Modified Permit Fact Sheet

General Information

Permit Number	WI-0036706-11-1
Permittee Name and Address	VILLAGE OF CLAYTON Box 63 111 Clayton Avenue W, CLAYTON, WI 54004-0091
Permitted Facility Name and Address	Village of Clayton NORTH PRENTICE STREET, CLAYTON, WISCONSIN
Permit Term	January 01, 2025 to December 31, 2029; modification date April 01, 2026
Discharge Location	Approx. 2,500 feet west of the Final Pond of the facility located at North Prentice Street, Clayton WI, where the discharge meets the intermittent tributary (SE¼, NE¼ of section 15; T33N-R15W). North Prentice Street, Clayton WI
Receiving Water	Clayton Branch (an intermittent tributary to the South Branch of Beaver Brook) within the Beaver Brook watershed in the St. Croix River drainage basin in Polk County
Wild Rice Impacts: *(no specific wild rice standards exist at this time)*	No impacts identified at this location. Wild rice beds have been found in the Apple River Flowage, but not near the mouth of Beaver Brook. The conclusion of no impact is based on the distance to any known rice habitat.
Stream Flow ($Q_{7,10}$)	0.09 cfs
Stream Classification	Based on an investigation of the receiving water, the classification of Clayton Branch is a Warm Water Sport Fishery (WWSF). It is also a non-public water supply and within the ceded territory.
Discharge Type	Existing continuous
Annual Average Design Flow (MGD)	0.105 MGD
Industrial or Commercial Contributors	N/A
Plant Classification	A3 - Recirculating Media Filters; A4 - Ponds, Lagoons and Natural Systems; SS - Sanitary Sewage Collection System
Approved Pretreatment Program?	N/A

Facility Description

The Village of Clayton owns and operates a domestic wastewater treatment system that consists of an influent fine screen, chemical-feed phosphorus reduction system, four stabilization ponds and a recirculating gravel filter. Influent enters the main lift station through the fine screen. The chemical-feed is added prior to the primary treatment pond and gravity transferred to the secondary, tertiary and quaternary ponds. Within the primary and secondary ponds naturally occurring bacteria and organisms already present in the wastewater metabolize organic matter. The main purpose of the tertiary and quaternary ponds is holding water during the months when nitrification is inhibited by cold weather (January – February). Following the quaternary pond is the recirculating gravel filter. Water is distributed over three beds constructed of layers of gravel and sand and lined with a synthetic liner. Wastewater receives additional treatment by the biofilm attached to the gravel extending the period nitrification can occur and increasing total suspended solid removal. The water from the filters is sent back to the splitter tank and filtered again until treatment goals are met. Solids produced during the

treatment process are removed as needed to maintain facility performance and land-applied on WDNR-approved agricultural sites

Reason for Modification

As part of the Disinfection and Effluent Limitations for E. coli schedule the permittee submitted a report on the quality of the effluent discharge. The permittee does not have disinfection, but they were able to demonstrate the quality of the effluent is able to meet the E. coli monthly geometric mean of 126#/100 ml. Since disinfection is not required per s. NR 210.06(3)(d), Wis. Adm. Code, the E. coli limitations are no longer required. The permit has been modified to remove effluent E. coli monitoring, limit and the remaining actions of the afore mentioned schedule.

Permit Requirements

1 Influent – Monitoring Requirements

1.1 Sample Point Number: 701- INFLUENT TO PLANT

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Total Daily	
BOD5, Total		mg/L	Weekly	24-Hr Flow Prop Comp	
Suspended Solids, Total		mg/L	Weekly	24-Hr Flow Prop Comp	

Changes from Previous Permit:

No changes of influent limitations and monitoring requirements were required in this permit section.

2 Surface Water - Monitoring and Limitations

2.1 Sample Point Number: 004- EFFLUENT DISCHARGE

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Total Daily	
BOD5, Total	Weekly Avg	5.0 mg/L	Weekly	Grab	Limit is effective May through October.
BOD5, Total	Weekly Avg	10 mg/L	Weekly	Grab	Limit is effective November through April.
BOD5, Total	Daily Max	30 mg/L	Weekly	Grab	Limit is effective June through August and December through February.

