City of Whitehall Public Noticed Permit Fact Sheet

General Information

Permit Number:	WI-0030970-10-0
Permittee Name:	City of Whitehall, City Hall, PO Box 155, Whitehall, WI 54773
Discharge Location:	Whitehall Wastewater Treatment Plant, 36173 Schansberg Rd., Whitehall, WI 54776 N44° 22' W91° 19', T22N, R8W, the north east bank of the Trempealeau River, 0.8 mile upstream of the Main Street/Highway 53 bridge
Receiving Water:	the Trempealeau River located in the Pigeon Creek Watershed of the Buffalo-Trempealeau River Basin in Trempealeau County
StreamFlow ($Q_{7,10}$):	66 cfs
Stream Classification:	Warmwater Sportfish, Non-public Water Supply
Discharge Type:	Existing, continuous
Design Flow:	1.2 MGD Annual Average
Significant Industrial Loading?	Associated Milk Producers Inc. (AMPI) of Blair and Ornua Ingredients
Operator at Proper Grade?	Yes
Approved Pretreatment Program?	N/A

Facility Description

The City of Whitehall owns and operates the Whitehall Wastewater Treatment Facility (WWTF) for treatment of domestic wastewater from the City of Whitehall, the Lincoln Sanitary District, Trempealeau County Health Care and the City of Blair. The Whitehall WWTF also treats industrial waste from two dairy industries, Associated Milk Producers Inc. (AMPI) of Blair and Ornua Ingredients (two plants). The wastewater treatment system consists of six-celled lagoon system with a design flow 1.2 million gallons per day (MGD). The actual annual average influent flow in 2023 was 0.797 MGD. Phosphorus is removed via addition of ferric chloride. No major operational changes occurred during the last permit term, however a facility upgrade is anticipated in this permit term. Significant monitoring and/or limit changes in the upcoming permit term are as follows: 1) the influent and effluent sample frequency for flow has been changed from “continuous” to “daily” for eDMR reporting purposes, 2) the monitoring frequencies at two of the influent sample points increased for some parameters, 3) the effluent monitoring frequency for BOD, TSS, phosphorus and ammonia has increased, 4) the multi-discharger variance (MDV) for phosphorus has been conditionally reapproved and there is a reduction in the interim MDV limit, along with a schedule to meet that lower limit, 5) fecal coliform effluent monitoring and limits will be replaced during the permit term with Escherichia coli (E. coli) monitoring and limits, per the associated compliance schedule, 6) effluent monitoring for PFOS and PFOA has been added in accordance with s. NR 106.98(2)(c), Wis. Adm. Code, 7) effluent copper limits have decreased, 8) addition of zinc monitoring, 9) the variable daily maximum effluent ammonia limit table has been expanded to include applicable limits at a lower effluent pH, and 10) The permittee is required to conduct instream monitoring of the receiving water for copper and total suspended solids as a condition of the dissolved based metals limit calculation approach for copper (results will be submitted at the new Sample point 601).

Additionally, to quantitate the risk, PFAS sludge sampling has been included in the permit pursuant to ss. NR 214.18(5)(b) and NR 204.06(2)(b)9., Wis. Adm. Code.

Substantial Compliance Determination

Enforcement During Last Permit: The facility received an NOV in July of 2019 for ongoing violations regarding BOD, Copper, Fecal Coliform, TSS, and Phosphorus. In addition, the facility had some under reporting instances and ongoing issues with the industries in town. The facility included the industries in conversations with plant issues and was able to get the industries to make changes to improve influent quality and therefore, plant operations bringing them back into compliance.

After the closing of the enforcement case two other enforcement actions were taken. An NON was issued in December of 2022 for fecal coliform violations in the 2022 disinfection season. Additionally, an NON was issued in December of 2023 for BOD, Fecal, Nitrogen, and Phosphorus violations. The fecal coliform violation in 2023 was isolated to one weekly limit in 2023 and showed an overall improvement in wastewater quality at the facility. All NONs were properly addressed and responded to. The facility has ongoing issues with industries in town but is actively working on a facility plan to address phosphorus compliance and increasing industry loadings for the future.

After a desk top review of all Discharge monitoring reports, CMARs, Land application reports, and compliance schedule items, and an inspection on 03/13/2024, Whitehall WWTF has been found to be in substantial compliance with their current permit.

Compliance determination entered by Jenna Monahan on 03/19/2024.

