

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

Public Notice Date: 8/7/2024

Public Notice Number: ND-2024-021

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: 1/19/2024

Application Number: ND0020567

Applicant Name: Casselton City Of

Mailing Address: PO Box 548, Casselton, ND 58012-0548

Telephone Number: 701.347.4861

Proposed Permit Expiration Date: 9/30/2029

Facility Description

The reapplication is for the discharge of wastewater from the seven waste stabilization ponds which service the City of Casselton. The discharge points are located in the SW 1/4 of Section 36, Township 140N, Range 52W in Cass County. Any discharge would be from Outfalls 001, 002, and 003 to Swan Creek, a Class III stream.

Tentative Determinations

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

Information Requests and Public Comments

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

All comments received by September 06, 2024 will be considered prior to finalizing the permit. If there is significant interest, a public hearing will be scheduled. Otherwise, the Department will issue the final permit within sixty (60) days of this notice.

The NDDEQ will consider every request for reasonable accommodation to provide an accessible meeting facility or other accommodation for people with disabilities, language interpretation for people with limited English proficiency (LEP), and translations of written material necessary to access programs and information. Language assistance services are available free of charge to you. To request accommodations, contact the NDDEQ Non-discrimination Coordinator at 701-328-5210 or deqEJ@nd.gov. TTY users may use Relay North Dakota at 711 or 1-800-366-6888.

**FACT SHEET FOR NDPDES PERMIT
ND0020567**

CITY OF CASSELTON

DATE OF THIS FACT SHEET – June 2024

INTRODUCTION

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

The following rules or regulations apply to NDPDES permits:

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

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

According to 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 period (NDAC chapter 33-16-01-07). 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 33.1-16-01-07). For more information regarding preparing and submitting comments about the fact sheet and permit, please see **Appendix A – Public Involvement 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 D – Response to Comments**.

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BACKGROUND INFORMATION

Table 1: General Facility Information	
Applicant:	City of Casselton
Facility Name and Address:	Casselton City of 702 1 st St N Casselton, ND 58012 701.642.6565
Permit Number:	ND0020567
Permit Type:	Minor POTW – Reissuance
Type of Treatment:	Facultative Lagoon System
SIC Code:	4952 – Sewerage Systems
NAICS Code:	221320 – Sewage Treatment Facilities
Discharge Location(s):	<p>Outfall 001: Swan Creek, Class III Stream Latitude: 46.891111 Longitude: -97.195556</p> <p>Outfall 002: Swan Creek, Class III Stream Latitude: 46.891111 Longitude: -97.193611</p> <p>Outfall 003: Swan Creek, Class III Stream Latitude: 46.891111 Longitude: -97.191389</p>
Hydrologic Code:	09020205 – Maple River
Population:	2,508 – NDPDES Permit Application

wastewater can then be routed up to Cell 4, where it will then flow to Cells 5, 6, and 7. Wastewater can then be discharged from Cell 7 through outfall 003. Wastewater is typically discharged from outfalls 002 and 003.

Below is a table of the cells and their size:

Cell	Size (acres)
Cell 1	12.70
Cell 2	8.20
Cell 3	7.70
Cell 4	4.10
Cell 5	4.00
Cell 6	7.60
Cell 7	10.60
Total	54.90

The following diagram of the wastewater treatment system was provided with the permit application.



Figure 2: Diagram of the wastewater treatment system provided by the city with the permit application.

Outfall Description

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under a NDPDES permit is a violation of the Clean Water Act (CWA) and could subject the person(s)

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responsible for such discharge to penalties under section 309 of the CWA. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge within the specified timeframe outlined in this permit could subject such person(s) to penalties as provided under the CWA.

There are three active outfalls at the facility. The descriptions for the active outfalls are as follows:

Outfall 001. Active. Final Outfall.			
Latitude: 46.891111	Longitude: -97.195556	County: Cass	
Township: 140 N	Range: 52 W	Section: 36	QQ: CC
Receiving Stream: Swan Creek		Classification: III	
Outfall Description: Discharges from this point are from Cell 2 via a 40 ft pipe to Swan Creek. The permit application indicates that this outfall is for emergency use and was not used during the last permit cycle.			

Outfall 002. Active. Final Outfall.			
Latitude: 46.891111	Longitude: -97.193611	County: Cass	
Township: 140 N	Range: 52 W	Section: 36	QQ: CD
Receiving Stream: Swan Creek		Classification: III	
Outfall Description: Discharges from this point are from Cell 3 via a 40 ft pipe to Swan Creek. This outfall is used for intermittent discharges from April through November.			

Outfall 003. Active. Final Outfall.			
Latitude: 46.891111	Longitude: -97.191389	County: Cass	
Township: 140 N	Range: 52 W	Section: 36	QQ: CD
Receiving Stream: Swan Creek		Classification: III	
Outfall Description: Discharges from this point are from Cell 7 via a 40 ft pipe to Swan Creek. This outfall is used for intermittent discharges from April through November.			

PERMIT STATUS

The department issued the previous permit for the facility on October 1, 2019. The previous permit had effluent limitations and monitoring requirements for the following parameters: 5-day biological oxygen demand (BOD₅), Total Suspended Solids (TSS), pH, *E. coli*, Ammonia, Temperature, Oil and Grease, Effluent Flow, Total Drain, and Metals.

The department was in contact with the City of Casselton to obtain information to reissue their permit. The department received EPA applications Form 2A on January 19, 2024. The application was accepted as complete by the department on July 26, 2024. Effluent sample data has been provided to the department through official laboratory reports, discharge monitoring reports, and the permit application Form 2A.

SUMMARY OF COMPLIANCE WITH PREVIOUS PERMIT ISSUED

Two (2) inspections of the facility were conducted between October 1, 2019, and April 30, 2024. The department's assessment of the compliance is based on review of the facility's Discharge Monitoring Report (DMR) forms and inspections conducted by department staff. The facility had one (1) pH exceedance at outfall 003 between October 1, 2019, and March 31, 2020. The facility had one (1) *E. coli* exceedance at outfall 003 between April 1, 2020, and September 30, 2020. No exceedances were reported for outfall 002 between October 1, 2019, and March 31, 2024.