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Suspended Solids, Total	Weekly Avg	10 mg/L	Weekly	Grab	
Suspended Solids, Total	Daily Max	30 mg/L	Weekly	Grab	Limit is effective June through August and December through February.
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	3.8 mg/L	Weekly	Grab	Limit is effective May through October.
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	6.7 mg/L	Weekly	Grab	Limit is effective November through April.
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	8.3 mg/L	Weekly	Grab	Limit is effective May through October.
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	16 mg/L	Weekly	Grab	Limit is effective November through April.
Nitrogen, Ammonia (NH3-N) Total	Daily Max - Variable	mg/L	Weekly	Grab	Enter the daily ammonia result on the eDMR and compare to the Nitrogen, Ammonia Variable Limit column to determine compliance.
Nitrogen, Ammonia Variable Limit		mg/L	Weekly	See Table	Using the daily pH result look up the applicable ammonia limit in the Ammonia Limitation section and report the variable limit on the eDMR.
pH Field	Daily Max	9.0 su	Weekly	Grab	
pH Field	Daily Min	6.0 su	Weekly	Grab	
Dissolved Oxygen	Daily Min	7.0 mg/L	Weekly	Grab	
~~E. coli~~		~~#/100 ml~~	~~Weekly~~	~~Grab~~	~~Monitoring is required May through September 2025.~~
~~E. coli~~	~~Geometric Mean - Monthly~~	~~126 #/100 ml~~	~~Weekly~~	~~Grab~~	~~Monitoring and limit effective May through September annually per the Effluent Limitations for E. coli Schedule in the permit.~~
~~E. coli~~	~~% Exceedance~~	~~10 Percent~~	~~Monthly~~	~~Calculated~~	~~Monitoring and limit effective May through September annually per the~~

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
					~~Effluent Limitations for E. coli Schedule in the permit. See the E. coli Percent Limit section below. Enter the result in the DMR on the last day of the month.~~
Phosphorus, Total	Monthly Avg	1.4 mg/L	Weekly	Grab	INTERIM LIMIT through 12/31/2027. See the MDV (Multi-Discharger Variance) Requirements section and Phosphorus schedules.
Phosphorus, Total	Monthly Avg	1.0 mg/L	Weekly	Grab	INTERIM MDV LIMIT begins 1/1/2028. See the MDV (Multi-Discharger Variance) Requirements section and Phosphorus schedules.
Phosphorus, Total		lbs/month	Monthly	Total Monthly	Report the total monthly phosphorus discharged in lbs/month on the last day of the month on the DMR. See Standard Requirements for 'Appropriate Formulas' to calculate the Total Monthly Discharge in lbs/month.
Phosphorus, Total		lbs/yr	Annual	Total Annual	Report the sum of the total monthly discharges for the calendar year on the Annual report form.
Temperature		deg F	Weekly	Multiple Grab	Monitoring is required during the 2026 calendar year.
Nitrogen, Total Kjeldahl		mg/L	See Listed Qtr(s)	Grab	See the Nitrogen Series Monitoring section.
Nitrogen, Nitrite + Nitrate Total		mg/L	See Listed Qtr(s)	Grab	See the Nitrogen Series Monitoring section.
Nitrogen, Total		mg/L	See Listed Qtr(s)	Calculated	Total Nitrogen = Total Nitrogen Kjeldahl (mg/L) + Nitrite +Nitrate Nitrogen (mg/L). See the Nitrogen Series Monitoring section.

Changes from Previous Permit

The following change to the effluent limitations and monitoring requirements was required in this modified permit.

- **E. coli -** The permittee was able to demonstrate in the "Report on Effluent Discharges" dated November 28, 2025 the quality of the effluent is able to meet the E. coli monthly geometric mean of 126#/100 ml. Since disinfection is not required per s. NR 210.06(3)(d), Wis. Adm. Code, the E. coli limitations are no longer required. E. coli monitoring, limit have been removed from the permit. Identified by a strike through in the table above.

