### North Dakota Department of Environmental Quality Public Notice Reissue of an NDPDES Permit

Public Notice Date: 7/31/2024 Public Notice Number: ND-2024-014

#### **Purpose of Public Notice**

The Department intends to reissue the following North Dakota Pollutant Discharge Elimination System (NDPDES) Discharge Permit under the authority of Section 61-28-04 of the North Dakota Century Code.

#### **Permit Information**

Application Date: 7/2/2024 Application Number: ND0026654

Applicant Name: Pioneer Generating Station

Mailing Address: 1717 E Interstate Ave, Bismarck, ND 58503

Telephone Number: 701.557.5488

Proposed Permit Expiration Date: 9/30/2029

## Facility Description

The re-application is for a natural gas fired electric power generating station located in Township 155 North, Range 102 West, Section 20, SE ¼ and NE ¼ , in Williams County. Discharges consist of site runoff and cooling tower blowdown that is discharged from Outfall 001 to an unnamed tributary of Painted Woods Creek, a Class III stream.

#### **Tentative Determinations**

Proposed effluent limitations and other permit conditions have been made by the Department. They assure that State Water Quality Standards and applicable provisions of the FWPCAA will be protected.

#### **Information Requests and Public Comments**

Copies of the application, draft permit, and related documents are available for review. For further information on making public comments/public comment tips please visit: https://deq.nd.gov/PublicCommentTips.aspx. Comments or requests should be directed to the ND Dept of Env Quality, Div of Water Quality, 4201 Normandy Street, Bismarck ND 58503-1324 or by calling 701.328.5210.

All comments received by August 30, 2024 will be considered prior to finalizing the permit. If there is significant interest, a public hearing will be scheduled. Otherwise, the Department will issue the final permit within sixty (60) days of this notice.

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, contact the NDDEQ Non-discrimination Coordinator at 701-328-5210 or deqEJ@nd.gov. TTY users may use Relay North Dakota at 711 or 1-800-366-6888.

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# FACT SHEET FOR NDPDES PERMIT ND0026654

#### **PERMIT ISSUANCE**

# BASIN ELECTRIC POWER COOPERATIVE - PIONEER GENERATING STATION DATE OF THIS FACT SHEET – July 2024

#### INTRODUCTION

The Federal Clean Water Act (CWA, 1972, and later amendments in 1977, 1981, and 1987, etc.) established water quality goals for the navigable (surface) waters of the United States. One mechanism for achieving the goals of the CWA is the National Pollutant Discharge Elimination System (NPDES), which the US Environmental Protection Agency (EPA) oversees. In 1975, the State of North Dakota was delegated primacy of the NPDES program by EPA. The North Dakota Department of Environmental Quality, hereafter referred to as "department", has been designated the state water pollution control agency for all purposes of the Federal Water Pollution Control Act, as amended [33 U.S.C. 1251, et seq.], and is authorized to take all action necessary or appropriate to secure to this state the benefits of the act and similar federal acts. The department's authority and obligations for the wastewater discharge permit program is in the North Dakota Administrative Code (NDAC) 33.1-16 which was adopted under North Dakota Century Code (NDCC) chapter 61-28. In North Dakota, these permits are referred to as North Dakota Pollutant Discharge Elimination System (NDPDES) permits.

The following rules or regulations apply to NDPDES permits:

- Procedures the department follows for issuing NDPDES permits (NDAC chapter 33.1-16-01),
- Standards of Quality for Waters of the State (NDAC chapter 33.1-16-02.1).

These rules require any treatment facility operator to obtain an NDPDES permit before discharging wastewater to state waters. They also define the basis for limits on each discharge and for other requirements imposed by the permit.

According to NDAC section 33.1-16-01-08, the department must prepare a draft permit and accompanying fact sheet and make it available for public review. The department must also publish an announcement (public notice) during a period of thirty days, informing the public where a draft permit may be obtained and where comments regarding the draft permit may be sent (NDAC chapter 33.1-16-01-07). For more information regarding preparing and submitting comments about the fact sheet and permit, please see Appendix A - Public Involvement. Following the public comment period, the department may make changes to the draft NDPDES permit. The department will summarize the responses to comments and changes to the permit in Appendix D - Response to Comments.

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# FACT SHEET FOR NDPDES PERMIT ND0026654 BASIN ELECTRIC POWER COOPERATIVE - PIONEER GENERATING STATION EXPIRATION DATE: 09/30/2029

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### **BACKGROUND INFORMATION**

Table 1: General Facility Information

Applicant:	Basin Electric Power Cooperative
Facility Name and Address:	Pioneer Generating Station
	5639 151 Avenue NW
	Williston, ND 58801
Facility Location:	SE ¼ and NE ¼ Sec. 20, Twp. 155 N, Range
	103 W, Williams County
Permit Number:	ND0026654
Permit Type:	Minor Industrial, Permit Reissuance
Type of Treatment:	Sedimentation Pond
SIC Code:	4911-Electric Services
NAICS Code:	221112 – Fossil Fuel Electric Power Generation
Discharge Location:	Outfall 001:
	Latitude: 48.233527
	Longitude: -103.950951
Hydrologic Code:	10110101 – Lake Sakakawea
	10060005 – Charlie-Little Muddy
Receiving Waters:	Unnamed tributary to Painted Woods Creek, a
	Class III Stream
	Unnamed tributary to Little Muddy Creek, a
	Class III Stream

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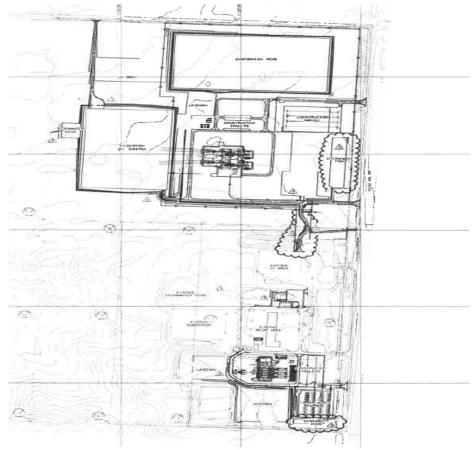
Figure 1:Pioneer Generation Station Overview.



BASIN ELECTRIC POWER COOPERATIVE - PIONEER GENERATING STATION

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### **FACILITY DESCRIPTION**

Pioneer Generating Station is an electrical generation facility which uses natural gas to generate approximately up to 839 megawatts (MW) of electricity from 23 units. Expansion of the station has occurred in phases.