Past Discharge Data

The City of Casselton is an intermittent discharger. During the last permit cycle, no discharges occurred from outfall 001. Discharges did occur from outfalls 002 and 003. The concentration of pollutants in the discharge were reported in DMRs reviewed by the department. A summary of the data follows:

Table 2 – City of Casselton POTW Outfall 002 (October 1, 2019 to April 30, 2024)					
Parameter	Units	Range	Average	Permit Limit	Number of Exceedances
<i>Effluent – Outfall 002</i>					
BOD ₅	mg/l	9.2 – 24.7	18.3	30 – Avg.	0
				45 – Weekly	
TSS	mg/l	11.7 – 29.6	21.3	30 – Avg.	0
				45 – Weekly	
<i>E. coli</i>	Colonies per 100 ml	6.3 – 106	38.8	126 – Avg.	0
				409 – Max.	
pH	S.U.	7.29 – 8.89	NA	6.0 to 9.0	0
Ammonia as N	mg/l	1.23 – 9.77	5.16	NA	NA
Temperature	°C	44.6 – 73.4	60.9	NA	0
Flow	MGD	0.07 – 1.19	1.19	NA	NA

Table 2 – City of Casselton POTW Outfall 002 (October 1, 2019 to April 30, 2024)					
Parameter	Units	Range	Average	Permit Limit	Number of Exceedances
Drain	MG	10.06 – 47.8	22.9	NA	NA
Discharge Duration	Days	6 – 20	13.2	NA	NA
Antimony	mg/l	0.01 – 0.01	0.01	NA	0
Arsenic	mg/l	0.02 – 0.02	0.02	NA	0
Beryllium	mg/l	0.01 – 0.01	0.01	NA	0
Cadmium	mg/l	0.01 – 0.01	0.01	NA	0
Chromium	mg/l	0.01 – 0.01	0.01	NA	0
Copper	mg/l	0.01 – 0.01	0.01	NA	0
Lead	mg/l	0.02 – 0.02	0.02	NA	0
Mercury	µg/l	0.2 – 0.2	0.2	NA	0
Nickel	mg/l	0.05 – 0.05	0.05	NA	0
Selenium	mg/l	0.01 – 0.01	0.01	NA	0
Silver	mg/l	0.01 – 0.01	0.01	NA	0
Thallium	mg/l	0.01 – 0.01	0.01	NA	0
Zinc	mg/l	0.02 – 0.02	0.02	NA	0
Cyanide	µg/l	0.01 – 10	7.50	NA	0
Phenols	mg/l	0.02 – 0.059	0.029	NA	0
Hardness as CaCO ₃	mg/l	609 – 1047	901.5	NA	0
Notes:					
The Casselton POTW discharged ten (10) times from Outfall 002 during the stated time frame.					
<ul style="list-style-type: none"> • One discharge in the month of April; • Two discharges in the month of May; • Three discharges in the month of June; • Two discharges in the month of July; • One discharge in the month of September; • One discharge in the month of November. 					

Table 3 – City of Casselton POTW Outfall 003 (October 1, 2019 to April 30, 2024)					
Parameter	Units	Range	Average	Permit Limit	Number of Exceedances

Table 3 – City of Casselton POTW Outfall 003 (October 1, 2019 to April 30, 2024)					
Parameter	Units	Range	Average	Permit Limit	Number of Exceedances
<i>Effluent – Outfall 003</i>					
BOD5	mg/l	2 – 23.5	14.4	30 – Avg.	0
				45 – Weekly	
TSS	mg/l	2.1 – 25.4	16.8	30 – Avg.	0
				45 – Weekly	
<i>E. coli</i>	Colonies per 100 ml	7.4 – 225	64.8	126 – Avg.	1
				409 – Max.	
pH	S.U.	7.92 – 9.54	NA	6.0 to 9.0	1
Ammonia as N	mg/l	0.04 – 6.52	1.94	NA	NA
Temperature	°C	40.3 – 72.2	57.2	NA	0
Flow	MGD	0.05 – 2.72	2.09	NA	NA
Drain	MG	12.12 – 52.45	29.7	NA	NA
Discharge Duration	Days	6 – 21	12	NA	NA
Antimony	mg/l	0.01 – 0.01	0.01	NA	0
Arsenic	mg/l	0.02 – 0.02	0.02	NA	0
Beryllium	mg/l	0.01 – 0.01	0.01	NA	0
Cadmium	mg/l	0.01 – 1	0.26	NA	0
Chromium	mg/l	0.01 – 0.01	0.01	NA	0
Copper	mg/l	0.01 – 0.01	0.01	NA	0
Lead	mg/l	0.02 – 0.02	0.02	NA	0
Mercury	µg/l	0.02 – 0.2	0.16	NA	0
Nickel	mg/l	0.05 – 0.05	0.05	NA	0
Selenium	mg/l	0.01 – 0.01	0.01	NA	0
Silver	mg/l	0.01 – 0.01	0.01	NA	0
Thallium	mg/l	0.01 – 0.01	0.01	NA	0
Zinc	mg/l	0.02 – 0.02	0.02	NA	0
Cyanide	µg/l	0.01 – 10	7.50	NA	0
Phenols	mg/l	0.02 – 0.057	0.029	NA	0

Table 3 – City of Casselton POTW Outfall 003 (October 1, 2019 to April 30, 2024)					
Parameter	Units	Range	Average	Permit Limit	Number of Exceedances
Hardness as CaCO ₃	mg/l	6.62 – 1310	796.7	NA	0
Notes:					
The Casselton POTW discharged fourteen (14) times from Outfall 003 during the stated time frame.					
<ul style="list-style-type: none"> • Two discharges in the month of May; • Four discharges in the month of June; • One discharge in the month of July; • One discharge in the month of September; • One discharge in the month of October; • Four discharges in the month of November; • One discharge in the month of December. 					

PROPOSED PERMIT LIMITS AND SELF MONITORING REQUIREMENTS

The City of Casselton is subject to secondary treatment standards. 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.

Below are the technology-based limits specified in 40 CFR Part 133 for BOD₅, TSS, pH, and Percent Removal:

40 CFR Part 133 Technology-Based Effluent Limits-Municipal Treatment		
Parameter	30 Day Average	7 Day Average
BOD ₅	30 mg/l	45 mg/l
TSS	30 mg/l	45 mg/l
pH	Remain between 6.0 to 9.0 S.U.	
Percent Removal	85% BOD ₅ 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 BOD₅ limit of twenty-five 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 has determined that a 25 mg/l (consecutive 30-day average) for BOD₅ is appropriate for this facility. Similar facilities with waste stabilization ponds have the same limit.

