

**North Dakota Department of Health Public Notice  
Reissue of an NDPDES Permit**

Public Notice Date: 4/14/2017

Public Notice Number: ND-2017-004

**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: 1/11/2017

Application Number: ND0023183

Applicant Name: Southwest Water Authority

Mailing Address: 4665 2nd St SW, Dickinson, ND 58601-7231

Telephone Number: 701.225.0241

Proposed Permit Expiration Date: 6/30/2022

**Facility Description**

The application is for bypasses from the water treatment plants at 800 West Broadway which serves the city of Dickinson and surrounding communities. This would include potential overflows from the current plant's storage reservoir, backwash reservoir, pumping station vent pipes, drain line from the south side of the treatment plant, and possibly from the Ray Christensen Pumping Station, as well as from the new plant's rapid mix basin, reactor basin, clarifier basin, backwash basins, ozone basin, UF buffer basin, and the wet well. Under normal operating conditions there are to be no discharges from the water treatment plant. Discharges would be to the Heart River a Class IA 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 FWPCA will be protected.

**Information Requests and Public Comments**

Copies of the application, draft permit, and related documents are available for review. Comments or requests should be directed to the ND Dept of Health, Div of Water Quality, 918 East Divide Ave, Bismarck ND 58501-1947 or by calling 701.328.5210.

All comments received by May 16, 2017 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. If you require special facilities or assistance relating to a disability, call TDD at 1.800.366.6868.

FACT SHEET FOR NDPDES PERMIT  
ND0023183

PERMIT REISSUANCE

SOUTHWEST WATER AUTHORITY  
DICKINSON, ND

DATE OF THIS FACT SHEET – MARCH 2017

**Reissuance – (Non POTW, No Discharge)**

**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) has oversight authority. In 1975, the State of North Dakota was delegated primacy of the NPDES program by EPA. The North Dakota Department of Health (NDDH) 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 hereby authorized to take all action necessary or appropriate to secure to this state the benefits of that act and similar federal acts. NDDH's authority and obligations for the wastewater discharge permit program is in the NDAC 33-16 (North Dakota Administrative Code), which was promulgated pursuant to NDCC chapter 61-28 (North Dakota Century Code). NDDH uses the North Dakota Pollutant Discharge Elimination System (NDPDES) as its permitting title.

The following regulations apply to NDPDES permits:

- Procedures the department follows for issuing NDPDES permits (NDAC chapter 33-16-01),
- Water quality criteria for waters of the State (NDAC chapter 33-16-02.1).

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 the NDAC, section 33-16-01-08, the NDPDES permit program, the NDDH must prepare a draft permit and accompanying fact sheet and make it available for a thirty-day public review period (NDAC chapter 33-16-01-07). The NDDH must also publish an announcement (public notice) telling people where they can obtain the draft permit and send their comments on the draft. For more details on preparing and filing comments about these documents, please see **Appendix A – Public Involvement Information**. After the Public Comment Period ends, the NDDH may make changes to the draft NDPDES permit. The NDDH will summarize the responses to comments and any changes to the permit in **Appendix D – Response to Comments**.

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**BACKGROUND INFORMATION**

**Table 1-General Facility Information**

Applicant:	<b>Southwest Water Authority</b>
Facility Name and Address:	Southwest Water Authority 4665 2 <sup>nd</sup> St. W Dickinson, ND 58601 701.225.0241
Permit Number:	ND0023183
Permit Type:	Non POTW, No Discharge
Type of Treatment:	Drinking Water Treatment Plants
SIC Code:	4951
Treatment Facility Description:	<p>Outfall 001: This is the outfall for all potential overflow sources from the current water treatment plant which serves the City of Dickinson and surrounding communities. This would include potential overflows from the storage reservoir, backwash reservoir, pumping station vent pipes, drain line from the south side of the treatment plant, and possibly from the Ray Christensen Pumping Station. Under normal operating conditions there are to be no discharges from the water treatment plant.</p> <p>Outfall 002: This is the outfall for all potential overflow sources from the new water treatment plant which serves the City of Dickinson and surrounding communities. This would include potential overflows from the rapid mix basin, reactor basin, clarifier basin, backwash basins, ozone basin, UF buffer basin, and the wet well. The overflow from these basins is piped to the retention pond with a controlled discharge valve. Under normal operating conditions, there are to be no discharges from the water treatment plant</p>
Discharge Location	<p>Outfall 001: Heart River, Class IA stream Latitude: 46.875019 Longitude: -102.801675</p> <p>Outfall 002: Heart River, Class IA stream Latitude: 46.874856 Longitude: -102.801272</p>
Hydrologic Code	10130202 – Upper Heart



Figure 1 – Aerial Photograph of Southwest Water Authority Water Treatment Plant

### **FACILITY DESCRIPTION**

The current Southwest Water Authority facility provides water for the city of Dickinson and surrounding communities. The new facility will serve this same community.

