

## AIR POLLUTION CONTROL TITLE V PERMIT TO OPERATE

<b>Permittee:</b> <b>Name:</b> North Dakota State University  <b>Address:</b> NDSU Facilities Management Department 3200 P.O. Box 6050 Fargo, ND 58108	<b>Permit Number:</b> AOP-28364 v6.1  <b>Source Name:</b> North Dakota State University
<b>Source Location:</b> 1235 Bolley Drive Fargo, North Dakota 58102 Cass County	<b>Source Type:</b> Heating Plant
<b>Expiration Date:</b> June 11, 2028	

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

Renewal: 6/6/23  
Revision (Sig. Mod.): TBD

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James L. Semerad  
Director  
Division of Air Quality

**North Dakota State University**  
Title V Permit to Operate  
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1. **Emission Unit Identification:**

The emission units regulated by this permit are as follows:

**Table 1.1 Emission Unit Identification**

<b>Emission Unit Description</b>	<b>Emission Unit (EU)</b>	<b>Emission Point (EP)</b>	<b>Air Pollution Control Equipment</b>
Zurn Industries coal-fired boiler rated at $109.4 \times 10^6$ Btu/hr (built 1978) (MACT JJJJJ)	2	02 HP	Zurn Industries multiclone Model MTSA-64-9CYT-TA followed by a Baghouse
Cleaver Brooks Model DL-76 natural gas-fired (distillate oil backup) boiler rated at $75.8 \times 10^6$ Btu/hr (built 1990) (NSPS Dc)	3 <sup>A</sup>	02 HP	None
Erie City coal-fired boiler rated at $92.8 \times 10^6$ Btu/hr (built 1962) (MACT JJJJJ)	4	02 HP	Zurn Industries multiclone Model MTSA-56-9CYT-TA-A-RV followed by a Baghouse
English Boiler and Tube natural gas-fired (distillate oil backup) boiler Model 100-DS-250 rated at $140 \times 10^6$ Btu/hr (built 2015) (NSPS Db)	9 <sup>A</sup>	01 HP	Low-NO <sub>x</sub> Burner
Two Johnston Model PFTX800-4LG150s natural gas-fired (ultra-low sulfur diesel backup) boilers each rated at approximately $32 \times 10^6$ Btu/hr (built 2023) (NSPS Dc)	14 <sup>A</sup> & 15 <sup>A</sup>	14 & 15	None
Approximately 36 diesel or natural gas-fired electrical generator engines ranging from a nominal 40 bhp to 2,941 bhp each (NSPS IIII & JJJJ; MACT ZZZZ; as appropriate)	101, 105 through 108, 110 through 114 & 116 through 141 <sup>B, C</sup>	Various	None

<sup>A</sup> Liquid fuel may be burned only during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year for the unit to meet the definition of a gas-fired boiler under 40 CFR §63.11237 (40 CFR 63, Subpart JJJJJ).

<sup>B</sup> Insignificant or fugitive emission sources (no specific emission limit).

<sup>C</sup> The potential to emit for an emergency stationary reciprocating internal combustion engine (RICE) is based on operating no more hours per year, for other than emergency situations, than is allowed by the subpart (40 CFR 60 Subparts IIII and JJJJ, and 40 CFR 63 Subpart ZZZZ). For engines to be considered emergency stationary RICE under the RICE rules, engine operations must comply with the operating hour limits as specified in the applicable subpart. There is no time limit on the use of emergency stationary RICE in emergency situations [40 CFR 60, Subpart IIII, §60.4211(f), Subpart JJJJ §60.4243(d), and 40 CFR 63, Subpart ZZZZ, §63.6640(f)].

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

**A. Fuel Use and Restrictions:**

- 1) EU 3 (Limit Emissions of NO<sub>x</sub>): Fuel usage and combustion shall be restricted to pipeline quality natural gas containing no more than 2.0 grains of sulfur per 100 standard cubic feet and distillate (fuel) oil containing no more than 0.0015 percent sulfur by weight, resulting in NO<sub>x</sub> emissions totaling less than 40 tons in any 12-month period (12-month rolling total). See Table 3.1.

This fuel restriction ensures compliance with NDAC 33.1-15-06-01.2 and NDAC 33.1-15-05-02.2.

Applicable Requirement: Permit to Construct (PTC) 1/15/92

- 2) EU 9 (Limit Emissions of NO<sub>x</sub>): Fuel usage and combustion shall be restricted to pipeline quality natural gas containing no more than 2.0 grains of sulfur per 100 standard cubic feet and distillate (fuel) oil containing no more than 0.0015 percent sulfur by weight, resulting in NO<sub>x</sub> emissions totaling less than 40 tons in any 12-month period (12-month rolling total). See Table 3.1.

This fuel restriction ensures compliance with NDAC 33.1-15-06-01.2 and NDAC 33.1-15-05-02.2.

Applicable Requirement: ACP-18153 v1.0

- 3) EU 2 and EU 4: Fuel for EU 2 and 4 shall be coal.

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

- 4) EU 14, 15 and the Generator Engines (EU 101, 105 through 108, 110 through 114 and 116 through 141): Combust only pipeline quality natural gas containing no more than 2 grains of sulfur per 100 standard cubic feet or distillate oil containing no more than 0.0015 percent sulfur by weight. This fuel restriction ensures compliance with NDAC 33.1-15-06-01.2 and NDAC 33.1-15-05-02.2.

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

**B. Insignificant Units Inventory:**

- 1) Equipment meeting the definition of an insignificant unit may be added, deleted, or replaced without a permit modification. By definition, an insignificant unit is an emission unit that has the potential to emit less than two tons per year of any individual criteria pollutant and less than 0.5 tons per year of any individual air toxic pollutant.

