

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

Public Notice Date: 8/16/2019

Public Notice Number: ND-2019-020

**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: 3/28/2019

Application Number: ND0020010

Applicant Name: Gwinner City Of

Mailing Address: PO Box 425, Gwinner, ND 58040-0425

Telephone Number: 701.678.2409

Proposed Permit Expiration Date: 9/30/2024

**Facility Description**

The reapplication is for four waste stabilization ponds, which service the City of Gwinner. The discharge facility is located in the S1/2, SW1/4, Section 14, Township 132N, Range 56W in Sargent county . Any discharge would be to an unnamed drainage of the Wild Rice River, 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. Comments or requests should be directed to the ND Dept of Env Quality, Div of Water Quality, 918 East Divide Ave, Bismarck ND 58501-1947 or by calling 701.328.5210.

All comments received by September 16, 2019 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  
ND0020010**

**PERMIT REISSUANCE**

**CITY OF GWINNER PUBLICLY OWNED TREATMENT WORKS**

**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 Environmental Quality (NDDEQ) 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. The department's authority and obligations for the wastewater discharge permit program is in the North Dakota Administrative Code (NDAC) 33.1-16, promulgated pursuant to North Dakota Century Code (NDCC) Chapter 61-28. The department uses the North Dakota Pollutant Discharge Elimination System (NDPDES) as its permitting title.

The following regulations apply to municipal NDPDES permits:

- Procedures the department use for issuing NDPDES permits (NDAC chapter 33.1-16-01),
- Standards of Quality for Waters of the State (NDCA 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 the 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 Section 33.1-16-01-07). For more information regarding preparing and filing comments about the fact sheet and permit, please see **Appendix A – Public Involvement Information**. Following the public comment period, the department may make changes to the draft NDPDES permit. The department will summarize the responses to comments and any changes to the permit in **Appendix B – Response to Comments**.

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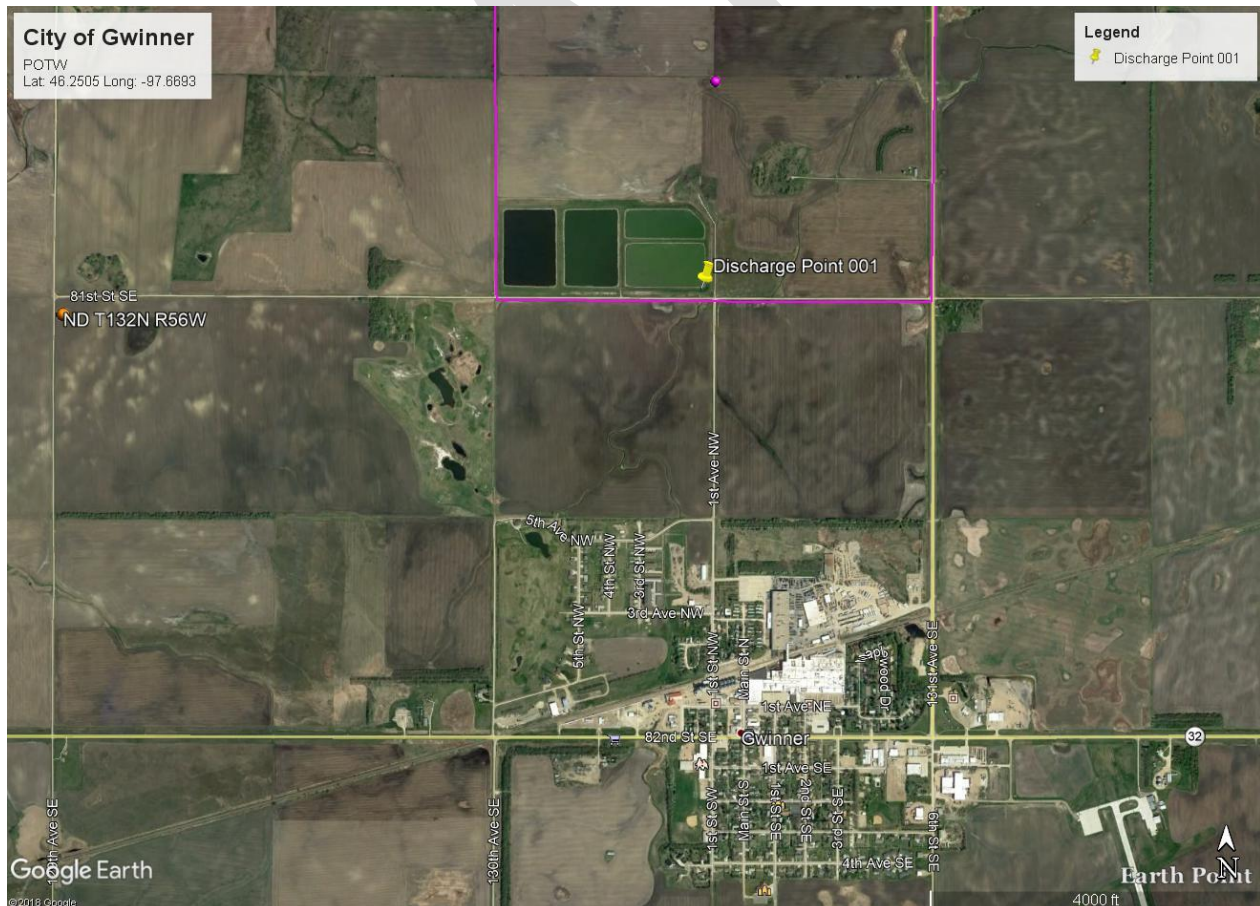
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### BACKGROUND INFORMATION