The current facility consists of corrosion control, sequestration, chloramines disinfection, fluoridation, coagulation, rapid sand filtration, flocculation, and lime soda ash addition. This plant is designed to be a “no discharge” facility and treats 12 million gallons per day.

The new facility will consist of corrosion control, sequestration, chloramines disinfection, fluoridation, coagulation, UF filtration, flocculation, and lime soda ash addition. This facility is designed to be a “no discharge” facility and will treat 6.063 million gallons per day.

**Outfall Description**

<b>Outfall 001. Active. Final Outfall</b>			
Latitude: 46.875019	Longitude: -102.801675	County: Stark	
Township: 139N	Range: 96W	Section: 9	QQ: BAD
Receiving Stream: Heart River		Classification: 1A	
Outfall Description: This is the outfall for all potential overflow sources from the current water treatment plant which serves the City of Dickinson and surrounding communities. This would include potential overflows from the storage reservoir, backwash reservoir, pumping station vent pipes, drain line from the south side of the treatment plant, and possibly from the Ray Christensen Pumping Station. Under normal operating conditions there are to be no discharges from the water treatment plant.			
<b>Outfall 002. Active. Final Outfall</b>			
Latitude: 46.874856	Longitude: -102.801272	County: Stark	
Township: 139N	Range: 96 W	Section: 9	QQ: BAA
Receiving Stream: Heart River		Classification: 1A	
Outfall Description: This is the outfall for all potential overflow sources from the new water treatment plant which serves the City of Dickinson and surrounding communities. This would include potential overflows from the rapid mix basin, reactor basin, clarifier basin, backwash basins, ozone basin, UF buffer basin, and the wet well. The overflow from these basins is piped to the retention pond with a controlled discharge valve. Under normal operating conditions, there are to be no discharges from the water treatment plant.			

**PERMIT STATUS**

This facility was first permitted in 1975. That initial permit expired in 1977 and was not reissued. On October 31, 2008, a failure of the raw water valve resulted in an inundation of the water treatment system, resulting in a blend of raw water, filter backwash water, and solids from the contact basin being discharged into the Heart River. At that time it was determined that it would be appropriate for the facility to be permitted as a “no discharge” facility. That permit went into effect July 1, 2012. The current permit has monitoring requirements for Total Dissolved Aluminum, Total Suspended Solids, pH, and Total Residual Chlorine.

**Summary of Compliance with Previous Permit Issued**

During the previous permit cycle, no discharges occurred.

**PROPOSED MONITORING REQUIREMENTS**

**No Discharge Requirements**

The discharge of wastewater generated in the production of drinking water is not regulated by national effluent guidelines, which establish technology-based effluent limitation for various industries. In the absence of a federal standard, limitations may be generated using Best Professional Judgment (BPJ) to ensure reasonable control technologies are used to prevent potential harmful effects of the discharge. In addition, the department must consider and include limitations necessary to protect water quality standards (WQS) applicable to the receiving waters.

The department is not proposing specific effluent limitations in the proposed permit. Upon the effective date of the proposed permit, the facility will not be allowed to discharge under normal operating conditions. If a discharge were to take place, follow the bypass provision of the permit. If an unauthorized release occurs or is expected to occur, the facility must minimize the discharge of pollutants to waters of the state in accordance with the North Dakota Standards of Quality for Waters of the State (NDAC Chapter 33-16-02.1). An unauthorized release shall be monitored as outlined in Table 2.

