# Permit Fact Sheet

## General Information

| | |
|---|---|
| Permit Number | WI-0028444-11-0 |
| Permittee Name and Address | Village of Wittenberg<br>P O Box 331, Wittenberg, WI 54499 |
| Permitted Facility Name and Address | Wittenberg Wastewater Treatment Facility<br>1000 Mohawk Rd., Wittenberg, Wisconsin |
| Permit Term | April 01, 2026 to March 31, 2031 |
| Discharge Location | South bank of river adjacent to CTH Q, approximately 100 feet west of Cardinal Lane; at approximately 44° 49' 32" N Latitude, 89° 07' 05" W Longitude |
| Receiving Water | Embarrass River, Middle Branch in Middle & South Branches Embarrass River of Wolf River in Shawano County |
| Stream Flow ($Q_{7,10}$) | 11.4 cfs |
| Stream Classification | Cold Water (CW) Community, Class II Trout Stream, Non-public Water Supply |
| Discharge Type | Existing, Continuous |
| Annual Average Design Flow (MGD) | 0.328 MGD |
| Industrial or Commercial Contributors | Nueske Meats: approx. 15,000-35,000 gpd |
| Plant Classification | A4 - Ponds, Lagoons and Natural Systems; P - Total Phosphorus; D - Disinfection; L - Laboratory; U - Unique Treatment Systems; SS - Sanitary Sewage Collection System; B – Solids Separation |
| Approved Pretreatment Program? | N/A |

## Facility Description

The Wittenberg Wastewater Treatment Facility (WWTF) utilizes an aerated lagoon system. Influent wastewater is pumped through a mechanically cleaned bar screen and then through two aerated lagoons operated in series. Each has a floating cover with fine-bubble diffusers. Wastewater proceeds to a settling pond with quiescent conditions which allows for settling. Alum is added into the third lagoon for phosphorus removal. Wastewater is then disinfected seasonally via ultraviolet light during May – September. Following disinfection, treated wastewater is sent to one of three sand filter beds prior to being discharged on a continuous basis via Outfall 002 to the south bank of the Middle Branch Embarrass River, approximately. 1,300 ft east of USH 45 South where river flows adjacent to CTH Q.

## Substantial Compliance Determination

After a desk top review of all discharge monitoring reports, CMARs, land application reports, compliance schedule items, and a site visit on November 6, 2025, this facility has been found to be in substantial compliance with their current permit.

**Compliance determination made by Brooke Klingbeil on December 15, 2025.**

# Sample Point Descriptions

| Sample Point Designation | | |
|---|---|---|
| **Sample Point Number** | **Discharge Flow, Units, and Averaging Period** | **Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)** |
| 701 | 0.210 MGD (2022-2024) | INFLUENT: 24-Hr flow proportional sampler located after the mechanical screen in the influent flow channel. Flow meter located prior to solids screening. |
| 002 | 0.216 MGD (2022-2024) | EFFLUENT: 24-Hr flow proportional sampler located at the end of the UV channel. Effluent flow is located at the end of the UV channel prior to discharge to the sand beds. |
| 007 | N/A – No land application in previous permit term | REED BED CAKE: Cake sludge from the reed beds. Representative samples shall be collected from various locations within the beds and composited for analysis. |

# Permit Requirements

# 1 Influent – Monitoring Requirements

## 1.1 Sample Point Number: 701- Influent

| Monitoring Requirements and Limitations | | | | | |
|---|---|---|---|---|---|
| **Parameter** | **Limit Type** | **Limit and Units** | **Sample Frequency** | **Sample Type** | **Notes** |
| Flow Rate | | MGD | Daily | Continuous | |
| BOD5, Total | | mg/L | 2/Week | 24-Hr Flow Prop Comp | |
| Suspended Solids, Total | | mg/L | 2/Week | 24-Hr Flow Prop Comp | |
| Phosphorus, Total | | mg/L | Weekly | 24-Hr Flow Prop Comp | |

### 1.1.1 Changes from Previous Permit:

Influent limitations and monitoring requirements were evaluated for this permit term and the following changes were made:

- **BOD5, Total -** Sample frequency was changed to "2/week" to be consistent with effluent sample frequencies.