- a) An insignificant units inventory shall be maintained and updated annually by the permittee.
- 2) The insignificant units inventory shall also identify the engines to which 40 CFR 60, Subpart IIII, 40 CFR 60, Subpart JJJJ, and/or 40 CFR 63, Subpart ZZZZ apply, as well as emergency or nonemergency (peaking/on-demand) status.

Applicable Requirements: NDAC 33.1-15-12-02, Subparts IIII and JJJJ, NDAC 33.1-15-14-06 and 40 CFR 63, Subpart ZZZZ

C. **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 Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units (EU 9).
  - a) EU 9 is a high heat release rate boiler per Subpart Db, with a heat release rate of 79,414 Btu/hr-ft<sup>3</sup> while firing natural gas and 77,350 Btu/hr-ft<sup>3</sup> while firing #2 fuel oil.
- 2) Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units (EU 3, 14 and 15).
- 3) Subpart IIII (4I) – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (affected diesel engines manufactured after April 1, 2006).
- 4) Subpart JJJJ (4J) – Standards of Performance for stationary Spark Ignition Internal Combustion Engines (affected natural gas engines manufactured after June 12, 2006).

Applicable Requirements: NDAC 33.1-15-12, Subparts A, Db, Dc, IIII and JJJJ

D. **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 (4Z) – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engine (EU 101, 105 through 108, 110 through 114 and 116 through 141, as applicable). As an area source of HAP emissions, compliance with Subpart ZZZZ is achieved by complying with the applicable NSPS Subpart IIII or JJJJ as appropriate. The Department has not adopted the area source provisions of this subpart. Please send all documentation to EPA at the following address:

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

- 2) Subpart JJJJJ (6J) – National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers (EU 2 and EU 4).
- a) Boilers EU 3, 9, 14 and 15 combust natural gas with distillate oil as a backup fuel. Gas-fired boilers that fire liquid fuels only during periods of gas curtailment, gas supply interruption, startup or for periodic testing (not to exceed 48 hours per calendar year) are still considered gas-fired boilers. The rule does not apply if compliance with the above operating scenarios is demonstrated and documented.
- b) Boilers EU 2 and 4 combust coal and are subject to the rule to include emission limits for Hg and CO, initial and periodic performance testing for Hg and CO, a one-time energy assessment, minimizing startup/shutdown periods, operating monitoring systems, monitoring and collecting data according to the site-specific monitoring plan, and submitting reports.
- 1] Conduct an energy assessment and submit report: §63.11214(c).
- 2] Implement work practice standards for startups and shutdowns: Table 2, Subpart 6J and §63.11201.
- 3] Install, operate, and maintain a continuous emission monitoring system (CEMS) for CO and oxygen, or install, calibrate, operate, and maintain an oxygen analyzer system: §63.11224(a).
- 4] Triennial stack testing for Hg and CO is required no later than 37 months after the initial or previous test: §63.11220(a).
- 5] Establish operating limits for CO based on oxygen and for Hg based on boiler operating load according to Table 6, Subpart 6J and § 63.11211.
- 6] Record monthly the type and amount of all fuels burned: §63.11225(c)(2)(iv).
- 7] Comply with operating limits in § 63.11201 as follows: maintain boiler operating load not to exceed 110% of the average operating load recorded during the most recent performance stack test; and, maintain the 30-day rolling average oxygen level at or above the minimum level which is the lowest hourly average oxygen level measured during the most recent performance stack test demonstrating compliance with the CO emission limit.

- 8] An annual compliance certification report is due by March 1, 2015 and thereafter by March 1 of each calendar year: §63.11225(b)(1) through (4).

Applicable Requirements: NDAC 33.1-15-22-03, Subparts A and 6J and 40 CFR 63, Subpart ZZZZ

E. **Like-Kind Engine Replacement:** This permit allows the permittee to replace an existing engine with a like-kind engine. Replacement is subject to the following conditions:

- 1) The Department must be notified within 10 days after the engine change out.
- 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 manufacturer 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)

F. **Stack Height:** Emissions from boilers EU 14 and 15 shall each be vented from a height of at least 55 feet.

Applicable Requirement: ACP-18225 v1.0

### 3. Emission Unit Limits:

**Table 3.1 Emission Unit Limits**

Emission Unit Description	EU	EP	Pollutant/Parameter	Emission/Parameter Limit <sup>A</sup>	NDAC Applicable Requirement
Zurn Industries coal-fired boiler	2	02 HP	PM	0.438 lb/10 <sup>6</sup> Btu	33.1-15-05-02.2.a & b
			SO <sub>2</sub>	3.0 lb/10 <sup>6</sup> Btu	33.1-15-06
			CO	420 ppmvd @ 3% O <sub>2</sub>	33.1-15-22-03, Subpart 6J
			Hg	0.000022 lb/10 <sup>6</sup> Btu	33.1-15-22-03, Subpart 6J
			Opacity	20% <sup>B</sup>	33.1-15-03-01.2