Sample Point Designation		
Sample Point Number	**Discharge Flow, Units, and Averaging Period**	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**
705	0.012 MGD (2023) Influent flow from Lincoln Sanitary District	Representative influent samples from the Lincoln Sanitary District shall be collected from the discharge manhole.
706	0.797 MGD (2023) Influent flow from all sources [City of Whitehall, Lincoln Sanitary District, Trempealeau County Health Care, City of Blair. Associated Milk Producers Inc. (AMPI) of Blair, and Whitehall Specialties]	Permittee shall calculate the total flow, total suspended solids and BOD5 from all influent sources and report those results at influent sample point 706. Domestic Sources are the City of Whitehall, Lincoln Sanitary District, City of Blair & Trempealeau County Health Care Facility. Industrial sources are two dairy industries, Associated Milk Producers Inc. (AMPI) of Blair and the two Whitehall Specialties of Whitehall facilities.
707	0.786 MGD (2023) All influent except Lincoln Sanitary District	Representative influent samples shall be collected at the combined influent monitoring station. Influent data shall include information from all sources at influent sample point 706 EXCEPT for Lincoln Sanitary District.
001	0.730 MGD (2023) Effluent to surface water	Representative effluent samples shall be collected from the Outfall 001 manhole prior to discharge to the Trempealeau River.
601	New instream sample point (no flow measurement)	Representative samples of the receiving water, the Trempealeau River, shall be collected from a point downstream which is representative of the mixed receiving water and effluent at a

Sample Point Designation		
Sample Point Number	**Discharge Flow, Units, and Averaging Period**	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**
		point where chemical equilibrium has been reached.
003	In 2023 2.02 MG were removed and land applied on department approved fields. Pond 5 sludge is removed annually, and if cost allows one rotating additional pond has sludge removed.	Representative composite sludge samples shall be collected prior to land app and monitored for List 1, 2, 3 & 4 and PFAS. Sludge shall be monitored once in 2026 for PCBs.

1 Influent – Monitoring Requirements

Sample Point Number: 705- INFLUENT from LINCOLN SD

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Continuous	
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:

The sample frequency for flow has been changed from “continuous” to “daily” for eDMR reporting purposes. The BOD and TSS monitoring frequencies have increased from 2/month to weekly to better determine percent removal between the influent and effluent. The sample type for BOD & TSS has changed from 24 hour composite to 24 hour flow proportional composite.

Explanation of Limits and Monitoring Requirements

Monitoring of influent for BOD5 and total suspended solids is required by s. NR 210.04(2), Wis. Adm. Code, to assess wastewater strengths and to demonstrate the percent removal requirements in s. NR 210.05, Wis. Adm. Code, and in the Standard Requirements section of the permit.

Sample Point Number: 706- COMBINED INFLUENT- ALL SOURCES

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Calculated	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
BOD5, Total		mg/L	Weekly	Calculated	
Suspended Solids, Total		mg/L	Weekly	Calculated	

Changes from Previous Permit:

The sample frequency for BOD and TSS has been reduced from daily to weekly.

Explanation of Limits and Monitoring Requirements

Monitoring of influent flow, BOD5 and total suspended solids is required by s. NR 210.04(2), Wis. Adm. Code, to assess wastewater strengths and to demonstrate the percent removal requirements in s. NR 210.05, Wis. Adm. Code, and in the Standard Requirements section of the permit.

Sample Point Number: 707- INFLUENT, EXCEPT LINCOLN SD

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Continuous	
BOD5, Total		mg/L	Daily	24-Hr Flow Prop Comp	
Suspended Solids, Total		mg/L	Daily	24-Hr Flow Prop Comp	
Phosphorus, Total		mg/L	3/Week	24-Hr Flow Prop Comp	

Changes from Previous Permit:

The monitoring frequency for BOD and TSS has increased to better determine percent removal between the influent and effluent.

Explanation of Limits and Monitoring Requirements

Monitoring of influent flow, BOD5 and total suspended solids is required by s. NR 210.04(2), Wis. Adm. Code, to assess wastewater strengths and to demonstrate the percent removal requirements in s. NR 210.05, Wis. Adm. Code, and in the Standard Requirements section of the permit.