**Table 1: General Facility Information**

Applicant:	City of Gwinner
Facility Name and Address:	Gwinner Publicly Owned Treatment Works PO Box 425 Gwinner, ND 58040-0425
Permit Number:	ND-0020010
Permit Type:	Minor POTW - Renewal
Type of Treatment:	Waste Stabilization Pond
SIC Code	4952
Discharge Location:	Unnamed Drainage to Wild Rice River, Class III Stream Latitude: 46.250550 Longitude: -97.669300
Hydrologic Code:	0902105 - Western Wild Rice
Population:	765



**Figure 1 - Aerial view of Gwinner Wastewater Treatment Facility (Google Earth 5/16/2016)**

**FACILITY DESCRIPTION**

The City of Gwinner has a four-cell waste stabilization pond system which services the city of Gwinner. The total population served is currently estimated to be 765 people. The City of Gwinner also services one categorical industrial user (CIU) which contributes approximately two-thirds of the daily flow of influent into the system. This CIU facility, Bobcat Company - Gwinner Manufacturing, has pretreatment permit number NDP000015. The CIU is a metal finisher subject to 40 CFR 433, and is presently regulated by the North Dakota Department of Environmental Quality (department).

**Background**

The City of Gwinner utilizes waste stabilization ponds for the treatment of sewage prior to discharge. In 1974 the system was upgraded from a two (2) cell system to a four (4) cell system.

The city has two primary cells, Cell 1 at 15.2 acres and Cell 2 at 14.3 acres along with Cell 3 as a secondary cell and Cell 4 as a tertiary cell.

**Outfall Description**

<b>Outfall 001. Active. Final Outfall</b>			
Latitude: 46.25055	Longitude: -97.66930	County: Sargent	
Township: 132 N	Range: 56 W	Section: 14	Q: C
Receiving Stream: Drainage to Wild Rice River		Classification: Class III	
Outfall Description: Final discharge point for cells 3 and 4. Discharges are made on an average of two times per year from cells 3 and 4. Any discharge is to an unnamed drainage crossing approximately 1.2 miles of private property until it reaches a more defined drainage. The main channel of the Wild Rice River is approximately 15 miles southeast of Gwinner.			

**PERMIT STATUS**

The department issued the previous permit for this facility on October 1, 2014. The previous permit placed effluent limits on Biological Oxygen Demand (BOD), Total Suspended Solids (TSS), pH, and Oil and Grease. In addition to the effluent limits, the permit also placed a once per year monitoring requirement for the following metals: cadmium, total chromium, total copper, total lead, total nickel, total silver, total zinc, and total hardness.

Gwinner submitted an application (EPA Application Form 2A) for permit renewal on March 28, 2019. Effluent sample data has been provided to the department through official laboratory reports, discharge monitoring reports (DMRs) and EPA Application Form 2A.

**Summary of Compliance with Previous Permit Issued**

The department's assessment of compliance is based on review of the facility's Discharge Monitoring Reports (DMRs) and inspections conducted by department staff. Two (2) non-

sampling compliance inspections of the facility were conducted on May 13, 2015 and September 18, 2018, from October 1, 2014 through March 31, 2019.

**Past Discharge Data**

According to department records, this facility has discharged nine times during the previous permit cycle for a total of 70 days with the average discharge lasting 7.7 days. The last reported discharge took place in October 2018. The concentration of pollutants in the discharge was reported in DMR forms. The effluent from Outfall 001 is characterized as shown in Table 2.

**Table 2 – City of Gwinner - Effluent (October 1, 2014 to March 31, 2019)**

Parameter	Units	Range	Average	Permit Limit	Number of Excursions
<i>Effluent – Outfall 001</i>					
pH	S.U.	8.02 – 8.94	N/A	6.0 – 9.0	0
Total Suspended Solids (TSS)	mg/l	5 - 40	17.68	30	1
BOD <sub>5</sub>	mg/l	6 – 24	12.86	25	0
Oil and Grease	Visual	0	0	No Visible Sheen	0
Oil and Grease	mg/l	N/A	N/A	10	0
Drain, Total	MG	45 – 90	56.2	N/A	N/A

Annual metals monitoring was reported in DMR forms. Annual metals monitoring results are displayed in Table 3 below.