The station is comprised of three natural gas-fired simple-cycle combustion turbines (SCCT) with a total generating capacity of 135 MW (Phase I and II), and 12 natural gas-fired reciprocating internal combustion engines (RICE) capable of generating 111 MW (Phase III). Phase IV is an expansion of the existing facility that includes the addition of two SCCT producing approximately 480 MW, and six additional RICE capable of producing a total of approximately 110 MW. The SCCT units use dry low emission burner technology along with an anhydrous ammonia-based selective catalytic reduction (SCR) system for nitrogen oxide (NOx) control.

Potable water is supplied to the facility from the local rural water distribution system. The potable water is treated by a portable demineralization trailer which further filters the water. The demineralization trailer is provided by an outside contractor, and when required, the

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demineralized water can be generated off site. The demineralization trailer is a self-contained filter system, no reject water is generated by the trailer. Demineralized water is injected into the SCCT for nitrogen oxide NOx control. A mixture of demineralized and potable water is used to cool SCCT air inlet temperatures during hot weather operation (evaporative cooling or spray mist). The injected NOx control water is used up in the process of controlling emissions and evaporated (with emissions exiting through the stack).

The SCCT and RICE are cooled by an evaporative cooling system. Evaporative cooling water is pumped to the top of the evaporative cooling system from a sump and as the water trickles down through the media, some of the water is evaporated. The evaporated water does not contain any minerals, resulting in an overall increase in the concentration of minerals as the water returns to the sump. New make-up water is added to the sump to replace water lost through evaporation. Over time, minerals become concentrated in the sump water. When the evaporative cooling water reaches a conductivity level of 1,500 micromhos/cm, the blow down system is purged until a lower conductivity level of 1,200 micromhos/cm is reached. The purged water is routed to the sedimentation ponds. No process wastewater is generated by the RICEs and the mechanical facilities are completely enclosed.

### **History**

Basin Electric Power Cooperative's Pioneer Generation Station was built to serve the increasing demand for electricity by member cooperatives in northwest North Dakota. The facility has four phases of construction. Phase I was the construction of SCCT Unit 1 and started commercial operation in December of 2013. Phase two was the addition of SCCT Unit 2 and Unit 3 started commercial operation in 2014. SCCT Units 1, 2, and 3 utilize an evaporative cooling system during the hot months to reduce the turbine air inlet temperatures. Phase III was the addition of 12 RICE in 2017. Currently Basin Electric Power Cooperative is in the process of constructing Phase IV expansion. This expansion includes two additional SCCT and six RICE units.

#### **Treatment System**

Stormwater runoff from the Phase I footprint, existing SCCT evaporative cooling tower blow down, and sump overflows are routed to a sedimentation pond. The design capacity of the pond is approximately 34,304 cubic feet at a 3-foot water depth. The pond is also sized to accommodate 2 feet of sediment accumulation with 2 feet of freeboard. The pond is designed to hold stormwater runoff from a 25-year, 24-hour rainfall event. The pond has one outlet; an 18-inch diameter pipe controlled by a valve on the west side of the pond. In the northwest corner of the pond there is a riprap lined overflow spillway. The department determined discharges from this outlet (Outfall 001) are a regulated point source of pollution.

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Plant site stormwater from Phase III is routed to a second stormwater pond which has a design capacity of approximately 677,700 cubic feet. The pond is sized to accommodate runoff from a 25-year, 24-hour rainfall event. This pond is discharged from a point on the west side of the facility, to an unnamed drainage. RICE are housed in buildings and no process wastewater is discharged to the pond. The pond is being reshaped as part of the Phase IV expansion with more efficient drainage. The department determined runoff from this area does not meet the definition of "storm water discharge associated with industrial activity" and is not a regulated point source of pollution.

The evaporative cooling water and blowdown from the two SCCT in Phase IV will be directed to a non-discharging, evaporative pond on the north side of the site. RICE are housed in buildings and no process wastewater is discharged to the pond. The design capacity of the pond is approximately 4,704,480 cubic feet. The pond was not constructed with an outlet.

Additional stormwater retention ponds are located on the far southeast corner of the facility and along the northeast corner of the site, these discharges are east to unnamed drainages. They are designed to be freely draining within 72 hours and not long-term retention ponds. The department determined runoff from these areas does not meet the definition of "storm water discharge associated with industrial activity" and is not a regulated point source of pollution.

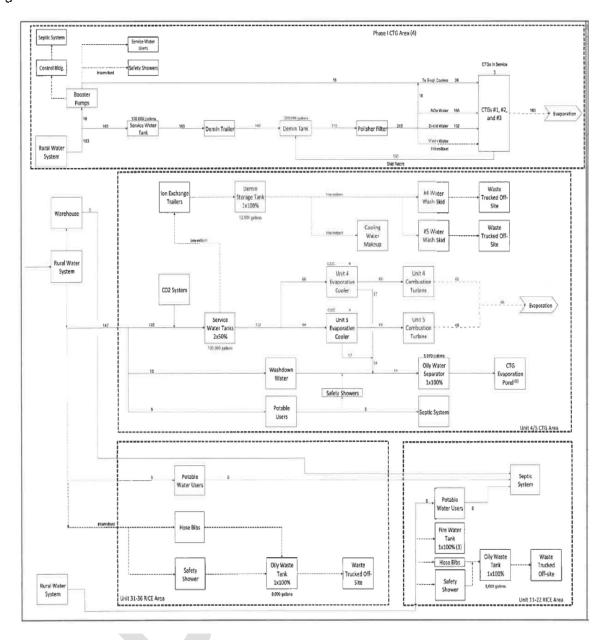
Sanitary waste is managed with onsite septic systems.

Below is the water balance provided to the department in the permit application:

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### **Outfall Description**

Outfall 001. Active. Final Outfall. Sedimentation Pond. Industrial Wastewater.					
Latitude: 48.233527 Longitude: -103.950951 County: McKenzie					
Township: 155 N Range: 103 W Section: 20 QQ: DAA					
Receiving Stream: Unnamed tributary to Painted Woods Creek  Classification: Class III Stream					
	nt is the final discharge point f liameter pipe to an unnamed t				

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#### **PERMIT STATUS**

The department issued the previous permit for the facility on October 1, 2019. The permit had self-monitoring requirements for Percent Sodium (%Na), Chlorides (CI), Sulfates (SO<sub>4</sub>), Total Suspended Solids (TSS), pH, Oil and Grease, discharge flow, and amount drained. The previous permit had effluent limitations for TSS, pH, and Oil and Grease.