2 Surface Water - Monitoring and Limitations

Sample Point Number: 001- EFFLUENT TO TREMPEALEAU RIVER

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Continuous	
BOD5, Total	Weekly Avg	45 mg/L	3/Week	24-Hr Flow Prop Comp	
BOD5, Total	Monthly Avg	30 mg/L	3/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Monthly Avg	60 mg/L	3/Week	24-Hr Flow Prop Comp	
pH Field	Daily Min	6.0 su	Daily	Grab	
pH Field	Daily Max	9.0 su	Daily	Grab	
Nitrogen, Ammonia Variable Limit		mg/L	3/Week	24-Hr Flow Prop Comp	Look up the variable ammonia limit from the 'Variable Ammonia Limitation' table and report the variable limit in the Ammonia Variable Limit column on the eDMR.
Nitrogen, Ammonia (NH3-N) Total	Daily Max - Variable	mg/L	3/Week	24-Hr Flow Prop Comp	Report the daily maximum Ammonia result in the Nitrogen, Ammonia (NH3-N) Total column of the eDMR. See Ammonia Limitation Section in the permit.
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	34 mg/L	3/Week	24-Hr Flow Prop Comp	
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	34 mg/L	3/Week	24-Hr Flow Prop Comp	
Fecal Coliform	Geometric Mean - Monthly	400 #/100 ml	Weekly	Grab	Interim limit effective May through September annually until the final E. coli limit goes into effect per the Effluent Limitations for E. coli Schedule.
E. coli		#/100 ml	Weekly	Grab	Monitoring only May through September annually until the final limit goes into effect per the

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
					Effluent Limitations for E. coli Schedule.
E. coli	Geometric Mean - Monthly	126 #/100 ml	Weekly	Grab	Limit Effective May through September annually per the Effluent Limitations for E. coli Schedule.
E. coli	% Exceedance	10 Percent	Monthly	Calculated	Limit Effective May through September annually per the Effluent Limitations for E. coli Schedule. See the E. coli Percent Limit section in the permit. Enter the result in the DMR on the last day of the month.
Copper, Total Recoverable	Daily Max	0.74 lbs/day	Monthly	Calculated	Additional instream monitoring of the receiving water is required to support the dissolved-based copper limitation calculation. See Sample Point 601 in the permit for info. When applicable, copper samples shall be collected at the same time as a scheduled WET test.
Copper, Total Recoverable	Daily Max	34 ug/L	Monthly	24-Hr Flow Prop Comp	
Copper, Total Recoverable	Weekly Avg	34 ug/L	Monthly	24-Hr Flow Prop Comp	
Copper, Total Recoverable	Monthly Avg	34 ug/L	Monthly	24-Hr Flow Prop Comp	
Zinc, Total Recoverable		ug/L	Quarterly	24-Hr Flow Prop Comp	
Hardness, Total as CaCO3		mg/L	Quarterly	24-Hr Flow Prop Comp	Quarterly sample shall be collected at the same time as a copper & zinc sample.
PFOS		ng/L	1/ 2 Months	Grab	Monitoring only. See PFOS/PFOA sections in the permit & the associated schedule.
PFOA		ng/L	1/ 2 Months	Grab	
Phosphorus, Total	Monthly Avg	0.8 mg/L	3/Week	24-Hr Flow Prop Comp	This is an interim limit effective through 08/31/2029. See the MDV/Phosphorus subsections and phosphorus schedules in the permit.

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Phosphorus, Total	Monthly Avg	0.6 mg/L	3/Week	24-Hr Flow Prop Comp	This is an interim MDV limit effective 09/01/2029. See the MDV/Phosphorus subsections and phosphorus schedules in the permit.
Phosphorus, Total		lbs/month	Monthly	Calculated	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	Calculated	Report the sum of the total monthly discharges for the calendar year on the Annual report form.
Nitrogen, Total Kjeldahl		mg/L	See Listed Qtr(s)	24-Hr Flow Prop Comp	Monitoring required in specific quarters. See Nitrogen Series Monitoring section in the permit for more info.
Nitrogen, Nitrite + Nitrate Total		mg/L	See Listed Qtr(s)	24-Hr Flow Prop Comp	
Nitrogen, Total		mg/L	See Listed Qtr(s)	Calculated	
Acute WET		TUa	See Listed Qtr(s)	24-Hr Flow Prop Comp	See WET testing section below
Chronic WET		TUc	See Listed Qtr(s)	24-Hr Flow Prop Comp	

Changes from Previous Permit

Significant effluent monitoring and/or limit changes in this permit term are as follows: 1) an increase in the monitoring frequency for BOD, TSS, phosphorus and ammonia, 2) the conditional reapproval of a multi-discharger variance (MDV) for phosphorus and the reduction in the interim MDV limit, along with a schedule to meet that limit, 3) fecal coliform monitoring and limits will be replaced during the permit term with Escherichia coli (E. coli) monitoring and limits, per the associated compliance schedule, 4) monitoring for PFOS and PFOA added every other month in accordance with s. NR 106.98(2)(c), Wis. Adm. Code, 5) the sample frequency for flow has been changed from “continuous” to “daily” for eDMR reporting purposes, 6) the copper limits have decreased, 7) zinc monitoring added, and 8) the variable daily maximum ammonia limit table has been expanded to include applicable limits at a lower effluent pH.