Emission Unit Description	EU	EP	Pollutant/Parameter	Emission/Parameter Limit <sup>A</sup>	NDAC Applicable Requirement
Cleaver Brooks natural gas-fired boiler	3	02 HP	PM	0.46 lb/10 <sup>6</sup> Btu	33.1-15-05-02.2.b
			NO <sub>x</sub>	10.4 lb/hr & <40 tons/12-months <sup>D</sup>	PTC 1/15/92
			Opacity: Natural Gas	20% <sup>B</sup>	33.1-15-03-02
			Distillate Oil	20% <sup>C</sup>	33.1-15-12-02, Subpart Dc
Erie City coal-fired boiler	4	02 HP	PM	0.448 lb/10 <sup>6</sup> Btu	33.1-15-05-02.2.a & b
			SO <sub>2</sub>	3.0 lb/10 <sup>6</sup> Btu	33.1-15-06
			CO	420 ppmvd @ 3% O <sub>2</sub>	33.1-15-22-03, Subpart 6J
			Hg	0.000022 lb/10 <sup>6</sup> Btu	33.1-15-22-03, Subpart 6J
			Opacity	20% <sup>B</sup>	33.1-15-03-01.2
English Boiler and Tube natural gas-fired boiler	9	01 HP	NO <sub>x</sub>	0.20 lb/10 <sup>6</sup> Btu heat input (30-day rolling average) & <40 tons/12-months <sup>D</sup>	ACP-18153 v1.0
			Opacity: Natural Gas	20% <sup>B</sup>	33.1-15-03-02
			Distillate Oil	20% <sup>C</sup>	33.1-15-12-02, Subpart Db
Two Johnston natural gas-fired boilers	14 & 15	14 & 15	Opacity: Natural Gas	20% <sup>B</sup>	ACP-18225 v1.0 & 33.1-15-03-02
			Distillate Oil	20% <sup>C</sup>	33.1-15-12-02, Subpart Dc
Diesel or natural gas-fired electrical generator engines	101, 105 to 108, 110 to 114 & 116 to 141	Various	Opacity	20% <sup>B</sup>	33.1-15-03-02
			Operating Hours	Condition 1 Footnote D & Condition 2.B	33.1-15-12-02, Subpart IIII, 33.1-15-12-02, Subpart JJJJ, 40 CFR 63, Subpart ZZZZ

<sup>A</sup> Emission limits apply to each individual emission point.

<sup>B</sup> 40% opacity is permissible for not more than one six-minute period per hour. Applies at all times.

<sup>C</sup> 27% opacity is permissible for not more than one six-minute period per hour. Applies at all times, except during periods of startup, shutdown or malfunction.

<sup>D</sup> NO<sub>x</sub> emissions shall total less than 40 tons in any 12-month period (12-month rolling total) as calculated by Condition 4.B.10.



4. **Monitoring Requirements and Conditions:**

A. **Requirements:**

**Table 4.1 Emission Monitoring**

<b>Emission Unit Description</b>	<b>EU</b>	<b>Pollutant/ Parameter</b>	<b>Monitoring Requirement (Method)</b>	<b>Condition Number</b>	<b>NDAC Applicable Requirement</b>
Zurn Industries coal-fired boiler	2	PM	Compliance Assurance Monitoring (CAM) & Emissions Testing	4.B.3 & 4.B.4	33.1-15-14-06.10 & 33.1-15-06.5.a(3)(a)
		SO <sub>2</sub>	Fuel Analysis & Calculation	4.B.1	33.1-15-14-06.5.a(3)(a)
		CO	CEMS or oxygen analyzer & Emissions Testing	2.D.2)b	33.1-15-22-03, Subpart 6J
		Hg	Emissions Testing	2.D.2)b	33.1-15-22-03, Subpart 6J
		Opacity	VEE	4.B.2	33.1-15-14-06.5.a(3)(a)
Cleaver Brooks natural gas-fired boiler	3	PM/Opacity	Recordkeeping	4.B.7	33.1-15-14-06.5.a(3)(a)
		NO <sub>x</sub>	Emissions Testing/O&M & Monthly Calculation	4.B.6 & 4.B.10	33.1-15-14-06.5.a(3)(a)
		Fuel Usage & Type	Flow Meter & Fuel Analysis	4.B.5	PTC 1/15/92 & 33.1-15-12-02, Subpart Dc
Erie City coal-fired boiler	4	PM	CAM & Emissions Testing	4.B.3 & 4.B.4	33.1-15-14-06.10 & 33.1-15-14-06.5.a(3)(a)
		SO <sub>2</sub>	Fuel Analysis & Calculations	4.B.1	33.1-15-14-06.5.a(3)(a)
		CO	CEMS or oxygen analyzer & Emissions Testing	2.D.2)b	33.1-15-22-03, Subpart 6J
		Hg	Emissions Testing	2.D.2)b	33.1-15-22-03, Subpart 6J
		Opacity	VEE	4.B.2	33.1-15-14-06.5.a(3)(a)

Emission Unit Description	EU	Pollutant/ Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
English Boiler and Tube natural gas-fired boiler	9	NO <sub>x</sub>	CEMS & Monthly Calculation	4.B.8, 4.B.9 & 4.B.10	33.1-15-12-02, Subpart Db & 33.1-15-14-06.5.a(3)(a)
		Opacity <sup>A</sup>	Recordkeeping	4.B.7	33.1-15-14-06.5.a(3)(a)
		Fuel Usage & Type	Flow Meter & Fuel Analysis	4.B.5	33.1-15-14-06.5.a(3)(a)
Two Johnston natural gas-fired boilers	14 & 15	Opacity	Recordkeeping	4.B.7	33.1-15-14-06.5.a(3)(a)
		Fuel Usage & Type	Flow Meter & Fuel Analysis	4.B.5	33.1-15-14-06.5.a(3)(a) & 33.1-15-12-02, Subpart Dc
Diesel or natural gas-fired electrical generator engines	101, 105 to 108, 110 to 114 & 116 to 141	Opacity	Recordkeeping	4.B.7	33.1-15-14-05.4.a(3)(a)
		Operating Hours	Recordkeeping	4.B.11	33.1-15-12-02, Subpart IIII, 33.1-15-12-02, Subpart JJJJ, 40 CFR 63, Subpart ZZZZ

<sup>A</sup> Although opacity for the EU 9 boiler may be monitored by a Continuous Opacity Monitoring System (COMS), there is no requirement to do so.