3 Land Application - Monitoring and Limitations

3.1 Sample Point Number: 003- LAGOON SLUDGE

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Solids, Total		Percent	Once	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Once	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Once	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Once	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Once	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Once	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Once	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Once	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Once	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Once	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Once	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Once	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Once	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Once	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Once	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Once	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Once	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Once	Composite	
Nitrogen, Total Kjeldahl		Percent	Per Application	Composite	
~~Nitrogen, Ammonia (NH3-N) Total~~ Nitrogen, Ammonium		Percent	Per Application	Composite	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
(NH4-N) Total					
Phosphorus, Total		Percent	Per Application	Composite	
Phosphorus, Water Extractable		% of Tot P	Per Application	Composite	
Potassium, Total Recoverable		Percent	Per Application	Composite	
PFOA + PFOS		ug/kg	Once	Calculated	Report the sum of PFOA and PFOS. See PFAS Permit Sections for more information.
PFAS Dry Wt			Once	Grab	Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.

Changes from Previous Permit:

The following changes to the sludge limitations and monitoring requirements were required in this modified permit.

- The parameter nitrogen ammonia was mistakenly included in the permit and has been replaced with nitrogen ammonium.
- The PFAS monitoring list found in permit section 3.2.1.6 has been updated to the most current list. Changes have been made to the following portions of the list (highlighted).

TELOMER SULFONIC Acids	
4:2FTSA	*1H,1H,2H,2H*-Perfluorohexane sulfonic acid
6:2FTSA	*1H,1H,2H,2H*-Perfluorooctane sulfonic acid
8:2FTSA	*1H,1H,2H,2H*-Perfluorodecane sulfonic acid
PERFLUOROALKYLETHERCARBOXYLIC Acids (PFECAs)	
HFPO-DA	Hexafluoropropylene oxide dimer acid
ADONA	4,8-dioxa-3*H*-perfluorononanoic acid
PFMPA	Perfluoro-3-methoxypropanoic acid
PFMBA	Perfluoro-4-methoxybutanoic acid
NFDHA	Nonafluoro-3,6-dioxaheptaoic acid
CHLORO-PERFLUOROALKYLSULFONATE	

9Cl-PF3ONS	9-chloroehexadecafluoro-3-oxanone-1-sulfonic acid
11Cl-PF3OUdS	11-chloroelcosafluoro-3-oxaundecane-1-sulfonic acid
PFEESA	Perfluroro(2-ethoxyethane)sulfonic acid
TELOMER SULFONIC Acids	
3:3FTCA	3-Perfluoropropyl propanoic acid
5:3FTCA	*2H,2H,3H,3H*-Perfluorooctanoic acid
7:3FTCA	3-Perfluoroheptyl propanoic acid

4 Schedules

4.1 Disinfection and Effluent Limitations for E. coli

Required Action	Due Date
Status Update: The permittee shall submit information within the January 2025 discharge monitoring report (DMR) comment section documenting the steps taken in preparation for properly monitoring and testing for E. coli including, but not limited to, selected test method and location of sampling.	02/21/2025 Completed
Report on Effluent Discharge: The permittee shall prepare and submit a report on effluent discharge. The report shall include an evaluation of collected effluent data and the facility's ability to comply with final E. coli limitations. The report shall state whether current treatment results in compliance with the final E. coli limitations. The permittee shall also submit a request to the department to evaluate the need for disinfection pursuant s. NR 210.06(3), Wis. Adm. Code. MODIFICATION - If the department determines, based on the information submitted in the Report on Effluent Discharges, that disinfection is not required pursuant s. NR 210.06(3), Wis. Adm. Code, the department will modify or revoke and reissue the permit in accordance with public notice procedures under ch. 283, Wis. Stats., and ch. NR 203, Wis. Adm. Code, to remove monitoring, the final E. coli limitation, and the remaining actions in this schedule of compliance. FACILITY PLAN - If the Report on Effluent Discharge concludes that current treatment does not results in compliance with the final E. coli limitations, the permittee shall initiate development of a facility plan for meeting final E. coli limitations and comply with the remaining required actions in this schedule of compliance.	11/30/2025 Completed
~~Submit Facility Plan: The permittee shall submit a Facility Plan per s. NR 110.09, Wis. Adm. Code for meeting disinfection requirements and complying with E. coli surface water limitations. The permittee may submit an abbreviated facility plan if the Department determines that the modifications are minor.~~	~~04/30/2026~~
~~Final Plans and Specifications: The permittee shall submit final construction plans to the Department for approval pursuant to ch. NR 108, Wis. Adm. Code, specifying treatment plant upgrades that must be constructed to meet disinfection requirements per s. NR 210.06(1), Wis. Adm Code, achieve compliance with final E. coli limitations, and a schedule for completing construction of the upgrades by the complete construction date specified below.~~	~~03/31/2027~~
~~Treatment Plant Upgrade to Meet Limitations: The permittee shall initiate bidding, procurement, and/or construction of the project. The permittee shall obtain approval of the final construction plans and schedule from the Department pursuant to s. 281.41. Stats., prior to initiating activities defined as~~	~~09/30/2027~~