The department was in contact with Basin Electric Power Cooperative to obtain information to reissue the permit. The department received EPA applications Forms 1 and 2C on July 2, 2024. The application was accepted by the department on July 8, 2024. Effluent sample data was provided to the department through official laboratory reports, discharge monitoring reports, and the permit application Form 2C.

#### SUMMARY OF COMPLIANCE WITH PREVIOUS PERMIT ISSUED

The department's assessment of the compliance is based on review of the facility's Discharge Monitoring Report (DMR) forms and inspections conducted by the department. Two inspections occurred at this facility July 31, 2019, and July 16, 2024. Six (6) discharges have occurred at the facility from October 1, 2019, to March 31, 2024. The facility had effluent limitation excursion in May 2022 (**Table 3**).

The facility is an intermittent discharger. A summary of the data follows:

Table 2: Summary of DMR data from 10/01/2019 – 3/31/2024.								
Disch Pt	Location	Parameter	Ave Conc	Range	Units	Ave Load	Max Load	Max Load Units
001A	Effluent	Chlorides	6.26	0 – 9.5	mg/l	N/A	N/A	N/A
001A	Effluent	Drain in Million Gallons	N/A	N/A	N/A	N/A	0.38	Mgal
001A		Discharge Flow in Million Gallons	N/A	N/A	N/A	0.0162	0.036	MGD
001A	Effluent	Oil & Grease	0.00	0 - 0	mg/l	0.00	0	#/Day
001A	Effluent	Oil and Grease Visual	N/A	N/A	N/A	N/A	0	Y=1; N=0
001A	Effluent	рН	N/A	1.3*- 8.9	S.U.	N/A	N/A	N/A
001A	Effluent	Sodium %, total cations	31.96	0 – 65.5	mEq/l	N/A	N/A	N/A
001A	Effluent	Sulfates	60.21	24.1 - 106	mg/l	N/A	N/A	N/A
001A	Effluent	Total Suspended Solids	4.75	2-17	mg/l	N/A	N/A	N/A

\*Note: The 1.3 value listed was due to laboratory error issued as previously reported to the NDDEQ. A pH value of 6.92 is the minimum result for the period from the valid samples (4).

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### **Summary of DMR Data Excursions**

One (1) excursion occurred from October 1, 2019, through March 31, 2023, for the facility. The pH value of 1.3 associated with a laboratory error. A pH value of 6.92 is the minimum result for the period from valid samples.

Table 3: DMR exceedances from 10/01/2019 – 12/31/2023.									
Disch Location Month Parameter Min Avg Max Units Excursions TRC Conc Conc Conc									
∥ Pt				Conc	Conc	Conc	Conc		Exceedance

#### PROPOSED EFFLUENT LIMITATIONS

The discharge of wastewater generated by gas turbine electric power generation is not regulated by national effluent guidelines. The discharge of industrial stormwater runoff from the facility also is not subject to national effluent guidelines. Effluent Guidelines and Standards for the Steam Electric Power Generating point source category were reviewed to determine appropriate limitations. Using Best Professional Judgment (BPJ), the department determined the guidelines and standards are appropriate for this facility due to the similarities of the low volume waste sources.

The effluent limitation guidelines published for the steam electric power generating point source category are found in 40 CFR Part 423. Section § 423.15 identifies standards for New Source Performance Standards (NSPS) for new point sources. The applicable effluent guidelines are summarized in the table below:

Table 4: Best Practicable Technology 40 CFR 423.15: Low Volume Wastes					
Parameter	Federal Requirements				
	Maximum for any 1 day (mg/l)  Average of daily values for 30 consecutive days shall no exceed (mg/l)				
TSS	100.0 30.0				
Oil and Grease	20.0 15.0				

Limitations based on numeric nutrient criteria are not being included in the proposed permit. Narrative nutrient criteria have been developed for the state of North Dakota that require discharges to be free from nutrients that cause objectionable growth of aquatic vegetation or algae or threaten public health, welfare, or impair beneficial uses.

The proposed effluent limitations shall take effect upon the effective date of the proposed permit. The effluent limitations and the basis for the limitations are provided in the Table 5. The notations used in the table for the basis of the effluent limitations are as follows:

"BMP" refers to best management practice.

"BPJ" refers to best professional judgment.

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"Previous Permit" refers to limitations in the previous permit. The NPDES regulations 40 CFR Part 122.44(I)(1) Reissued permits require that when a permit is renewed or reissued, interim limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit unless the circumstances on which the previous permit was issued have materially and substantially changed since the previous permit was issued and would constitute cause for permit modification or revocation and reissuance under 40 CFR Part 122.62.

"WQS" refers to effluent limitations based on the State of North Dakota's "Standards of Quality for Waters of the State", NDAC Chapter 33.1-16-02.1.

"CFR" refers to the Code of Federal Regulations.

Table 5 – Efflo	Table 5 – Effluent Limitations for Outfalls 001								
Effluent Parameter	Units	Average Monthly Limit	Maximum Daily Limit	Basis					
Total Suspended Solids	mg/l	30	100	Previous Permit; BPJ					
pH <sup>a</sup>	S.U.	Shall remain bet	ween 6.0 and 9.0	Previous Permit; BPJ; WQS					
Oil & Grease <sup>b</sup>	mg/l	15	20	WQS					

#### Notes:

- a. The pH, an instantaneous limitation, shall be between 6.0 S.U. and 9.0 S.U. Any single analysis and or measurement beyond this limitation shall be considered a violation of the conditions of this permit.
- b. If an oil sheen or floating oil is observed in the discharge, a grab sample shall be immediately taken, analyzed and reported. The sample shall not exceed the effluent limitations above.

#### Stipulations:

There shall be no discharge of floating solids or visible foam in other than trace amounts.

The department may specify additional discharge conditions or restrictions at any time to maintain water quality standards.

#### **SELF-MONITORING REQUIREMENTS**

Effluent parameters are sampled prior to leaving company property and entering the unnamed tributary to Painted Woods Creek. Monitoring for sulfate, chloride, and percent sodium are included to monitor the concentration of these pollutants in evaporative cooling water and blowdown.

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The dates of discharge, frequency of analyses, total number of gallons discharged, discharge flow rates, and number of exceedances shall also be included on the Discharge Monitoring Reports (DMR).