**B. Monitoring Conditions:**

- 1) The sulfur content of the fuel used shall be analyzed with each shipment using ASTM or Department approved methods. The sulfur analysis for the fuel may be conducted by the permittee or by the source where the fuel is purchased. The permittee shall calculate sulfur dioxide emission rates from the sulfur content of the fuel using the following equations or other methods approved by the Department.

- a) For lignite coal:

$$SO_2 \text{ emissions (lb) per million Btu} = 30(\%S)/(EC)$$

Where: 30(%S) = The product of 30 multiplied by the coal sulfur content (%S); (from AP-42, Fifth Edition).

and EC = The coal energy content in 10<sup>6</sup> Btu per ton coal.

b) For subbituminous coal:

$$SO_2 \text{ emissions (lb) per million Btu} = 35(\%S)/(EC)$$

Where: 35(%S) = The product of 35 multiplied by the coal sulfur content (%S); (from AP-42, Fifth Edition).

and EC = The coal energy content in  $10^6$  Btu per ton coal.

- 2) 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 using 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 that are discovered must be corrected as soon as possible. If the correction of the emissions is expected to take longer than 24 hours, the permittee shall follow procedures as outlined in Condition 7.G.
    - 2] Following corrective maintenance, a formal visible emissions evaluation shall be made. Opacity reading shall consist of three consecutive six-minute periods per day of visible emissions using EPA Reference Method 9 and conducted by a certified visible emissions reader.
  - c) All instances of visible emissions, investigations of malfunctions and corrective actions 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.
- 3) For EU 2 and 4 the permittee shall monitor particulate matter emissions in accordance with the Compliance Assurance Monitoring (CAM) Plan in Attachment A of this permit. The permittee shall conduct monitoring, recordkeeping and reporting as required by NDAC 33.1-15-14-06.10 and 40 CFR 64.
- 4) Within two years of issuance of a renewal permit, the permittee shall conduct an emissions test for EU 2 and 4 to measure particulate emissions using EPA Test Methods in 40 CFR 60, Appendix A. A test shall consist of three runs, with each run at least one hour in length. Other test methods may be used provided they are approved in advance by the Department.

- 5) To ensure compliance with the fuel restrictions in Conditions 2.A.1, 2.A.2 and 2.A.4, flow meters shall be maintained and operated to measure actual quantities of natural gas and fuel oil combusted in EU 3, 9, 14 and 15.
  - a) Fuel supplier certification may be used to demonstrate compliance with the fuel sulfur limit.
- 6)
  - a) Within two years of issuance of a renewal permit, to provide a reasonable assurance of compliance, the permittee shall conduct an emissions test to measure NO<sub>x</sub> emissions, using at a minimum, a portable analyzer with quality assurance procedures equivalent to Conditional Test Methods 22 and/or 30 as outlined in EPA's Emission Measurement Center or the Department's Standard Operating Procedure, Use of Portable Analyzer for Title V Semi-Annual Testing. A test shall consist of three runs, with each run at least 20 minutes in length.
  - b) The manufacturer's recommended operations and maintenance (O&M) procedures, or site-specific O&M procedures (developed from the manufacturer's recommended O&M procedures), shall be followed to assure proper operation and maintenance of the emission unit. The permittee shall have the O&M procedures available on-site and provide the Department with a copy when requested.
- 7) For purposes of compliance monitoring, burning of gaseous fuel and distillate oil as outlined in Conditions 2.A.1, 2.A.2 and 2.A.4 shall be considered credible evidence of compliance with the applicable opacity, and particulate emission standard. However, results from tests conducted in accordance with the test methods in 40 CFR 50, 51, 60, 61, or 75 will take precedence over burning of gaseous fuel and fuel oil for evidence of compliance or noncompliance with any applicable opacity, particulate matter emission limit or distillate oil in the opacity limit in the event of an enforcement action.
- 8) The permittee shall monitor nitrogen oxides emissions in accordance with 40 CFR 60, Subpart Db.
  - a) The permittee shall calibrate, maintain, and operate a system for continuously monitoring and recording NO<sub>x</sub> on a lb/10<sup>6</sup> Btu basis. The monitoring and recording shall be in accordance with the requirements for Notification and Recordkeeping (40 CFR 60.7) and monitoring requirements (40 CFR 60.13) as adopted by reference in the North Dakota Air Pollution Control Rules under Section 33.1-15-12-02 or quality assurance procedures approved in advance by the Department.
  - b) The quality assurance requirements applicable to the CEMS are specified in Appendix F of 40 CFR 60.
  - c) When a failure of a CEMS occurs, an alternative method, acceptable to the Department, for measuring or estimating emissions must be undertaken as soon as possible. Timely repair of the emission monitoring system must be made.