Explanation of Limits and Monitoring Requirements

The effluent monitoring frequency for all parameters were considered. Monitoring frequencies are based on the size and type of the facility and are established to best characterize effluent quality and variability, to detect events of noncompliance, and to ensure fairness and consistency in permits issued across the state. Requirements in administrative

code (NR 108, 205, 210 and 214 Wis. Adm. Code) and Section 283.55, Wis. Stats. were considered, where applicable, when determining the appropriate monitoring frequencies for pollutants that have final effluent limits in effect during this permit term. For more information see the March 22, 2021 version of the Bureau of Water Quality Program Guidance Document "Monitoring Frequencies for Individual Wastewater Permits". Using the criteria previously stated, and taking into consideration that Whitehall has significant industrial contributors with fluctuating loadings, and has a history of noncompliance, the department has determined the following monitoring frequency increases are appropriate: 1) BOD, TSS and phosphorus has increased from weekly to 3/week, and 2) ammonia has increased from weekly to 3x/week. These monitoring frequency increases are necessary in order to effectively characterize the effluent quality and variability, and to best determine compliance with effluent limitations.

Limits were determined for Whitehall's existing discharge to the Trempealeau River using chs. NR 102, 104, 105, 106, 207, 210, 212 and 217 of the Wisconsin Administrative Code (where applicable). For additional information on any of the limits see the August 21, 2024 memo from Ben Hartenbower to Holly Heldstab titled "Water Quality-Based Effluent Limitations for the Whitehall Wastewater Treatment Facility WPDES Permit No. WI-0030970".

MUNICIPAL EFFLUENT LIMITS – In accordance with the federal regulation 40 CFR 122.45(d), and to comply with the expression of limits requirements in ss. NR 106.07 and NR 205.065(7), Wis. Adm. Codes, limits in this permit are to be expressed as weekly average and monthly average limits whenever practicable.

BOD, TSS and pH: Other than the increase in BOD & TSS monitoring frequency as stated above, limits for these pollutants correspond to the requirements of the current permit since the facility has not increased the capacity of the wastewater treatment system since the last permit issuance, nor are increases expected during the term of the permit.

In accordance with s. NR 210.07(2), Wis. Adm. Code, Whitehall has been granted a variance for a 60 mg/L monthly average total suspended solids (TSS) limit at Outfall 001. Like many Wisconsin aerated lagoons and stabilization ponds, the Whitehall lagoon/pond system is not capable of consistently meeting the 30 mg/L monthly average TSS limit that would normally apply to a discharge to the Trempealeau River, a warm water sportfish river. This is a continuation of the TSS variance that Whitehall has been granted in the past.

Ammonia: Water quality-based effluent limitations were evaluated for Ammonia Nitrogen based upon water quality criteria in ch. NR 105 (as revised March 2004), including acute toxicity criteria (ATC) and chronic toxicity criteria (CTC). Effluent limitations for ammonia are calculated using the procedures in s. NR 106.32, Wis. Adm. Code and are shown in the WQBEL memo dated 8/21/2024 referenced above. In addition to weekly and monthly average ammonia limits, daily maximum ammonia limits that vary with effluent pH apply year-round. In addition to the increase in monitoring frequency as mentioned above, the variable daily maximum ammonia limits have changed based on effluent pH in accordance with s. NR 106.32(2), Wis. Adm. Code. See table below for more information. Samples for ammonia shall be collected at the same time as the pH samples.

Effluent pH s.u.	Limit mg/L	Effluent pH s.u.	Limit mg/L	Effluent pH s.u.	Limit mg/L
6.0 ≤ pH ≤ 6.1	108	7.0 < pH ≤ 7.1	66	8.0 < pH ≤ 8.1	14
6.1 < pH ≤ 6.2	106	7.1 < pH ≤ 7.2	59	8.1 < pH ≤ 8.2	11
6.2 < pH ≤ 6.3	104	7.2 < pH ≤ 7.3	52	8.2 < pH ≤ 8.3	9.4
6.3 < pH ≤ 6.4	101	7.3 < pH ≤ 7.4	46	8.3 < pH ≤ 8.4	7.8
6.4 < pH ≤ 6.5	98	7.4 < pH ≤ 7.5	40	8.4 < pH ≤ 8.5	6.4
6.5 < pH ≤ 6.6	94	7.5 < pH ≤ 7.6	34	8.5 < pH ≤ 8.6	5.3
6.6 < pH ≤ 6.7	89	7.6 < pH ≤ 7.7	29	8.6 < pH ≤ 8.7	4.4
6.7 < pH ≤ 6.8	84	7.7 < pH ≤ 7.8	24	8.7 < pH ≤ 8.8	3.7
6.8 < pH ≤ 6.9	78	7.8 < pH ≤ 7.9	20	8.8 < pH ≤ 8.9	3.1
6.9 < pH ≤ 7.0	72	7.9 < pH ≤ 8.0	17	8.9 < pH ≤ 9.0	2.6