The department acknowledges that 40 CFR Part 133 requires an 85% removal for BOD₅ and TSS. The percent removal rate in 40 CFR Part 133 is dependent upon the influent and effluent

samples being taken at approximately the same time. Since the city utilizes waste stabilization ponds to treat wastewater, lagoon systems have a hydraulic residency time of greater than 30 days and have an intermittent nature of discharge. It would be infeasible to determine the percent removal for waste stabilization ponds, the department has determined not to include the percent removal requirements for this permit. The Influent and effluent samples would not be representative of the same wastewater. Therefore, the department has calculated an estimated percent removal for lagoon systems. The average BOD concentration of domestic wastewater is 220 mg/l (Metcalf & Eddy, Inc., 2nd Edition, 1979). Facilities meeting a discharge limitation of 25 mg/l BOD theoretically would be achieving 88% removal efficiency. The department would then assume that the city meeting the permit limitation of 25 mg/l would therefore be meeting the percent removal requirement. The average TSS concentration of domestic wastewater is 220 mg/l (Metcalf & Eddy, Inc., 2nd Edition, 1979). Facilities meeting the discharge limitation of 30 mg/l TSS theoretically would achieve 86% removal efficiency. The department would then assume that the city meeting the permit limitation of 30 mg/l would therefore be meeting the percent removal requirement.

Effluent Limitations

The proposed effluent limitations shall take effect once the permit becomes effective. The limitations apply to outfalls 001, 002, and 003. The department proposes the following effluent limitations and basis for the limitations which are provided in the table below.

Table 4: Proposed Effluent Limitations and Basis for Outfalls 001, 002, and 003				
Parameter	Effluent Limitations			Basis ^a
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	
BOD ₅ (mg/l)	25	45	*	40 CFR 133.102(a)(2); NDAC 33.1-16-01-14(3)(c)(1); Previous Permit
TSS (mg/l)	30	45	*	40 CFR 133.102(b)(1) & (2); NDAC 33.1-16-01-14(3); Previous Permit
pH (S.U.) ^b	Shall be between 6.0 to 9.0 S.U.			40 CFR 133.102(c); WQS
<i>E. coli</i> (#/100 ml) ^c	126	*	409	WQS; Previous Permit
Oil & Grease (mg/l) ^d	*	*	10.0 mg/l	NDAC 33.1-16-02.1; WQS; Previous Permit
Notes:				
*	This parameter is not limited. However, the department may impose limitations based on sample history and to protect the receiving waters.			

Table 4: Proposed Effluent Limitations and Basis for Outfalls 001, 002, and 003				
Parameter	Effluent Limitations			Basis ^a
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	
a.	<p>The basis of the effluent limitations is given below:</p> <p>“Previous Permit” refers to limitations 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 CFR Part 122.62.</p> <p>“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.</p> <p>“BPJ” refers to best professional judgement.</p>			
b.	The pH, an instantaneous limitation, shall be between 6.0 S.U. and 9.0 S.U.			
c.	<p><i>E. coli</i> shall not exceed 126 organisms per 100 ml as a geometric mean of the representative samples collected during any 30-day consecutive period, nor shall samples exceed 409 organisms per 100 ml for any one day.</p> <p>The limit for <i>E. coli</i> shall only apply during the recreational season, April 1 through October 31. Averages for <i>E. coli</i> shall be determined as a geometric mean.</p>			
d.	A daily visual check shall be performed. There shall be no discharge of oily wastes that produce a visible sheen on the surface of the receiving water. If present, a grab sample shall be analyzed for oil and grease to ensure compliance with the concentration limitation.			
<p>Stipulations:</p> <p>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 floating oil or a visible sheen is observed at the discharge point, the department shall be contacted, and grab samples analyzed for oil and grease.</p>				

SELF-MONITORING REQUIREMENTS

All effluent must be sampled leaving Cell 2, Cell 3, or Cell 7 and prior to entering Swan Creek at either outfall 001, 002, or 003. A pre-discharge sample must be taken prior to the start of any discharge and be reported to the department. The pre-discharge sample shall be tested for BOD₅, TSS, pH, *E. coli*, and Ammonia as N. This pre-discharge sample can represent the first

week discharge sample. An additional sample of the actual discharge shall be taken and analyzed on a weekly basis for each additional week of the discharge.

The department may require the permittee to provide additional sampling and monitoring as deemed necessary to assure adequate operation of the treatment system and the WQS are met during the discharge period.

Table 6: Self-Monitoring Requirements for Outfalls 001, 002, and 003.		
Parameter	Frequency	Sample Type ^a
<i>Effluent</i>		
BOD ₅ (mg/L)	Weekly	Grab
TSS (mg/L)	Weekly	Grab
pH (S.U.)	Weekly	Grab
<i>E. coli</i> (#/100 ml)	Weekly/Conditional ^b	Grab
Ammonia as N (mg/L)	Weekly	Grab
Temperature (°C)	Weekly	Grab
Oil and Grease Visual ^c	Daily	Visual
Oil and Grease (mg/l) ^c	Conditional/Daily ^c	Grab
Metals (µg/l) ^d	1/Year	Grab
Effluent Flow (MGD)	Daily	Calculated
Total Drain (mgal)	Monthly	Calculated
<i>Upstream</i>		
Stream Flow Upstream (cfs) ^e	Weekly ^e	Useable Data Source
Temperature Upstream (°C) ^e	Weekly ^e	Grab
pH Upstream (S.U.) ^e	Weekly ^e	Grab
Notes:		
a.	Refer to Appendix B for definitions.	
b.	<i>E. coli</i> is only required to be sampled during the recreation season, April 1 through October 31.	
c.	There shall be no floating oil or visible sheen present in the discharge. If floating oil or a visible sheen is detected in the discharge, the department shall be contacted, and a grab sample analyzed to ensure compliance with the concentration limitation. Any single analysis and/or measurement beyond this limitation shall be considered a violation of the conditions of the permit.	