- d) The Department may require additional audits of the CEMS.
- 9) The monitoring system shall report NO<sub>x</sub> emissions on a lb/10<sup>6</sup> Btu basis. The continuous emission monitoring systems (CEMS) shall be used to determine compliance with the NO<sub>x</sub> emission limits applicable to the boiler (EP 9).
- a) The CEMS shall be certified to comply with the applicable requirements of 40 CFR 60, Appendix B, Performance Specification 2 for a CEMS.
  - b) A relative accuracy test audit (RATA) shall be conducted annually on the NO<sub>x</sub> CEMS in accordance with the applicable procedures in 40 CFR 60, Appendix B, Performance Specification 2 for a CEMS.
- 10) For EU 3 and EU 9, on the first day of each month, the permittee shall determine the 12-month NO<sub>x</sub> emission rate utilizing the following equations.
- a) 
$$\text{EU 3 tons of NO}_x = 5.0 \times 10^{-8} (\text{NG}) + 10 \times 10^{-6} (\text{FO})$$

Where: NG = the number of cubic feet of natural gas combusted in the boiler during the previous 12-month period.

FO = the number of gallons of fuel oil combusted in the boiler during the previous 12-month period
  - b) 
$$\text{EU 9 tons of NO}_x = 7.0 \times 10^{-8} (\text{NG}) + 12 \times 10^{-6} (\text{FO})$$

Where: NG = the number of cubic feet of natural gas combusted in the boiler during the previous 12-month period.

FO = the number of gallons (volume) of fuel oil combusted in the boiler during the previous 12-month period.
  - c) In the event that NO<sub>x</sub> emissions from EU 3 or EU 9 are greater than or equal to 40 tons/yr, the permittee shall notify the Department, in writing, by the 15th day of the month that the exceedance was determined and include an explanation of why the exceedance occurred and the steps taken to ensure continual compliance.
- 11) A log shall be kept of the total hours of operation on a calendar year basis for each engine using a non-resettable hour meter. For emergency engines, records shall be maintained to differentiate between time operated for emergency purposes, for maintenance/testing purposes, and for other nonemergency purposes.
- a) For certified engines, collect operational and maintenance data to demonstrate that the facility complies with the engine manufacturer's emission-related written instructions [40 CFR 60.4211(a)].

C. In addition to the requirements outlined in Conditions 4.B, monitoring shall be in accordance with the following requirements of the North Dakota Air Pollution Control Rules (NDAC) 33.1-15-12 and 33.1-15-22, as applicable.

- 1) NDAC 33.1-15-12-02, Subpart A, §60.13, Monitoring Requirements
- 2) NDAC 33.1-15-12-02, Subpart Db, §60.47b and §60.48b, Emission Monitoring
- 3) NDAC 33.1-15-12-02, Subpart Dc, §60.46c and §60.47c, Emission Monitoring
- 4) NDAC 33.1-15-22-03, Subpart A, §63.8, Monitoring Requirements
- 5) NDAC 33.1-15-22-03, Subpart 6J, §63.11221 Monitoring Data

Applicable Requirements: NDAC 33.1-15-12-02 and NDAC 33.1-15-22-03

**5. Recordkeeping Requirements:**

A. The permittee shall maintain compliance monitoring records as outlined in the Monitoring Records table that include the following information.

- 1) The date, place (as defined in the permit) and time of sampling or measurement.
- 2) The date(s) testing was performed.
- 3) The company, entity, or person that performed the testing.
- 4) The testing techniques or methods used.
- 5) The results of such testing.
- 6) The operating conditions that existed at the time of sampling or measurement.

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

**Table 5.1 Monitoring Records**

<b>Emission Unit Description</b>	<b>EU</b>	<b>Pollutant/Parameter</b>	<b>Compliance Monitoring Record</b>
Zurn Industries coal-fired boiler	2	PM	CAM Data & Emissions Test Data
		SO <sub>2</sub>	Fuel Analysis & Calculation Data
		CO	CEMS/Oxygen Analyzer Data & Emissions Test Data
		Hg	Emissions Test Data
		Opacity	VEE Data
Cleaver Brooks Model DL natural gas-fired boiler	3	PM/Opacity	Type of Fuel Usage
		NO <sub>x</sub>	Emissions Test Data/O&M Data & Monthly Calculation Data
		Fuel Usage & Type	Flow Meter & Fuel Analysis Data
Erie City coal-fired boiler	4	PM	CAM Data & Emissions Test Data
		SO <sub>2</sub>	Fuel Analysis & Calculation Data
		CO	CEMS/Oxygen Analyzer Data & Emissions Test Data
		Hg	Emissions Test Data
		Opacity	VEE Data
English Boiler and Tube natural gas-fired boiler	9	NO <sub>x</sub>	CEMS Data & Monthly Calculation Data
		Opacity	Type of Fuel Usage
		Fuel Usage & Type	Flow Meter & Fuel Analysis Data
Two Johnston natural gas-fired boilers	14 & 15	Opacity	Type of Fuel Usage
		Fuel Usage & Type	Flow Meter & Fuel Analysis Data
Diesel or natural gas-fired electrical generator engines	101, 105 to 108, 110 to 114 & 116 to 141	Opacity	Type of Fuel Usage
		Operating Hours	Hours of Operation Data

B. In addition to the requirements outlined in Condition 5.A, recordkeeping shall be in accordance with the following requirements of the NDAC 33.1-15-12, 33.1-15-14 and 33.1-15-22, as applicable.