Table 6: Self-Monitoring Requirements for Outfall 001						
Effluent Parameter	Frequency	Sample Type				
TSS, mg/L	Weekly	Grab				
рН	Weekly	Grab				
Oil and Grease, visual	Weekly	Visual				
Oil and Grease, mg/l	Conditional/Daily	Grab				
Sulfate, mg/l	Weekly	Grab				
Chloride, mg/l	Weekly	Grab				
Sodium, % total cations, mEq/l	Weekly	Grab				
Flow Effluent, MGD	Daily	Calculated				
Total Drain, MGAL	Quarterly	Calculated				

#### SURFACE WATER QUALITY-BASED EFFLUENT LIMITS

The North Dakota Standards of Quality for Waters of the State (NDAC Chapter 33.1-16-02.1), or Water Quality Standards (WQS), are designed to protect existing water quality and preserve the beneficial uses of North Dakota's surface waters. Stormwater and wastewater discharge permits must include conditions that ensure the discharge will meet the surface water quality standards. Water quality-based effluent limits may be based on an individual waste load allocation or on a waste load allocation developed during a basin wide total maximum daily load (TMDL) study. TMDLs result from a scientific study of the water body and are developed in order to reduce pollution from all sources.

The unnamed tributary of Painted Woods Creek is not specifically mentioned in the Standards of Quality for Waters of the State (NDAC 33.1-16-02.1, Appendix I) and is considered a class III stream. The quality of water in class III streams must be suitable for agricultural and industrial uses. Streams in this class generally have low average flows with prolonged periods of no flow. During periods of no flow, class III streams are of limited value for recreation and fish and aquatic biota. The quality of these waters must be maintained to protect secondary contact recreation uses, such as wading, and fish and aquatic biota, and wildlife uses.

The unnamed tributary of Painted Woods Creek is not listed as impaired in the 2020-2022 North Dakota Section 303(d) List of Waters Needing Total Maximum Daily Loads (303(d) List). A TMDL is not required for the tributary.

#### Numerical Criteria for the Protection of Aquatic Life and Recreation

Numerical water quality criteria are listed in the water quality standards for surface waters (NDAC Chapter 33.1-16-02.1). They specify the maximum levels of pollutants allowed in receiving water to protect aquatic life and recreation in and on the water. The department uses numerical criteria along with chemical and physical data for the wastewater and receiving water to derive the effluent limits in the discharge permit. When surface water quality-based limits are

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more stringent or potentially more stringent than technology-based limits, the discharge must meet the water quality-based limits.

#### **Numerical Criteria for the Protection of Human Health**

The U.S. EPA has published numeric water quality criteria for the protection of human health that are applicable to dischargers. These criteria are designed to protect humans from exposure to pollutants linked to cancer and other diseases, based on consuming fish and shellfish and drinking contaminated surface waters. The Water Quality Standards also include radionuclide criteria to protect humans from the effects of radioactive substances.

#### **Narrative Criteria**

Narrative water quality criteria (NDAC Chapter 33.1-16-02.1-08) limit concentrations of pollutants from exceeding applicable standards of the receiving waters. The department adopted a narrative biological goal solely to provide an additional assessment method that can be used to identify impaired surface waters.

#### Antidegradation

The purpose of North Dakota's Antidegradation Policy (NDAC Chapter 33.1-16-02 (Appendix IV)) is to:

- Provide all waters of the state one of three levels of antidegradation protection.
- Determine whether authorizing the proposed regulated activity is consistent with antidegradation requirements.

The department's fact sheet demonstrates that the existing and designated uses of the receiving water will be protected under the conditions of the proposed permit.

#### **Mixing Zones**

The Department's WQS contain a Mixing Zone and Dilution Policy and Implementation Procedure, NDAC Chapter 33.1-16-02.1 (Appendix III). This policy addresses how mixing and dilution of point source discharges with receiving waters will be addressed in developing chemical-specific and whole effluent toxicity discharge limitations for point source discharges. Depending upon site-specific mixing patterns and environmental concerns, some pollutants/criteria may be allowed a mixing zone or dilution while others may not. In all cases, mixing zone and dilution allowances shall be limited, as necessary, to protect the integrity of the receiving water's ecosystem and designated uses.

# EVALUATION OF SURFACE WATER QUALITY-BASED EFFLUENT LIMITS FOR NUMERIC CRITERIA

### рΗ

Discharges to Class III streams shall have an instantaneous limitation between 6.0 (s.u.) and 9.0 (s.u.) in accordance with the water quality standards.

#### **Human Health**

North Dakota's water quality standards include numeric human health-based criteria that the department must consider when writing NDPDES permits. These criteria were established in 1992 by the U.S. EPA in its National Toxics Rule (40 CFR 131.36). The National Toxics Rule

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allows states to use mixing zones to evaluate whether discharges comply with human health criteria. The department determined the applicant's discharge is unlikely to contain chemicals regulated to protect human health. The department will re-evaluate this discharge for impacts to human health at the next permit reissuance.

#### MONITORING REQUIREMENTS

The department requires monitoring, recording, and reporting (NDAC Chapter 33.1-16-01-(21 through 23) and 40 CFR 122.41) to verify that the treatment process is functioning correctly and that the discharge complies with the permit's limits.

#### **Discharge Monitoring Report (DMR) Requirements**

The proposed permit requires the permittee to monitor discharges and submit discharge monitoring reports (DMRs) to the department. DMRs summarize monitoring results obtained during specified monitoring periods. If no discharge occurs during a monitoring period, "no discharge" must be reported. The monitoring period for 001 is quarterly.

The proposed permit includes specified intervals for submitting DMRs (Table 7). DMRs must be submitted electronically to the department in accordance with 40 CFR 127 unless otherwise waived and in compliance with 40 CFR 3. The requirement to submit DMRs quarterly is similar to other minor facilities.

Table 7 – DMR Submittal Requirements

Coverage Point	Report Designator	Report Type	Report Interval
001	Α	Conventional and Non-Conventional Pollutants, Flow and Volume Information	1/quarter

#### **Test Procedures**

The collection and transportation of all samples shall conform with EPA preservation techniques and holding times found in 40 CFR 136. All laboratory tests shall be performed by a North Dakota certified laboratory in conformance with test procedures pursuant to 40 CFR 136, unless other test procedures have been specified or approved by EPA as an alternate test procedure under 40 CFR 136.5. The method of determining the total amount of water discharged shall provide results within 10 percent of the actual amount.

#### OTHER PERMIT CONDITIONS

No other permit conditions are proposed for the facility.