**Table 3 – City of Gwinner - Metals (October 1, 2014 to October 31, 2018)**

Parameter	Units	Range	Average	Permit Limit	Number of Excursions
<i>Outfall 001</i>					
Cadmium	mg/l	<0.005	N/A	0.0018	N/A
Chromium	mg/l	<0.005	N/A	1.8	N/A
Copper	mg/l	0.006 – 0.00977	0.0075	0.014	0
Lead	mg/l	<0.005	N/A	0.082	N/A
Nickel	mg/l	0.022 – 0.03	0.0194	0.47	0
Silver	mg/l	<0.005	N/A	0.0038	N/A

**Table 3 – City of Gwinner - Metals (October 1, 2014 to October 31, 2018)**

<b>Parameter</b>	<b>Units</b>	<b>Range</b>	<b>Average</b>	<b>Permit Limit</b>	<b>Number of Excursions</b>
Zinc	mg/l	0.013 – 0.041	0.0237	0.12	0

**PROPOSED PERMIT LIMITS**

**EFFLUENT LIMITATIONS**

The effluent limitations become effective on the effective date of the permit except for any parameters in which a delayed time has been determined. The effluent limitations and the basis for the limitations are provided in the Table 4 below:

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<b>Table 4: Proposed Effluent Limits - Outfall 001</b>		
<b>Effluent Parameter</b>	<b>Discharge Limitations</b>	<b>Basis <sup>a</sup></b>
	<b>Weekly Average</b>	
BOD <sub>5</sub> , mg/l	25 mg/l	NDAC 33.1-16-01-14(3)(c)(1) 40 CFR 133.102(a)(2) Previous Permit
Total Suspended Solids (TSS), mg/l	30 mg/l	NDAC 33.1-16-01-14(3) 40 CFR 133.102(b)(1) & (2) Previous Permit
pH, s.u.	Shall remain between 6.0 to 9.0	WQS 40 CFR 133.102(c)
Oil & Grease Visual <sup>b</sup>	*	WQS Previous Permit
Oil & Grease, mg/l <sup>b</sup>	10	Previous Permit BPJ
Metals <sup>c</sup>	*	Previous Permit
There shall be no discharge of floating solids or visible foam in other than trace amounts, nor a discharge which causes a visible sheen in the receiving waters.		Previous Permit
<b>Notes:</b>		
* This parameter is not limited. However, the department may impose limitations based on sample history and to protect the receiving waters.		
a. The basis of the effluent limitations is given below:  “Previous Permit” refers to limitations in the previous permit. The NPDES regulations <b>40 CFR Part 122.44(1)(1) Reissued permits</b> 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 <b>40 CFR Part 122.62</b> .  “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.  “BPJ” refers to best professional judgement.		
b. The permittee must not discharge any floating solids, visible foam in other than trace amounts, or oily wastes that produce a sheen or floating oil in the effluent or on the surface of the receiving water. The discharge shall be visibly inspected for sheen or floating oil. If present, grab samples shall be analyzed for oil and grease.		
c. Once each year, a grab sample of the discharge shall be analyzed for total cadmium, total chromium, total copper, total lead, total nickel, total silver, total zinc, total cyanide and total hardness.		
<b>Stipulations:</b>		



The dates of discharge, frequency of analysis, and number of exceedances shall also be included on the Discharge Monitoring Report (DMR) form.

The limitations for 5-Day BOD and TSS are based on the average of all samples taken to monitor the discharge from a cell. If only one sample is taken, this value shall be used as the average. The limitation for pH applies to each sample taken. All discharges shall be made in such a manner to minimize any possible adverse impacts on the receiving stream and downstream landowners.

At a minimum, one grab sample shall be taken each week of the discharge and analyzed for 5-Day BOD, TSS and pH. Additional requirements may be identified by the department at the time the discharge is approved. The pre-discharge sample may be used for the sample required for the first week of the discharge. The beginning and ending dates of the discharge shall also be recorded. The total amount of water discharged shall be determined either by using a flow-measuring device or by recording the water level drop in the pond. All samples and measurements taken shall be representative of the discharge.

## SELF-MONITORING REQUIREMENTS

Sampling shall consist of one (1) grab sample to be taken and analyzed prior to any discharge for BOD<sub>5</sub>, TSS, and pH. This analysis shall be reported to the department. In addition, one (1) grab sample of the actual discharge shall be taken and analyzed on a weekly basis for the duration of the discharge. All effluent is sampled at a point leaving Cell 3 or Cell 4 but prior to entering waters of the state.

**Table 5: Self-Monitoring Requirements**

<b>Effluent Parameter</b>	<b>Frequency</b>	<b>Sample Type <sup>a</sup></b>
BOD <sub>5</sub> , mg/l	Weekly	Grab
TSS, mg/l	Weekly	Grab
pH, s.u.	Weekly	Instantaneous
Oil & Grease, mg/l	Daily	Visual <sup>b</sup>
Total Days Discharging	Semiannual	Calculated
Total Drain, MG	Monthly	Calculated
Metals	Yearly	Grab
<b>Notes:</b>		
a.	Refer to Appendix B for definitions.	
b.	If a visible sheen of floating oil is observed in the discharge, a grab sample shall be collected, and the department shall be contacted.	