Table 2: Monitoring Requirements **Outfall 001 and Outfall 002**

Parameter	Monitoring Requirements		
	Sample Frequency	Sample Type <sup>b</sup>	Basis <sup>c</sup>
Total Dissolved Aluminum (mg/l)	a	Grab	Previous Permit
Total Suspended Solids (TSS) (mg/l)	a	Grab	Previous Permit
pH (SU)	a	Instantaneous	Previous Permit
Total Residual Chlorine (TRC) <sup>d</sup> (mg/l)	a	Grab	Previous Permit
Effluent Flow (mgd)	a	Calculated	BPJ
Total Flow (mgd)	Per Event	Calculated	Previous Permit
Total Days Discharging	Per Event	Calculated	Previous Permit

**Notes:**

- a. The discharge shall be sampled and monitored three (3) times per week for the first week, including once as soon as practical after the unauthorized discharge is discovered or when an expected unauthorized discharge begins, and at weekly intervals thereafter until the unauthorized discharge stops. If the discharge lasts less than one (1) week, monitoring shall be performed at the beginning, middle and end of the discharge event if possible. If the discharge is of short duration, the permittee is responsible for taking at least one representative sample. The permittee shall report the monitoring results on their semi-annual Discharge Monitoring Report (DMR).
- b. Refer to Appendix B for definitions
- c. The basis of monitoring requirements is given below:  
  
 “Previous Permit” refers to the requirements in the previous permit. The NPDES regulations **40 CFR Part 122.44(1)(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 CRF Part 122.62**.
- d. This parameter is only required if chlorine has been added.

### **Surface Water Quality-Based Effluent Limits**

The North Dakota State Water Quality Standards (NDAC Chapter 33-16-02.1) are designed to protect existing water quality and preserve the beneficial uses of North Dakota's surface waters. Wastewater discharge permits must include conditions that ensure the discharge will meet the surface WQS. 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 Heart River is listed in the 2016 North Dakota List of Section 303(d) TMDL Waters for the Missouri River Basin. The Heart River is listed as impaired for Benthic-Macroinvertebrate Bioassessments for the designated use of fish and other aquatic biota. Any potential discharge from this facility would be short in duration. Due to the temporary nature of any discharge, no long term impact to the receiving stream is expected.

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

Numerical water quality criteria are listed in the WQS for surface waters (NDAC Chapter 33-16-02.1). They specify the maximum levels of pollutants allowed in receiving water to protect aquatic life and recreation in and on the water. The department used 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 more stringent or potential 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 WQS also include radionuclide criteria to protect humans from the effects of radioactive substances.

### **Narrative Criteria**

Narrative water quality criteria (NDAC Chapter 33-16-02.1-08) 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 33-16-02.1(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. There are no new or expanded discharges with this permit.

### **Mixing Zones**

The department's WQS contain a Mixing Zone and Dilution Policy and Implementation Procedure, NDAC Chapter 33-16-02.1 (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**

Specific water quality-based effluent limitations were not developed for this permit since the department is proposing a no discharge permit. The facility still would be required to minimize the discharge of pollutants to waters of the state consistent with the North Dakota State Water Quality Standards (NDAC Chapter 33-16-02.1) if an unauthorized release were to occur.

### **Human Health**

North Dakota's WQS 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 allows states to use mixing zones to evaluate whether discharges comply with human health criteria. The department has not identified any chemical in the applicant's discharges for regulation based on human health criteria. 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 33-16-01-(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.

### **Test Procedures**

The collection and transportation of all samples shall conform to EPA preservation techniques and holding times. 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**

#### **Water Treatment Additives**

To ensure selection and management of chemicals used in this facility minimize the potential for harmful effects in a discharge, the permittee may be required to provide, upon request, the following information on chemical additives which do not fall under American National Standards Institute/Nation Sanitation Foundation (ANSI/NSF) Standard 60. Water treatment additives which are approved under ANSI/NSF Standard 60 (Drinking water Treatment Chemicals) are recognized for use. The information on the chemical additives shall include the following usage and discharge information:

- a. Material Safety Data Sheet (MSDS);
- b. The proposed water additive discharge concentration;
- c. The discharge frequency (i.e. number of hours per day and number of days per year);
- d. The monitoring point from which the product is to be discharged;
- e. The type of removal treatment, if any, that the water additive receives prior to discharge;
- f. Product function (i.e. microbiocide, flocculant, etc.);
- g. A 48-hour LC<sub>50</sub> or EC<sub>50</sub> for a North American freshwater planktonic crustacean (either *Ceriodaphnia* sp., *Daphnia* sp. or *Simocephalus* sp.); and
- h. The results for a toxicity test for one other North American freshwater aquatic species (other than a planktonic crustacean).