#### **PERMIT ISSUANCE PROCEDURES**

#### **Permit Modifications**

This permit may be modified, revoked and reissued, or terminated for cause. This includes the establishment of limitations or prohibitions based on changes to Water Quality Standards, the development and approval of waste load allocation plans, the development or revision to water quality management plans, changes in sewage sludge practices, or the establishment of prohibitions or more stringent limitations for toxic or conventional pollutants and/or sewage sludge. The filing of a request by the permittee for a permit modification, revocation and

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reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

## **Proposed Permit Issuance**

This proposed permit meets all statutory requirements for the department to authorize a wastewater discharge. The permit includes limits and conditions to protect human health and aquatic life, and the beneficial uses of waters of the State of North Dakota. The department proposes to issue this permit for a term of five years.



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#### **APPENDIX A - PUBLIC INVOLVEMENT INFORMATION**

The department proposes to issue a permit to the **Basin Electric Power Cooperative – Pioneer Generating Station** near Williston, ND. The permit includes wastewater discharge limits and other conditions. This fact sheet describes the facility and the department's reasons for requiring permit conditions.

The department will place a Public Notice of Draft on **July 31**, **2024**, in the **Williston Herald** to inform the public and to invite comment on the proposed draft North Dakota Pollutant Discharge Elimination System permit and fact sheet.

#### The Notice -

- Indicates where copies of the draft Permit and Fact Sheet are available for public evaluation.
- Offers to provide assistance to accommodate special needs.
- Urges people to submit their comments before the end of the comment period.
- Informs the public that if there is significant interest, a public hearing will be scheduled.

You may obtain further information from the department by telephone, 701.328.5210 or by writing to the address listed below.

North Dakota Department of Environmental Quality
Division of Water Quality
4201 Normandy Street
Bismarck, ND 58503

The primary author of this permit and fact sheet is Brady Espe.

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#### North Dakota Department of Environmental Quality Public Notice Reissue of an NDPDES Permit

Public Notice Date: 7/31/2024 Public Notice Number: ND-2024-014

#### Purpose of Public Notice

The Department intends to reissue the following North Dakota Pollutant Discharge Elimination System (NDPDES) Discharge Permit under the authority of Section 61-28-04 of the North Dakota Century Code.

#### Permit Information

Application Date: 7/2/2024 Application Number: ND0026654

Applicant Name: Pioneer Generating Station

Mailing Address: 1717 E Interstate Ave, Bismarck, ND 58503

Telephone Number: 701.557.5488

Proposed Permit Expiration Date: 9/30/2029

#### Facility Description

The re-application is for a natural gas fired electric power generating station located in Township 155 North, Range 102 West, Section 20, SE ¼ and NE ¼, in Williams County. Discharges consist of site runoff and cooling tower blowdown that is discharged from Outfall 001 to an unnamed tributary of Painted Woods Creek, a Class III stream.

#### **Tentative Determinations**

Proposed effluent limitations and other permit conditions have been made by the Department. They assure that State Water Quality Standards and applicable provisions of the FWPCAA will be protected.

#### Information Requests and Public Comments

Copies of the application, draft permit, and related documents are available for review. For further information on making public comments/public comment tips please visit: https://deq.nd.gov/PublicCommentTips.aspx. Comments or requests should be directed to the ND Dept of Env Quality, Div of Water Quality, 4201 Normandy Street, Bismarck ND 58503-1324 or by calling 701.328.5210.

All comments received by August 30, 2024 will be considered prior to finalizing the permit. If there is significant interest, a public hearing will be scheduled. Otherwise, the Department will issue the final permit within sixty (60) days of this notice.

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, contact the NDDEQ Non-discrimination Coordinator at 701-328-5210 or deqEJ@nd.gov. TTY users may use Relay North Dakota at 711 or 1-800-366-6888.

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#### APPENDIX B - GLOSSARY

#### **DEFINITIONS Standard Permit BP 2019.05.29**

- 1. "Act" means the Clean Water Act.
- 2. "Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
- 3. "Average weekly discharge limitation" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.
- 4. "Best management practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.
- 5. "**Bypass**" means the intentional diversion of waste streams from any portion of a treatment facility.
- 6. "Composite" sample means a combination of at least 4 discrete sample aliquots, collected over periodic intervals from the same location, during the operating hours of a facility not to exceed a 24 hour period. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.
- 7. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- 8. "**Department**" means the North Dakota Department of Environmental Quality, Division of Water Quality.
- 9. "DMR" means discharge monitoring report.
- 10. "EPA" means the United States Environmental Protection Agency.
- 11. "**Geometric mean**" means the n<sup>th</sup> root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.
- 12. "Grab" for monitoring requirements, means a single "dip and take" sample collected at a

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representative point in the discharge stream.

- 13. "**Instantaneous**" for monitoring requirements, means a single reading, observation, or measurement. If more than one sample is taken during any calendar day, each result obtained shall be considered.
- 14. "Maximum daily discharge limitation" means the highest allowable "daily discharge."
- 15. **"Salmonid"** means of, belonging to, or characteristic of the family Salmonidae, which includes the salmon, trout, and whitefish.
- 16. "Sanitary Sewer Overflows (SSO)" means untreated or partially treated sewage overflows from a sanitary sewer collection system.
- 17. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 18. "Total drain" means the total volume of effluent discharged.
- 19. "**Upset**" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

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#### APPENDIX C - DATA AND TECHNICAL CALCULATIONS

No flow data was available to calculate the critical low flows for reasonable potential determinations as the facility discharges to the headwaters of the receiving stream. All reasonable potential determinations were made at end-of-pipe.

#### **Sulfate**

The reasonable potential determination for sulfate is provided below. The determination is conducted utilizing the Technical Support Document for Water Quality-based Toxics Control, EPA/505/2-90-001, March 1991 (TSD; March 1991). The coefficient of variation used was 0.51.

# Receiving Water Concentration (RWC) Reasonable Potential (RP) Determination

Technical Support Document (TSD) For Water Quality-based Toxics Control EPA/505/2-90-001; March 1991

Facility Name:	Pioneer Generating		Receiving Stream:	Unnamed Tri	ibutary		
NDPDES Permit:	ND0026654		1Q10 Acute	0	cfs		
Daily Maximum Flow	ow (mgd): 0.04		1B3 Acute	0	cfs		
Daily Average Flow (mgd):		0.02	7Q10 Chronic	0	cfs		
Stream Design Mixing:		0.0%	4B3 Chronic	0	cfs		
Statistical Multiplier:		1.9					
Upstream Concentra	tion:	0.0000	mg/l		Parameter:		
Effluent Concetration (max):		106.0000	mg/l		Sulfate		
(54-40)		(StatOa)	Ce)+(Cs(pmf)Qs)		Outfall:		
	RWC	Statue	ce)+(cs(pmi)Qs)	_	Outraii.		
	RVVC		Qe+(pmf)Qs		001		

RWC = Receiving water concentration, the resultant magnitude of concentration in the receiving water after effluent discharge concentration (also known as the in-stream waste concentration)

Stat = Statistical multiplier for effluent parameter (Table 3-1 and 3-2; page 57 of the TSD)

Qe = Effluent Design Flow

Ce = Highest effluent concentration reported.

pmf = Partial mix factor, percent of Qs allowed for mixing by State authority.