## TECHNOLOGY-BASED EFFLUENT LIMITS

Federal and state regulations define technology-based effluent limits for municipal wastewater treatment plants. These effluent limits are given in 40 CFR Part 133 and in NDAC Chapter 33.1-16-01-30. These regulations are performance standards that constitute all known, available, and reasonable methods of prevention, control, and treatment for municipal wastewater.

NDAC Chapter 33.1-16-01-30 incorporates by reference 40 CFR 133 which list the following technology-based limits for BOD<sub>5</sub>, TSS, and pH:

**Table 5: Technology-based Limits**

<b>Parameter</b>	<b>30 Day Average</b>	<b>7 Day Average</b>
BOD <sub>5</sub>	30 mg/l	45 mg/l
TSS	30 mg/l	45 mg/l
pH	Remain between 6.0 to 9.0	--
Percent Removal	85% BOD <sub>5</sub> and TSS	--

NDAC 33.1-16-01-14(3)(c)(1) allows for adjustment of the secondary treatment criteria to reflect site specific considerations. A five-day biochemical oxygen demand limit of twenty-five (25) milligrams per liter (consecutive thirty-day average) may be applied in instances in which limits expressed in terms of secondary treatment standards would be impractical or deemed inappropriate to protect receiving waters. The department applied this BOD<sub>5</sub> limit as a weekly average due to the short duration of the facility's discharges.

## **SURFACE WATER QUALITY-BASED EFFLUENT LIMITS**

A limit for ammonia and a seasonal limitation for *E. coli* has not been included since the receiving water is classified as a Class III stream according to the States Standards of Quality for Waters of the State. Class III streams generally have low average flows with prolonged periods of no flow, which are of limited value for recreation and fish and aquatic biota during these periods.

The North Dakota State Water Quality Standards (NDAC Chapter 33.1-16-02.1) 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 water quality standards. Water quality-based effluent limits may be based on a 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. Currently there are no 303(d) or TMDL listings for this drainage.

### **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 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**

### **BOD<sub>5</sub>**

The department has reviewed the BOD<sub>5</sub> data and sampling frequency for the Gwinner POTW. No exceedances occurred for this parameter. The department proposes to continue with the 25 mg/l (7-day arithmetic average) limitation with a sampling frequency of weekly.

### **TSS**

The department has reviewed the TSS data and sampling frequency for the Gwinner POTW. One exceedance was found for the 7-day average, however this exceedance was not over the Technical Review Criteria (TRC). The TRC value for TSS was determined by the following equation:

$$\text{TRC } 1.4 * \text{TSS } 30 \text{ mg/l} = \text{TSS } 42 \text{ mg/l}$$

The department has determined that there is not sufficient data to proceed with the implementation of "Equivalent-to-Secondary Treatment Standards" or "Alternative State Requirements" (ASRs). The department proposes to continue with the 30 mg/l (7-day arithmetic average) limitation with a sampling frequency of weekly.

### **pH**

The department has reviewed the pH data and sampling frequency for the Gwinner POTW. No exceedances occurred during the reviewed time frame. The department proposes to continue with the limitation of 6.0 to 9.0 with a sampling frequency of weekly to reflect the state's standards of water quality for Class III streams.

### **Whole Effluent Toxicity**

Testing requirements and limitations for whole effluent toxicity (WET) testing are specified in 40 CFR 122.44(d)(1)(iv) & (v) for discharges that may have the reasonable potential to contribute to an in-stream excursion above a numeric or narrative criterion for whole effluent toxicity. The state water quality standards include a narrative standard related to whole effluent toxicity. The narrative standard listed in NDAC 33.1-16-02.1-08(1)(a)(4) states that waters of the state shall be "free from substances attributable to municipal, industrial or other discharges or agricultural practices in concentrations which are toxic or harmful to humans, animals, plants or resident aquatic biota. For surface water this standard will be enforced in part through appropriate whole effluent toxicity requirements in North Dakota pollutant discharge elimination system permits."

The department has reviewed factors such as the conveyance of the effluent flows through a Class III unnamed tributary for fifteen miles before entering the Wild Rice river; the controlled discharge frequency is on average twice per year; this is a minor facility; and effluent discharges have had one exceedance for total suspended solids during the current permit cycle. With these factors, the department has determined this facility does not have reasonable potential to exceed the water quality standard. However, if new information becomes available the department will re-evaluate this determination.

### **BIOSOLIDS**

Currently the department does not have the authority to regulate biosolids. The use and/or disposal of sewage sludge shall be done under the Direct Enforceability provisions of 40 CFR Part 503.3(b) to meet the applicable requirements of the regulation.

### **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 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.

The permittee must notify the department prior to any lagoon discharge. Approximately two weeks prior to a planned discharge, a representative pre-discharge grab sample must be

collected from the lagoon cell and analyzed for the parameters listed in **Table 4**. The pre-discharge sample results must be provided when notifying the department of a planned discharge.