### **PERMIT ISSUANCE PROCEDURES**

#### **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 WQS, 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.

#### **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 (5) years.

## APPENDIX A – PUBLIC INVOLVEMENT INFORMATION

The department proposes to reissue a permit to the **Southwest Water Authority** for its water treatment plant. The permit includes wastewater discharge monitoring requirements and other conditions. This fact sheet describes the facility and the department's reason for requiring permit conditions.

The department will place a Public Notice of Draft on **Friday, April 14, 2017** in the **Dickinson Press** 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 individuals to submit their comments before the end of the comment period.
- Informs the public that 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 Health  
Division of Water Quality  
918 East Divide Avenue, 4<sup>th</sup> Floor  
Bismarck, ND 58501

The primary author of this permit and fact sheet is Sarah Waldron.

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Reissue of an NDPDES Permit**

Public Notice Date: 4/14/2017      Public Notice Number: ND-2017-004

**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.

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**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 FWPCA will be protected.

**Information Requests and Public Comments**

Copies of the application, draft permit, and related documents are available for review. Comments or requests should be directed to the ND Dept of Health, Div of Water Quality, 918 East Divide Ave, Bismarck ND 58501-1947 or by calling 701.328.5210.

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## APPENDIX B – DEFINITIONS

### DEFINITIONS Standard Permit BP 2013.12.31

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 Health, Division of Water Quality.
9. “**DMR**” means discharge monitoring report.
10. “**EPA**” means the United States Environmental Protection Agency.
11. “**Geometric mean**” means the  $n^{\text{th}}$  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.

### **APPENDIX C – DATA AND TECHNICAL CALCULATIONS**

The development of the permit did not require technical calculations by the North Dakota Department of Health. The department reviewed DMR information and applicable WQS for a Class 1A stream to determine the appropriate requirements to be placed in the permit.

DRAFT

**APPENDIX D – RESPONSE TO COMMENTS**

Any comments received during the public comment period will be placed here.

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Permit No: ND0023183  
Effective Date: July 1, 2017  
Expiration Date: June 30, 2022

AUTHORIZATION TO DISCHARGE UNDER THE  
NORTH DAKOTA POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with Chapter 33-16-01 of the North Dakota Department of Health rules as promulgated under Chapter 61-28 (North Dakota Water Pollution Control Act) of the North Dakota Century Code,

the Southwest Water Authority

is directed by the Department to have **no discharge** from the Dickinson water treatment plants

provided all the conditions of this permit are met.

This permit and the authorization to discharge shall expire at midnight,  
June 30, 2022.

Signed this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

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

BP 2014.06.12

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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 Health, Division of Water Quality.
9. “**DMR**” means discharge monitoring report.
10. “**EPA**” means the United States Environmental Protection Agency.
11. “**Geometric mean**” means the  $n^{\text{th}}$  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.

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## OUTFALL DESCRIPTION

<b>Outfall 001. Active. Final Outfall</b>			
Latitude: 46.875019	Longitude: -102.801675		
Township: 139N	Range: 96W	Section: 9	QQ: BAD
Receiving Stream: Heart River		Classification: 1A	
Outfall Description: This is the outfall for all potential overflow sources from the current water treatment plant which serves the City of Dickinson and surrounding communities. This would include potential overflows from the storage reservoir, backwash reservoir, pumping station vent pipes, drain line from the south side of the treatment plant, and possibly from the Ray Christensen Pumping Station. Under normal operating conditions there are to be no discharges from the water treatment plant.			

<b>Outfall 002. Active. Final Outfall</b>			
Latitude: 46.874856	Longitude: -102.801272		
Township: 139N	Range: 96 W	Section: 9	QQ: BAA
Receiving Stream: Heart River		Classification: 1A	
Outfall Description: This is the outfall for all potential overflow sources from the new water treatment plant which serves the City of Dickinson and surrounding communities. This would include potential overflows from the rapid mix basin, reactor basin, clarifier basin, backwash basins, ozone basin, UF buffer basin, and the wet well. The overflow from these basins is piped to the retention pond with a controlled discharge valve. Under normal operating conditions, there are to be no discharges from the water treatment plant.			