- **Suspended Solids, Total -** Sample frequency was changed to "2/week" to be consistent with effluent sample frequencies.
- **Phosphorus, Total** – Sample frequency was changed to "weekly" to be consistent with effluent sample frequencies.

### 1.1.2 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 volumes 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

## 2.1 Sample Point Number: 002- Effluent

| Monitoring Requirements and Limitations | | | | | |
|---|---|---|---|---|---|
| **Parameter** | **Limit Type** | **Limit and Units** | **Sample Frequency** | **Sample Type** | **Notes** |
| Flow Rate | | MGD | Daily | Continuous | |
| BOD5, Total | Weekly Avg | 40 mg/L | 2/Week | 24-Hr Flow Prop Comp | Effective May – October. |
| BOD5, Total | Weekly Avg | 45 mg/L | 2/Week | 24-Hr Flow Prop Comp | Effective November – April. |
| BOD5, Total | Monthly Avg | 30 mg/L | 2/Week | 24-Hr Flow Prop Comp | |
| BOD5, Total | Weekly Avg | 110 lbs/day | 2/Week | Calculated | Effective May – October. |
| BOD5, Total | Weekly Avg | lbs/day | 2/Week | Calculated | Monitoring only November – April. |
| Suspended Solids, Total | Weekly Avg | 40 mg/L | 2/Week | 24-Hr Flow Prop Comp | Effective May - October. |
| Suspended Solids, Total | Weekly Avg | 45 mg/L | 2/Week | 24-Hr Flow Prop Comp | Effective November - April. |
| Suspended Solids, Total | Monthly Avg | 30 mg/L | 2/Week | 24-Hr Flow Prop Comp | |
| Suspended Solids, Total | Weekly Avg | 130 lbs/day | 2/Week | Calculated | |
| Suspended Solids, Total | Monthly Avg | 85 lbs/day | 2/Week | Calculated | |
| Suspended Solids, Total | | lbs/month | Monthly | Calculated | Calculate the Total Monthly Discharge of TSS and report on the last day of the month on the DMR. See TMDL Calculations |

| Monitoring Requirements and Limitations | | | | | |
|---|---|---|---|---|---|
| **Parameter** | **Limit Type** | **Limit and Units** | **Sample Frequency** | **Sample Type** | **Notes** |
| | | | | | section. |
| Suspended Solids, Total | | lbs/yr | Monthly | Calculated | Calculate the 12-month rolling sum of total monthly mass of TSS discharged and report on the last day of the month on the DMR. See TMDL Calculations section. |
| pH Field | Daily Max | 9.0 su | 5/Week | Grab | |
| pH Field | Daily Min | 6.0 su | 5/Week | Grab | |
| 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 | Monthly Avg | 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 below. Enter the result in the DMR on the last day of the month. |
| Nitrogen, Ammonia Variable Limit | | mg/L | 2/Week | See Table | Look up 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 | 2/Week | 24-Hr Flow Prop Comp | |
| Nitrogen, Ammonia (NH3-N) Total | Weekly Avg | 66 mg/L | 2/Week | 24-Hr Flow Prop Comp | Effective May – October. |