- 1) NDAC 33.1-15-12-02, Subpart A, §60.7, Notification and recordkeeping
- 2) NDAC 33.1-15-12-02, Subpart Db, §60.49b, Reporting and recordkeeping requirements (EU 9)
- 3) NDAC 33.1-15-12-02, Subpart Dc, §60.48c, Reporting and recordkeeping requirements (EU 3, 14 and 15)
- 4) NDAC 33.1-15-12-02, Subpart IIII, §60.4214, Notification, reports and records (EU 101, 105 to 108, 110 to 114 & 116 to 141, as applicable)
- 5) NDAC 33.1-15-12-02, Subpart JJJJ, §60.4245, Notification, reports and records (EU 101, 105 to 108, 110 to 114 & 116 to 141, as applicable)
- 6) NDAC 33.1-15-14-06.10, §64.9 - Reporting and Recordkeeping Requirements Paragraph (b) General Recordkeeping Requirements (EU 2 and 4).
- 7) NDAC 33.1-15-22-03, Subpart A, §63.10, Recordkeeping and reporting requirements
- 8) NDAC 33.1-15-22-03, Subpart JJJJJ, §63.11225 Notification, reporting and recordkeeping requirements (EU 2 and 4)
- 9) 40 CFR 63, Subpart ZZZZ, §63.6645 - §63.6660, Notifications, reports, and records (EU 101, 105 to 108, 110 to 114 & 116 to 141, as applicable)

Applicable Requirements: NDAC 33.1-15-12, Subparts A and Db, Dc, IIII, JJJJ, NDAC 33.1-15-14-06.10, NDAC 33.1-15-22-03, Subparts A and JJJJJ and 40 CFR 63, Subpart ZZZZ

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 the NDAC 33.1-15-12, 33.1-15-14 and 33.1-15-22, as applicable.

- 1) NDAC 33.1-15-12-02, Subpart A, §60.7, Notification and recordkeeping



- 2) NDAC 33.1-15-12-02, Subpart Db, §60.49b, Reporting and recordkeeping requirements (EU 9)
- 3) NDAC 33.1-15-12-02, Subpart Dc, §60.48c, Reporting and recordkeeping requirements (EU 3, 14 and 15)
- 4) NDAC 33.1-15-12-02, Subpart IIII, §60.4214, Notification, reports and records (EU 101, 105 to 108, 110 to 114 & 116 to 141, as applicable)
- 5) NDAC 33.1-15-12-02, Subpart JJJJ, §60.4245, Notification, reports and records (EU 101, 105 to 108, 110 to 114 & 116 to 141, as applicable)
- 6) NDAC 33.1-15-14-06.10, §64.9 - Reporting and Recordkeeping Requirements Paragraph (a) General Reporting Requirements (EU 2 and 4).
- 7) NDAC 33.1-15-22-03, Subpart A, §63.9 and §63.10, Notification requirements and Recordkeeping and reporting requirements
- 8) NDAC 33.1-15-22-03, Subpart JJJJJ, §63.11225 Notification, reporting and recordkeeping requirements (EU 2 and 4)
- 9) 40 CFR 63, Subpart ZZZZ, §63.6645 - §63.6660, Notifications, reports, and records (101, 105 to 108, 110 to 114 & 116 to 141, as applicable)

Applicable Requirements: NDAC 33.1-15-12, Subparts A and Db, Dc, IIII, JJJJ, NDAC 33.1-15-14-06.10 and NDAC 33.1-15-22-03, Subparts A and JJJJJ and 40 CFR 63, Subpart ZZZZ

- B. Quarterly Report: Quarterly excess emission reports for the boiler (EU 9) shall be submitted to the Department within 30 days following the end of each calendar quarter. Excess emissions are defined as emission rates which exceed the emission limits in Condition 3. Excess emissions shall be reported for the following:

<u>Parameter</u>	<u>Averaging Period</u>
NO <sub>x</sub> (lb/10 <sup>6</sup> Btu)	30-day rolling average (d.r.a.)

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

- C. Compliance with the NO<sub>x</sub> emission rate limit (ton/yr) and fuel usage restrictions for EU 3 and EU 9 shall be determined on a rolling 12-month basis. Quarterly reports shall be submitted to the Department within 30 days following the end of the calendar quarter including fuel usage totals, emissions totals and compliance determinations.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(3)(a)

- D. When oil supplier certification is being used to demonstrate compliance with SO<sub>2</sub> emission limits as indicated in 40 CFR 60, Subpart Dc for EU 3, 14 and/or 15, a semi-annual report shall be submitted with a certified statement signed by the owner or operator that the records of fuel supplier certifications represent all of the fuel combusted during the quarter.

Fuel supplier certification shall include the following information for distillate oil:

- 1) The name of the oil supplier; and
- 2) A statement from the oil supplier that the oil complies with the distillate oil specifications defined as fuel oil numbers 1 or 2 according to the American Society for Testing and Materials in ASTM D396-78, Standard Specifications for Fuel Oils.

Records shall be maintained for a period of three years to document the quantities of natural gas and oil combusted for each calendar year.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(3)(a) and NDAC 33.1-15-12-02, Subpart Dc

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

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

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

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

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

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

- H. The permittee shall submit an annual emission inventory report (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 33.1-15-02, external to buildings, to which the general public has access.
- 2) Radioactive substances. The permittee shall not release into the ambient air any radioactive substances exceeding the concentrations specified in NDAC 33.1-10.
- 3) Other air contaminants. The permittee shall not emit any other air contaminants in concentrations that would be injurious to human health or well-being or unreasonably interfere with the enjoyment of property or that would injure plant or animal life.
- 4) Disclaimer. Nothing in any other part or section of this permit may in any manner be construed as authorizing or legalizing the emission of air contaminants in such manner that would violate the standards in Paragraphs 1), 2) and 3) of this condition.

Applicable Requirements: NDAC 33.1-15-02-04 and 40 CFR 50.1(e)

B. **Fugitive Emissions:** The release of fugitive emissions shall comply with the applicable requirements in NDAC 33.1-15-17.

