or deqEJ@nd.gov. TTY users may use Relay North Dakota at 711 or 1-800-366-6888.

Dated this 28th day of May 2025

James L. Semerad Director Division of Air Quality

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Environmental Quality

May 28, 2025

Mr. Jon Madison **Environmental Specialist** Minnkota Power Cooperative, Inc. $3401 - 24^{\text{th}}$ Street SW Center, ND 58530

Re: Air Quality Title V (Renewal) Permit to Operate

Dear Mr. Madison:

Pursuant to the Air Pollution Control Rules of the State of North Dakota, the Department of Environmental Quality has reviewed your permit application dated November 1, 2024, for the Milton R. Young Station located in Oliver County, North Dakota.

Enclosed is a copy of the Department's draft/proposed Title V Permit to Operate and statement of basis for the facility. Before making final determinations on the permit application, the Department provides for public comment by means of the enclosed public notice, to be immediately followed by a 45-day Environmental Protection Agency (EPA) review period. As indicated in the notice, the 30-day public comment period will begin June 6, 2025 and end July 5, 2025.

If any changes are subsequently made to the draft permit, then a review copy of the proposed permit reflecting those changes will be provided to EPA prior to the start of a 45-day EPA review period. The 45-day EPA review period is scheduled to begin July 6, 2025 and end August 19, 2025.

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

If you have any questions, please contact me at (701)328-5218 or email kkschneider@nd.gov.

Sincerely,

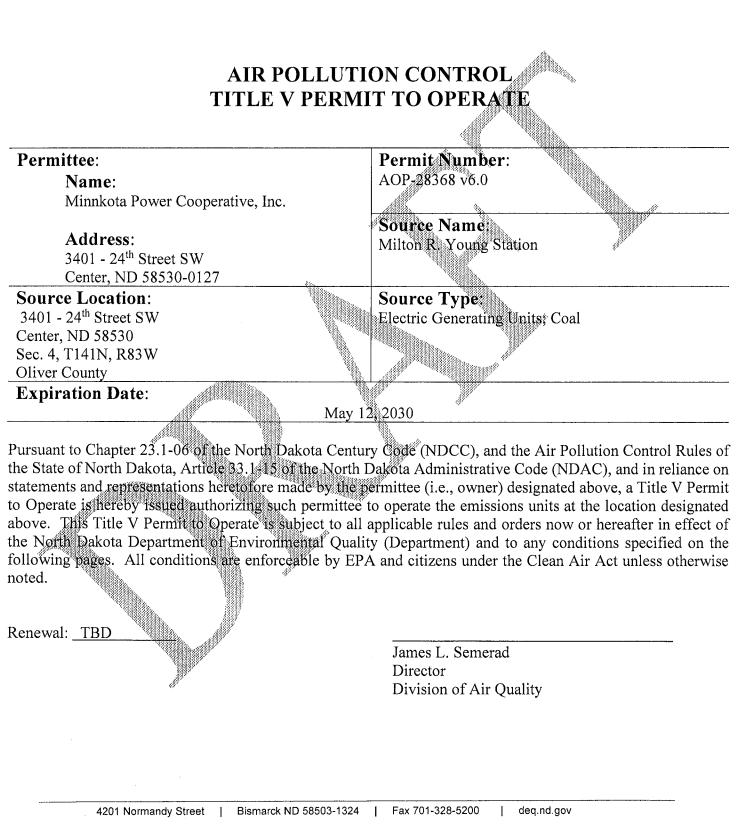
Kyla K. Schneider **Environmental Scientist** Division of Air Quality

KKS: Enc: xc/enc: EPA Region 8, Air Permitting (email – r8airpermitting@epa.gov) 4201 Normandy Street | Bismarck ND 58503-1324 Fax 701-328-5200 1 deg.nd.gov

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Director's Office 701-328-5150	Division of Air Quality 701-328-5188	Division of Municipal Facilities 701-328-5211	Division of Waste Managem 701-328-5166

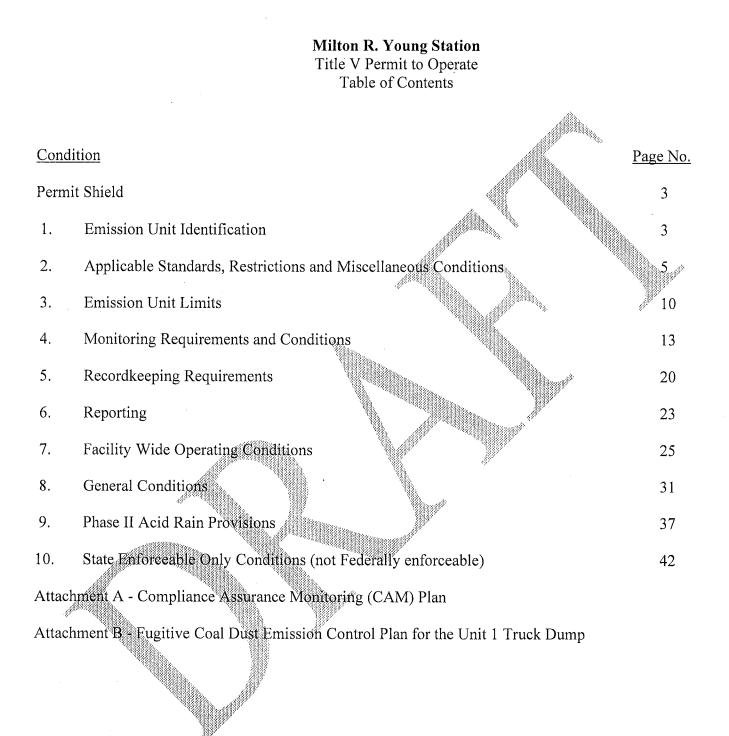
Division of e Management Water Quality 1-328-5166 701-328-5210 **Division of Chemistry** 701-328-6140 2635 East Main Ave Bismarck ND 58501

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Division of Municipal Facilities 701-328-5211 Division of Waste Management 701-328-5166 Division of Water Quality 701-328-5210 Division of Chemistry 701-328-6140 2635 East Main Ave Bismarck ND 58501



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:

	mission onn	Identification	
	Emission	Emission	Air Pollution
Emission Unit Description	Unit (EU)	Point (EP)	Control Equipment
Babcock & Wilcox cyclone, coal-fired boiler	1	1	Electrostatic Precipitator (ESP),
with a nominal rated heat input capacity of	\\. 🖉		Wet Scrubber Flue Gas
3,200 x 10 ⁶ Btu/hr; Unit 1 (1970;			Desulfurization System (FGD),
NESHAP/MACT UUUUU)		49"	Advanced Separated Over-fire Air
			(ASOFA), Selective Non-catalytic
			Reduction (SNCR) & Mercury
Nub. Allbass		С -	Control (Post-combustion Sorbent
			Injection)
Babcock & Wilcox cyclone, coal-fired boiler	2	2	ESP, FGD, ASOFA SNCR, &
with a nominal rated heat input capacity of			Mercury Control (Post-
6,300 x 10 ⁶ Btu/hr; Unit 2 (1977; NSPS D;			combustion)
NESHAP/MACT UUUUU)			
Cleaver Brooks distillate oil-fired auxiliary	3	3	None
boiler rated at 78×10^6 Btu/hr (1969;			
NESHAP/MACT DDDDD)			
Caterpillar (237 bhp) diesel engine-driven fire	5 A	5	Catalytic Converter
pump for Unit 1 (NESHAP/MACT ZZZZ)			
Cummins (190 bhp) diesel engine-driven fire	6 ^A	6	Catalytic Converter
pump for Unit 2 (NESHAP/MACT ZZZZ)			
Cummins (2,205 bhp) Model 1500DQGAB	7 A	7	None
diesel engine-driven emergency generator			
(manuf. 5/16/09) (NSPS IIII;			
NESHAP/MACT ZZZZ)			
Unit 1 crusher house and conveyor 1C	M1	M1	Rotoclone

Table 1.1 Emission Unit Identification

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Emission	Emission	Air Pollution
Unit (EU)	Point (EP)	Control Equipment
M2	M2	Rotoclone
M3	M3	Rotoclone
M4	M4	Rotoclone
M5	M5 ^B	None
M6	M6 ^B	Fabric Filter
M7	M7	*Fabric Filter
M12	M12	Fabric Filter
M13	M13	Fabric Filter
	Unit (EU) M2 M3 M4 M5 M6 M7 M12	Unit (EU) Point (EP) M2 M2 M3 M3 M4 M4 M5 M5 ^B M6 M6 ^B M7 M7 M12 M12

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

^B See Condition 2.B.