| Monitoring Requirements and Limitations | | | | | |
|---|---|---|---|---|---|
| **Parameter** | **Limit Type** | **Limit and Units** | **Sample Frequency** | **Sample Type** | **Notes** |
| Nitrogen, Ammonia (NH3-N) Total | Weekly Avg | 27 mg/L | 2/Week | 24-Hr Flow Prop Comp | Effective November – April. |
| Nitrogen, Ammonia (NH3-N) Total | Monthly Avg | 27 mg/L | 2/Week | 24-Hr Flow Prop Comp | Effective May – October. |
| Nitrogen, Ammonia (NH3-N) Total | Monthly Avg | 21 mg/L | 2/Week | 24-Hr Flow Prop Comp | Effective November – April. |
| Phosphorus, Total | Monthly Avg | 1.0 mg/L | 2/Week | 24-Hr Flow Prop Comp | |
| Phosphorus, Total | Monthly Avg | 1.7 lbs/day | Weekly | Calculated | Monitoring only upon permit effective date. Final TMDL-based mass limits go into effect per the phosphorus compliance schedule. See Phosphorus section(s). |
| Phosphorus, Total | 6-Month Avg | 0.56 lbs/day | Weekly | Calculated | Monitoring only upon permit effective date. Final TMDL-based mass limits go into effect per the phosphorus compliance schedule. See Phosphorus section(s). |
| Phosphorus, Total | | lbs/month | Monthly | Calculated | Calculate the Total Monthly Discharge of phosphorus and report on the last day of the month on the DMR. See TMDL Calculations section. |
| Phosphorus, Total | | lbs/yr | Monthly | Calculated | Calculate the 12-month rolling sum of total monthly mass of phosphorus discharged and report on the last day of the month on the DMR. See TMDL Calculations section. |
| Copper, Total Recoverable | | ug/L | Quarterly | 24-Hr Flow Prop Comp | |
| Chloride | | mg/L | Monthly | 24-Hr Flow Prop Comp | Monthly monitoring in 2028. |
| Hardness, Total as CaCO3 | | mg/L | Quarterly | 24-Hr Flow Prop Comp | Collect hardness on the same day copper samples |

| Monitoring Requirements and Limitations | | | | | |
|---|---|---|---|---|---|
| **Parameter** | **Limit Type** | **Limit and Units** | **Sample Frequency** | **Sample Type** | **Notes** |
| | | | | | are collected. |
| Nitrogen, Total Kjeldahl | | mg/L | See Listed Qtr(s) | 24-Hr Flow Prop Comp | |
| Nitrogen, Nitrite + Nitrate Total | | mg/L | See Listed Qtr(s) | 24-Hr Flow Prop Comp | |
| Nitrogen, Total | | mg/L | See Listed Qtr(s) | Calculated | Annual in rotating quarters. See Nitrogen Series Monitoring section below. Total Nitrogen shall be calculated as the sum of reported values for Total Kjeldahl Nitrogen and Total Nitrite + Nitrate Nitrogen. |
| Temperature | | deg F | Monthly | Grab | Monthly monitoring in 2028. |
| Acute WET | | TUa | See Listed Qtr(s) | 24-Hr Flow Prop Comp | |
| Chronic WET | Monthly Avg | 6.6 TUc | See Listed Qtr(s) | 24-Hr Flow Prop Comp | |

### 2.1.1 Changes from Previous Permit

Effluent limitations and monitoring requirements were evaluated for this permit term and the following changes were made from the previous permit. See additional explanation of limits under "Explanation of Limits and Monitoring Requirements" below.

- **BOD -** The sample frequency has been changed from "weekly" to "2/week".
- **Total Suspended Solids -** The sample frequency has been changed from "weekly" to "2/week". TMDL mass limits have been added.
- **Total Suspended Solids TMDL Limits -** Mass based TSS limits of 130 lbs/day as a weekly average and 85 lbs/day as a monthly average have been added to the permit to comply with requirements of the Upper Fox Wolf River TMDL. Effluent concentration (mg/L) shall be monitored and reported 2 times per week upon permit reissuance and will be used to calculate amounts reported for mass-based limits. An additional reporting requirement for lbs/month will be used to calculate the facility's 12-month rolling sum of total monthly discharge, which can be compared directly to the facility's designated WLA.
- **E. coli -** Fecal coliform monitoring and limits have been replaced with Escherichia coli (E. coli) monitoring and limits following compliance schedule.
- **Total Phosphorus -** The sample frequency has been changed from "weekly" to "2/week".
- **Phosphorus TMDL Limits -** An interim limit of 1.0 mg/L remains in effect upon reissuance unless a more stringent limit is required at a future permit issuance by ss. NR 217.13 and NR 217.16(2), Wis. Adm. Code, or the limit is

relaxed following procedures outlined in ch. NR 207, Wis. Adm. Code. Discharge effluent concentration (mg/L) shall be reported 2 times per week upon permit reissuance and will be used to calculate amounts reported for mass-based parameters. An additional reporting requirement for lbs/month will be used to calculate the facility's 12-month rolling sum of total monthly discharge, which can be compared directly to the facility's designated WLA. Final TMDL WLA-based effluent limits of 1.7 lbs/day as a six-month average and 0.56 lbs/day as a monthly average will go into effect in accordance with Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus compliance schedule.