## PERMIT SUBMITTALS SUMMARY

Coverage Point	Submittal	Frequency	First Submittal Date
001A	Discharge Monitoring Report	Semi-Annual	January 31, 2018
002A	Discharge Monitoring Report	Semi-Annual	January 31, 2018
Application Renewal	NPDES Application Renewal	1/permit cycle	January 1, 2022

## SPECIAL CONDITIONS

### Water Treatment Additive Information

To ensure selection and management of chemicals used in this facility minimize the potential for harmful effects in a discharge, the permittee may be required to provide, upon request, the following information on chemical additives which do not follow under American National Standards Institute/Nation Sanitation Foundation (ANSI/NSF) Standard 60. Water treatment additives which are approved under ANSI/NSF Standard 60 (Drinking Water Treatment Chemicals) are recognized for use. The information on the chemical additives shall include the following usage and discharge information:

- a. Material Safety Data Sheets (MSDS);
- b. The proposed water additive discharge concentration;
- c. The discharge frequency (i.e., number of hours per day and number of days per year);
- d. The monitoring point from which the product is to be discharged;

- e. The type of removal treatment, if any, that the water additive receives prior to discharge;
- f. Product function (i.e., microbiocide, flocculant, etc.);
- g. A 48-hour LC<sub>50</sub> or EC<sub>50</sub> for a North American freshwater planktonic crustacean (either *Ceriodaphnia* sp., *Daphnia* sp. Or *Simocephalus* sp.); and
- h. The results for a toxicity test for one other North American freshwater aquatic species (other than a planktonic crustacean).

**I. MONITORING REQUIREMENTS**

**A. No Discharge Requirements**

During the effective dates of this permit, there shall be no discharge except in accordance with the conditions specified in the bypass section of this permit. If an unauthorized release occurs or is expected to occur, the permittee shall take the appropriate measures to minimize the discharge of pollutants and monitor as shown below.

**B. Monitoring Requirements**

- 1. If an unauthorized release is discovered or expected to occur, the discharge shall be monitored as specified below:

Table 1: Monitoring Requirements **Outfall 001 and Outfall 002**

Parameter	Monitoring Requirements	
	Sample Frequency	Sample Type
Total Dissolved Aluminum (mg/l)	a	Grab
Total Suspended Solids (TSS) (mg/l)	a	Grab
pH (SU)	a	Instantaneous
Total Residual Chlorine (TRC) <sup>b</sup> (mg/l)	a	Grab
Effluent Flow (mgd)	Daily	Calculated
Total Flow (mgd)	Per Event	Calculated
Total Days Discharging	Per Event	Calculated

**Notes:**

- a. The discharge shall be sampled and monitored three (3) times per week for the first week, including once as soon as practical after the unauthorized discharge is discovered or when an expected unauthorized discharge begins, and at weekly intervals thereafter until the unauthorized discharge stops. If the discharge lasts less than one (1) week, monitoring shall be performed at the beginning, middle and end of the discharge event if possible. If the discharge is of short duration, the permittee is responsible for taking at least one representative sample. The permittee shall report the monitoring results on their semi-annual Discharge Monitoring Report (DMR).
- b. This parameter is only required if chlorine has been added.

## II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS BP 2016.06.14

### 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 **Part I Effluent Limitations and Monitoring** 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 **B. Test Procedures**. 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 **B. Test Procedures**, shall be included in the summary on the Discharge Monitoring Report.

### **E. Reporting of Monitoring Results**

1. 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. Starting on December 21, 2016, the permittee must submit DMRs, electronically, using the electronic information reporting system.
2. Prior to December 21, 2020, the permittee may elect to electronically submit the following compliance monitoring data and reports instead of mailing paper forms. Beginning December 21, 2020, 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
3. 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 Health  
Division of Water Quality  
918 East Divide Ave  
Bismarck ND 58501-1947

### **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:

- a. The authorization is made in writing by a person described above and submitted to the department; and
- b. 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 E. Signatory Requirements 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 G. Bypass of Treatment Facilities;
  - b. Any upset which exceeds any effluent limitation in the permit under H. Upset Conditions; 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 Part II.E. Reporting of Monitoring Results. 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. Bypass not exceeding limitations. 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. Prohibition of Bypass. 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 1. Anticipated Bypass 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 F. Twenty-four Hour Notice of Noncompliance Reporting 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 the filing of a Statement of Acceptance by the new party and subsequent department approval. The current permit holder should inform the new controller, operator, or owner of the existence of this permit and also 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.

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