B. Insignificant or Fugitive Emission Sources:

- 1) Fuel and Waste Oil Storage Tanks
- 2) Urea Storage Tanks

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- 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 1 fly ash silo (rotary unloader) with water spray

-) Unit 2 fly ash silo with telescopic chute
- c) Unit 2 fly ash silo (rotary unloader) with water spray
- d) Activated carbon silo with fabric filter
 - Unit I truck dump with fogging system (modified 2013; NSPS Y)
 - Unit 2 truck dump (pre-2008; NSPS Y)
- g) Coal storage piles (active and inactive)

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C. Continuous Emission/Monitoring Systems (CEMS/CMS) for EU 1 and 2 (EP 1 and EP 2):

- 1) Flue gas from Unit 1 (EU 1) and Unit 2 (EU 2) is emitted through separate stacks
 - a) Each stack is equipped with one each of the following:
 - 1) Sulfur dioxide analyzer
 - 2) Nitrogen oxides analyzer
 - 3) Particulate matter monitor
 - 4) Carbon dioxide analyzer
 - 5) Ultrasonic continuous flow monitor
 - 6) Mercury CEMS analyzer or sorbent trap system
- 2) 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.
 - a) Each inlet duct to the three, flue gas desulfurization absorber modules is equipped with a sulfur dioxide analyzer and carbon dioxide analyzer
- 3) The permittee shall calibrate, operate and maintain the CEMS/CMS equipment.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(3)(a), NDAC 33.1-15-21-09 and NDAC 33.1-15-22-03, Subpart UUUUU

2. Applicable Standards, Restrictions and Miscellaneous Conditions:

Fuel Restrictions:

- Unit 1 and Unit 2 shall be operated using primarily lignite coal.
- a) Distillate oil may be utilized during periods of startup as well as to deslag the cyclone burners.
- 2) The auxiliary boiler shall combust only distillate oil containing no more than 0.0015 percent sulfur by weight or commercial propane as defined by the Gas Processors Association.
- 3) The engines EU 5, 6 and 7 are restricted to combusting only distillate oil with no more than 0.0015 percent sulfur by weight.

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- 4) 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.
- 5) All the applicable requirements listed in Conditions 3 and 4 and the requirements for monitoring, recordkeeping, and reporting listed in Conditions 4 through 6 apply to the scenarios in 2.A.1, 2.A.2 and 2.A.3.

Applicable Requirements: ACP-17244 V1.0, 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

- B. Fly Ash Silos (EU M5 and M6): The applicable requirements regarding Condition 2.B.1 and 2.B.2 are listed in Conditions 3 and 4. Monitoring, recordkeeping and reporting shall be conducted in accordance with Conditions 4 through 6 when the scenarios occur.
 - 1) Unit 1 and Unit 2 fly ash silos vent immediately upstream of Unit 1 or Unit 2 ESPs. EU M6 utilizes a bin vent filter when both ESPs are off-line or when either Unit 1 or Unit 2 fly ash silo is venting, but off-line for a short period of time (malfunction or maintenance).
 - 2) The rotary unloaders are located at the bottom of the fly ash silos (EU M5 and M6). When operated, water spray is injected into the unloader and mixed with the fly ash prior to loading the ash into trucks. 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.

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

- C. **FGD Operation**: 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.
 - 1) 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 §60.2.

Applicable Requirement: ACP-17408 v1.1

- D. **NO_x Control Technology**: The permittee shall continuously operate all NO_x control technology 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.
 - 1) 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

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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 §60.2.

Applicable Requirement: ACP-17408 v1.1

E. **ESP Operation**:

- 1) The permittee shall continuously operate each ESP 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.
 - a) 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 §60.2.
- 2) The permittee shall continuously operate each PM control device 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;
 - 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
 - optimize for Unit 2 the plate-cleaning system for the ESP by varying the cycle time and frequency of the cycle.

Applicable Requirements: ACP-17408 v1.1 and NDAC 33.1-15-14-06.5.b(1)

F. General NO_x and SO₂ Provisions:

1) In determining emission rates for NO_x and SO_2 , 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).
 - a) 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:

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- 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 2020 and each calendar year thereafter, the permittee shall surrender 17,886 SO₂ allowances to EPA that have been allocated to the Milton R. Young Station for the calendar year.

The permittee shall make such surrender annually, within forty-five (45) days of their receipt from EPA of the Allowance Deduction Reports for SO_2 for the previous compliance year.

Any surrender need not include the specific SO_2 allowances that were allocated to the permittee, so long as the permittee surrenders SO_2 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.

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.

1] 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: ACP-17408 v1.1 and NDAC 33.1-15-21-08.1

- G. New Source Performance Standards (NSPS): The permittee shall comply with all applicable requirements of the following NDAC 33.1-15-12-02 and 40 CFR 60 subparts in addition to complying with Subpart A General Provisions.
 - 1) Subpart D Standards of Performance for Fossil-Fuel Fired Steam Generators (EU 2).
 - 2) Subpart Y Standards of Performance for Coal Preparation and Processing Plants (fugitive emission sources Unit 1 truck dump and Unit 2 truck dump).
 - 3) Subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (EU 7).

Applicable Requirements: NDAC 33.1-15-12-02, Subparts A, D, Y and IIII

2)

a)

- H. National Emission Standards for Hazardous Air Pollutants (NESHAP)/Maximum Achievable Control Technology (MACT): The permittee shall comply with all applicable requirements of the following NDAC 33,1-15-22-03 and 40 CFR 63 subparts in addition to complying with Subpart A General Provisions.
 - 1) Subpart ZZZZ National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (EU 5, 6 and 7).

Note: 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)

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

The auxiliary boiler (EU 3) 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.

3) Subpart UUUUU - National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units [EU 1 and EU 2, categorized by EPA as coal-fired electric generating units designed for the low rank virgin coal subcategory (78

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Fed. Reg. 27,386, May 10, 2013)].

Applicable Requirements: NDAC 33.1-15-22-03, Subparts A, ZZZZ, DDDDD and UUUUU

- **Like-Kind Engine Replacement**: This permit allows the permittee to replace the existing engine(s) with a like-kind engine. Replacement is subject to the following conditions.
 - 1) The Department must be notified 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 as applicable (see 2.G.3 and 2.H.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)

3. Emission Unit Limits:

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				DIC 5.1 Emission Onic Emites	
Emission Unit Description	EU	EP	Pollutant/ Parameter	Emission Limit/ Parameter	NDAC Applicable Requirement
Babcock &	1	1	PM (filterable)	0.10 lb/10 ⁶ Btu ^A &	33.1-15-14-06.5.b(1)
Wilcox boiler				0.030 lb/10 ⁶ Btu ^{B, O}	ACP-17408 v1.1 &
(Unit 1)					33.1-15-22-03, Subpart UUUUU
			PM10	160.3 lb/hr ^C	33.1-15-14-06.5.b(1)
			SO_2	3.0 lb/10 ⁶ Btu ^D ,	33.1-15-06-01.2,
				$7,500 \text{ lb/hr}^{\text{D}}$	33.1-15-14-06.5.b(1) &
- X				95% removal ^E	ACP-17408 v1.1
			NOx	0.36 lb/10 ⁶ Btu ^E &	ACP-17408 v1.1
	~			2,070.2 lb/hr ^F	
×		C. Bullet	HCl	SO ₂ Surrogate 0.2 lb/10 ⁶ Btu ^B	33.1-15-22-03, Subpart UUUUU
· ·			Hg	4.0 lb/TBtu ^{B,O}	33.1-15-22-03, Subpart UUUUU
ľ			Opacity	20% ^{с, н}	33.1-15-03-01.2 & ND SIP §8.3.2

Table 3.1 Emission Unit Limits

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<u>(</u>			r	_	Permit No. <u>AOP-28368 v6.0</u>
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 & 0.030 lb/10 ⁶ Btu ^{B, O}	33.1-15-12-02, Subpart D ACP-17408 v1.1 & 33.1-15-22-03, Subpart UUUUU
			PM10	315.1 lb/hr ^C	33.1-15-14-06.5.b(1)
			SO ₂	1.20 lb/10 ⁶ Btu ^{, b, 1} , 5,635.2 lb/hr ^{, b} & 0.15 lb/10 ⁶ Btu & 90% removal ^J	33.1-15-12, Subpart D, 33.1-15-14-06.5.b(1), ACP-17251 v1.0 & ACP-17408 v1.1
			NO _x	0.35 lb/10 ⁶ Btu ^E & 3,995.6 lb/hr ^F	ACP-17408 v1.1
			HC1	SO ₂ Surrogate 0.2 lb/10 ⁶ Btu ^B	33.1-15-22-03, Subpart UUUUU
			Hg	4.0 lb/TBtu ^{B,O}	33.1-15-22-03, Subpart UUUUU
•			Opacity	20% ^{с, к}	33.1-15-12, Subpart D & 33.1-15-03-02
Cleaver Brooks	3	3	PM	0.80 lb/106Btu	33.1-15-05-02.2.a
auxiliary boiler			Opacity	20% ^G	33.1-15-03-02
			Annual Capacity	476,087 gallons of fuel combusted/calendar year ^L	33.1-15-22-03, Subpart DDDDD
Caterpillar	5	5	CO	230 ppm	33.1-15-22-03, Subpart ZZZZ
diesel engine (237 bhp)			Opacity	20% ^G	33.1-15-03-02
	ŝ		Operating Hours	See Table 1.1 Footnote A	33.1-15-22-03, Subpart ZZZ
Cummins	6	6	CO	230 ppm	33.1-15-22-03, Subpart ZZZZ
diesel engine (190 bhp)			Opacity	20% ^G	33.1-15-03-02
			Operating Hours	See Table 1.1 Footnote A	33.1-15-22-03, Subpart ZZZZ
Cummins diesel	7	7	Opacity	20% ^G	33.1-15-03-02
emergency engine (2,205 bhp)			Operating Hours	See Table 1.1 Footnote A	33.1-15-12-02, Subpart IIII & 33.1-15-22-03, Subpart ZZZZ
Unit 1 crusher house and	M1	M1	PM10	4.3 lb/hr	33.1-15-02
conveyor 1C			Opacity	20% ^G	33.1-15-03-02
Unit 1 coal silos	M2 ⁺	M2	PM ₁₀	7.5 lb/hr	33.1-15-02
			Opacity	20% ^G	33.1-15-03-02
Unit 2 crusher house	M3	M3	PM ₁₀	18.7 lb/hr	33.1-15-02-04.1
110450			Opacity	20% ^G	33.1-15-03-02