- **Chloride –** Monthly monitoring in 2028 has been added to ensure sufficient sample results are available at the next permit issuance to meet the data requirements of s. NR 106.85, Wis. Adm. Code.
- **Hardness –** Quarterly monitoring has been added due to the relationship between hardness and daily maximum limits based on acute toxicity criteria.
- **Total Nitrogen Monitoring (TKN, N02+N03 and Total N)**- Annual monitoring is required in specific quarters as outlined in the permit.
- **Temperature** – Monthly monitoring in 2028 was added to acquire updated effluent data to determine the need for temperature limits at the next permit reissuance.
- **Acute WET** – Sampling twice during the permit term has been added.
- **Chronic WET** – Annual sampling has been added. Limit added.

### 2.1.2 Explanation of Limits and Monitoring Requirements

Detailed discussions of limits and monitoring requirements can be found in the attached water quality-based effluent limits (WQBEL) memo dated January 8, 2025.

**Monitoring Frequencies-** The Monitoring Frequencies for Individual Wastewater Permits guidance (April 12, 2021) recommends that standard monitoring frequencies be included in individual wastewater permits based on the size and type of the facility, in order to characterize effluent quality and variability, to detect events of noncompliance, and to ensure consistency in permits issued across the state. Guidance and requirements in administrative code were considered when determining the appropriate monitoring frequencies for pollutants that have final effluent limits in effect during this permit term. BOD, Total Suspended Solids, and Total Phosphorus sample frequencies have been changed from weekly to 2/week.

**Expression of Limits**- In accordance with the federal regulation 40 CFR 122.45(d) and s. NR 205.065, Wis. Adm. Code, limits in this permit are to be expressed as weekly and monthly average limits whenever practicable.

**Upper Fox Wolf River Total Maximum Daily Load (TMDL) -** The permitted facility is located within the Upper Fox Wolf River Basin Total Maximum Daily Load (UFWRB TMDL), which was approved by EPA February 27, 2020. The TMDL establishes Waste Load Allocations (WLAs) for point source dischargers and determines the maximum amounts of phosphorus and total suspended solids that can be discharged and still protect water quality. The final effluent limits and monitoring expressed in the permit were derived from and comply with the applicable water quality criterion and are consistent with the assumptions and requirements of the EPA-approved WLAs in the TMDL, which are 170 lbs/yr for phosphorus and 19,413 lbs/yr for TSS for the permitted facility.

The approved TMDL expresses WLAs as lbs/year and lbs/day (maximum annual load divided by 365 days). As outlined in Section 4.6 of the department's 2020 TMDL Implementation Guidance for Wastewater Permits, TMDL limits must be given in the permit that are consistent with the TMDL WLA permit limits derived from the TMDL and need to be expressed as specified by 40 CFR 122.45 (d), s. NR 212.76 (4), and s. NR 205.065 (7),Wis. Adm. Code, unless determined to be impracticable. Impracticability has already been determined for phosphorus limits as laid out in the phosphorus impracticability agreement that was approved by USEPA in 2012 (see NPDES MOA Addendum dated July 12, 2012 at https://apps.dnr.wi.gov/swims/Documents/DownloadDocument?id=167886175).

For phosphorus, continuously discharging facilities covered by the UFWRB TMDL are given monthly average mass limits. If the equivalent effluent concentration is less than or equal to 0.3 mg/L, six-month average mass limits (averaging period of May through October and November through April) are also included. The equivalent effluent concentration of 0.17 mg/L was calculated for the facility, thus, TMDL based mass limits are expressed as a six-month average and a monthly average equal to three times the six-month average limits.

For TSS, continuously discharging municipal/industrial facilities covered by the UFWRB TMDL are given monthly average and weekly average/daily max mass limits.

Facilities with UFWRB TMDL based effluent limits for phosphorus and TSS must report the 12-month rolling sum of total monthly discharge (lbs/yr). If reported 12-month rolling sums exceed the facility's max annual WLA, the facility's mass limits (monthly average and six-month average) may be recalculated using more appropriate CVs or monitoring frequencies when the permit is reissued to bring discharge levels into compliance with the facility's given WLA.