Disinfection/*E. Coli*/Fecal Coliform: Revisions to bacteria surface water quality criteria to protect recreational uses and accompanying *E. coli* WPDES permit implementation procedures became effective May 1, 2020. The new rule requires

that WPDES permits for facilities with required disinfection include monitoring for E. coli while facilities are disinfecting during the recreation period and establish effluent limitations for *E. coli* established in s. NR 210.06 (2), Wis. Adm Code. The administrative code rule changes included the following actions: revised the bacteria water quality criteria from fecal coliform to *E. coli* to protect recreation in ch. NR 102, Wis. Adm. Code.; removed fecal coliform criteria for certain individual waters from ch. NR 104, Wis. Adm. Code.; revised permit requirements for publicly and privately owned sewage treatment works in ch. NR 210, Wis. Adm. Code.; and, updated approved analytical methods for bacteria in ch. NR 219, Wis. Adm. Code. Whitehall currently does not disinfect the effluent prior to discharge to the Trempealeau River. In recent years the facility has had sporadic fecal coliform and E. coli limit exceedances. If operational and sampling procedure adjustments alone do not allow the facility to consistently meet disinfection limits, it is anticipated the permittee will need to install disinfection as part of a facility upgrade.

Copper: Effluent data from Dec 2019 to June 2024 indicate the need for copper limits because the 1-day P99 concentration of 82.7 µg/L and the maximum concentration of 97.0 µg/L both exceeded the maximum daily calculated limit. Therefore, monthly monitoring and limits continue for the upcoming permit term. The permittee requested limits be calculated using the dissolved-based approach on August 27, 2024 via an email to Jenna Monahan. Using that approach, the limits included in the permit are 34 ug/L & 0.74 lbs/day Daily Max, and 34 ug/L Weekly & Monthly Avg. See the requirements at Sample Point 601 below for more information on additional instream monitoring required of the permittee when using the dissolved-based limit calculation. Also see the August 21, 2024 WQBEL memo referenced above that details the calculations used to derive the limits.

Zinc: Contrary to the August 21, 2024 WQBEL memo, zinc limits are not needed and no instream monitoring of the receiving water for zinc is necessary at sample point 601. Additional effluent zinc samples collected and analyzed after the WQBEL memo was finalized indicate no reasonable potential. Monthly zinc monitoring is included in the permit due to variability of results and industrial contribution.

Hardness: Quarterly hardness monitoring is required because of the relationship between hardness and daily maximum copper & zinc limits based on acute toxicity.

PFOS and PFOA – NR 106 Subchapter VIII – Permit Requirements for PFOS and PFOA Dischargers became effective on August 1, 2022. At the first reissuance of a WPDES permit after August 1, 2022, the new rule requires WPDES permits for municipal dischargers with an average flow rate less than 1 MGD, to be evaluated on a case-by-case basis to determine if monitoring is required pursuant to s. NR 106.98(2)(c), Wis. Adm. Code. The department evaluated the need for PFOS and PFOA monitoring taking into consideration the presence of potential PFOS or PFOA industrial wastes, remediation sites and other potential sources of PFOS or PFOA. Based on information available at the time the permit was drafted, PFOS/PFOA monitoring is required because of the nondomestic contributions. Therefore, monitoring once every two months is included. The initial determination of the need for sampling shall be conducted for up to two years in order to determine if the permitted discharge has the reasonable potential to cause or contribute to an exceedance of the PFOS or PFOA standards under s. NR 102.04(8)(d)1, Wis. Adm. Code.

Phosphorus: Phosphorus rules became effective December 1, 2010 per NR 217, Wis. Adm. Code, that required the permittee to comply with water quality based effluent limits (WQBELs) for total phosphorous. The final phosphorus WQBELs (0.225 monthly average and 0.075 6-month average) were to become effective as scheduled unless a variance was granted. For this permit term, the permittee has re-applied for the Multi-Discharger Variance (MDV) for phosphorus as provided for in s. 283.16, Wis. Stats., and approved by USEPA on February 6, 2017 for a 10-year duration. Whitehall's MDV application was conditionally approved by the DNR on June 14, 2024. The permittee qualifies for the MDV because it is an existing source and a major facility upgrade is needed to comply with the applicable phosphorus WQBELs, thereby creating a financial burden. The interim monthly average highest attainable condition (HAC) limit of 0.8 mg/L applies at the permit effective date. A compliance schedule is included in the permit to bring the permittee into compliance with next step down in an interim MDV limit of 0.6 mg/L, which becomes effective 09/01/2029.