Applicable Requirement: NDAC 33.1-15-17

C. **Open Burning:** The permittee may not cause, conduct, or permit open burning of refuse, trade waste, or other combustible material, except as provided for in Section 33.1-15-04-02 and may not conduct, cause, or permit the conduct of a salvage operation by open burning. Any permissible open burning under NDAC 33.1-15-04-02 must comply with the requirements of that section.

Applicable Requirement: NDAC 33.1-15-04

D. **Asbestos Renovation or Demolition:** Any asbestos renovation or demolition at the facility shall comply with emission standard for asbestos in NDAC 33.1-15-13.

Applicable Requirement: NDAC 33.1-15-13-02

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

- 1) Any organic compounds, gases and vapors which are generated as wastes as the result of storage, refining or processing operations and which contain hydrogen sulfide shall be incinerated, flared or treated in an equally effective manner before being released into the ambient air.

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

Applicable Requirement: NDAC 33.1-15-07-02

- F. **Rotating Pumps and Compressors:** All rotating pumps and compressors handling volatile organic compounds must be equipped and operated with properly maintained seals designed for their specific product service and operating conditions.

Applicable Requirement: NDAC 33.1-15-07-01.5

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

- 1) Maintenance Shutdowns. In the case of shutdown of air pollution control equipment for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Department at least 24 hours prior to the planned shutdown provided that the air contaminating source will be operated while the control equipment is not in service. Such prior notice shall include the following:
  - a) Identification of the specific facility to be taken out of service as well as its location and permit number.
  - b) The expected length of time that the air pollution control equipment will be out of service.
  - c) The nature and estimated quantity of emissions of air pollutants likely to be emitted during the shutdown period.
  - d) Measures, such as the use of off-shift labor and equipment, that will be taken to minimize the length of the shutdown period.
  - e) The reasons that it would be impossible or impractical to 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 33.1-15-01-13.1

- 2) Malfunctions.
  - a) When a malfunction in any installation occurs that can be expected to last longer than 24 hours and cause the emission of air contaminants in violation of this article or other applicable rules and regulations, the person responsible for such installation shall notify the Department of such malfunction as soon as possible

during normal working hours. The notification must contain a statement giving all pertinent facts, including the estimated duration of the breakdown. The Department shall be notified when the condition causing the malfunction has been corrected.

- b) Immediate notification to the Department is required for any malfunction that would threaten health or welfare or pose an imminent danger. During normal working hours the Department can be contacted at 701-328-5188. After hours the Department can be contacted through the 24-hour state radio emergency number 1-800-472-2121. If calling from out of state, the 24-hour number is 701-328-9921.
- c) Unavoidable Malfunction. The owner or operator of a source who believes any excess emissions resulted from an unavoidable malfunction shall submit a written report to the Department which includes evidence that:
  - [1] The excess emissions were caused by a sudden, unavoidable breakdown of technology that was beyond the reasonable control of the owner or operator.
  - [2] The excess emissions could not have been avoided by better operation and maintenance, did not stem from an activity or event that could have been foreseen and avoided, or planned for.
  - [3] To the extent practicable, the source maintained and operated the air pollution control equipment and process equipment in a manner consistent with good practice for minimizing emissions, including minimizing any bypass emissions.
  - [4] Any necessary repairs were made as quickly as practicable, using off-shift labor and overtime as needed and possible.
  - [5] All practicable steps were taken to minimize the potential impact of the excess emissions on ambient air quality.
  - [6] The excess emissions are not part of a recurring pattern that may have been caused by inadequate operation or maintenance, or inadequate design of the malfunctioning equipment.

The report shall be submitted within 30 days of the end of the calendar quarter in which the malfunction occurred or within 30 days of a written request by the Department, whichever is sooner.

The burden of proof is on the owner or operator of the source to provide sufficient information to demonstrate that an unavoidable equipment malfunction occurred. The Department may elect not to pursue enforcement action after considering whether excess emissions resulted from an unavoidable equipment malfunction.

The Department will evaluate, on a case-by-case basis, the information submitted by the owner or operator to determine whether to pursue enforcement action.

Applicable Requirement: NDAC 33.1-15-01-13.2

- 3) Continuous Emission Monitoring System Failures. When a failure of a continuous emission monitoring system occurs, an alternative method for measuring or estimating emissions must be undertaken as soon as possible. The owner or operator of a source that uses an alternative method shall have the burden of demonstrating that the method is accurate. Timely repair of the emission monitoring system must be made. The provisions of this subsection do not apply to sources that are subject to monitoring requirements in Chapter 33.1-15-21 (40 CFR 75, Acid Rain Program).

Applicable Requirement: NDAC 33.1-15-01-13.3

- H. **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

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

- 1) The permittee shall not permit or cause air pollution, as defined in NDAC 33.1-15-01-04.
- 2) Nothing in any other part of this permit or any other regulation relating to air pollution shall in any manner be construed as authorizing or legalizing the creation or maintenance of air pollution.

Applicable Requirement: NDAC 33.1-15-01-15

- 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

- 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)

- 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 off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.

Applicable Requirements: NDAC 33.1-15-14-06.4 and NDAC 33.1-15-14-06.6

- C. **Transfer of Ownership or Operation:** This permit may not be transferred except by procedures allowed in Chapter 33.1-15-14 and is to be returned to the Department upon the destruction or change of ownership of the source unit(s), or upon expiration, suspension or revocation of this permit. A change in ownership or operational control of a source is treated as an administrative permit amendment if no other change in the permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department.