**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. Quarterly effluent monitoring for Total Nitrogen is included in the permit because of the potential for higher nitrogen loading resulting from higher flows (major facilities), higher concentrations, or both. 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.

# 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)** |
| 007 | B | Cake | Fecal coliform reduction | Incorporation | Land application or landfill | 0 during previous permit term |
| 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** | | | | | | |

## 3.1 Sample Point Number: 007- REED BED CAKE

| 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 | |
| PCB Total Dry Wt | Ceiling | 50 mg/kg | Once | Composite | |
| PCB Total Dry Wt | High Quality | 10 mg/kg | Once | Composite | |
| Nitrogen, Total Kjeldahl | | Percent | Once | Composite | |
| Nitrogen, Ammonium ($NH_4$-N) Total | | Percent | Once | Composite | |
| Phosphorus, Total | | Percent | Once | Composite | |
| Phosphorus, Water Extractable | | % of Tot P | Once | Composite | |
| Potassium, Total Recoverable | | % of Tot P | Once | Composite | |
| PFOA + PFOS | | µg/kg | Once | Calculated | Report the sum of PFOA and PFOS. See PFAS Permit Sections for more information. |

| Monitoring Requirements and Limitations | | | | | |
|---|---|---|---|---|---|
| **Parameter** | **Limit Type** | **Limit and Units** | **Sample Frequency** | **Sample Type** | **Notes** |
| PFAS Dry Wt | | | Once | Grab | Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information. |

### 3.1.1 Changes from Previous Permit:

Sludge limitations and monitoring requirements were evaluated for this permit term and the following changes were made from the previous permit. See additional explanation of limits under "Explanation of Limits and Monitoring Requirements" below.

**Nitrogen, Total Kjeldahl –** Monitoring added.

**Nitrogen, Ammonium Total –** Monitoring added.

**Total Phosphorus –** Monitoring added.

**Water Extractable Phosphorus –** Monitoring added.

**Total Recoverable Potassium –** Monitoring added.

**PFAS** – Monitoring once is included in the permit pursuant s. NR 204.06(2)(b)9., Wis. Adm. Code.

### 3.1.2 Explanation of Limits and Monitoring Requirements

Requirements for disposal, including 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 has released a draft assessment which documents the potential public health risks associated with land applying biosolids contaminated with PFOA and/or PFOS, and the department is currently evaluating this information. 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 |
|---|---|
| **Achieve Compliance:** The permittee shall achieve compliance with final E. coli limitations. | 04/01/2027 |

### 4.1.1 Explanation of Schedule

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 Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus

The permittee shall comply with the WQBELs for Phosphorus 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 requirement.

| Required Action | Due Date |
|---|---|
| **Operational Evaluation Report:** The permittee shall prepare and submit to the Department for approval an operational evaluation report. The report shall include an evaluation of collected effluent data, possible source reduction measures, operational improvements or other minor facility modifications that will optimize reductions in phosphorus discharges from the treatment plant during the period prior to complying with final phosphorus WQBELs and, where possible, enable compliance with final phosphorus WQBELs by April 1, 2029. The report shall provide a plan and schedule for implementation of the measures, improvements, and modifications as soon as possible, but not later than April 1, 2029 and state whether the measures, improvements, and modifications will enable compliance with final phosphorus WQBELs. Regardless of whether they are expected to result in compliance, the permittee shall implement the measures, improvements, and modifications in accordance with the plan and schedule specified in the operational evaluation report.<br><br>If the operational evaluation report concludes that the facility can achieve final phosphorus WQBELs using the existing treatment system with only source reduction measures, operational improvements, and minor facility modifications, the permittee shall comply with the final phosphorus WQBEL by April 1, 2029 and is not required to comply with the milestones identified below for years 3 through 9 of this compliance schedule ('Preliminary Compliance Alternatives Plan', 'Final Compliance Alternatives Plan', 'Final Plans and Specifications', 'Treatment Plant Upgrade to Meet WQBELs', 'Complete Construction', 'Achieve Compliance').<br><br>STUDY OF FEASIBLE ALTERNATIVES - If the Operational Evaluation Report concludes that the permittee cannot achieve final phosphorus WQBELs with source reduction measures, operational improvements and other minor facility modifications, the permittee shall initiate a study of feasible alternatives for meeting final phosphorus WQBELs and comply with the remaining required actions of this schedule of compliance. If the Department disagrees with the conclusion of the report, and determines that the permittee can achieve final phosphorus WQBELs using the existing treatment system with only source reduction measures, operational improvements, and minor facility modifications, the Department may reopen and modify the permit to include an implementation schedule for achieving the final phosphorus WQBELs sooner than April 1, 2035. | 10/01/2026 |
| **Compliance Alternatives, Source Reduction, Improvements and Modifications Status:** The permittee shall submit a 'Compliance Alternatives, Source Reduction, Operational Improvements and Minor Facility Modification' status report to the Department. The report shall provide an update on the permittee's: (1) progress implementing source reduction measures, operational improvements, and minor facility modifications to optimize reductions in phosphorus discharges and, to the extent that such measures, improvements, and modifications will not enable compliance with the WQBELs, | 04/01/2027 |