Qs = Receiving Water Flow (1Q10 or 1B3 for acute and 7Q10 or 4B3 for chronic)

Cs = Background concentration of the receiving water.

Qe - Acute	0.04	mgd	Qs - 1Q10	0.00	mgd
Qe - Chronic	0.02	mgd	Qs - 1B3	0.00	mgd
Ce	106.0000	mg/l	Qs - 7Q10	0.00	mgd
Cs	0.0000	mg/l	Qs - 4B3	0.00	mgd
Stat	1.90				
pmf	0.0%				
Acute RP			Chronic RP		
RWC - 1Q10	201.4000	mg/l	RWC - 7Q10	201.4000	mg/l

RWC - 1B3 201.4000 mg/l RWC - 4B3 201.4000 mg/l Criterion Maximum Concentration (CMC) Criterion Continuous Concentration (CCC)

Acute Criterion N/A mg/l Chronic Criterion 750.0000 mg/l

If the calculated RWC is greater than its respective criterion then there is RP and if RWC is less than the criterion then there is no RP.

 CMC RP Present:
 CCC RP Present:

 1Q10 Acute OR
 NO
 7Q10 Chronic OR
 NO

 1B3 Acute
 NO
 4B3 Chronic
 NO

The North Dakota State Water Quality Standards (WQS) Chapter 33-16-02.1 use biologically based design and harmonic mean flows to determine Water Quality Based Effluent Limits (WQBELs) and Whole Effluent Toxicity (WET) limits.

BASIN ELECTRIC POWER COOPERATIVE - PIONEER GENERATING STATION

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#### Chloride

The reasonable potential determination for chloride is provided below. The determination is conducted utilizing the Technical Support Document for Water Quality-based Toxics Control, EPA/505/2-90-001, March 1991 (TSD; March 1991). The coefficient of variation used was 0.36.

# Receiving Water Concentration (RWC) Reasonable Potential (RP) Determination

Technical Support Document (TSD) For Water Quality-based Toxics Control EPA/505/2-90-001: March 1991

Facility Name:	Pioneer Generating		Receiving Stream:	Unnamed Tributary		
NDPDES Permit:	ND0026654		1Q10 Acute	0	cfs	
Daily Maximum Flow (mgd):		0.04	1B3 Acute	0	cfs	
Daily Average Flow (mgd):		0.02	7Q10 Chronic	0	cfs	
Stream Design Mixing:		0.0%	4B3 Chronic	0	cfs	
Statistical Multiplier:		1.7				
Upstream Concentration:		0.0000	mg/l		Parameter:	
Effluent Concetration (max):		9.5000	mg/l	Chloride		
RW(.		ColulColpmflOcl		Outfall:		
		Statue	(StatQeCe)+(Cs(pmf)Qs)		- Outrain.	
		Qe+(pmf)Qs		001		

RWC = Receiving water concentration, the resultant magnitude of concentration in the receiving water after effluent discharge concentration (also known as the in-stream waste concentration)

Stat = Statistical multiplier for effluent parameter (Table 3-1 and 3-2; page 57 of the TSD)

Qe = Effluent Design Flow

Ce = Highest effluent concentration reported.

pmf = Partial mix factor, percent of Qs allowed for mixing by State authority.

Qs = Receiving Water Flow (1Q10 or 1B3 for acute and 7Q10 or 4B3 for chronic)

Cs = Background concentration of the receiving water.

Qe - Acute	0.04	mgd	Qs - 1Q10	0.00	mgd
Qe - Chronic	0.02	mgd	Qs - 1B3	0.00	mgd
Ce	9.5000	mg/l	Qs - 7Q10	0.00	mgd
Cs	0.0000	mg/l	Qs - 4B3	0.00	mgd
Stat	1.70				
pmf	0.0%				
Acute RP			Chronic RP		
RWC - 1Q10	16.1500	mg/l	RWC - 7Q10	16.1500	mg/l
RWC - 1B3	16.1500	mg/l	RWC - 4B3	16.1500	mg/l
Criterion Maximum Concentration (CMC)			Criterion Continuous	Concentrat	ion (CCC)
Acute Criterion	N/A	mg/l	Chronic Criterion	250.0000	mg/l

If the calculated RWC is greater than its respective criterion then there is RP and if RWC is less than the criterion then there is no RP.

CMC RP Present: CCC RP Present:

 1Q10 Acute OR
 NO
 7Q10 Chronic OR
 NO

 1B3 Acute
 NO
 4B3 Chronic
 NO

The North Dakota State Water Quality Standards (WQS) Chapter 33-16-02.1 use biologically based design and harmonic mean flows to determine Water Quality Based Effluent Limits (WQBELs) and Whole Effluent Toxicity (WET) limits.

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# APPENDIX D - RESPONSE TO COMMENTS

Comments provided during the public notice/comment period will be placed here.



Permit No: ND0026654
Effective Date: October 01, 2024
Expiration Date: September 30, 2029

# AUTHORIZATION TO DISCHARGE UNDER THE NORTH DAKOTA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Chapter 33.1-16-01 of the North Dakota Department of Environmental Quality rules as promulgated under Chapter 61-28 (North Dakota Water Pollution Control Act) of the North Dakota Century Code,

Basin Electric Power Cooperative – Pioneer Generating Station Bismarck. North Dakota

bismarck, North Dakota
is authorized to discharge from its gas fired electric generating plant (Pioneer Generating Station) located near Williston, North Dakota
to the unnamed tributary of Painted Woods Creek
provided all the conditions of this permit are met.
This permit and the authorization to discharge shall expire at midnight,
September 30, 2029.
Signed this,

Karl H. Rockeman, P.E. Director Division of Water Quality

BP 2019.05.29

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#### **DEFINITIONS Standard Permit BP 2019.05.29**