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	<u></u>			· · · · · · · · · · · · · · · · · · ·	Perilin No. <u>AOP-28308 V0.0</u>
Emission Unit Description	EU	EP	Pollutant/ Parameter	Emission Limit/ Parameter	NDAC Applicable Requirement
Unit 2 coal	M4	M4	PM10	18.5 lb/hr	33.1-15-02-04.1
silos					
			Opacity	20% ^G	33.1-15-03-02
Unit 1 fly ash silo (vent)	M5	M5	PM ₁₀	2.2 lb/hr	33.1-15-02-04.1
			Opacity	20% ^G	33.1-15-03-02
Unit 1 fly ash silo (rotary unloader)			Opacity	40% ^M	33.1-15-03-03
Unit 2 fly ash silo (vent)	M6	M6	PM ₁₀	2.2 lb/hr	33.1-15-02-04.1
			Opacity	20% ^G	33.1-15-03-02
Unit 2 fly ash silo (rotary unloader)			Opacity	40% M	33.1-15-03-03
Unit 2 lime storage silo	M7	M7	PM ₁₀ Opacity	43.3 Jb/hr 20% ^G	33.1-15-02-04.1 33.1-15-03-02
Unit 1 truck dump (fugitive)			Opacity	< 10%	33.1-15-12-02, Subpart Y
Unit 2 truck dump (fugitive)			Opacity	< 20%	33.1-15-12-02, Subpart Y
Water treatment plant lime storage silo	M12	M12	Opacity	20% ^G	33.1-15-03-02
Unit 1 Lime silo	M13	M13	Opacity	20% ^G	33.1-15-03-02
Facility-wide		.49 9 40.	SO ₂	8,500 tons/year (2-year avg.) ^N	ACP-17408 v1.1

Ā Boiler operating day (arithmetic average of all hourly emission rates each boiler operating day, except for data obtained during startup, shutdown or malfunction periods). See Condition 4.B.2)b)5 for compliance monitoring with the emission limit. 30 boiler operating day rolling average (BODRA); emission rate shall be calculated in accordance with

B 40 CFR 63, Subpart UUUUU.

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3-hour rolling average, 3-hour rolling average, more restrictive standard applies. The emission rate shall be calculated in D accordance with 40 CFR 60.

- E 30-day rolling average. The emission rate shall be calculated in accordance with ACP-17408 v1.1. The limit for NO_x does not include startup.
- F 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 2,500 x 10⁶ Btu/hr for Unit 1 and 4,800 x 10⁶ Btu/hr for Unit 2; startup cannot exceed 61 hours for Unit 1 (EU 1) and 115 hours for Unit 2 (EU 2).
- G 40% opacity (six-minute average) is permissible for not more than one six-minute period per hour. This standard applies at all times.
- H PM emissions are limited to 0.062 lb/10⁶ Btu (3-hour average) to ensure equivalency of monitoring methods and compliance with the opacity limit.
- I This standard does not apply during startup, shutdown or malfunction.
- J 30-day rolling average removal efficiency; the standard applies at all times. The emission rate shall be calculated in accordance with ACP-17408 v1.1 (CD construction permit). In accordance with ACP-17251

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v1.0 (BART construction permit), the permittee shall achieve the indicated emission rate or as an alternative 95% removal of SO_2 .

- ^K 27% opacity (six-minute average) is permissible for not more than one six-minute period per hour. This standard does not apply during startup, shutdown or malfunction.
- ^L See 40 CFR 63, Subpart DDDDD for additional, equally acceptable methods of demonstrating compliance with the average annual capacity factor of no more than 10 percent.
- ^M Fugitive emissions opacity limit is permissible for not more than one six-minute period per hour. Such visible emissions shall have been visibly transported off the property of emission origination and remain visible to an observer positioned off said property when sighting along a line which does not cross the property of emission origination.
- ^N The facility-wide SO₂ emission limit is based on a plant-wide tonnage for the annual average of two calendar years.
- Emission limits and timelines shall be in accordance with Table 2 of 40 CFR 63, Subpart UUUUU, April 8, 2025 Proclamations (Regulatory Relief for Certain Stationary Sources to Promote American Energy) and Annex 1, as applicable.

4. Monitoring Requirements and Conditions:

A. **Requirements**:

	Pollutant/	Requirement		NDAC Applicable	
EP				Requirement	
1	PM/PM ₁₀	PM CEMS,	4.B.1, 4.B.2, 4.B.3,	33.1-15-14-06.5.a(3)(a),	
	(filterable)	O&M & Perf.		ACP-17408 v1.1 &	
A		Spec. Tests	4.B.10	33.1-15-22-03, Subpart UUUUU	
	SO ₂	CEMS/CMS &	4.B.1, 4.B.3 & 4.B.5	33.1-15-14-06.5.a(3)(a) &	
		O&M	- All	33.1-15-21	
100	NO _x	CEMS/CMS &	4.B.1. 4.B.3 & 4.B.5	33.1-15-21 &	
ю.		O&M	,	33.1-15-14-06.5.a(3)(a)	
	HCI	SO ₂ CEMS &	4.B.1, 4.B.3, 4.B.5	33.1-15-22-03, Subpart UUUUU	
		Barrow			
	Hg	CEMS & O&M	4.B.1, 4.B.3, 4B.5 & 4.B.14	33.1-15-22-03, Subpart UUUUU	
	Opacity	VEE &	4.B.1, 4.B.2 & 4.B.8	33.1-15-14-06.5.a(3)(a),	
		PM CEMS		ND SIP §8.3.2, 33.1-15-21 &	
% .	.MI			AČP-17408 v1.1	
	CO ₂	CEMS &	4.B.1, 4.B.3 & 4.B.5	33.1-15-21	
)))		O&M			
	Flow	Flow Monitor	4.B.1 & 4.B.3	33.1-15-21	
	EP	EPPollutant/ Parameter1PM/PM10 (filterable)2SO2 NOxNOxHClHgOpacityOpacityCO2	Pollutant/ ParameterMonitoring Requirement (Method)1PM/PM10 (filterable)PM CEMS, O&M & Perf. Spec. TestsSO2SO2CEMS/CMS & O&MNOxCEMS/CMS & O&MHClSO2 CEMS & O&MHgCEMS & O&MOpacityVEE & PM CEMSCO2CEMS & O&M	Pollutant/ ParameterMonitoring Requirement (Method)Condition Number1PM/PM10 (filterable)PM CEMS, O&M & Perf. Spec. Tests4.B.1, 4.B.2, 4.B.3, 4.B.5, 4.B.6, & 4.B.1, 4.B.3 & 4.B.5SO2CEMS/CMS & O&M4.B.1, 4.B.3 & 4.B.5NOxCEMS/CMS & O&M4.B.1, 4.B.3 & 4.B.5NOxCEMS/CMS & O&M4.B.1, 4.B.3, 4.B.5NOxCEMS/CMS & O&M4.B.1, 4.B.3, 4.B.5MO2CEMS/CMS & O&M4.B.1, 4.B.3, 4.B.5NOxCEMS/CMS & O&M4.B.1, 4.B.3, 4.B.5MCISO2 CEMS & O&M4.B.1, 4.B.3 & 4.B.5	

Table 4.1 Emission Monitoring

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	1	T	N/	1	<u>1 child 1 (0. 1101 20300 70.0</u>
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 & Perf. Spec. Tests	4.B.1, 4.B.2, 4.B.3, 4.B.5, 4.B.6, & 4.B.10	33.1-45-12, Subpart D, 33.1-15-14-06.5.a(3)(a), ACP-17408 v1.1 &
		SO ₂	CEMS/CMS & O&M	4.B.1, 4.B.3 & 4.B.5	33.1-15-22-03, Subpart UUUUU 33.1-15-12, Subpart D & 33.1-15-21
		NOx	CEMS/CMS & O&M	4.B.1, 4.B.3 & 4.B.5	33.1-15-14-06.5.a(3)(a) & 33.1-15-21
		HCI	SO2 CEMS & O&M	4.B 1, 4.B.3, 4.B.5 & 4.B.14	33.1-15-22-03, Subpart UUUUU
		Hg	CEMS & O&M	4.B.1, 4.B.3, 4.B.5 & 4.B.14	33.1-15-22-03, Subpart UUUUU
		Opacity	VEE & PM CEMS	4.B.1, 4.B.2 & 4.B.8	33.1-15-12, Subpart D, 33.1-15-21 & ACP-17408 v1.1
		CO ₂	CEMS & O&M	4.B.1, 4.B.3 & 4.B.5	33.1-15-12, Subpart D & 33.1-15-21
		Flow	Flow Monitor	4. B .1& 4.B.3	33.1-15-12, Subpart D & 33.1-15-21
Cleaver Brooks auxiliary boiler	3	PM/Opacity	Recordkeeping	4 B .4	33.1-15-14-06.5.a(3)(a)
		Fuel Üse	Recordkeeping	4.B.7	33.1-15-14-06.5.a(3)(a)
		Annual Capacity	Recordkeeping	4.B.11, 4.B.12	33.1-15-22-03, Subpart DDDDD
Caterpillar diesel engine (237 bhp)	5	CO	Recordkeeping	2.H.1	33.1-15-22-03, Subpart ZZZZ
		Opacity	Recordkeeping	4.B.4 & 4.B.7	33.1-15-14-06.5.a(3)(a)
A	<i>¥</i>	Operating Hours	Recordkeeping	4.B.13	33.1-15-22-03, Subpart ZZZZ
Cummins diesel engine (190 bhp)	6	CO	Recordkeeping	2.H.1	33.1-15-22-03, Subpart ZZZZ
		Opacity	Recordkeeping	4.B.4 & 4.B.7	33.1-15-14-06.5.a(3)(a)
an a		Operating Hours	Recordkeeping	4.B.13	33.1-15-22-03, Subpart ZZZZ
Cummins diesel engine (2,205 bhp)	7	Opacity	Recordkeeping	4.B.4 & 4.B.7	33.1-15-14-06.5.a(3)(a)
	v	Operating Hours	Recordkeeping	4.B.13	33.1-15-22-03, Subpart ZZZZ
Unit 1 crusher house and Conveyor 1C	M1	PM ₁₀ / Opacity	САМ	4.B.9	33.1-15-14-06.10
Unit 1 coal silos	M2	PM ₁₀ / Opacity	CAM	4.B.9	33.1-15-14-06.10