| | |
|---|---|
| (2) status evaluating feasible alternatives for meeting phosphorus WQBELs. | |
| **Preliminary Compliance Alternatives Plan:** The permittee shall submit a preliminary compliance alternatives plan to the Department.<br><br>If the plan concludes upgrading of the permittee's wastewater treatment facility is necessary to achieve final phosphorus WQBELs, the submittal shall include a preliminary engineering design report.<br><br>If the plan concludes Adaptive Management will be used, the submittal shall include a completed Watershed Adaptive Management Request Form 3200-139 without the Adaptive Management Plan.<br><br>If water quality trading will be undertaken, the plan must state that trading will be pursued. | 10/01/2027 |
| **Final Compliance Alternatives Plan:** The permittee shall submit a final compliance alternatives plan to the Department.<br><br>If the plan concludes upgrading of the permittee's wastewater treatment is necessary to meet final phosphorus WQBELs, the submittal shall include a final engineering design report addressing the treatment plant upgrades, and a facility plan if required pursuant to ch. NR 110, Wis. Adm. Code.<br><br>If the plan concludes Adaptive Management will be implemented, the submittal shall include a completed Watershed Adaptive Management Request Form 3200-139 and an engineering report addressing any treatment system upgrades necessary to meet interim limits pursuant to s. NR 217.18, Wis. Adm. Code.<br><br>If the plan concludes water quality trading will be used, the submittal shall identify potential trading partners.<br><br>Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit. | 04/01/2028 |
| **Progress Report:** The permittee shall submit a progress report on compliance with final phosphorus limits. | 10/01/2028 |
| **Achieve Compliance:** The permittee shall achieve compliance with final phosphorus WQBELs.<br>Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit. | 04/01/2029 |

### 4.2.1 Explanation of Schedule

Subchapter NR 217.17, Wis. Adm. Code, allows the department to provide a schedule of compliance for water quality-based phosphorus limits where the permittee cannot immediately achieve compliance. This compliance schedule requires the permittee to comply with the final water quality-based phosphorus limits within 5 years.

The permittee may be required to meet the final phosphorus WQBEL sooner than March 31, 2031 (less than 5 years) if the required "Operational Evaluation Report" concludes that the phosphorus WQBEL can be met using the existing treatment system with only source reduction measures, operational improvements and minor facility modifications. Also, the permittee will conduct a "Study of Feasible Alternatives" to determine whether Water Quality Trading or Adaptive Management, either alone or in combination with plant upgrades will allow the plant to meet the phosphorus WQBEL.

The department believes that the compliance schedule suggested in the draft permit provides the appropriate length of time for the permittee to evaluate these options, implement the chosen option and meet the final phosphorus limits (WQBELs).