## 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

### PRETREATMENT

#### Federal and State Pretreatment Program Requirements

Under the terms of the “Memorandum of Understanding between North Dakota Department of Environmental Quality and the United States Environmental Protection Agency, Region 8” (2019), NDDEQ has been delegated authority to administer the Pretreatment Program. Under this delegation of authority, the department issues wastewater discharge permits for significant industrial users discharging to POTWs which have not been delegated authority to issue their own wastewater discharge permits. The requirements for a Pretreatment Program are contained in Title 40, part 403 of the Code of Federal Regulations. Under the requirements of the Pretreatment Program (40 CFR 403.8(f)(1)(iii)), the department is required to approve, condition, or deny new discharges or a significant increase in the discharge for existing significant industrial users (SIUs) (40 CFR 403.8(f)(1)(i)).

### BENEFICIAL REUSE

#### Irrigation

Only wastewater that has received secondary or tertiary treatment may be used for irrigation provided soil and water compatibility testing confirms the water is suitable for irrigation. Wastewater used for irrigation shall be applied at a rate which would allow complete infiltration and not result in ponding or runoff from the irrigated area.

Agricultural land may be irrigated provided the crop is not used for human consumption. Forage crops used for livestock consumption or pastures irrigated with wastewater shall not be harvested or grazed within 30 days of a wastewater application.

Public properties such as golf courses or parks may be irrigated provided the treated wastewater meets the following quality criteria.

**Table 6 - Beneficial Reuse-Irrigation Requirements**

Parameter	Discharge	Monitoring Frequency
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	Limitations		
	Daily Max	Measurement Frequency	Sample Type
BOD <sub>5</sub> (mg/l)	30.0	1 per 14 days	Grab
TSS (mg/l)	45.0	1 per 14 days	Grab
<i>E. Coli</i> (number/100 ml)	126	Weekly	Grab

Whenever possible, irrigation shall take place during hours when the public does not have access to the area being irrigated. If the public has constant access to an area, signs must be posted in visible areas during irrigation and for two hours after irrigation is completed. The signs must advise people that the water could pose a health concern and to avoid the irrigated area.

Worker and public contact with treated wastewater should be minimized. Where frequent contact is likely, a higher level of disinfection should be provided such as achieving *E. coli* counts less than 14 colonies per 100 ml.

Avoid application within 100 feet of areas which have unlimited access (i.e., yards) or within 300 feet of potable water supply wells.

Runoff that occurs from irrigated areas shall be monitored at the frequencies and with the types of measurements described in Part I(B) of the permit.

The permittee shall maintain monitoring records indicating the location and usage (e.g., park or agricultural) of the land being irrigated, the dates irrigation occurred, the amount of wastewater used, and the total flow. In addition, monitoring records must include results from collected samples.

### Construction

Treated domestic wastewater may be used for construction purposes such as soil compaction, dust suppression and washing aggregate, provided the following conditions are met.

The wastewater intended for use in construction, must at a minimum, receive secondary treatment.

Prior to using treated wastewater, a sample from the prospective source must be tested and meet the criteria set below. In addition, the test results for *E. coli* must be provided to the department prior to use. Results from samples up to two (2) weeks old will be considered valid. The water quality limitations and minimum sampling frequencies recommended for wastewater used in construction are provided in the following table.

**Table 7 - Beneficial Reuse-Construction Requirements**

Parameter	Limitations (Maximum)	Measurement Frequency	Sample Type
BOD <sub>5</sub> (mg/l)	30	Monthly	Grab

TSS (mg/l)	100	Monthly	Grab
<i>E. Coli</i> (number/100 ml)	126	Weekly	Grab

In some systems chlorination is available. Chlorination is particularly desirable when frequent worker contact with the treated wastewater is likely or when the public may have constant access to areas where the wastewater is being used. Maintaining a chlorine residual of at least 0.1 mg/l is recommended.

While the conventional methods for treating domestic wastewater are generally effective in reducing infectious agents (bacteria, viruses, parasites) to acceptable levels, direct reuse of treated wastewater can pose a health concern. Additional precautions to consider are:

1. Worker and public contact with treated wastewater should be minimized.
2. Where frequent worker contact is likely a higher level of disinfection should be provided, such as achieving *E. coli* counts less than 14/100 ml.
3. Work closely with the treatment system operator to ensure treated wastewater quality is suitable when it is drawn for construction purposes.
4. Apply the treated wastewater in a manner that does not result in runoff or ponding.

Runoff that occurs from application areas shall be monitored at the frequencies and with the types of measurements described in Part I(B) of the permit.

The permittee shall maintain monitoring records indicating the location and usage of the land where application occurs, the dates application occurred, the amount of wastewater used, and the total flow. In addition, monitoring records must include results from collected samples.

### **Oil and Gas Production (including Hydraulic Fracturing)**

The specific user of the wastewater may determine the specific treatment requirements for receiving wastewater.

The permittee shall maintain monitoring records indicating the specific user, the amount of wastewater used, and the total flow. In addition, monitoring records must include results from collected samples.

### **Other Uses as Approved**

The permittee must consult with the department before beneficially reusing wastewater for purposes not identified in this permit.

## **PERMIT ISSUANCE PROCEDURES**

### **PERMIT MODIFICATIONS**



The department may modify this permit to impose numerical limits, if necessary to comply with water quality standards for surface waters, with sediment quality standards, or with water quality standards for ground waters, based on new information from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies.