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Emission Unit		Pollutant/	Monitoring Bequirement		NDAC Applicable
Description	ЕР	Parameter	Requirement (Method)	Condition Number	Requirement
Unit 2 crusher house	M3	PM ₁₀ /	CAM	4.B.9	33.1-15-14-06.10
·		Opacity			
Unit 2 coal silos	. M4	PM ₁₀ /	CAM	4.B.9	33.1-15-14-06.10
	L	Opacity			
Unit 1 fly ash silo	M5	PM10/	O&M & VEE	4.B.5, 4.B.8	33.1-15-14-06.5.a(3)(a)
(vent)		Opacity			373330 ₃₀₀
Unit 1 fly ash silo		Opacity	VEE	4.B.8	33.1-15-14-06.5.a(3)(a)
(rotary unloader)					
Unit 2 fly ash silo	M6	PM ₁₀ /	O&M, VEE &	4.B.5, 4.B.8 & 4.B.9	33.1-15-14-06.5.a(3)(a) &
(vent)		Opacity	CAM		33.1-15-14-06.10
Unit 2 fly ash silo		Opacity	VEE	4.B.8	33.1-15-14-06.5.a(3)(a)
(rotary unloader)					
Unit 2 lime storage	M7	PM ₁₀ /	CAM	4.B.9	33.1-15-14-06.10
silo		Opacity	le di		
Unit 1 truck dump		Opacity	VEO/VEE	4.B.15	33.1-15-12-02, Subpart Y
Unit 2 truck dump		Opacity	VEO/VEE	4.B.15	33.1-15-12-02, Subpart Y,
					33.1-15-14-06.5.a(3)(a)
Water treatment plant	M12	Opacity	VEE	4.B.8	33.1-15-14-06.5.a(3)(a)
lime storage silo) 		
Unit 1 lime storage	M13	Opacity	VEE	4. B .8	33.1-15-14-06.5.a(3)(a)
Silo			Marina.		
Facility-wide		SO_2	Calculation	4.B.16	33.1-15-14-06.5.a(3)(a)
			Recordkeeping		

B. Monitoring Conditions:

b)

d)

- 1) The monitoring shall be in accordance with the following requirements of NDAC 33.1-15-06, 33.1-15-12, 33.1-15-21, and 33.1-15-22, as applicable.
 - a) NDAC 33 1-15-06-04, Monitoring Requirements.

NDAC 33.1-15-12-02, Subpart A, §60.13, Monitoring Requirements (Unit 2 only).

c) NDAC 33.1-15-12-02, Subpart D, §60.45, Emission and Fuel Monitoring (Unit 2 only).

NDAC 33.1-15-21-09, Monitoring Requirements.

NDAC 33.1-15-22-03, Subpart UUUUU, §63.10020, Continuous Compliance Requirements.

- f) 40 CFR 72 and 40 CFR 75
- g) Emissions are calculated using 40 CFR 75, Appendix F and 40 CFR 60, Appendix A.

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- 1] 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).
- 2) PM CEMS (Unit 1 and Unit 2):

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5]

- a) The permittee shall maintain, in an electronic database, the hourly average emission values of all PM CEMS in lb/10⁶ Btu.
 - 1] The permittee shall make reasonable efforts to keep the PM CEMS running and producing data whenever Unit1 and/or Unit 2 is operating.
 - 2] 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 ACP-17408 v1.1 provided the following conditions are met:
 - 1] The PM CEMS installed are appropriate to the stack conditions at both Units 1 and 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;
 - The PM CEMS are certified in accordance with Performance Specification 11 (PS-11) at 40 CFR 60, Appendix B;

Quality assurance/quality control requirements must be performed in accordance with 40 CFR 60, Appendix F, Procedure 2;

Compliance with the applicable PM emission limits at 40 CFR 60.42(a) must be based on boiler operating day (arithmetic average of all hourly emission rates each boiler operating day, except for data obtained during startup, shutdown or malfunction periods).

A] In accordance with §60.45, which refers to §60.48Da, daily averages are only calculated for boiler operating days that have non-out-ofcontrol data for at least 18 hours of unit operation during which the standard applies. All non-out-of-control hourly emission rates of the operating day(s) not meeting the minimum 18 hours non-outof-control data daily average requirement are averaged with all nonout-of-control hourly emission rates for the next boiler operating

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day with 18 hours or more of non-out-of-control [§60.48Da(f)].;

- 6] The permittee must meet all applicable reporting, recordkeeping and operational requirements under 40 CFR 60.40 <u>et seq.</u> and the General Provisions under 40 CFR 60.7-60.13.
 - a] Quarterly excess emissions of PM must be reported for any boiler operating day period during which the average emissions (arithmetic average of all operating one-hour periods) exceed the applicable standards in §60.42, in accordance with §60.45(g)(4).;
- 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.
 - a] The Method 9 readings must be taken for at least one hour each week, for six consecutive weeks during regular source operation.
 - b] 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;

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;

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

All Method 9 readings must be taken by a certified observer.

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CEMS/CMS:

a) When a failure of a CEMS/CMS occurs, an alternative method, acceptable to the Department, for measuring or estimating emissions must be undertaken as soon as possible.

- 1] The procedures outlined in 40 CFR 75, Subpart D for data substitution are considered an acceptable alternative method, as applicable.
- 2] Timely repair of the emission monitoring system must be made.

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- b) The Department may require additional performance audits of each CEMS and CMS.
- 4) For purposes of compliance monitoring, burning of fuel in compliance with Condition 2.A.2 and 2.A.3 shall be considered credible evidence of compliance with any applicable opacity and particulate matter emission limit. However, results from tests conducted in accordance with the test methods in 40 CFR 50, 51, 60, 61, or 75 will take precedence over burning distillate oil for evidence of compliance or noncompliance with any applicable opacity, particulate matter and SO₂ emission limit in the event of enforcement action.
- 5) Operations and Maintenance (O&M): 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.
 - a) The manufacturer's recommended 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.
 - 1] The permittee shall have the O&M procedures available on-site and provide the Department with a copy when requested.
- 6) Units 1 and 2 (EP 1 and 2) PM Emissions Tests:

d)

- 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 calculate the PM emissions rate from annual stack tests in accordance with 40 CFR §60.8(f).
 - The permittee shall submit all the results of each PM stack test to the Department within sixty (60) days of completion of each test.
- 7) The sulfur content of the fuel used shall be analyzed with each shipment using ASTM or Department approved methods.
 - a) The sulfur analysis for the fuel may be conducted by the permittee or by the source where the fuel is purchased.
 - b) When distillate oil is combusted, an annual statement from the fuel supplier indicating the sulfur content does not exceed 0.0015% by weight will satisfy the analysis requirement.

- c) 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.
- 8) Visible Emissions Evaluation (VEE): At least once per month in which the emission unit is operated, a certified visible emissions reader shall conduct a formal visible emissions evaluation in accordance with EPA Reference Method 9.
 - a) 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.
 - b) If the visible emissions evaluation indicates emissions to be greater than the allowable opacity limit, the permittee must investigate the problem within eight hours.
 - 1] Any problems 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 7.G.
 - 2] Following corrective maintenance, a formal visible emissions evaluation shall be made. If no visible emissions are observed, the date and time shall be recorded. If visible emissions are observed, continue with Condition 4.B.8)b, as many times as necessary.

c) 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.

For EP M1, M2, M3, M4, M6 and M7, the permittee shall conduct the monitoring, recordkeeping and reporting as required by the applicable subparts of 40 CFR 64. Monitoring shall be conducted in accordance with the applicable Compliance Assurance Monitoring (CAM) Plan in Attachment A of this permit.

9)

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The monitoring shall be in accordance with the applicable requirements of 40 CFR 60, Performance Specification 11 at Appendix B, the Amendments to Standards of performance for New Stationary Sources: Monitoring Requirements, 69 Fed. Reg. 1786 (January 12, 2004), Procedure 2 at Appendix F and the requirements of 40 CFR 63, Subpart UUUUU.

- a) Prior to July 6, 2029, for EU 1 and EU 2 PM CEMS, conduct performance testing quarterly and/or annually in accordance with 40 CFR 63, Subpart UUUUU.
- b) On and after July 6, 2029, work practice standards and continuous compliance monitoring shall be in accordance with 40 FR 63, Subpart UUUUU, as applicable for EU 1 and EU 2.