Table 6: Self-Monitoring Requirements for Outfalls 001, 002, and 003.				
Parameter		Frequency		Sample Type ^a
d.	The following metals shall be sampled and analyzed for:			
	Antimony, Total	Arsenic, Total	Beryllium, Total	Cadmium, Total
	Chromium, Total	Copper, Total	Lead, Total	Mercury, Total
	Nickel, Total	Selenium, Total	Silver, Total	Thallium, Total
	Zinc, Total	Cyanide, Total	Phenols, Total	Hardness as CaCO ₃ , Total
A total hardness as (CaCO ₃) of the receiving stream shall be determined and reported every time the above parameters are tested. The hardness is used to calculate parameter criterion(s) according to the North Dakota State Water Quality Standards. This sample shall be collected upstream of the outfall.				
e.	Sample must be collected/recorded the same day as the ammonia sample. The flow, temperature, and pH may be obtained from the nearest United States Geological Survey (USGS) gauging station if applicable or can be sampled by the permittee.			
Stipulations:				
Dates of discharge and number of exceedances shall be included in the Discharge Monitoring Reports.				
Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to leaving the facility property or entering the receiving stream.				
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 floating oil or a visible sheen is observed at the discharge point, the department shall be contacted, and grab samples analyzed for oil and grease.				

SURFACE WATER QUALITY-BASED EFFLUENT LIMITS

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

All tributaries, minor, or intermittently flowing watercourse, unnamed creeks, or draws not specifically mentioned are classified as class III streams as described in the Standards of Quality for Waters of the State (NDAC 33.1-16-02.1). Swan Creek, which the facility discharges, is not specifically mentioned within NDAC 33.1-16-02.1, therefore is classified as a class III stream. The quality of the water in this class shall be suitable for agricultural and industrial uses.

Streams in this class generally have low average flows with prolonged periods of no flow. During period of no flow, they are of limited value for recreation and fish and aquatic biota. The quality of these waters must be maintained to protect secondary contact recreation uses (e.g., wading) fish and aquatic biota, and wildlife uses.

Currently, the stream reach of the receiving water body that the facility discharges to, ND-09020205-003S_00 is listed as impaired on the *North Dakota 2020 – 2022 Integrated Section 305(b) Water Quality Assessment Report and Section 303(d) List of Waters Needing Total Maximum Daily Loads*. Swan Creek is listed as impaired under Section 303(d) for fish and other aquatic biota and recreation. Fish and other aquatic biota are impaired due to combination biota/habitat bioassessments and recreation is impaired by *Escherichia coli* (*E. coli*). The impairment is for Swan Creek from its confluence with the Maple River upstream to the Casselton Reservoir, including all tributaries. The TMDL priority level for this stream reach is listed as high. The proposed permit includes *E. coli* limits, which will be protective of Swan Creek and meet the water quality standards.

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 contains 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

Outfall 001: Treated wastewater from Cell 2.

Outfall 002: Treated wastewater from Cell 3.

Outfall 003: Treated wastewater from Cell 7.

Biochemical Oxygen Demand (BOD₅)

No discharge from outfall 001 occurred during the last permit cycle, therefore no data was reviewed. The department has reviewed the BOD₅ data and the sampling frequency for outfalls 002 and 003 from the last permit cycle, no exceedances occurred for this parameter. The department proposes effluent limitations of 25 mg/l (30-day arithmetic average) for BOD₅ and a 45 mg/l (average weekly limit) with a sampling frequency of weekly based on 40 CFR 133.102(a)(2) and NDAC 33.1-16-01-14(3)(c)(1).

Total Suspended Solids (TSS)

No discharge from outfall 001 occurred during the last permit cycle, therefore no data was reviewed. The department has reviewed the TSS data and the sampling frequency for outfalls 002 and 003 from the last permit cycle, no exceedances occurred for this parameter. The department proposes to continue with effluent limitations of 30 mg/l (30-day arithmetic average) and 45 mg/l (average weekly limit) with a sampling frequency of weekly based on 40 CFR 133.102(b)(1) & (2) and NDAC 33.1-16-01.

pH

No discharge from outfall 001 occurred during the last permit cycle, therefore no data was reviewed. The department has reviewed the pH data and the sampling frequency for outfalls 002 and 003 from the last permit cycle. No pH exceedances for outfall 002 occurred. One (1) pH exceedance occurred for this parameter for outfall 003. The department proposes to continue with the pH limits of 6.0 to 9.0, with a sampling frequency of weekly. This is in accordance with NDAC 33.1-16-02.1 and 40 CFR 133.103(c).

E. coli

No discharge from outfall 001 occurred during the last permit cycle, therefore no data was reviewed. The department has reviewed the *E. coli* data and the sampling frequency for outfalls 002 and 003 from the last permit cycle. No *E. coli* exceedances for outfall 002 occurred. One (1) *E. coli* exceedance occurred for this parameter for outfall 003. The department proposes to

continue with the effluent limitations of 126 organisms per 100 ml (30-day average geometric mean) and 409 organisms per 100 ml (daily maximum) for *E. coli* with a sampling frequency of weekly. The WQS under NDAC 33.1-16-02.1 only applies during the recreation season from May 1 through September 30. The department shall extend the standard from April 1 through October 31. The department used BPJ to extend this period to ensure the entire recreation season is covered.

Ammonia as N

The previous permit included monitoring requirements for ammonia as N. Sample data indicates the presence of ammonia in the discharge. The department was unable to calculate a reasonable potential analysis due to lack of upstream data. The department proposes to continue monitoring ammonia as N at weekly frequency, with the addition of collecting upstream monitoring data, which includes upstream pH, upstream temperature, and stream flow upstream. This is based on other similar permits (BPJ) and NDAC 33.1-16-02.1. The department will reevaluate ammonia as N for impacts to the WQS at the next permit reissuance.

Oil and Grease Visual

The department proposes to continue with the oil and grease visual requirement of weekly and report if present based on other similar permits and NDAC 33.1-16-02.1.

Oil and Grease

The department proposes to continue with the conditional effluent limit of 10.0 mg/l for oil and grease with a sampling frequency of weekly based on other similar permits.

Metals

No discharge from outfall 001 occurred during the last permit cycle, therefore no data was reviewed. The department has reviewed the metals analysis data and the sampling frequency for outfalls 002 and 003 from the last permit cycle. The department conducted a metals analysis utilizing the maximum concentration for the identified metals and compared them to the WQS (**Appendix C**). Both outfalls 002 and 003 exceeded the WQS for the maximum concentration of mercury and thallium. The facility sampled and reported both mercury and thallium as below the lab method detection level. The department has implemented the Amalgam Rule (40 CFR Part 441) and conducted an inspection of dental facilities in the service area to ensure implementation of the Amalgam Rule and mercury minimization. The department proposes to continue with monitoring for this parameter an annual sampling frequency. This is based on other similar permits (BPJ) and NDAC 33.1-16-02.1.