The department may also modify this permit to comply with new or amended state or federal regulations.

### **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.

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## APPENDIX A – PUBLIC INVOLVEMENT INFORMATION

The Department proposes to reissue a permit to the **City of Gwinner**. 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 **August 16, 2019** in the **The Teller** 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 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  
918 East Divide Avenue, 4<sup>th</sup> Floor  
Bismarck, ND 58501

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

STATEMENT OF BASIS FOR NDPDES PERMIT ND00-20010  
WASTEWATER STABILIZATION POND  
**EXPIRATION DATE: September 30, 2019**  
Page 18 of 22

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

Public Notice Date: 8/16/2019      Public Notice Number: ND-2019-020

**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: 3/28/2019      Application Number: ND0020010

Applicant Name: Gwinner City Of  
Mailing Address: PO Box 425, Gwinner, ND 58040-0425  
Telephone Number: 701.678.2409

Proposed Permit Expiration Date: 9/30/2024

**Facility Description**

The reapplication is for four waste stabilization ponds, which service the City of Gwinner. The discharge facility is located in the S1/2, SW1/4, Section 14, Township 132N, Range 56W in Sargent county . Any discharge would be to an unnamed drainage of the Wild Rice River, 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 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 Env Quality, Div of Water Quality, 918 East Divide Ave, Bismarck ND 58501-1947 or by calling 701.328.5210.

All comments received by September 16, 2019 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.

## 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  $n^{\text{th}}$  root of a product of  $n$  factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.

STATEMENT OF BASIS FOR NDPDES PERMIT ND00-20010  
WASTEWATER STABILIZATION POND

**EXPIRATION DATE: September 30, 2019**

Page 20 of 22

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 department reviewed DMR information, pretreatment requirements, applicable water quality standards for Class III streams to determine the appropriate requirements to be placed in the permit.

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**APPENDIX D – RESPONSE TO COMMENTS**

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

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Permit No: ND0020010  
Effective Date: October 1, 2019  
Expiration Date: September 30, 2024

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,

the City of Gwinner  
Gwinner Publicly Owned Treatment Works (POTW)  
Gwinner, ND

is authorized to discharge from its waste stabilization ponds

to an unnamed drainage to the Wild Rice River, a Class III stream

provided all the conditions of this permit are met.

This permit and the authorization to discharge shall expire at midnight,  
September 30, 2024.

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

---

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



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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.
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18. "**Total drain**" means the total volume of effluent discharged.
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**OUTFALL DESCRIPTION**

<b>Outfall 001. Active. Final Outfall</b>			
Latitude: 46.250550	Longitude: -97.669300	County: Sargent	
Township: 132 N	Range: 56 W	Section: 14	Q: C
Receiving Stream: Unnamed Drainage to Wild Rice River		Classification: Class IIII	
Outfall Description: Any discharge is conveyed via a discharge pipe to an unnamed drainage of the Wild Rice River. The discharge crosses approximately 1.2 miles of private property until it reaches a more defined drainage. The main channel of the Wild Rice River is approximately 15 miles southeast of Gwinner. All discharge water is generated from the waste stabilization ponds.			

**PERMIT SUBMITTALS SUMMARY**

Coverage Point	Submittal	Frequency	First Submittal Date
001A	Discharge Monitoring Report	Semiannually	April 30, 2020
001M	Discharge Monitoring Report	Yearly	October 31, 2020
Application Renewal	NDPDES Application Renewal	1/permit cycle	April 1, 2024

**SPECIAL CONDITIONS**

No special conditions have been determined at this time.

## 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: **an unnamed drainage to the Wild Rice River, a Class III Stream.**

No discharge shall occur from the lagoons until all pre-discharge parameters have been reviewed by the department. After the review process has been completed the permittee shall comply with the limitations of this permit and take one grab sample of the actual discharge on a weekly basis.

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:

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Table 1: Effluent Limitations and Monitoring Requirements **Outfall 001**

Parameter	Effluent Limitations			Monitoring Requirements	
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
Biological Oxygen Demand (BOD <sub>5</sub> )	*	25 mg/l	*	Weekly	Grab
pH	Shall remain between 6.0 to 9.0 s.u. <sup>a</sup>			Weekly	Grab
Total Suspended Solids (TSS)	*	30 mg/l	*	Weekly	Grab
Oil & Grease, Visual <sup>a</sup>	*	*	*	Daily	Visual
Oil & Grease <sup>a</sup>	*	*	10 mg/l	Conditional/ Daily	Grab
Total Days Discharging	*	*	*	Semiannual	Calculated
Total Drain, MGAL	*	*	Report Monthly Total	Monthly	Calculated
Metals, Total <sup>b</sup>	*	*	*	Yearly	Grab

Notes:

- \*. This parameter is not limited. However, the department may impose limitations based on sample history and to protect the receiving waters.
- a. The permittee must not discharge any floating solids, visible foam in other than trace amounts, or oily wastes that produce a sheen or floating oil in the effluent or on the surface of the receiving water. The discharge shall be visibly inspected for sheen or floating oil. If present, a grab sample shall be analyzed for oil and grease.
- b. Once each year, a grab sample shall be analyzed for total cadmium, total chromium, total copper, total lead, total nickel, total silver, total zinc, total cyanide, and total hardness

Stipulations:

A pre-discharge sample must be taken prior to the start of any discharge. A grab sample from each lagoon cell to be discharged shall be tested for BOD<sub>5</sub>, TSS, and pH. The limitations for BOD<sub>5</sub> and TSS are based on the average of all sample taken to monitor the discharge from a cell. If only one sample is taken, this value shall be used as the average. The limitation for pH applies to each sample taken.