- 11) The permittee shall monitor and record the type and amount of fuel used by the Auxiliary Boiler (EU/EP 3).
 - a) 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.
 - 1] These records shall be retained by the permittee for a period of five years and made available to the Department upon request.
 - 2] If the annual capacity factor exceeds 10 percent, the permittee shall notify the Department within 15 days after making the calculation.
 - b) The quantity and type of fuel used for a calendar year shall be reported with the annual compliance certification report (Condition 6.C).
- 12) Complete a boiler (EU/EP 3) tune-up once every 60 months in accordance with §63.7540 of 40 CFR 63, Subpart DDDDD.
- 13) A monthly log shall be kept of the hours of operation for each engine (EU/EP 5, 6 and 7) and the total hours of operation on a calendar year basis using a non-resettable hour meter. Records shall be maintained to differentiate between time operated for emergency purposes, maintenance/testing purposes, and other nonemergency purposes.
 - a) For certified engines, the permittee shall 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)].
- 14) Conduct a tune-up on each existing coal fired boiler (EU/EP 1 and 2) at least every 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)).

Conduct monthly visual emissions observations (VEO) of all process and control equipment, and at least once every five calendar years, conduct a Method 9 performance test (VEE) in accordance with Appendix A-4 of 40 CFR 60.

The facility-wide SO₂ emissions shall be calculated annually and based on plant-wide tonnage for the annual average of two calendar years.

5. Recordkeeping Requirements:

15)

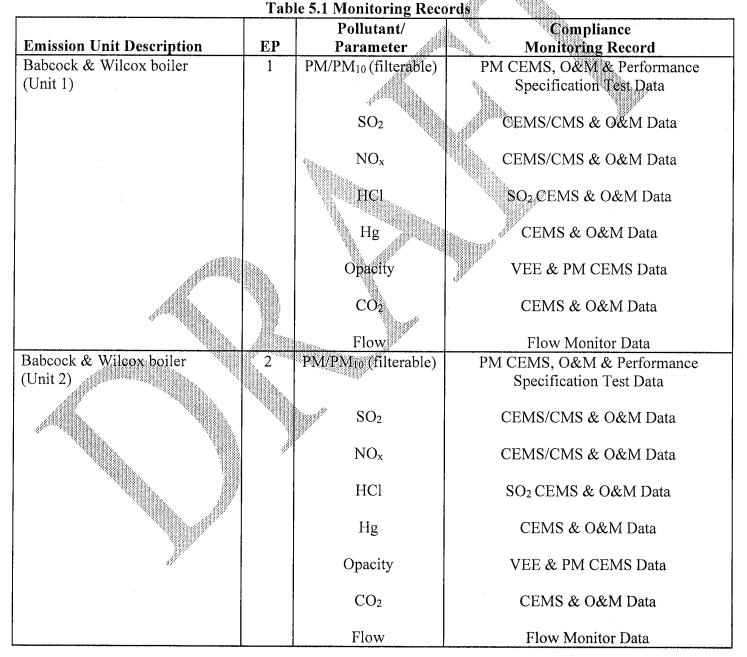
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- A. The permittee shall maintain compliance monitoring records as outlined in the Monitoring Records table that include the following information.
 - 1) The date, place (as defined in the permit) and time of sampling or measurement.
 - 2) The date(s) 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]



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· · · · · · · · · · · · · · · · · · ·		······	Permit No. <u>AOP-28368 v6.0</u>
		Pollutant/	Compliance
Emission Unit Description	EP	Parameter	Monitoring Record
Cleaver Brooks auxiliary boiler	3	PM/Opacity	Type of Fuel Usage
		Fuel Use	Type of Fuel Usage &
			Distillate Oil Sulfur Content
		T = D / A = 1	
		HAP/Annual	Fuel Quantity Used & Tune-up Records
Caterpillar diesel engine (237	5&6	Capacity Factor CO	Initial Emissions Test Data &
bhp) & Cummins diesel engine	500		Maintenance Plans/Records
(190 bhp)		, di	Wannenance Flans/Records
		Opacity	Type of Fuel Usage
		opuenty (
		Operating Hours	Hours of Operation Data
Cummins diesel engine (2,205	7	Opacity	Type of Fuel Usage
bhp)		1 NA	
		Operating Hours	Hours of Operation Data
Unit 1 crusher house and	M1	PM ₁₀ /Opacity	CAM Data
Conveyor 1C			
Unit 1 coal silos	<u>M2</u>	PM ₁₀ /Opacity	CAM Data
Unit 2 crusher house	M3	PM ₁₀ /Opacity	CAM Data
Unit 2 coal silos	M4	PM ₁₀ /Opacity	CAM Data
Unit 1 fly ash silo (vent)	M5	PM ₁₀ /Opacity	O&M & VEE Data
Unit 1 fly ash silo (rotary	÷	Opacity	VEE Data
unloader)			
Unit 2 fly ash silo (vent)	<u>M6</u>	PM ₁₀ /Opacity	O&M, VEE & CAM Data
Unit 2 fly ash silo (rotary unloader)		Opacity	VEE Data
Unit 2 lime storage silo	N 17	Quarter	
Unit 1 truck dump	M7	Opacity	CAM Data
Unit 2 truck dump		Opacity Opacity	VEO/VEE Data
Unit 1 fly ash silo (rotary	M10	5 215 S.d	VEO/VEE Data
unloader)		Opacity	VEE Data
Unit 2 fly ash silo (rotary	M11	Opacity	VEE Data
unloader)	14111	Opacity	v DD Dala
Water treatment plant lime	M12	Opacity	VEE Data
storage silo		- Langel	, DD Duiu
Unit 1 Lime Storage Silo	M13	Opacity	VEE Data
Facility-wide		SO ₂	Facility-wide Calculation Data
	····-		

B. In addition to requirements outlined in Condition 6.A, recordkeeping shall be in accordance with the following requirements of NDAC 33.1-15-06, 33.1-15-12, 33.1-15-14, 33.1-15-21 and 33.1-15-22, as applicable:

- 1) NDAC 33.1-15-06-05, Reporting and Recordkeeping Requirements (EU 1).
- 2) NDAC 33.1-15-12-02, Subpart A, §60.7, Notification and Recordkeeping (EU 2).
- 3) NDAC 33.1-15-12-02, Subpart Y, §60.258, Reporting and Recordkeeping (Unit 1 and Unit 2 truck dumps).
- 4) NDAC 33.1-15-14-06.10, §64.9, Reporting and Recordkeeping Requirements, Paragraph (b), General Recordkeeping Requirements (EU M1, M2, M3, M4, M6 and M7).
- 5) NDAC 33.1-15-21-09, Recordkeeping Requirements (EU 1 and 2).
- 6) NDAC 33.1-15-22-03, Subpart A, §63.10, Recordkeeping and Reporting Requirements (EU 1 through 3).
- 7) NDAC 33.1-15-22-03, Subpart DDDDD, §63.7555 and §63.7560, Notification, Reports and Records (EU 3).
- 8) NDAC 33.1-15-22-03, Subpart UUUUU, §63.10032 and §63.10033, Notification, Reports and Records (EU 1 and 2).

Applicable Requirements: NDAC 33.1-15-06, NDAC 33.1-15-12, NDAC 33.1-15-14-06.10, NDAC 33.1-15-21 and NDAC 33.1-15-22

C. The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sampling, measurement, report, or application Support information includes all calibration and maintenance records and all original strip-chart recordings/computer printouts of continuous monitoring instrumentation, and copies of all reports required by the permit.

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

6. **Reporting**:

A.

- Reporting shall be in accordance with the following requirements of NDAC 33.1-15-06, 33.1-15-12, 33.1-15-14, 33.1-15-21 and 33.1-15-22, as applicable.
 - 1) NDAC 33.1-15-06-05, Reporting and Recordkeeping Requirements (Unit 1).
 - 2) NDAC 33.1-15-12-02, Subpart A, §60.7, Notification and Recordkeeping (Unit 2).
 - 3) NDAC 33.1-15-12-02, Subpart Y, §60.258, Reporting and Recordkeeping (Unit 1 and Unit 2 truck dumps).
 - 4) NDAC 33.1-15-14-06.10, §64.9, Reporting and Recordkeeping Requirements, Paragraph (a), General Reporting Requirements (EU M1, M2, M3, M4, M6 and M7).

- 5) NDAC 33.1-15-21-09, Recordkeeping Requirements (EU 1 and 2).
- 6) NDAC 33.1-15-22-03, Subpart A, §63.10, Recordkeeping and Reporting Requirements (EU 1 through 3).
- 7) NDAC 33.1-15-22-03, Subpart DDDDD, §63.7555 and §63.7560, Notification, Reports and Records (EU 3).
- 8) NDAC 33.1-15-22-03, Subpart UUUUU, §63.10032 and §63.10033, Notification, Reports and Records (EU 1 and 2).
- 9) Quarterly excess emission reports for Unit 1 and Unit 2 (EU 1 and 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 3.

<u>Parameter</u>	Reporting Period
PM lb/10 ⁶ Btu	Boiler operating day average & 30 BODRA
SO ₂ lb/10 ⁶ Btu	3-hour rolling average
SO ₂ lb/10 ⁶ Btu	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 BODDRA
N333223. 323	

a) Excess emissions for Unit 1 and Unit 2 shall be reported for the following:

Applicable Requirements NDAC 33.1-15-06, NDAC 33.1-15-12, NDAC 33.1-15-14-06.10, NDAC 33.1-15-21 and NDAC 33.1-15-22

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

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

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

С.