- 1. "Act" means the Clean Water Act.
- 2. "Average monthly discharge limitation" means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
- 3. "Average weekly discharge limitation" means the highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all "daily discharges" measured during a calendar week divided by the number of "daily discharges" measured during that week.
- 4. "Best management practices" (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.
- 5. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- 6. "Composite" sample means a combination of at least 4 discrete sample aliquots, collected over periodic intervals from the same location, during the operating hours of a facility not to exceed a 24 hour period. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.
- 7. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- 8. "Department" means the North Dakota Department of Environmental Quality, Division of Water Quality.
- 9. "DMR" means discharge monitoring report.
- 10. "EPA" means the United States Environmental Protection Agency.
- 11. "**Geometric mean**" means the n<sup>th</sup> root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.
- 12. "**Grab**" for monitoring requirements, means a single "dip and take" sample collected at a representative point in the discharge stream.
- 13. "Instantaneous" for monitoring requirements, means a single reading, observation, or measurement. If more than one sample is taken during any calendar day, each result obtained shall be considered.
- 14. "Maximum daily discharge limitation" means the highest allowable "daily discharge."
- 15. **"Salmonid"** means of, belonging to, or characteristic of the family Salmonidae, which includes the salmon, trout, and whitefish.
- 16. "Sanitary Sewer Overflows (SSO)" means untreated or partially treated sewage overflows from a sanitary sewer collection system.

- 17. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 18. "Total drain" means the total volume of effluent discharged.
- 19. "**Upset**" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

# **OUTFALL DESCRIPTION**

Outfall 001. Active. Final Outfall. Sedimentation Pond. Industrial Wastewater.					
Latitude: 48.233527	tude: 48.233527 Longitude: -103.950951 County: McKenzie		zie		
Township: 155 N	Range: 103 W	Section: 20	QQ: DAA		
Receiving Stream: Unnamed tributary to Painted Woods Creek Classification: Class III Stream					
Outfall Description: This point is the final discharge point for the sedimentation pond. Any discharge is to an unnamed tributary to Painted Woods Creek.					

# PERMIT SUBMITTALS SUMMARY

Coverage Point Submittal		Monitoring Period	Submittal Frequency	First Submittal Date
001A	Discharge Monitoring Report	Quarterly	Quarterly	January 31, 2025
Application Renewal	application Renewal EPA Form 1 & 2C		1/permit cycle	March 31, 2029

#### I. LIMITATIONS AND MONITORING REQUIREMENTS

#### A. Discharge Authorization

During the effective period of this permit, the permittee is authorized to discharge pollutants from the outfall as specified to the following: **Unnamed tributary of Painted Woods Creek** 

This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

### **B.** Effluent Limitations and Monitoring

1. The permittee must limit and monitor all discharges as specified below:

Effluent Limitations and Monitoring Requirements Outfall 001						
	Effluent Lim	nitations	Monitoring Requirements			
Parameter	Avg. Monthly Limit	Daily Maximum Limit	Sample Frequency	Sample Type		
TSS, mg/l	30 mg/l	100 mg/l	Weekly	Grab		
pH 1/	Shall Remain Between 6.0 to 9.0 S.U.		Weekly	Grab		
Oil and Grease, visual 2/	Report Yes or No		Weekly	Visual		
Oil and Grease, mg/l 2/	15 mg/l	20 mg/l	Conditional/Daily	Grab		
Sulfate, mg/l	NA	NA	Weekly	Grab		
Chloride, mg/l	NA	NA	Weekly	Grab		
Sodium, % total cations, mEq/l	NA	NA	Weekly	Grab		
Flow Effluent, MGD	Report Avg. Quarterly Value	Report Max. Daily Value	Daily	Calculated		
Total Drain, MGAL	Report Quarterly Total		Quarterly	Calculated		

#### Notes:

1/ The pH, an instantaneous limitation, shall be between 6.0 S.U. and 9.0 S.U. Any single analysis and or measurement beyond this limitation shall be considered a violation of the conditions of this permit.

2/ If an oil sheen or floating oil is observed in the discharge, a grab sample shall be immediately taken, analyzed and reported. The sample shall not exceed the effluent limitations above.

### NA Not Applicable

#### Stipulations:

The dates of discharge, frequency of analyses, total number of gallons discharged, discharge flow rates, and number of exceedances shall also be included on the Discharge Monitoring Reports (DMR).

Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to leaving the facility property or entering the receiving stream.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

#### II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS BP 2021.09.09

#### A. Representative Sampling (Routine and Non-Routine Discharges)

All samples and measurements taken shall be representative of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited under <a href="Part I Effluent Limitations">Part I Effluent Limitations and Monitoring</a> requirements of this permit that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with <u>B. Test Procedures</u>. The permittee must report all additional monitoring in accordance with D. Additional Monitoring.

#### **B. Test Procedures**

The collection and transportation of all samples shall conform with EPA preservation techniques and holding times found in 40 CFR 136. All laboratory tests shall be performed by a North Dakota certified laboratory in conformance with test procedures pursuant to 40 CFR 136, unless other test procedures have been specified in this permit or approved by EPA as an alternate test procedure under 40 CFR 136.5. The method of determining the total amount of water discharged shall provide results within 10 percent of the actual amount.

#### C. Recording of Results

Records of monitoring information shall include:

- 1. the date, exact place and time of sampling or measurements;
- 2. the name(s) of the individual(s) who performed the sampling or measurements;
- 3. the name of the laboratory;
- 4. the date(s) and time(s) analyses were performed;
- 5. the name(s) of the individual(s) who performed the analyses;
- 6. the analytical techniques or methods used; and
- 7. the results of such analyses.

#### D. Additional Monitoring

If the discharge is monitored more frequently than this permit requires, all additional results, if in compliance with <u>B. Test Procedures</u>, shall be included in the summary on the Discharge Monitoring Report.

#### E. Reporting of Monitoring Results

- Monitoring results shall be summarized and reported to the department using Discharge Monitoring Reports (DMRs). If no discharge occurs during a reporting period, "No Discharge" shall be reported. The permittee must submit DMRs electronically using the electronic information reporting system unless requirements in subsection 3 are met.
- 2. Prior to December 21, 2025, the permittee may elect to electronically submit the following compliance

- 3. monitoring data and reports instead of mailing paper forms. Beginning December 21, 2025, the permittee must report the following using the electronic reporting system:
  - a. General permit reports [e.g., notices of intent (NOI); notices of termination (NOT); no exposure certifications (NOE)];
  - b. Municipal separate storm sewer system program reports;
  - c. Pretreatment program reports;
  - d. Sewer overflow/bypass event reports; and
  - e. Clean Water Act 316(b) annual reports
- 4. The permittee may seek a waiver from electronic reporting. To obtain a waiver, the permittee must complete and submit an Application for Temporary Electronic Reporting Waiver form (SFN 60992) to the department. The department will have 120 days to approve or deny the waiver request. Once the waiver is approved, the permittee may submit paper versions of monitoring data and reports to the department.
  - a. One of the following criteria must be met in order to obtain a waiver. The department reserves the right to deny any waiver request, even if they meet one of the criteria below.
    - 1. No internet access,
    - 2. No computer access,
    - 3. Annual DMRs (upon approval of the department),
    - 4. Employee turnover (3-month periods only), or
    - 5. Short duration permits (upon approval of the department)

All reports must be postmarked by the last day of the month following the end of each reporting period. All original documents and reports required herein shall be signed and submitted to the department at the following address:

ND Department of Environmental Quality Division of Water Quality 4201 Normandy Street Bismarck ND 58503-1324

#### F. Records Retention

All records and information (including calibration and maintenance) required by this permit shall be kept for at least three years or longer if requested by the department or EPA.