The beginning and ending dates of the discharge shall be recorded. The total amount of water discharged shall be determined either by using a flow-measuring device or by recording the water level drop in the pond. All samples and measurements taken shall be representative of the discharge.

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

## II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS BP 2019.05.29

### 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. The permittee must submit DMRs electronically using the electronic information reporting system unless requirements in subsection 3 are met.
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 Environmental Quality  
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:

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 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.

**II. INDUSTRIAL WASTE MANAGEMENT BP 2019.05.29**

**Minor POTWs Non-Approved Pretreatment Program Requirements**

**A. General Responsibilities**

The permittee has the responsibility to protect the Publicly Owned Treatment Works (POTW) from pollutants which would inhibit, interfere, or otherwise be incompatible with operation of the treatment works including interference with the use or disposal of municipal sludge.

**B. Pollutant Restrictions**

Pretreatment Standards (40 CFR Section 403.5) developed pursuant to Section 307 of the Federal Clean Water Act (the Act) require that the permittee shall not allow, under any circumstances, the introduction of the following pollutants to the POTW from any source of nondomestic discharge:

1. Any other pollutant which may cause Pass Through or Interference;
2. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than sixty (60) degrees Centigrade (140 degrees Fahrenheit) using the test methods specified in 40 CFR Section 261.21;
3. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with a pH of lower than 5.0 s.u., unless the treatment facilities are specifically designed to accommodate such discharges;
4. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, or other interference with the operation of the POTW;
5. Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with any treatment process at the POTW;
6. Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds forty (40) degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;
7. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through at the POTW;
8. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
9. Any trucked or hauled pollutants, except at discharge points designated by the POTW; and
10. Any specific pollutant which exceeds a local limitation established by the permittee in accordance with the requirements of 40 CFR Section 403.5 (c) and (d).

**C. Approval Authority**

**North Dakota was delegated the Industrial Pretreatment Program in September of 2005. The North Dakota Department of Environmental Quality, Division of Water Quality shall be the**

**Approval Authority and the mailing address for all reporting and notifications to the Approval Authority shall be:**

**ND Department of Environmental Quality  
Division of Water Quality  
918 East Divide Ave  
Bismarck ND 58501-1947**

**D. Industrial Categories**

In addition to the general limitations expressed above, more specific Pretreatment Standards have been and will be promulgated for specific industrial categories under Section 307 of the Act (40 CFR Part 405 et. Seq.).

**E. Notification Requirements**

The permittee must notify the Approval Authority, of any new introductions by new or existing industrial users or any substantial change in pollutants from any industrial user within sixty (60) days following the introduction or change. Such notice must identify:

1. Any new introduction of pollutants into the POTW from an industrial user which would be subject to Sections, 301, 306, and 307 of the Act if it were directly discharging those pollutants; or
2. Any substantial change in the volume or character of pollutants being introduced into the POTW by any industrial user;
3. For the purposes of this section, adequate notice shall include information on:
  - a. The identity of the industrial user;
  - b. The nature and concentration of pollutants in the discharge and the average and maximum flow of the discharge to be introduced into the POTW; and
  - c. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from or biosolids produced at such POTW,
4. For the purposes of this section, a significant industrial user shall include:
  - a. Any discharger subject to Categorical Pretreatment Standards under Section 307 of the Act and 40 CFR chapter I, subchapter N;
  - b. Any discharger which has a process wastewater flow of 25,000 gallons or more per day;
  - c. Any discharger contributing five percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant;
  - d. Any discharger who is designated by the Approval Authority as having a reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standards or requirements.

**F. Approval Authority Options**

At such time as a specific Pretreatment Standard or requirement becomes applicable to an industrial user of the permittee, the Approval Authority may, as appropriate:

1. Amend the permittee's North Dakota Pollutant Discharge Elimination System (NDPDES) discharge

permit to specify the additional pollutant(s) and corresponding effluent limitation(s) consistent with the applicable national Pretreatment Standards;

2. Require the permittee to specify, by ordinance, order, or other enforceable means, the type of pollutant(s) and the maximum amount which may be discharged to the permittee's POTW for treatment. Such requirement shall be imposed in a manner consistent with the POTW program development requirements of the General Pretreatment Regulations at 40 CFR Part 403; and/or,
3. Require the permittee to monitor its discharge for any pollutant which may likely be discharged from the permittee's POTW, should the industrial user fail to properly pre-treat its waste.