Conditions of the MDV require the permittee to optimize phosphorus removal throughout the permit term, comply with interim limits and make annual payments to participating county(s) by March 1 of each year based on the pounds of phosphorus discharged during the previous year in excess of the specified target value. A reopener clause is included in

the permit to address the current MDV's expiration date, as a permit action may be required to update or remove variance provisions if the MDV is altered or unavailable after February 6, 2027.

The "price per pound" value is $50.00 adjusted for CPI annually during the first quarter as defined by s. 283.16(8)(a)2, Wis. Stats and takes effect for reissued permits with effective dates starting April 1. This may differ from the "price per pound" that is public noticed; however, the "price per pound" is set upon reissuance and is applicable for the entire permit term. The participating county(s) uses these payments to implement non-point source phosphorus control strategies at the watershed level.

Total Nitrogen Monitoring (NO2+NO3, TKN and Total N)- The Department has included effluent monitoring for Total Nitrogen in the permit through the authority under §§ 283.55(1)(e), Wis. Stats., which allows the department to require the permittee to submit information necessary to identify the type and quantity of any pollutants discharged from the point source, and through s. NR 200.065(1)(h), Wis. Adm. Code, which allows for this monitoring to be collected during the permit term. More information on the justification to include total nitrogen monitoring in wastewater permits can be found in the "Guidance for Total Nitrogen Monitoring in Wastewater Permits" dated October 1, 2019. Annual tests are scheduled in the following rotating quarters:

- 2nd quarter (April – June) 2025
- 3rd quarter (July – Sept) 2026
- 1st quarter (Jan – March) 2027
- 4th quarter (Oct – Dec) 2028
- 2nd quarter (April – June) 2029

Whole Effluent Toxicity- Whole effluent toxicity (WET) testing requirements and limits (if applicable) are determined in accordance with ss. NR 106.08 and NR 106.09 Wis. Adm. Code, as revised August 2016. (See the current version of the Whole Effluent Toxicity Program Guidance Document and checklist and WET information, guidance and test methods at http://dnr.wi.gov/topic/wastewater/wet.html). Acute and chronic WET tests are required in the following quarters:

- 2nd quarter (April – June) 2025
- 3rd quarter (July – Sept) 2027
- 1st quarter (Jan – March) 2029

Sample Point Number: 601- TREMPEALEAU RIVER

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Copper, Total Recoverable		ug/L	See Listed Qtr(s)	Grab	See below for more info & quarters in which monitoring is required.
Copper Dissolved		ug/L	See Listed Qtr(s)	Grab	
Suspended Solids, Total		mg/L	See Listed Qtr(s)	Grab	

Changes from Previous Permit

This sample point and associated monitoring of the receiving water has been added this permit term as a condition of the dissolved based metals copper limits calculation method granted for Outfall 001.

Explanation of Limits and Monitoring Requirements

Dissolved-based copper limits were evaluated for the Whitehall Wastewater Treatment Facility pursuant to chs. NR 105 and 106, Wis. Adm. Code. The permittee is required to collect on-site receiving water information to verify a site-specific translator for copper dissolved based calculations. Monitoring of the receiving water, the Trempealeau River, for the above parameters is required twice, once each in the following quarters:

- 2nd quarter (April-June) 2025
- 4th quarter (Oct – Dec) 2027

3 Land Application - Monitoring and Limitations

Municipal Sludge Description						
Sample Point	**Sludge Class (A or B)**	**Sludge Type (Liquid or Cake)**	**Pathogen Reduction Method**	**Vector Attraction Method**	**Reuse Option**	**Amount Reused/Disposed (Dry Tons/Year)**
003	B	Liquid	Fecal Coliform	Injection	Land Application	198
Does sludge management demonstrate compliance? Yes						
Is additional sludge storage required? No						
Is Radium-226 present in the water supply at a level greater than 2 pCi/liter? No						
Is a priority pollutant scan required? No						

Sample Point Number: 003- SLUDGE

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Solids, Total		Percent	Annual	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Annual	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Annual	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Annual	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Annual	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Annual	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Annual	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Annual	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Annual	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Annual	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Annual	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Annual	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Annual	Composite	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nickel Dry Wt	High Quality	420 mg/kg	Annual	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Annual	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Annual	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Annual	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Annual	Composite	
Nitrogen, Total Kjeldahl		Percent	Annual	Composite	
Nitrogen, Ammonia (NH3-N) Total		Percent	Annual	Composite	
Phosphorus, Total		Percent	Annual	Composite	
Phosphorus, Water Extractable		% of Tot P	Annual	Composite	
Potassium, Total Recoverable		Percent	Annual	Composite	
PCB Total Dry Wt	Ceiling	50 mg/kg	Once	Composite	Once in 2026
PCB Total Dry Wt	High Quality	10 mg/kg	Once	Composite	Once in 2026
PFOA + PFOS		ug/kg	Annual	Calculated	Report the sum of PFOA and PFOS. See PFAS Permit Sections for more information.
PFAS Dry Wt			Annual	Grab	Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.