#### III. COMPLIANCE RESPONSIBILITIES

#### A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

#### **B.** Proper Operation and Maintenance

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. If necessary to achieve compliance with the conditions of this permit, this shall include the operation and maintenance of backup or auxiliary systems.

### C. Planned Changes

The department shall be given advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance. Any anticipated facility expansions, production increase, or process modifications which might result in new, different, or increased discharges of pollutants shall be reported to the department as soon as possible. Changes which may result in a facility being designated a "new source" as determined in 40 CFR 122.29(b) shall also be reported.

#### D. Duty to Provide Information

The permittee shall furnish to the department, within a reasonable time, any information which the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the department, upon request, copies of records required to be kept by this permit. When a permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in a permit application or any report, it shall promptly submit such facts or information.

#### E. Signatory Requirements

All applications, reports, or information submitted to the department shall be signed and certified.

All permit applications shall be signed by a responsible corporate officer, a general partner, or a principal executive officer or ranking elected official.

All reports required by the permit and other information requested by the department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

The authorization is made in writing by a person described above and submitted to the department; and

The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters.

If an authorization under <u>E. Signatory Requirements</u> is no longer accurate for any reason, a new authorization satisfying the above requirements must be submitted to the department prior to or together with any reports, information, or applications to be signed by an authorized representative.

Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

#### F. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The following occurrences of noncompliance shall be included in the oral report to the department at 701.328.5210:

- a. Any lagoon cell overflow or any unanticipated bypass which exceeds any effluent limitation in the permit under <u>G. Bypass of Treatment Facilities</u>;
- b. Any upset which exceeds any effluent limitation in the permit under <u>H. Upset Conditions</u>; or
- c. Violation of any daily maximum effluent or instantaneous discharge limitation for any of the pollutants listed in the permit.
- 2. A written submission shall also be provided within five days of the time that the permittee became aware of the circumstances. The written submission shall contain:
  - a. A description of the noncompliance and its cause;
  - b. The period of noncompliance, including exact dates and times;
  - c. The estimated time noncompliance is expected to continue if it has not been corrected; and
  - d. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

Reports shall be submitted to the address in <u>Part II.E. Reporting of Monitoring Results</u>. The department may waive the written report on a case by case basis if the oral report has been received within 24 hours by the department at 701.328.5210 as identified above.

All other instances of noncompliance shall be reported no later than at the time of the next Discharge Monitoring Report submittal. The report shall include the four items listed in this subsection.

### G. Bypass of Treatment Facilities

- 1. <u>Bypass not exceeding limitations</u>. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to any of the following provisions in this section.
- 2. Bypass exceeding limitations-notification requirements.
  - a. Anticipated Bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of bypass.
  - b. Unanticipated Bypass. The permittee shall submit notice of an unanticipated bypass as required under F. Twenty-four Hour Notice of Noncompliance Reporting.
- 3. <u>Prohibition of Bypass.</u> Bypass is prohibited, and the department may take enforcement action against a permittee for bypass, unless:
  - a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - c. The permittee submitted notices as required under the <u>1. Anticipated Bypass</u> subsection of this section.

The department may approve an anticipated bypass, after considering its adverse effects, if the department determines that it will meet the three (3) conditions listed above.

### **H. Upset Conditions**

An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of the following paragraph are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- 1. An upset occurred and the permittee can identify its cause(s);
- 2. The permitted facility was, at the time being, properly operated;
- 3. The permittee submitted notice of the upset as required under <u>F. Twenty-four Hour Notice of Noncompliance Reporting</u> and
- 4. The permittee complied with any remedial measures required under I. Duty to Mitigate.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

#### I. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee, at the department's request, shall provide accelerated or additional monitoring as necessary to determine the nature and impact of any discharge.

#### J. Removed Materials

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be buried or disposed of in such a manner to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge/digester supernatant and filter backwash shall not be directly blended with or enter either the final plant discharge and/or waters of the state. The permit issuing authority shall be contacted prior to the disposal of any sewage sludges. At that time, concentration limitations and/or self-monitoring requirements may be established.

#### K. Duty to Reapply

Any request to have this permit renewed should be made six months prior to its expiration date.

#### IV. GENERAL PROVISIONS

#### A. Inspection and Entry

The permittee shall allow department and EPA representatives, at reasonable times and upon the presentation of credentials if requested, to enter the permittee's premises to inspect the wastewater treatment facilities and monitoring equipment, to sample any discharges, and to have access to and copy any records required to be kept by this permit.

#### B. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the department and EPA. As required by the Act, permit applications, permits, and effluent data shall not be considered confidential.

#### C. Transfers

This permit is not transferable except upon filing a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee and subsequent department approval. The written agreement shall be filed with the department at least thirty days in advance of the proposed transfer date. The current permit holder must inform the new controller, operator, or owner of the existence of this permit and notify the department of the possible change.

#### D. New Limitations or Prohibitions

The permittee shall comply with any effluent standards or prohibitions established under Section 306(a), Section 307(a), or Section 405 of the Act for any pollutant (toxic or conventional) present in the discharge or removed substances within the time identified in the regulations even if the permit has not yet been modified to incorporate the requirements.

#### E. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. This includes the establishment of limitations or prohibitions based on changes to Water Quality Standards, the development and approval of waste load allocation plans, the development or revision to water quality management plans, changes in sewage sludge practices, or the establishment of prohibitions or more stringent limitations for toxic or conventional pollutants and/or sewage sludges. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

#### F. Need to Halt or Reduce Activity Not a Defense

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.

#### G. State Laws

Nothing in this permit shall be construed to preclude the institution of legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation preserved under Section 510 of the Act.

#### H. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

#### I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

#### J. Severability

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.