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 has not identified any chemicals in the applicants' discharge for regulation based on the human health criteria. The department will re-evaluate this discharge for impacts to human health at the next permit reissuance.

Biosolids

Currently the department does not have the authority to regulate biosolids. Therefore, the permittee is required under the Direct Enforceability provisions of 40 CFR Part 503.3(b) to meet the applicable requirements of the regulation.

Test Procedures

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

Discharge Monitoring Report (DMR) Requirements

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

The proposed permit includes specified intervals for submitting semiannual and yearly DMRs (**Table 7**). DMRs must be submitted electronically to the department in accordance with 40 CFR 127 unless otherwise waived and in compliance with 40 CFR 3. The requirement to submit the ‘A’ reports semiannually and ‘M’ reports yearly is similar to other Publicly Owned Treatment Works.

Outfall	Report Designator	Report Type	Report Interval
001	A	Conventional and Non-Conventional Pollutants, Volume Information	Semiannually
001	M	Trace Elements - Metals	Annually
002	A	Conventional and Non-Conventional Pollutants, Volume Information	Semiannually
002	M	Trace Elements - Metals	Annually
003	A	Conventional and Non-Conventional Pollutants, Volume Information	Semiannually
003	M	Trace Elements - Metals	Annually

OTHER PERMIT CONDITIONS**Pre-Discharge Protocol**

Approximately one week prior to discharge, the permittee shall review with the department the following pre-discharge samples: BOD₅, TSS, pH, Ammonia as N, and *E. coli* prior to discharge.

After the review process has been completed the permittee shall comply with the limitations of this permit.

Sampling of the Discharge

Sample results for the pre-discharge parameters may represent the first week of discharge. Additional effluent samples must be collected and analyzed after the seventh day of the discharge and every seven days thereafter.

Pretreatment

On application Form 2A, the permittee indicated that there is one (1) significant industrial user (SIU). The SIU is characterized as categorical industrial user (CIU) known as Owen Industries (Northern Plains Finishing).

Northern Plains Finishing is a metal finisher. Northern Plains Finishing conducts metal powder coating, steel fabrication, CNC metal waterjet cutting, machining, and sheet metal forming. Northern Plains Finishing discharges an average of 1,850 gpd of combined process and non-process wastewater, on average 1,600 gpd of that flow is attributed to process flow. The two wastestreams are combined prior to entering the City of Casselton's sanitary system. Northern Plains Finishing is considered a categorical SIU, subject to the pretreatment standards outlined in 40 CFR 433. Northern Plains Finishing is permitted and regulated under the department's pretreatment program, with an NDPDES permit (NDP026743).

This permit shall contain the pretreatment requirements for Industrial Waste Management for Minors with a Non-Approved Pretreatment Program. The permit shall require the permittee to sample and analyze the effluent from Outfalls 001, 002, and 003 for those parameters listed in footnote e, of **Table 4**. This requirement is based on 40 CFR 403.5(b).

Beneficial Reuse

The permit contains conditions for the beneficial reuse of wastewater for irrigation and construction. Wastewater that has met secondary treatment or tertiary treatment standards may be beneficially reused in lieu of discharging.

Irrigation

Treated effluent may be used for irrigation provided it has gone through secondary or tertiary treatment and is suitable for irrigation. The effluent must be applied in a manner that allows complete infiltration and does not result in ponding or a discharge to waters of the state. Crop used for human consumption cannot be irrigated. Forage crops and pastureland may be irrigated but cannot be harvested or grazed for thirty days following application of treated effluent.

Treated effluent may be used to irrigate public properties if it meets the treatment levels in Table 10. Irrigation must be done during times when the public does not have access to the irrigated area to minimize human contact. Signs must be posted if the public has constant access to the area to keep the public aware. A higher level of disinfection is recommended when frequent contact is likely. Irrigation should be avoided within 100 feet of areas that have unlimited access, such as a private residence to minimize human contact. Irrigation also should be avoided within 300 feet of drinking water wells to minimize impact to the water source.

Irrigation water must be tested in accordance with Table 10 at a minimum; the results of more frequent testing may be used. Runoff from irrigated areas must be tested the same as a direct discharge.

Parameter	Units	Secondary Treatment Level (Daily Maximum)	Monitoring Frequency	Sample Type	Basis
BOD ₅	mg/L	30	1 per 14 days	Grab	BPJ
TSS	mg/L	45	1 per 14 days	Grab	BPJ
<i>E. Coli</i>	#/100 mL	126	1/Week	Grab	BPJ

Construction

Treated effluent that has gone through secondary treatment may be used for construction purposes (e.g., soil compaction, dust suppression, aggregate washing). Treated effluent must be tested and meet the treatment levels in Table 10. The department considers sample results up to two weeks old to be valid. Runoff from construction areas must be tested the same as a direct discharge.

Parameter	Units	Secondary Treatment Level (Daily Maximum)	Monitoring Frequency	Sample Type	Basis
BOD ₅	mg/L	30	1/Month	Grab	BPJ
TSS	mg/L	100	1/Month	Grab	BPJ
<i>E. Coli</i>	#/100 mL	126	1/Week	Grab	BPJ

While 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 include:

- Minimize worker and public contact with treated wastewater.
- Provide a higher level of disinfection where frequent worker contact is likely such as achieving *E. coli* counts less than 14/100 mL
- Ensure treated wastewater quality is suitable for construction purposes.
- Apply treated wastewater in a manner that does not result in runoff or ponding.

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

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.

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 **City of Casselton**. 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 the Draft on **August 7, 2024**, in the **Cass County Reporter** to inform the public and to invite comment(s) 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
4201 Normandy Street, 3rd Floor
Bismarck, ND 58503

The primary author of this permit and fact sheet is Montana Kruske.

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

Public Notice Date: 8/7/2024 Public Notice Number: ND-2024-021

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: 1/19/2024 Application Number: ND0020567

Applicant Name: Casselton City Of
Mailing Address: PO Box 548, Casselton, ND 58012-0548
Telephone Number: 701.347.4861

Proposed Permit Expiration Date: 9/30/2029

Facility Description

The reapplication is for the discharge of wastewater from the seven waste stabilization ponds which service the City of Casselton. The discharge points are located in the SW 1/4 of Section 36, Township 140N, Range 52W in Cass County. Any discharge would be from Outfalls 001, 002, and 003 to Swan Creek, a Class III stream.