Changes from Previous Permit:

PFAS – Monitoring for PFAS has been added once during the permit term pursuant s. NR 204.06(2)(b)9., Wis. Adm. Code.

Explanation of Limits and Monitoring Requirements

Requirements for land application of municipal sludge are determined in accordance with ch. NR 204 Wis. Adm. Code. Ceiling and high quality limits for metals in sludge are specified in s. NR 204.07(5). Requirements for pathogens are specified in s. NR 204.07(6) and in s. NR 204.07 (7) for vector attraction requirements. Limitations for PCBs are addressed in s. NR 204.07(3)(k).

PFAS- The presence and fate of PFAS in municipal and industrial sludges is an emerging public health concern. EPA is currently developing a risk assessment to determine future land application rates and expects to release this risk

assessment by the end of 2024. In the interim, the department has developed the "Interim Strategy for Land Application of Biosolids and Industrial Sludges Containing PFAS".

Collecting sludge data on PFAS concentrations from a wide range of wastewater treatment facilities will help protect public health from exposure to elevated levels of PFAS and determine the department's implementation of EPA's recommendations. To quantitate this risk, PFAS sampling has been included in the proposed WPDES permit pursuant to ss. NR 214.18(5)(b) and NR 204.06(2)(b)9., Wis. Adm. Code.

4 Schedules

4.1 Effluent Limitations for E. coli

The permittee shall comply with surface water limitations for E. coli as specified. No later than 14 days following each compliance date, the permittee shall notify the Department in writing of its compliance or noncompliance. If a submittal is required, a timely submittal fulfills the notification.

Required Action	Due Date
Status Update: The permittee shall submit information within the 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
Operational Evaluation Report: The permittee shall prepare and submit an Operational Evaluation Report to the Department for review and approval. The report shall include an evaluation of collected effluent data and proposed operational improvements that will optimize efficacy of disinfection at the treatment plant during the period prior to complying with final E. coli limitations and, to the extent possible, enable compliance with the final E. coli limitations. The report shall include a plan and schedule for implementation of the operational improvements. These improvements shall occur as soon as possible, but not later than 04/30/2026. The report shall state whether the operational improvements are expected to result in compliance with the final E. coli limitations. The permittee shall implement the operational improvements in accordance with the approved plan and schedule specified in the Operational Evaluation Report and in no case later than 04/30/2026. If the Operational Evaluation Report concludes that the operational improvements are expected to result in compliance with the final E. coli limitations, the permittee shall comply with the final E. coli limitations by 04/30/2026 and the permittee is not required to comply with subsequent milestones identified below in this compliance schedule ('Submit Facility Plan', 'Final Plans and Specifications', 'Treatment Plant Upgrade to Meet Limitations', 'Construction Upgrade Progress Report', 'Complete Construction', 'Achieve Compliance'). FACILITY PLAN - If the Operational Evaluation Report concludes that operational improvements alone are not expected to result 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. If the Department disagrees with the conclusion of the report and determines that the permittee can achieve final E. coli limitations using the existing treatment system with only operational improvements, the Department may reopen and modify the permit to include an implementation schedule for achieving the final E. coli limitations sooner than 04/30/2029.	11/30/2025
Submit Facility Plan: If the Operational Evaluation Report concluded that the permittee cannot achieve final E. coli limitations with operational improvements alone, the permittee shall submit a Facility Plan per s. NR 110.09, Wis. Adm. Code. The permittee may submit an abbreviated facility	04/30/2026

plan if the Department determines that the modifications are minor.	
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 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 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.	09/30/2027
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 Schedules: A compliance schedule is included in the permit to provide time for the permittee to investigate options for meeting new effluent E. coli water quality-based effluent limits while coming into compliance with the limits as soon as reasonably possible.