~~construction under ch. NR 108, Wis. Adm. Code. Upon approval of the final construction plans and schedule by the Department pursuant to s. 281.41, Stats., the permittee shall construct the treatment plant upgrades in accordance with the approved plans and specifications.~~	
~~Construction Upgrade Progress Report: The permittee shall submit a progress report on construction upgrades.~~	09/30/2028
~~Complete Construction: The permittee shall complete construction of wastewater treatment system upgrades.~~	03/31/2029
~~Achieve Compliance: The permittee shall achieve compliance with final E. coli limitations.~~	04/30/2029

Explanation of Schedule

E. coli- A compliance schedule was included in the permit to provide time for the permittee to investigate options for meeting new effluent E. coli water quality-based effluent limits. The permittee was able to demonstrate in the "Report on Effluent Discharges" dated November 28, 2025, the quality of the effluent is able to meet the E. coli monthly geometric mean of 126#/100 ml. Since disinfection is not required per s. NR 210.06(3)(d), Wis. Adm. Code, the E. coli limitations are no longer required. The permit has been modified to remove the remaining actions in the schedule. Identified with strike through in the table above.

4.2 Phosphorus Multi-Discharger Variance Interim Limit (1.0 mg/L)

Required Action	Due Date
Report on Effluent Discharges: Submit a report on effluent discharges of phosphorus with conclusions regarding compliance.	06/30/2025
Action Plan: Submit an action plan for complying with the specified interim effluent limit. If construction is required, include plans and specifications with the submittal.	12/31/2025
Initiate Actions: Initiate actions identified in the plan.	06/30/2026
Complete Actions: Complete actions identified in the plan and report on effectiveness of those actions in achieving the specified interim limit.	12/31/2026
Interim Limit Compliance: Continue to complete actions identified in the plan and achieve compliance with the specified interim effluent limit.	12/31/2027

Explanation of Schedule

No changes have been made to this schedule. *Phosphorus Multi-Discharger Variance Interim Limit (1.4 mg/L)* - Subsection 283.16(6), Wis. Stats., establishes required interim phosphorus effluent limits that must be met for multi-discharger variance (MDV) eligibility. The schedule above provides the permittee with two years to comply with that limit.

4.3 Phosphorus Schedule - Continued Optimization

Required Action	Due Date
Optimization: The permittee shall continue to implement the optimization plan as previously approved to optimize performance to control phosphorus discharges. Submit a progress report on optimizing removal of phosphorus by the Due Date.	12/31/2025
Progress Report #2: Submit a progress report on optimizing removal of phosphorus.	12/31/2026

Progress Report #3: Submit a progress report on optimizing removal of phosphorus.	12/31/2027
Progress Report #4: Submit a progress report on optimizing removal of phosphorus.	12/31/2028
Progress Report #5: Submit a progress report on optimizing removal of phosphorus.	12/31/2029

Explanation of Schedule

No changes have been made to this schedule. *Phosphorus Schedule - Continued Optimization* - Per s. 283.16(6)(a), Wis. Stats. the Department may include a requirement that the permittee optimize the performance of a point source in controlling phosphorus discharges, which may be necessary to achieve compliance with multi-discharger variance interim limits. This compliance schedule requires the permittee to continue to implement the optimization plan that was approved during the previous permit term.