Tentative Determinations

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

Information Requests and Public Comments

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

All comments received by September 06, 2024 will be considered prior to finalizing the permit. If there is significant interest, a public hearing will be scheduled. Otherwise, the Department will issue the final permit within sixty (60) days of this notice.

The NDDEQ will consider every request for reasonable accommodation to provide an accessible meeting facility or other accommodation for people with disabilities, language interpretation for people with limited English proficiency (LEP), and translations of written material necessary to access programs and information. Language assistance services are available free of charge to you. To request accommodations, contact the NDDEQ Non-discrimination Coordinator at 701-328-5210 or deqEJ@nd.gov. TTY users may use Relay North Dakota at 711 or 1-800-366-6888.

APPENDIX B – DEFINITIONS

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^{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

No critical low flow calculations were performed in the development of this permit. The USGS Gauge Station 05060000 on the Maple River near Mapleton, ND, is downstream of the facility's outfalls. All effluent limitations are based upon 40 CFR 133, 40 CFR 403, and NDAC 33.1-16-02.1.

Metals Analysis

The department conducted a metals analysis utilizing the maximum concentration for the identified metals and compared them to the WQS. Parameters which were below method detection level were entered at the detection limit value.

Outfall 001:

The facility reported no discharge from this outfall during the previous permit cycle.

FACT SHEET FOR NDPDES PERMIT ND0020567

CITY OF CASSELTON

EXPIRATION DATE: September 30, 2029

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Outfall 002:

The NDDEQ has developed the following tool to evaluate a single sample result to the North Dakota Standards of Quality for Waters of the State. A detailed explanation of the calculations and limits for the parameters listed can be found in ch 33.1-16-02.1-9, Table 1.

Parameters indicated as "HD-Hardness Dependent" are less toxic as the calcium carbonate hardness of the receiving stream increases. The calcium carbonate hardness of the effluent or the receiving stream is entered above. A hardness value in grains per gallon can also be entered.

Items in bold italic and underline indicate a parameter that needs further evaluation. Parameters listed above must be analyzed using an EPA approved method (40 CFR 136) that has a detection limit at or below the limits listed in 40 CFR 136 or the current version of the North Dakota Standards of Quality for Waters of the State ch33.1-16-02.

Facility Name		City of Casselton				Print Date:	7/26/2024			
Location		Outfall 002				Below are the current or calculated acute, chronic and human health standards based on the data entered.				
Enter Grains/Gallon or Hardness - Total (CaCO3) mg/l					0					
Safety Factor(multiplier):										
Enter Concentration Values						µg/l	µg/l	µg/l	µg/l	
Parameter		Detect	MDL/DL /RL	mg/l	µg/l	µg/l	Acute	Chronic	Human Health Class I, IA, II	Human Health Class III
Antimony		<	0.01	0.01		10			<u>5.6</u>	640
Arsenic		<	0.02	0.02		20	340	150	<u>10</u>	
Beryllium		<	0.01	0.01		10			<u>4</u>	
Cadmium	HD	<	0.01	0.01		10	18.9	<u>5.14</u>	<u>5.00</u>	
Chromium - Total		<	0.01	0.01		10			100	
Chromium (III)	HD					0	12341	590		
Chromium (VI)						0	16	11		
Copper	HD	<	0.01	0.01		10	128	69.4	1000.0	
Lead	HD	<	0.2	0.02		20	1623	63.2	<u>15.0</u>	
Mercury		<	0.2		0.2	0.2	1.7	0.88	<u>0.05</u>	<u>0.051</u>
Molybdenum - Total						0				
Nickel	HD	<	0.05	0.05		50	3421	380.4	100.0	4200
Selenium		<	0.01	0.01		10	20	<u>5</u>	50	
Silver	HD	<	0.01	0.01		10	215			
Thallium		<	0.01	0.01		10			<u>0.24</u>	<u>0.47</u>
Zinc	HD	<	0.02	0.02		20	876	876.4	7400.0	26000
Cyanide - Total		<	10		10	10	22	<u>5.2</u>	<u>4</u>	400
Phenols			0.0184	0.059		59		300	4000	300000

Comments:

The maximum values reported for each parameter from the ten (10) discharges that occurred from October 1, 2019 - April 30, 2024 were used. Non-detects were entered at the detection limit value.

Antimony: All sample results were below method detection level. No further analysis was conducted.

Arsenic: All sample results were below method detection level. No further analysis was conducted.

Beryllium: All sample results were below method detection level. No further analysis was conducted.

Cadmium: All sample results were below method detection level. No further analysis was conducted.

Chromium - Total: All sample results were below method detection level. No further analysis was conducted.

Copper: All sample results were below method detection level. No further analysis was conducted.

Lead: All sample results were below method detection level. No further analysis was conducted.

Mercury: All sample results were below method detection level. No further analysis was conducted.

Nickel: All sample results were below method detection level. No further analysis was conducted.

Selenium: All sample results were below method detection level. No further analysis was conducted.

Thallium: All sample results were below method detection level. No further analysis was conducted.

Zinc: All sample results were below method detection level. No further analysis was conducted.

Cyanide - Total: All sample results were below method detection level. No further analysis was conducted.

FACT SHEET FOR NDPDES PERMIT ND0020567

CITY OF CASSELTON

EXPIRATION DATE: September 30, 2029

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Outfall 003:

The NDDEQ has developed the following tool to evaluate a single sample result to the North Dakota Standards of Quality for Waters of the State. A detailed explanation of the calculations and limits for the parameters listed can be found in ch 33.1-16-02.1-9, Table 1.

Parameters indicated as "HD-Hardness Dependent" are less toxic as the calcium carbonate hardness of the receiving stream increases. The calcium carbonate hardness of the effluent or the receiving stream is entered above. A hardness value in grains per gallon can also be entered.

Items in bold italic and underline indicate a parameter that needs further evaluation. Parameters listed above must be analyzed using an EPA approved method (40 CFR 136) that has a detection limit at or below the limits listed in 40 CFR 136 or the current version of the North Dakota Standards of Quality for Waters of the State ch33.1-16-02.