1) 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

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

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

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

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

7. Facility Wide Operating Conditions:

A. Ambient Air Quality Standards:

- 1) Particulate and gases. The permittee shall not emit air contaminants in such a manner or amount that would violate the standards of ambient air quality listed in Table 1 of NDAC 33.1-13-02, 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.

(B) 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.

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

1)

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

- Maintenance Shutdowns. In the case of shutdown of air pollution control equipment for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Department at least 24 hours prior to the planned shutdown provided that the air contaminating source will be operated while the control equipment is not in service. Such prior notice shall include the following:
 - a) Identification of the specific facility to be taken out of service as well as its location and permit number.
 - b) The expected length of time that the air pollution control equipment will be out of service.
 - c) The nature and estimated quantity of emissions of air pollutants likely to be emitted during the shutdown period.

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

Applicable Requirement: NDAC 33.1-15-01-13

2) Malfunctions.

c)

[2]

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- 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.

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:

The excess emissions were caused by a sudden, unavoidable breakdown of technology that was beyond the reasonable control of the owner or operator.

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.

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.

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- [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. **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
- Prohibition of Air Pollution:

I.

- 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

J. **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)

K. **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

L. **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

- M. **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

- N. **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

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O. 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)

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

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

Applicable Requirement: NDAC 33.1-15-15-01.2

8. General Conditions:

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

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

B. **Permit Renewal and Expiration**: This permit shall be effective from the date of its issuance for a fixed period of five years. The permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least six months, but no more than 18 months, prior to the date of permit expiration. The Department shall approve or disapprove the renewal application within 60 days of receipt. Unless the Department requests additional information or otherwise notifies the applicant of incompleteness, the application shall be deemed complete. For timely and complete renewal applications for which the Department has failed to issue or deny the renewal permit before the expiration date of the previous permit, all terms and conditions of the permit, including any permit shield previously granted shall remain in effect until the renewal permit has been issued or denied. The application for renewal shall include the current permit number, description of any permit revisions and offpermit changes that occurred during the permit term, and any applicable requirements that were promulgated and hot 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

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agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department.

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

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

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

E. Submissions:

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

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

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

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

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

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

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

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

H. Duty to Provide Information: The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This includes instances where an alteration, repair, expansion, or change in method of operation of the source occurs. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such recourse directly to the Department along with a claim of confidentiality. The permittee, upon becoming aware that any relevant facts were omitted, or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. Items that warrant supplemental information submittal include, but are not limited to, changes in the ambient air boundary and changes in parameters associated with emission points (i.e., stack parameters). The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

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

- I. **Reopening for Cause**: The Department will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:
 - 1) Additional applicable requirements under the Federal Clean Air Act become applicable to the permittee with a remaining permit term of three or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
 - 2) The Department or the United States Environmental Protection Agency determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

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.

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

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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)

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

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 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 Modifications**: 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.
 - 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.

Is not required to be processed as a significant modification.

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

N. Significant Modifications:

5)

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.

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.

The ability of the United States Environmental Protection Agency to obtain information from a source pursuant to Section 114 of the Federal Clean Air Act.

4) Nothing in this permit shall relieve the permittee of the requirement to obtain a Permit to Construct.

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

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

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

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

Applicable Requirement: NDAC 33.1-15-01-08

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

Affected Source Unit:

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

2)

a)

bì

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

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.

The owners and operators of each affected source and each affected unit at the source shall:

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

Have an Acid Rain permit.

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

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 Requirements: NDAC 33.1-15-21-08], NDAC 33.1-15-21-09 and 40 CFR 76

C. Sulfur Dioxide Requirements

3)

- 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.

Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

An allowance shall not be deducted in order to comply with the requirements under Condition 9(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.

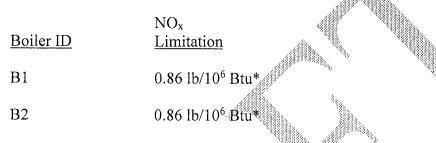
Permit No. AOP-28368 v6.0

6) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Applicable Requirements: 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:



* Annual average basis

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

Excess Emissions Requirements:

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 SO_2 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 Requirements: 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.

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 Requirements: NDAC 33.1-15-21-08.1 and NDAC 33.1-15-21-09

G. Liability:

2)

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 representation 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.
- 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 Requirements: 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

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

J. **Reopening for Cause**: In addition to any reasons for reopening for cause previously stated in this permit, the Department will reopen and revise this permit as necessary to remedy deficiencies in the following circumstance: If additional requirements, including excess emissions requirements, become applicable to an affected source under Title IV of the Federal Clean Air Act or the regulations promulgated there under. Upon approval by the administrator of the United States Environmental Protection Agency, excess emissions offset plans shall be deemed to be incorporated into the permit.

Applicable Requirements: NDAC 33.1-15-14-06.6.f(1)(b) and 40 CFR 70.7(f)(1)(ii)

- 10. 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. AOP-28368

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

COMPLIANCE ASSURANCE MONITORING

MINNKOTA POWER COOPERATIVE, INC. Milton R. Young Station

April 2025

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 AOP-28368, NDAC 33.1-15-05-01 & 33.1-15-03-02

Emission Limit:

Opacity 20% for all emission points 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.

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**

Emission Units: Lime Storage & Fly Ash Storage A.

Description: Fabric Filter

Emission Point: M6 Emission Point: M7 Location: Unit 2 Fly Ash Silo Location: Unit 2 Lime Storage Silo

Applicable Regulation, Emission Limit and Monitoring Requirements Β.

Regulation: Title V Permit Number AOP-28368, NDAC 33 1-15-05-01 & 33.1-15-03-02

Emission Limit:

PMic

Monitoring Approach

Opacity 20% for all emission points

II.

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

M6 - 2.2 lb/hr + 13.3 lb/h

М7

Table No. 1 Monitoring Approach Fabric Filter for PM Control Emission Points: M6 and M7

	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		19
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

MINNKOTA POWER COOPERATIVE, INC. Milton R. Young Station

> Fugitive Coal Dust Emission Control Plan for the Unit 1 Truck Dump (NSPS Subpart Y Post-2008)

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

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

Section 60.255 (c) 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."

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

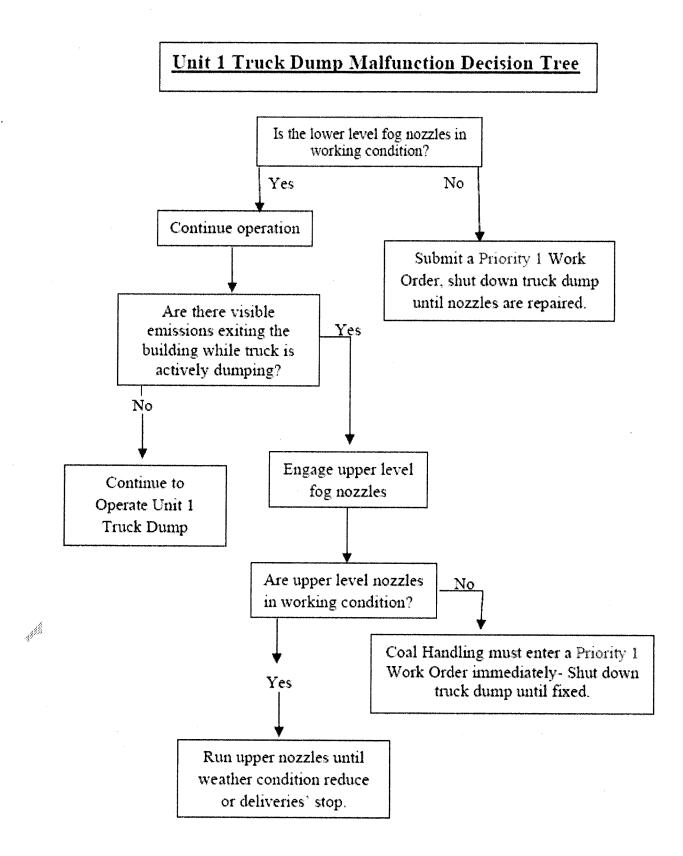
The initial performance test must be completed within 60 days of the Unit 1 truck dump reaching maximum capacity. The initial performance test will be conducted by MPC personnel certified in EPA Method 9. The Method 9 test will be 60 minutes in duration. In the event any six-minute average opacity reading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



VISIBLE EMISSIONS OBSERVATION FORM

Company: <u>Minnkota Pow</u>	er Cooperative, Inc. Ob	servation Date	
Stack Name: Unit 1 Coal T	uck Unloading APC	Permit Number <u>AOP-28368</u>	
Control Equipment Operat	ing:		
Number of Trucks Pr	ocess Rate tons		
Plume Background	Background Color	Sky Condition	
Observer's Location	Feet Of S	tack	
Wind Direction	Wind Speed		
Describe Plume	Color of Plume	Ambient Temp	°F
Time Observations Start	Tir	me 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						

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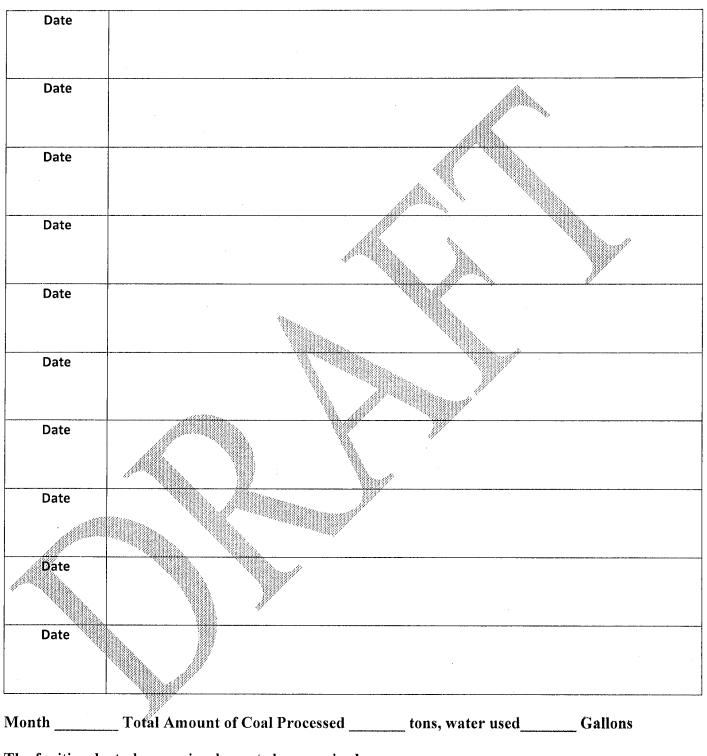
UNIT 1 TRUCK DUMP DAILY INSPECTION LOG

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.