4.2 PFOS/PFOA Minimization Plan Determination of Need

Required Action	Due Date
Report on Effluent Discharge: Submit a report on effluent PFOS and PFOA concentrations and include an analysis of trends in monthly and annual average PFOS and PFOA concentrations. This analysis should also include a comparison to the applicable narrative standard in s. NR 102.04(8)(d), Wis. Adm. Code. This report shall include all additional PFOS and PFOA data that may be collected including any influent, intake, in-plant, collection system sampling, and blank sample results.	12/31/2025
Report on Effluent Discharge and Evaluation of Need: Submit a final report on effluent PFOS and PFOA concentrations and include an analysis of trends in monthly and annual average PFOS and PFOA concentrations of data collected over the last 24 months. The report shall also provide a comparison on the likelihood of the facility needing to develop a PFOS/PFOA minimization plan. This report shall include all additional PFOS and PFOA data that may be collected including any influent, intake, in-plant, collection system sampling, and blank sample results. The permittee shall also submit a request to the department to evaluate the need for a PFOS/PFOA minimization plan. If the Department determines a PFOS/PFOA minimization plan is needed based on a reasonable potential evaluation, the permittee will be required to develop a minimization plan for Department approval no later than 90 days after written notification was sent from the Department. The Department will modify or revoke and reissue the permit to include PFOS/PFOA minimization plan reporting requirements along with a schedule of compliance to meet WQBELs. Effluent monitoring of PFOS and PFOA shall continue as specified in the permit until the modified permit is issued. If, however, the Department determines there is no reasonable potential for the facility to discharge	12/31/2026

PFOS or PFOA above the narrative standard in s. NR 102.04(8)(d), Wis. Adm. Code, no further action is required and effluent monitoring of PFOS and PFOA shall continue as specified in the permit.	

Explanation of Schedule: As stated above, NR 106 Subchapter VIII – Permit Requirements for PFOS and PFOA Dischargers became effective on August 1, 2022. S. NR 106.98, Wis. Adm. Code, specifies steps to generate data in order to determine the need for reducing PFOS and PFOA in the discharge. Data generated per the effluent monitoring requirements will be used to determine the need for developing a PFOS/PFOA minimization plan. As part of the schedule, the permittee is required to submit two annual Reports on Effluent Discharge.

If the Department determines that a minimization plan is needed, the permit will be modified or revoked/reissued to include additional requirements.

Phosphorus Schedule - Continued Optimization

The permittee is required to optimize performance to control phosphorus discharges per the following schedule.

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 Continued Optimization Schedule: 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.

4.3 Phosphorus Multi-Discharger Variance Interim Limit (0.6 mg/L)

This compliance schedule requires the permittee to achieve compliance with the specified MDV interim effluent limit in accordance with s. 283.16(6), Wis. Stats., by the due date.

Required Action	Due Date
Report on Effluent Discharges: Submit a report on effluent discharges of phosphorus with conclusions regarding compliance.	12/31/2025
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.	09/30/2026
Initiate Actions: Initiate actions identified in the plan.	09/30/2027
Progress Report: Permittee shall submit a report detailing the progress made to meet the interim phosphorus MDV effluent limitation.	09/30/2028
Complete Actions: Complete actions identified in the plan and achieve compliance with the specified interim effluent limit. The interim MDV limit of 0.6 mg/L becomes effective on 09/01/2029.	08/31/2029

Explanation of Schedule: Subsection 283.16(6), Wis. Stats., establishes required interim phosphorus effluent limits that must be met for multi-discharger variance (MDV) eligibility. The facility has indicated that they cannot meet an interim limit of 0.6 mg/L without a facility upgrade. The facility has begun the facility planning stage. In order to allow time for the plant to complete an upgrade, the schedule above provides the permittee almost five years to comply with that limit.

4.4 Phosphorus Payment per Pound to County

The permittee is required to make annual payments for phosphorus reductions to the participating county or counties in accordance with s. 283.16(8), Wis. Stats, and the following schedule. The price per pound will be set at the time of permit reissuance and will apply for the duration of the permit.

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.	03/01/2025
Annual Verification of Payment #2: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2026
Annual Verification of Payment #3: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2027
Annual Verification of Payment #4: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2028
Annual Verification of Payment #5: 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.	

Explanation of County Payment Schedule: 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).

Special Reporting Requirements

None

Other Comments:

Publishing newspaper: The Trempealeau County Times, PO Box 95, Whitehall, WI 54773

Attachments:

- Water Quality Based Effluent Limits: August 21, 2024 memo from Ben Hartenbower to Holly Heldstab titled "Water Quality-Based Effluent Limitations for the Whitehall Wastewater Treatment Facility WPDES Permit No. WI-0030970".
- MDV Evaluation Checklist, completed by Matt Claucherty, dated 06/14/2024
- MDV Conditional Approval Letter, completed by Matt Claucherty, dated 06/14/2024

Expiration Date:

12/31/2029

Justification Of Any Waivers From Permit Application Requirements

N/A

Prepared By: Holly Heldstab Wastewater Specialist **Date:** October 30, 2024