Facility Name			City of Casselton			Print Date:	7/26/2024				
Location			Outfall 003			Below are the current or calculated acute, chronic and human health standards based on the data entered.					
Enter Grains/Gallon or					0						
Hardness - Total (CaCO3) mg/l					1310						
Safety Factor(multiplier):											
Enter Concentration Values						µg/l	µg/l	µg/l	µg/l		
Parameter		Detect	MDL/DL /RL	mg/l	µg/l	µg/l	Acute	Chronic	Human Health Class I, IA,II	Human Health Class III	
Antimony		<	0.01	0.01		10			5.6	640	
Arsenic		<	0.02	0.02		20	340	150	10		
Beryllium		<	0.01	0.01		10			4		
Cadmium	HD	<	0.01	0.01		10	23.6	6.15	5.00		
Chromium - Total		<	0.01	0.01		10			100		
Chromium (III)	HD					0	14827	709			
Chromium (VI)						0	16	11			
Copper	HD	<	0.01	0.01		10	158	84.1	1000.0		
Lead	HD	<	0.02	0.02		20	2159	84.1	15.0		
Mercury		<	0.2		0.2	0.2	1.7	0.88	0.05	0.051	
Molybdenum - Total						0					
Nickel	HD	<	0.05	0.05		50	4136	459.8	100.0	4200	
Selenium		<	0.01	0.01		10	20	5	50		
Silver	HD	<	0.01	0.01		10	316				
Thallium		<	0.01	0.01		10			0.24	0.47	
Zinc	HD	<	0.02	0.02		20	1060	1059.7	7400.0	26000	
Cyanide - Total		<	10		10	10	22	5.2	4	400	
Phenols			0.02	0.057		57		300	4000	300000	

Comments:

The maximum values reported for each parameter from the ten (10) discharges that occurred from October 1, 2019 - April 30, 2024 were used. Non-detects were entered at the detection limit value.

Antimony: All sample results were below method detection level. No further analysis was conducted.

Arsenic: All sample results were below method detection level. No further analysis was conducted.

Beryllium: All sample results were below method detection level. No further analysis was conducted.

Cadmium: All sample results were below method detection level. No further analysis was conducted.

Chromium - Total: All sample results were below method detection level. No further analysis was conducted.

Copper: All sample results were below method detection level. No further analysis was conducted.

Lead: All sample results were below method detection level. No further analysis was conducted.

Mercury: All sample results were below method detection level. No further analysis was conducted.

Nickel: All sample results were below method detection level. No further analysis was conducted.

Selenium: All sample results were below method detection level. No further analysis was conducted.

Thallium: All sample results were below method detection level. No further analysis was conducted.

Zinc: All sample results were below method detection level. No further analysis was conducted.

Cyanide - Total: All sample results were below method detection level. No further analysis was conducted.

FACT SHEET FOR NDPDES PERMIT ND0020567

CITY OF CASSELTON

EXPIRATION DATE: September 30, 2029

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APPENDIX D – RESPONSE TO COMMENTS

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

Permit No: ND0020567
Effective Date: October 1, 2024
Expiration Date: September 30, 2029

AUTHORIZATION TO DISCHARGE UNDER THE
NORTH DAKOTA POLLUTANT DISCHARGE ELIMINATION SYSTEM

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

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

is authorized to discharge from its waste stabilization ponds

to Swan Creek, 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, 2029.

Signed this _____ day of _____, _____.

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

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DRAFT

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DEFINITIONS STANDARD PERMIT BP 2019.05.29

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

DRAFT

OUTFALL DESCRIPTIONS

Outfall 001. Active. Final Outfall.			
Latitude: 46.891111	Longitude: -97.195556	County: Cass	
Township: 140	Range: 52	Section: 36	QQ: CC
Receiving Stream: Swan Creek		Classification: III	
Outfall Description: Discharges from this point are from Cell 2 via a 40 ft pipe to Swan Creek.			

Outfall 002. Active. Final Outfall.			
Latitude: 46.891111	Longitude: -97.193611	County: Cass	
Township: 140	Range: 52	Section: 36	QQ: CC
Receiving Stream: Swan Creek		Classification: III	
Outfall Description: Discharges from this point are from Cell 3 via a 40 ft pipe to Swan Creek.			

Outfall 003. Active. Final Outfall.			
Latitude: 46.891111	Longitude: -97.191389	County: Cass	
Township: 140	Range: 52	Section: 36	QQ: CC
Receiving Stream: Swan Creek		Classification: III	
Outfall Description: Discharges from this point are from Cell 7 via a 40 ft pipe to Swan Creek.			

PERMIT SUBMITTALS SUMMARY

Coverage Point	Submittal	Frequency	First Submittal Date
001A	Discharge Monitoring Report	Semiannually	04/30/2025
001M	Discharge Monitoring Report	Annually	10/31/2025
002A	Discharge Monitoring Report	Semiannually	04/30/2025
002M	Discharge Monitoring Report	Annually	10/31/2025
003A	Discharge Monitoring Report	Semiannually	04/30/2025
003M	Discharge Monitoring Report	Annually	10/31/2025
Application Renewal	NDPDES Application Renewal	1/Permit Cycle	03/30/2029

I. LIMITATIONS AND MONITORING REQUIREMENTS

A. Discharge Authorization

During the effective period of this permit, the permittee is authorized to discharge pollutants from the outfalls as specified to the following: **Swan Creek, a Class III Stream.**

Approximately one week prior to discharge, the permittee shall review with the department pre-discharge samples: BOD₅, TSS, pH, Ammonia as N, and *E. coli* prior to discharge. After the review process has been completed the permittee shall comply with the limitations of this permit. All samples shall be taken prior to leaving the wastewater stabilization pond system or entering the receiving stream.

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

Sampling of the Discharge

Sample results for the pre-discharge parameters may represent the first week of discharge. Additional effluent samples must be collected and analyzed after the seventh day of the discharge and every seven days thereafter.