			AN.
Date	System Fully Operational Yes or No*	Any Visible Emissions Yes** or No	Comments Operators Initials
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<u> </u>			· · · · · · · · · · · · · · · · · · ·
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* 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?





The fugitive dust plan was implemented as required.

Minnkota Power Cooperative, Inc. (Minnkota), Milton R. Young Station Title V Permit to Operate No. AOP-28368 v6.0 (Previously T5-F76009) Statement of Basis (12/31/24)

<u>Facility Background</u>: The Milton R. Young Station (M.R. Young) is a lignite-fired electrical power generating facility consisting of Units 1 (approximately $3,200 \times 10^6$ Btu/hr and 257 MWe gross) and 2 (approximately $6,300 \times 10^6$ Btu/hr and 477 MWe gross).

Unit 1 consists of a Babcock and Wilcox cyclone-fired boiler equipped with a Research-Cottrell, Inc. electrostatic precipitator (ESP), a Marsulex Environmental Technologies wet lime flue gas desulfurization system (FGD), advanced separated over-fired air (ASOFA), selective non-catalytic reduction (SNCR) and post-combustion sorbent injection mercury (Hg) emissions control. Flue gases are emitted through a circular stack opening approximately 564 feet above-grade.

Unit 2 consists of a Babcock and Wilcox cyclone-fired boiler equipped with a Wheelabrator Lurgi ESP. Unit 2 is also equipped with a wet lime flue gas desulfurization system consisting of two modified Combustion Equipment Associates, Inc. spray tower scrubber absorber modules, ASOFA, SNCR and post-combustion sorbent injection Hg emissions control. Flue gases are emitted through a circular stack opening approximately 550 feet above grade.

Chronology of significant events (not all-inclusive):

March 1967 - Construction of Unit 1 and associated equipment.

October 27, 1970 - Unit 1 initial operations.

June 1, 1973 - Conditional Permit to Operate (PTO) No. 73010 was issued for Unit 1.

September 19, 1973 - Permit to construct application for Unit 2.

June 28, 1974 - Conditional Permit to Construct (PTC) was issued for Unit 2.

June 1974 - Construction of Unit 2 and associated equipment.

June 1975 - Unit 1 ESP became operational.

November 30, 1976 - First PTO for Unit 1 was issued (No. F76009) and subsequently renewed at three-year intervals.

May 1977 - Unit 2 initial operations.

November 21, 1978 - First PTO for Unit 2 was issued (No. F78007) and reissued at three-year intervals.

April 12, 1995 - Units 1 and 2 were consolidated into PTO No. F76009.

December 19, 1997 and January 1, 2000 - Title IV Permit No. T4-F76009 was issued and subsequently renewed prior to its inclusion in the Title V.

April 30, 2002 - The first Title V PTO for M. R. Young was issued (T5-F76009). Modeling was conducted prior to Title V issuance (1999-2001 timeframe). PM₁₀ emission limits for EU M1 through M7 were included in the modeling and appear to have been established showing SAAQS/NAAQS compliance and a potentially issued construction permit from January 1999.

May 12, 2005 - Title V PTO Renewal No. 1 (AOP-28368 v2.0) was issued and incorporated the Title IV provisions.

July 27, 2006 - The facility entered into a Consent Decree (CD) with the U.S. District Court for the District of North Dakota (Civil Action No. 1:06-cv-034).

July 16, 2007 - Title V PTO Renewal No. 1, Revision No. 1 (AOP-28368 v2.1; sig. mod.) was issued and incorporated portions of the CD.

December 23, 2009 - PTC09044 (ACP-17244 v1.0) was issued for the installation of a 2,205 bhp diesel engine-driven emergency generator set (EU 7).

February 23, 2010 – PTC10007 (ACP-17251 v1.0) was issued to establish BART emission limits if/when EPA approves the limits as part of the Round 1 Regional Haze SIP.

May 13, 2010 - Title V PTO Renewal No. 2 (AOP-28368 v3.0) was issued and incorporated ACP-17244 v1.0.

March 8, 2012 - PTC12003 (ACP-17408 v1.0) was issued for portions of the CD.

September 11, 2012 - Title V PTO Renewal No. 2, Revision No. 1 (AOP-28368 v3.1) was issued and incorporated ACP-17408 v1.0.

October 26, 2012; October 31, 2012; February 20, 2013 - Title V PTO Renewal No. 2, Revision No. 2 (AOP-28368 v3.2), Renewal No. 2, Revision No. 3 (AOP-28368 v3.3) and Renewal No. 2, Revision No. 3 (AOP-28368 v3.4) were issued for administrative amendments.

July 22, 2015 - Title V PTO Renewal No. 3 (AOP-28368 v4.0) was issued and incorporated ACP-17251 v1.0, Unit 1 truck dump modifications [2013 (NSPS Subpart Y); no PTC required] and applicable requirements of 40 CFR 63, Subpart UUUUU for Units 1 & 2 and Subpart DDDDD for the auxiliary boiler (EU 3).

August 6, 2015 - Title V PTO Renewal No. 3, Revision No. 1 (AOP-28368 v4.1) was issued for administrative amendments.

August 31, 2015 (published June 30, 2015) - EPA approved alternative opacity monitoring (Method 9 and PM CEMS) for Unit 1.

July 15, 2016 - Letter regarding Units 1 and 2; EPA agreed to waive the Relative Response Audit (RRA) data range requirement in Sections 10.4(6)(i) and (ii) of Procedure 2 providing the requirements of Section 10.4(6)(iii) are passed.

January 28, 2019 - PTC12003 Amendment No. 1 (ACP-17408 v1.1) was issued to be consistent with paragraphs 151 and 152 of the CD and prepare the documents for the conditional termination of the CD as indicated in paragraph 185. ACP-17408 v1.0 was rescinded with the issuance of this construction permit.

January 28, 2019 - Title V PTO Renewal No. 3, Revision No. 2 (AOP-28368 v4.2) of the Title V permit was issued and incorporated ACP-17408 v1.1.

May 6, 2020 - Title V PTO Renewal No. 4 (AOP-28368 v5.0) was issued with administrative updates.

<u>Current Action</u>: On November 1, 2024 the Department received a timely permit application through CERIS-ND from Minnkota for renewal of the Milton R. Young Station Title V PTO No. AOP-28368 (and Acid Rain permit). The draft permit changes include, but are not limited to emission unit description clarifications, applicable regulation clarifications, emission unit limit updates and clarifications based on historically issued construction permits and modeling, monitoring, recordkeeping and reporting clarifications, updates to standard conditions, and administrative corrections.

The Department proposes to issue Title V Permit No. AOP-28368 v6.0 after the required 30-day public comment period and subsequent EPA 45-day review period of the draft permit. This statement of basis summarizes the relevant information considered during the issuance of the Title V permit. The legal basis for each permit condition was retained from the previous permit unless otherwise noted and is stated in the draft permit under the heading of "Applicable Requirement."

Applicable Programs/As-Needed Topics:

- Title V. The facility is considered a major source under NDAC 33.1-15-14-06 (40 CFR 70) due to potential emissions of PM₁₀, SO₂, NO_x, CO and VOC above 100 tons per year, and individual Hazardous Air Pollutant (HAP) emissions (hydrogen chloride and hydrogen fluoride) above 10 tons per year.
- 2. New Source Performance Standards (NSPS). The following NDAC 33.1-15-12-02 and 40 CFR 60 subparts apply to the facility.

Subpart A, General Provisions, applies to source units to which another NSPS subpart applies.

Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators; except for the NO_x requirements, this applies to Unit 2 boiler (EU 2) because it was constructed after August 17, 1971 (built in 1973) and has a heat input rating greater than 250 million Btu per hour (actual 6,300 million Btu per hour). Unit 1 boiler (EU 1) (3,200 million Btu per hour) is not subject to Subpart D because it was constructed in 1967, however, Minnkota has elected to comply with the PM emission limit and averaging period for this subpart for EU 1.

Subpart Y, Standards of Performance for Coal Preparation Plants; Unit 1 truck dump was modified in 2013 and is subject this subpart. Although Unit 2 truck dump is not subject to the post-2008 requirements of the subpart, the facility has elected to conduct monitoring, recordkeeping and reporting in accordance with the post-2008 requirements for this unit. EU M1 through M4 (coal handling) are not subject, although they convey and crush more than 200 tons per day of coal, the units were constructed before the Subpart Y effective date of October 24, 1974 and do not meet the definition of modified or reconstructed in accordance with the regulations.

Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, applies to the 2205 bhp emergency diesel generator engine EU 7.

- 3. **National Emission Standards for Hazardous Air Pollutants (NESHAP).** No NDAC 33.1-15-13 and 40 CFR 61 subparts apply to the facility, with the following possible exception of NDAC 33.1-15-13-02 (40 CFR 61), Subpart M (National Emission Standard for Asbestos), which may apply during facility modifications involving asbestos.
- 4. **NESHAP/ Maximum Achievable Control Technology (MACT) Standards.** The following NDAC 33.1-15-22-03 and 40 CFR 63 subparts apply to the facility, which is a major source of HAP emissions.

Subpart A, General Provisions, applies to source units to which another MACT subpart applies.

Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (engines EU 5, 6 and 7).

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

Subpart UUUUU, National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units [EU 1 and 2 (cyclone-fired boilers)].

The plant's gasoline dispensing facility is not subject to 40 CFR 63, Subpart CCCCCC (NESHAP for Gasoline Dispensing Facilities) because the NESHAP applies to area sources and M.R. Young is a major source of HAP emissions.

- 5. Acid Rain (Title IV). NDAC 33.1-15-21 (40 CFR 72, 73, 75 and 76) applies to Units 1 and 2 since they are existing electric utility steam generating units each rated at greater than 25 MWe.
- 6. **Prevention of Significant Deterioration (PSD).** The facility is a major source under NDAC 33.1-15-15 (40 CFR 52) because it is a fossil-fuel fired steam electric plant with a heat input of more than 250 million Btu per hour that has the potential to emit more than 100 tons per year of a criteria pollutant. There are no changes contained in this draft permit that increase potential emissions by a PSD-significant amount. Therefore, this draft permit is not subject to PSD review.
- 7. **Best Available Control Technology (BACT).** Since there are no changes contained in this draft permit that increase potential emissions by a PSD-significant amount, a BACT review is not required.
- 8. **Gap Filling.** Although the permit does contain gap filling for testing, monitoring or recordkeeping not otherwise required by rule, this draft permit does not contain significant revisions to previously permitted gap filling, monitoring and recordkeeping. The gap filling conditions are generally identified by the applicable requirement: NDAC 33.1-15-14-06.5.a(3)(a).
- 9. **Streamlining Decisions.** Some emission limits that would have been otherwise applicable are not represented in the permit because more stringent limits apply. The NDAC 33.1-15-06-01.2 *Restrictions applicable to fuel burning installations* emission limit for sulfur (3.0 lb sulfur per million Btu) was streamlined because the standard ND natural gas fuel restriction for sulfur (2 grains/100 scf) is more stringent. The consent decree/ACP-17408 v1.1 and 40 CFR 63, Subpart UUUUUU PM emission limit of 0.03 lb/10⁶ Btu and averaging period for EU 1 and 2 are the same, so only one emission limit and averaging period is provided; both of the appliable regulations are listed for the one limit.
- 10. **Compliance Assurance Monitoring (CAM).** CAM applies to the rotoclones (EP M1, M2, M3 and M4) and fabric filters (EP M6 and M7).
- 11. **Permit Shield.** This draft permit contains applicable permit shields (Title V and Title IV); there are no changes to the permit shields.
- 12. **New Conditions/Limits.** Based on applicable regulations and standard condition updates, new conditions or limits have been incorporated into this draft permit. Specific changes in the draft permit are addressed in the Permit Changes by Section below.
- 13. **40 CFR 98 Mandatory Greenhouse Gas Reporting.** This rule requires sources above certain emission thresholds or in certain supplier thresholds to calculate, monitor and report greenhouse gas emissions. According to the definition of "applicable requirement" in 40 CFR 70.2, neither Subpart 98 nor Clean Air Act Section 307(d)(1)(V), the CAA authority under which Subpart 98 was promulgated, are listed as applicable requirements for the

purpose of Title V permitting. Although the rule is not an applicable requirement under 40 CFR 70, the source is not relieved from the requirement to comply with the rule separately from compliance with their Part 70 operating permit. It is the responsibility of each source to determine applicability to the subpart and to comply, if necessary.

Permit Changes by Section:

Note: Administrative changes were made to some sections of the permit to update to the current North Dakota (ND) format and to correct errors. In addition, the Permit to Operate number and references to Permit to Construct numbers have been updated to accommodate the Air Quality database (CERIS-ND). These changes may not be specifically addressed below.

Cover: The expiration date, permit and renewal numbers were updated.

Table of Contents: Page numbers and condition sections were updated as applicable.

Permit Shield: No change

- 1. **Emission Unit Identification**: Applicable regulations were added, the air pollution control equipment was clarified for EU 1 and 2, and the emergency engine footnote was added to Table 1.1. The fugitive emission sources (formerly EU M5/EP M10, EU M6/EP M11 and EU/EP 9) were removed from Table 1.1 and provided in Condition 1.B. The continuous emission/monitoring systems were clarified in Condition 1.C.
- 2. Applicable Standards, Restrictions and Miscellaneous Conditions (previously Condition 3): The "Alternative Operating Scenarios" were renamed to "Fuel Restrictions", clarified and moved to this section. All subsequent sections were renumbered. The facility-wide SO₂ limit was removed from this section and provided in Table 3.1 in the next section. The construction permit numbers were updated to accommodate the CERIS-ND numbering structure for existing permits. The applicable regulations were updated to the current ND standard, applicable units were clarified and references to other conditions were updated as necessary.
- 3. Emission Unit Limits (previously Condition 4): EU 1 and 2 emission limit averaging periods were updated in Table 3.1 for the 0.030 lb/10⁶ Btu/hr PM emission limit to match those of the applicable regulation 40 CFR 63, Subpart UUUUU (an averaging period was not provided in the construction permit that established the emission limits, but appears in the first Title V incorporating the construction permit). The 0.10 lb/10⁶ Btu PM emission limit and averaging period was added to Table 3.1 for EU 1 and 2, which agrees with the 40 CFR 60, Subpart D PM requirements. EU 1 is not subject to 40 CFR 60, Subpart D, however, Minnkota is requesting that both units comply with the subparts PM requirements. The opacity limits were provided in Table 3.1 and associated footnotes instead of refencing conditions later in the permit. Applicable regulation requirements for emergency engines were added to Table 3.1. The PM emission limits were removed from EU 3, M1 through M7, M12, M13 and the fugitive emission sources since they were not included in a construction permit or required for NAAQS compliance and are considered

no longer applicable, historical relics. Consequently, the subsequent monitoring, recordkeeping and reporting of PM for EU M1 through M7, M12, M13 were also removed. Unit 1 truck dump and Unit 2 truck dump opacity limits were updated to coincide with the applicable subpart requirements (NSPS Y). The facility-wide SO₂ limit was added to Table 3.1 and removed from the previous section.

The permitted PM_{10} limits for EU M1 through M7 were retained since they were modeled in the 1999-2001 timeframe for compliance with the NAAQS. However, the facility is considering testing those units prior to the next revision or renewal in an effort to provide data demonstrating the PM_{10} limits are not required for NAAQS compliance. Based on historical information, the emission units were tested in 1997.

- 4. **Monitoring Requirements and Conditions** (previously Condition 5): Monitoring requirements, condition number references and applicable requirements were updated in Table 4.1 as necessary. PM monitoring was removed from EU M1 through M7, M12, M13 and the fugitive emission sources since the emission limits have been removed. Monitoring was added to Table 4.1 for the Unit 1 truck dump applicable regulation 40 CFR 60, Subpart Y and the facility-wide SO₂. Unit 2 truck dump monitoring was updated to coincide with the newer Unit 1 truck dump monitoring. Monitoring conditions were updated to the current ND standard as required.
- 5. **Recordkeeping Requirements** (previously Condition 6): The "Compliance Monitoring Record" column in Table 5.1 was updated for several units as necessary. PM recordkeeping was removed from EU M1 through M7, M12, M13 and the fugitive emission sources since monitoring has been removed. Recordkeeping was added to Table 5.1 for the Unit 1 truck dump and the facility-wide SO₂. Unit 2 truck dump recordkeeping was updated to coincide with the newer Unit 1 truck dump recordkeeping. Recordkeeping conditions were updated to the current ND standard as needed.
- 6. **Reporting** (previously Condition 7): Reporting conditions were updated to the current ND standard and applicable units were updated as required.
- 7. **Facility Wide Operating Conditions** (previously Condition 8): The Noncompliance Due to an Emergency condition (7.H) was removed per EPA's Affirmative Defense Provision Rule effective 8/21/23 and to reflect the current ND standard facility wide operating conditions. All subsequent condition lettering designation was updated.
- 8. **General Conditions** (previously Condition 9): Condition No. 8.E was updated to the current ND standard general conditions.
- 9. **Phase II Acid Rain Provisions** (previously Condition 10): Condition 9.J was added to be consistent with the current ND standard phase II acid rain provisions.
- 10. State Enforceable Only Conditions (not Federally enforceable) (previously Condition 11): No change.

Attachment A - Compliance Assurance Monitoring (CAM) Plan: Particulate matter was removed from the CAM plan since CAM does not apply.

Attachment B - Fugitive Coal Dust Emission Control Plan for the Unit 1 Truck Dump: Administrative updates provided by Minnkota.

<u>Comments/Recommendations</u>: It is recommended that Title V Permit to Operate No. AOP-28368 v6.0 be processed and considered for issuance following a 30-day public comment period and a subsequent 45-day EPA review period.