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

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

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

E. **Submissions:**

- 1) Reports, test data, monitoring data, notifications, and requests for renewal shall be submitted to 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, 2<sup>nd</sup> 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.
- 3) The Department or the United States Environmental Protection Agency determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 4) Reopenings shall not be initiated before a notice of intent to reopen is provided to the permittee by the Department at least 30 days in advance of the date that this permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency. Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

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

J. **Permit Changes:** The permit may be modified, revoked, reopened, and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

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

K. **Off-Permit Changes:** A permit revision is not required for changes that are not addressed or prohibited by this permit, provided the following conditions are met:

- 1) No such change may violate any term or condition of this permit.
- 2) Each change must comply with all applicable requirements.

- 3) Changes under this provision may not include changes or activities subject to any requirement under Title IV or that are modifications under any provision of Title I of the Federal Clean Air Act.
- 4) A Permit to Construct under NDAC 33.1-15-14-02 has been issued, if required.
- 5) Before the permit change is made, the permittee must provide written notice to both the Department and Air Program (8P-AR), Office of Partnerships & Regulatory Assistance, US EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129, except for changes that qualify as insignificant activities in Section 33.1-15-14-06. This notice shall describe each change, the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result.
- 6) The permittee shall record all changes that result in emissions of any regulated air pollutant subject to any applicable requirement not otherwise regulated under this permit, and the emissions resulting from those changes. The record shall reside at the permittee's facility.

Applicable Requirement: NDAC 33.1-15-14-06.6.b(3)

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

- 1) Corrects typographical errors.
- 2) Identifies a change in the name, address or phone number of any person identified in this permit or provides a similar minor administrative change at the source.
- 3) Requires more frequent monitoring or reporting by the permittee.
- 4) Allows for a change in ownership or operational control of the source where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the Department.
- 5) Incorporates into the Title V permit the requirements from a Permit to Construct when the review was substantially equivalent to Title V requirements for permit issuance, renewal, reopenings, revisions and permit review by the United States Environmental Protection Agency and affected state review, that would be applicable to the change if it were subject to review as a permit modification and compliance requirements substantially equivalent to Title V requirements for permit content were contained in the Permit to Construct.
- 6) Incorporates any other type of change which the Administrator of the United States Environmental Protection Agency has approved as being an administrative permit amendment as part of the Department's approved Title V operating permit program.

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

M. **Minor Permit Modification:** This permit may be revised by a minor permit modification, if the proposed permit modification meets the following requirements:

- 1) Does not violate any applicable requirement.
- 2) Does not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in this permit.
- 3) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis.
- 4) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include a federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the Federal Clean Air Act; and alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the Federal Clean Air Act.
- 5) Is not a modification under NDAC 33.1-15-12, 33.1-15-13, and 33.1-15-15 or any provision of Title I of the Federal Clean Air Act.
- 6) Is not required to be processed as a significant modification.

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

N. **Significant Modifications:**

- 1) Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments. Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions shall be considered significant. Nothing therein shall be construed to preclude the permittee from making changes consistent with this subsection that would render existing permit compliance terms and conditions irrelevant.
- 2) Significant permit modifications shall meet all Title V requirements, including those for applications, public participation, review by affected states, and review by the United States Environmental Protection Agency, as they apply to permit issuance and permit renewal. The Department shall complete review of significant permit modifications within nine months after receipt of a complete application.

Applicable Requirement: NDAC 33.1-15-14-06.6.e(3)

- O. **Operational Flexibility:** The permittee is allowed to make a limited class of changes within the permitted facility that contravene the specific terms of this permit without applying for a permit revision, provided the changes do not exceed the emissions allowable under this permit, are not Title I modifications and a Permit to Construct is not required. This class of changes does not include changes that would violate applicable requirements; or changes to federally-enforceable permit terms or conditions that are monitoring, recordkeeping, reporting, or compliance certification requirements.

The permittee is required to send a notice to both the Department and Air Program (8P-AR), Office of Partnerships & Regulatory Assistance, US EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129, at least seven days in advance of any change made under this provision. The notice must describe the change, when it will occur and any change in emissions, and identify any permit terms or conditions made inapplicable as a result of the change. The permittee shall attach each notice to its copy of this permit. Any permit shield provided in this permit does not apply to changes made under this provision.

Applicable Requirement: NDAC 33.1-15-14-06.6.b(2)

- P. **Relationship to Other Requirements:** Nothing in this permit shall alter or affect the following:
- 1) The provisions of Section 303 of the Federal Clean Air Act (emergency orders), including the authority of the administrator of the United States Environmental Protection Agency under that section.
  - 2) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.
  - 3) The ability of the United States Environmental Protection Agency to obtain information from a source pursuant to Section 114 of the Federal Clean Air Act.
  - 4) Nothing in this permit shall relieve the permittee of the requirement to obtain a Permit to Construct.

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

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

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

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

Applicable Requirement: NDAC 33.1-15-01-08

9. **State Enforceable Only Conditions (not Federally enforceable):**

- A. **General Odor Restriction:** The permittee shall not discharge into the ambient air any objectionable odorous air contaminant which exceeds the limits established in NDAC 33.1-15-16.

Applicable Requirement: NDAC 33.1-15-16

DRAFT

**Attachment A**

**Compliance Assurance Monitoring (CAM) Plan  
for Particulate Matter Control**

**North Dakota State University  
Title V Permit to Operate**

EU 2 ( $109.4 \times 10^6$ Btu/hr Boiler) -	Multiclone Followed by a Baghouse (EP 02 HP)
EU 4 ( $92.8 \times 10^6$ Btu/hr Boiler) -	Multiclone Followed by a Baghouse (EP 02 HP)