B. Effluent Limitations and Monitoring

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

Table 1: Proposed Effluent Limitations and Self-Monitoring Requirements for Outfalls 001, 002, and 003					
Parameter	Effluent Limitations			Monitoring Requirements	
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Sample Frequency	Sample Type
BOD ₅ (mg/l)	25	45	*	Weekly	Grab
TSS (mg/l)	30	45	*	Weekly	Grab
pH (S.U.) ^a	Shall be between 6.0 to 9.0 S.U. ^a			Weekly	Grab
<i>E. coli</i> (#/100 ml) ^b	126	*	409	Weekly/Conditional ^b	Grab
Ammonia as N (mg/l)	*	*	*	Weekly	Grab
Temperature (°C)	*	*	*	Weekly	Grab
Oil & Grease Visual ^c	*	*	*	Daily	Visual
Oil & Grease (mg/l) ^c	*	*	10.0 mg/l	Conditional/Daily ^c	Grab
Effluent Flow (MGD)	Report Monthly Average	*	Report Daily Max	Daily	Calculated
Total Drain (mgal)	*	*	Report Monthly Total	Monthly	Calculated
Metals (µg/l) ^d	*	*	*	1/Year	Grab
Stream Flow Upstream (cfs) ^e	*	*	*	Weekly ^e	Useable Data Source
Temperature Upstream (°C) ^e	*	*	*	Weekly ^e	Grab
pH Upstream (S.U.) ^e	*	*	*	Weekly ^e	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 pH, an instantaneous limitation, shall be between 6.0 S.U. and 9.0 S.U.				
b.	<p><i>E. coli</i> shall not exceed 126 organisms per 100 ml as a geometric mean of the representative samples collected during any 30-day consecutive period, nor shall samples exceed 409 organisms per 100 ml for any one day.</p> <p>The limit for <i>E. coli</i> shall only apply during the recreational season, April 1 through October 31. Averages for <i>E. coli</i> shall be determined as a geometric mean.</p>				
c.	There shall be no floating oil or visible sheen present in the discharge. If floating oil or a visible sheen is detected in the discharge, the department shall be contacted, and a grab sample analyzed to ensure compliance with the concentration limitation. Any single analysis and/or measurement beyond this limitation shall be considered a violation of the conditions of the permit.				

Table 1: Proposed Effluent Limitations and Self-Monitoring Requirements for Outfalls 001, 002, and 003																					
Parameter	Effluent Limitations			Monitoring Requirements																	
	Avg. Monthly Limit	Avg. Weekly Limit	Daily Maximum Limit	Sample Frequency	Sample Type																
d.	<p>The following metals shall be sampled and analyzed for:</p> <table border="0"> <tr> <td>Antimony, Total</td> <td>Arsenic, Total</td> <td>Beryllium, Total</td> <td>Cadmium, Total</td> </tr> <tr> <td>Chromium, Total</td> <td>Copper, Total</td> <td>Lead, Total</td> <td>Mercury, Total</td> </tr> <tr> <td>Nickel, Total</td> <td>Selenium, Total</td> <td>Silver, Total</td> <td>Thallium, Total</td> </tr> <tr> <td>Zinc, Total</td> <td>Cyanide, Total</td> <td>Phenols, Total</td> <td>Hardness as CaCO₃, Total</td> </tr> </table> <p>A total hardness as (CaCO₃) of the receiving stream shall be determined and reported every time the above parameters are tested. The hardness is used to calculate parameter criterion(s) according to the North Dakota State Water Quality Standards. This sample shall be collected upstream of the outfall.</p>					Antimony, Total	Arsenic, Total	Beryllium, Total	Cadmium, Total	Chromium, Total	Copper, Total	Lead, Total	Mercury, Total	Nickel, Total	Selenium, Total	Silver, Total	Thallium, Total	Zinc, Total	Cyanide, Total	Phenols, Total	Hardness as CaCO ₃ , Total
Antimony, Total	Arsenic, Total	Beryllium, Total	Cadmium, Total																		
Chromium, Total	Copper, Total	Lead, Total	Mercury, Total																		
Nickel, Total	Selenium, Total	Silver, Total	Thallium, Total																		
Zinc, Total	Cyanide, Total	Phenols, Total	Hardness as CaCO ₃ , Total																		
e.	<p>Sample must be collected/recorded the same day as the ammonia sample. The flow, temperature, and pH may be obtained from the nearest United States Geological Survey (USGS) gauging station if applicable or can be sampled by the permittee.</p>																				
<p>Stipulations:</p> <p>Dates of discharge and number of exceedances shall be included in the Discharge Monitoring Reports.</p> <p>Samples taken in compliance with the monitoring requirements specified in this permit shall be taken prior to leaving the facility property or entering the receiving stream.</p> <p>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 floating oil or a visible sheen is observed at the discharge point, the department shall be contacted, and grab samples analyzed for oil and grease.</p>																					

II. MONITORING, RECORDING, AND REPORTING REQUIREMENTS BP 2021.09.09

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

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

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters limited under **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, 2025, the permittee may elect to electronically submit the following compliance monitoring data and reports instead of mailing paper forms. Beginning December 21, 2025, the permittee must report the following using the electronic reporting system:
 - a. General permit reports [e.g., notices of intent (NOI); notices of termination (NOT); no exposure certifications (NOE)];
 - b. Municipal separate storm sewer system program reports;
 - c. Pretreatment program reports;
 - d. Sewer overflow/bypass event reports; and
 - e. Clean Water Act 316(b) annual reports

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
4201 Normandy Street
Bismarck ND 58503-1324

F. Records Retention

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

III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

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

B. Proper Operation and Maintenance

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

C. Planned Changes

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

D. Duty to Provide Information

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

E. Signatory Requirements

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

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

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

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

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

If an authorization under 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.

**V. INDUSTRIAL WASTE MANAGEMENT BP 2023.02.23
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
4201 Normandy Street
Bismarck ND 58503-1324

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:
 - d. Any discharger subject to Categorical Pretreatment Standards under Section 307 of the Act and 40 CFR chapter I, subchapter N;
 - e. Any discharger which has a process wastewater flow of 25,000 gallons or more per day;
 - f. Any discharger contributing five percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant;
 - g. 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 Environmental Quality 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.

Parameter	Units	Secondary Treatment Level (Daily Maximum)	Monitoring Frequency	Sample Type
BOD ₅	mg/L	30	1 per 14 days	Grab
TSS	mg/L	45	1 per 14 days	Grab
<i>E. Coli</i>	#/100 mL	126	1/Week	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.

Parameter	Units	Secondary Treatment Level (Daily Maximum)	Monitoring Frequency	Sample Type
BOD ₅	mg/L	30	1/Month	Grab
TSS	mg/L	100	1/Month	Grab
<i>E. Coli</i>	#/100 mL	126	1/Week	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. Other Uses as Approved

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