**G. Enforcement Authority**

The Approval Authority retains, at all times, the right to take legal action against any source of nondomestic discharge, whether directly or indirectly controlled by the permittee, for violations of a permit, order or similar enforceable mechanism issued by the permittee, violations of any Pretreatment Standard or requirement, or for failure to discharge at an acceptable level under national standards issued by EPA under 40 CFR, chapter I, subchapter N. In those cases where a North Dakota Pollutant Discharge Elimination System (NDPDES) permit violation has occurred because of requirements as necessary to protect the POTW, the North Dakota Department of Health and/or Approval Authority shall hold the permittee and/or industrial user responsible and may take legal action against the permittee as well as the industrial user(s) contributing to the permit violation.

**VI. BENEFICIAL REUSES BP 2015.09.03**

**A. Irrigation**

Only wastewater that has received secondary or tertiary treatment may be used for irrigation provided soil and water compatibility testing confirms the water is suitable for irrigation. Wastewater used for irrigation shall be applied at a rate which would allow complete infiltration and not result in ponding or runoff from the irrigated area.

Agricultural land may be irrigated provided the crop is not used for human consumption. Forage crops used for livestock consumption or pastures irrigated with wastewater shall not be harvested or grazed within 30 days of a wastewater application.

Public properties such as golf courses or parks may be irrigated provided the treated wastewater meets the following quality criteria.

Beneficial Reuse Parameters – Irrigation			
Parameter	Limitations (Maximum)	Monitoring Requirements	
		Sample Frequency	Sample Type
BOD <sub>5</sub> (mg/l)	Daily Max 30	1 per 14 days	Grab
TSS (mg/l)	45	1 per 14 days	Grab
<i>E. Coli</i> (number/100 mL)	126	Weekly	Grab

Whenever possible, irrigation shall take place during hours when the public does not have access to the area being irrigated. If the public has constant access to an area, signs must be posted in visible areas during irrigation and for two hours after irrigation is completed. The signs must advise people that the water could pose a health concern and to avoid the irrigated area.

Worker and public contact with treated wastewater should be minimized. Where frequent contact is



likely, a higher level of disinfection should be provided such as achieving *E. coli* counts less than 14 colonies per 100 ml.

Avoid application within 100 feet of areas which have unlimited access (i.e., yards) or within 300 feet of potable water supply wells.

Runoff that occurs from irrigated areas shall be monitored at the frequencies and with the types of measurements described in Part I(B).

The permittee shall maintain monitoring records indicating the location and usage (e.g., park or agricultural) of the land being irrigated, the dates irrigation occurred, the amount of wastewater used, and the total flow. In addition, monitoring records must include results from collected samples.

**B. Construction**

Treated domestic wastewater may be used for construction purposes such as soil compaction, dust suppression and washing aggregate, provided the following conditions are met.

The wastewater intended for use in construction, must at a minimum, receive secondary treatment.

Prior to using treated wastewater, a sample from the prospective source must be tested and meet the criteria set below. In addition, the test results for *E. coli* must be provided to the department prior to use. Results from samples up to two (2) weeks old will be considered valid. The water quality limitations and minimum sampling frequencies recommended for wastewater used in construction are provided in the following table.

Beneficial Reuse Parameters – Construction			
Parameter	Limitations (Maximum)	Monitoring Requirements	
		Sample Frequency	Sample Type
	Daily Max		
BOD <sub>5</sub> (mg/l)	30	Monthly	Grab
TSS (mg/l)	100	Monthly	Grab
<i>E. Coli</i> (number/100 mL)	126	Weekly	Grab

In some systems chlorination is available. Chlorination is particularly desirable when frequent worker contact with the treated wastewater is likely or when the public may have constant access to areas where the wastewater is being used. Maintaining a chlorine residual of at least 0.1 mg/l is recommended.

While the conventional methods for treating domestic wastewater are generally effective in reducing infectious agents (bacteria, viruses, parasites) to acceptable levels, direct reuse of treated wastewater can pose a health concern. Additional precautions to consider are:

1. Worker and public contact with treated wastewater should be minimized.
2. Where frequent worker contact is likely a higher level of disinfection should be provided, such as achieving *E. coli* counts less than 14/100 ml.
3. Work closely with the treatment system operator to ensure treated wastewater quality is suitable when it is drawn for construction purposes.
4. Apply the treated wastewater in a manner that does not result in runoff or ponding.

Runoff that occurs from application areas shall be monitored at the frequencies and with the types of measurements described in Part I(B).

The permittee shall maintain monitoring records indicating the location and usage of the land where application occurs, the dates application occurred, the amount of wastewater used, and the total flow. In addition, monitoring records must include results from collected samples.

**C. Oil and Gas Production (including Hydraulic Fracturing)**

The specific user of the wastewater may determine the specific treatment requirements for receiving wastewater.

The permittee shall maintain monitoring records indicating the specific user, the amount of wastewater used, and the total flow. In addition, monitoring records must include results from collected samples.

**D. Other Uses as Approved**

The permittee must consult with the department before beneficially reusing wastewater for purposes not identified in this permit.

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