## 4.3 Land Application Management Plan

A management plan is required for the land application system.

| Required Action | Due Date |
|---|---|
| **Land Application Management Plan Submittal:** Submit a management plan to optimize the land application system performance and demonstrate compliance with ch. NR 204, Wis. Adm. Code, by the Due Date. This management plan shall 1) specify information on pretreatment processes (if any); 2) identify land application sites; 3) describe site limitations; 4) address vegetative cover management and removal; 5) specify availability of storage; 6) describe the type of transporting and spreading vehicle(s); 7) specify monitoring procedures; 8) track site loading; 9) address contingency plans for adverse weather and odor/nuisance abatement; and 10) include any other pertinent information. Once approved, all landspreading 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. | 04/01/2027 |

### 4.3.1 Explanation of Schedule

An up-to-date Land Application Management Plan is required that documents how the permittee will manage the land application of biosolids consistent with ch. NR 204, Wis. Adm. Code

## 4.4 Sludge Depth

| Required Action | Due Date |
|---|---|
| **Sludge Depth:** Measure the sludge depth for the settling pond and report findings. | 01/01/2027 |

### 4.4.1 Explanation of Schedule

## 4.5 Reed Bed Phragmites Survey

| Required Action | Due Date |
|---|---|
| **Submit an Annual Phragmites Survey:** The permittee shall conduct an annual survey of adjacent lands for new Phragmites growth. Surveys shall be done at a time of the year when Phragmites are biologically active. The annual surveys shall contain the name and qualifications of the person(s) completing the inspection, the date of the survey, and at a minimum include descriptions of the area(s) inspected, land use(s), dominant plant community, existing Phragmites stands, and any areas of potential concern or newly discovered Phragmites growth. Photographic documentation of the survey area(s) is also recommended. The survey area should be as large as practicable and include any area potentially susceptible to phragmites growth. Survey results shall be submitted to the Department within 60 days of survey completion. The Department shall be notified within 24 hours whenever new growths of Phragmites are discovered. The Department may require the permittee to eradicate specific stands of Phragmites in these areas. | 10/31/2026 |
| **Annual Phragmites Survey:** Report results of the survey to your department wastewater compliance engineer by October 31st or within 60 days of survey completion, whichever is sooner. NOTE: Department notification is required within 24 hours whenever new growths of non-native Phragmites are discovered. | 10/31/2027 |
| **Annual Phragmites Survey:** Report results of the survey to your department wastewater compliance engineer by October 31st or within 60 days of survey completion, whichever is sooner. NOTE: Department notification is required within 24 hours whenever new growths of non-native Phragmites are discovered. | 10/31/2028 |
| **Annual Phragmites Survey:** Report results of the survey to your department wastewater compliance engineer by October 31st or within 60 days of survey completion, whichever is sooner. NOTE: | 10/31/2029 |

| | |
|---|---|
| Department notification is required within 24 hours whenever new growths of non-native Phragmites are discovered. | |
| **Annual Phragmites Survey:** Report results of the survey to your department wastewater compliance engineer by October 31st or within 60 days of survey completion, whichever is sooner. NOTE: Department notification is required within 24 hours whenever new growths of non-native Phragmites are discovered. | 10/31/2030 |
| **Annual Phragmites Survey:** Continue to report results of the survey to your department wastewater compliance engineer by October 31st or within 60 days of survey completion, whichever is sooner. NOTE: Department notification is required within 24 hours whenever new growths of non-native Phragmites are discovered. | |

### 4.5.1 Explanation of Schedule

The reed beds were planted with the non-native reed grass which can be highly invasive in natural wetland habitats if the seeds or rhizomes escape to the natural environment. A Compliance Schedule has been included requiring an annual survey of the wastewater treatment facility and surrounding area. See the Reed Bed Requirements found in section 3 of the permit for more information.

## 4.6 Operator Certification

| Required Action | Due Date |
|---|---|
| **Operator Certification:** Operator In Charge shall obtain Subclass C (Biological Solids/Sludge Handling, Processing, and Reuse) and Subclass U (Unique Treatment Systems) by the due date. | 04/01/2027 |

# Attachments

Water Quality Based Effluent Limitations for the Wittenberg Wastewater Treatment Facility WPDES Permit No. WI-0028444-11-0

# Justification Of Any Waivers From Permit Application Requirements

No waivers requested or granted as part of this permit reissuance

**Prepared By:** Ashley Clark, Wastewater Specialist

**Date:** January 27, 2026