4.4 Phosphorus Payment per Pound to County

Required Action	Due Date
Annual Verification of Phosphorus Payment to County: The permittee shall make a total payment to the participating county or counties approved by the Department by March 1 of each calendar year. The amount due is equal to the following: [(lbs of phosphorus discharged minus the permittee's target value) times ($64.75] per pound)] or $640,000, whichever is less. See the payment calculation steps in the Surface Water section. The permittee shall submit Form 3200-151 to the Department by March 1 of each calendar year indicating total amount remitted to the participating counties to verify that the correct payment was made. The first payment verification form is due by the specified Due Date. Note: The applicable Target Value is 0.2 mg/L as defined by s. 283.16(1)(h), Wis. Stats. The "per pound" value is $50.00 adjusted for CPI.	03/01/2026
Annual Verification of Payment #2: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2027
Annual Verification of Payment #3: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2028
Annual Verification of Payment #4: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2029
Continued Coverage: If the permittee intends to seek a renewed variance, an application for the MDV (Multi Discharger Variance) shall be submitted as part of the application for permit reissuance in accordance with s. 283.16(4)(b), Wis. Stats.	
Annual Verification of Payment After Permit Expiration: In the event that this permit is not reissued prior to the expiration date, the permittee shall continue to submit Form 3200-151 to the Department indicating total amount remitted to the participating counties by March 1 each year.	

4.4.1 Explanation of Schedule

No changes have been made to this schedule. *Phosphorus Payment per Pound to County* - Subsection 283.16(6)(b), Wis. Stats., requires permittees that have received approval for the multi-discharger variance (MDV) to implement a watershed project that is designed to reduce non-point sources of phosphorus within the HUC 8 watershed in which the permittee is located. The permittee has selected the "Payment to Counties" watershed option described in s. 283.16(8), Wis. Stats. Under this option the permittee shall make annual payment(s) to participating county(s) that are calculated based on the

amount of phosphorus actually discharged during a calendar year in pounds per year less the amount of phosphorus that would have been discharged had the permittee discharged phosphorus at a target value concentration of 0.2 mg/L. The pounds of phosphorus discharged in excess of the target value is multiplied by a per pound phosphorus charge that will equal $64.75 per pound. This schedule requires the permittee to submit Form 3200-151 to the Department indicating the total amount remitted to the participating county(s).

4.5 Sludge Management Plan

Required Action	Due Date
Submit a Sludge Management Plan: The permittee shall submit a management plan for approval if removal of sludge will occur during this permit term. The plan shall demonstrate compliance with ch. NR 204 Wis. Adm. Code and at minimum address 1) How and where is sludge sampled; 2) Available sludge storage details and location(s); 3)How will the sludge be removed with details on volume, characterization and how will the treatment plant continue to function during the drawdown; 4) Describe the type of transportation and spreading vehicles and loading and unloading practices; 5) Identify approved land application sites, apply for needed sites, site limitations, total acres needed and vegetative cover management; 6) Specify record keeping procedures including site loading; 7) Address contingency plans for adverse weather and odor/nuisance abatement; and 8) Include any other pertinent information such as other disposal options that may be used or specifications of any pretreatment processes Once approved, all sludge management activities shall be conducted in accordance with the plan. Any changes to the plan must be approved by the Department prior to implementing the changes. No desludging may occur unless approval from the Department is obtained. Daily logs shall be kept that record where the sludge has been disposed. The plan is due at least 60 days prior to desludging.	

4.5.1 Explanation of Schedule

No changes have been made to this schedule. *Sludge Management Plan* - If the lagoons are to be de-sludged during this permit term a management plan is needed to show compliance with ch NR 204, Wis. Adm. Code. There are outlines available to assist in plan development.

Prepared By: Sheri A. Snowbank Wastewater Specialist **Date:** January 16, 2026