

Permit Fact Sheet

General Information

Permit Number	WI-0021229-11-0
Permittee Name and Address	City of Berlin PO Box 272, Berlin, WI 54923
Permitted Facility Name and Address	Berlin Wastewater Treatment Facility 770 N Wisconsin St, Berlin, WI 54923
Permit Term	October 01, 2026 to September 30, 2031
Discharge Location	North side of Berlin, north bank of the Fox River, 135 ft. east of the North Wisconsin Bridge
Receiving Water	Fox River in Fox River - Berlin Watershed of Upper Fox River Basin in Waushara County
Stream Flow (Q _{7,10})	340 cfs
Stream Classification	Warm Water Sport Fish (WWSF) community, non-public water supply, and recreational use
Discharge Type	Existing, Continuous
Annual Average Design Flow (MGD)	1.5 MGD
Industrial or Commercial Contributors	Generac Mobile Products Painting Wisconsin Spice Darling Ingredients Valley Trail Landfill
Plant Classification	A1 - Suspended Growth Processes; B - Solids Separation; C - Biological Solids/Sludges; P - Total Phosphorus; D - Disinfection; L - Laboratory; SS - Sanitary Sewage Collection System
Approved Pretreatment Program?	N/A

Facility Description

Wastewater enters the wet well at the treatment plant, passes through an aerated grit tank (where phosphorous removal chemicals are added), screening is performed and from there it goes to rectangular primary clarifiers. Berlin uses alum to remove phosphorous. Biosolids from the primary clarifiers are directed to an anaerobic digester. This facility has primary and secondary anaerobic digesters. Wastewater goes from the primary clarifiers to rectangular activated sludge aeration basins, then to final clarifiers. Solids from the final clarifiers are returned to the aeration basins and to a dissolved air floatation unit for thickening prior to discharge to the anaerobic digesters. The final effluent passes through UV disinfection and then to the final effluent weir. Solids from the digesters go to 4 sludge drying beds to allow the solids to concentrate prior to hauling. An underdrain system carries the decant liquids from the drying beds to the head of the plant.

Substantial Compliance Determination

After a desktop review of all discharge monitoring reports, CMARs, land application reports, compliance schedule items, and a site visit on January 26th, 2026, this facility has been found to be in substantial compliance with their current permit.

Compliance determination made by Mark Stanek, Wastewater Engineer, on January 26, 2026.

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	N/A – flow not required in previous permit term	INFLUENT: 24-hour flow proportional samples shall be collected from the aerated grit chamber prior to grit removal. Flow is monitored at the head of the plant after the grit chamber but before the primary clarifiers with a Parshall flume and ultrasonic flow meter.
001	0.68 MGD (2025)	EFFLUENT: 24-hour flow proportional samples shall be collected prior to the UV contact tank. Grab samples shall be collected after the UV contact tank. Flow is monitored after the UV contact tank with a Parshall flume and ultrasonic flow meter.
002	92 metric tons (2025)	LAND APPLICATION: Anaerobically digested Class B liquid sludge samples shall be collected from the end of the secondary digester.
003	588 cu yards (2024)	LAND APPLICATION: Anaerobically digested and dewatered Class B cake sludge samples shall be collected from the dewatering cell.

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	5/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total		mg/L	5/Week	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 from the previous permit. See additional explanation of limits under “Explanation of Limits and Monitoring Requirements” below.

Flow Rate – Flow rate has been added to meet the requirements of s. NR 210.04(2), Wis. Adm. Code.

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: 001- 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	45 mg/L	5/Week	24-Hr Flow Prop Comp	
BOD5, Total	Monthly Avg	30 mg/L	5/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Weekly Avg	45 mg/L	5/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Monthly Avg	30 mg/L	5/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Weekly Avg	393 lbs/day	5/Week	Calculated	
Suspended Solids, Total	Monthly Avg	298 lbs/day	5/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 section in the permit.
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 in the permit.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
pH Field	Daily Max	9.0 su	5/Week	Grab	
pH Field	Daily Min	6.0 su	5/Week	Grab	
Nitrogen, Ammonia (NH3-N) Total		mg/L	5/Week	24-Hr Flow Prop Comp	Monitoring only April – September.
Nitrogen, Ammonia (NH3-N) Total	Daily Max	30 mg/L	5/Week	24-Hr Flow Prop Comp	October - March.
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	30 mg/L	5/Week	24-Hr Flow Prop Comp	October - March.
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	30 mg/L	5/Week	24-Hr Flow Prop Comp	October - March.
E. coli	Geometric Mean - Monthly	126 #/100 ml	Weekly	Grab	May - September.
E. coli	% Exceedance	10 Percent	Monthly	Calculated	May - September. See the E. coli Percent Limit section in the permit. Enter the result in the DMR on the last day of the month.
Chloride		mg/L	Monthly	24-Hr Flow Prop Comp	Monitoring only in 2028.
PFOS		ng/L	1/ 2 Months	Grab	Monitoring only. See PFOS/PFOA Minimization Plan Determination of Need schedule.
PFOA		ng/L	1/ 2 Months	Grab	Monitoring only. See PFOS/PFOA Minimization Plan Determination of Need schedule.
Phosphorus, Total	Monthly Avg	1.0 mg/L	5/Week	24-Hr Flow Prop Comp	
Phosphorus, Total	Monthly Avg	7.23 lbs/day	5/Week	Calculated	
Phosphorus, Total	6-Month Avg	2.41 lbs/day	5/Week	Calculated	
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.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
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.
Nitrogen, Total Kjeldahl		mg/L	Quarterly	24-Hr Flow Prop Comp	
Nitrogen, Nitrite + Nitrate Total		mg/L	Quarterly	24-Hr Flow Prop Comp	
Nitrogen, Total		mg/L	Quarterly	Calculated	Total Nitrogen shall be calculated as the sum of reported values for Total Kjeldahl Nitrogen and Total Nitrite + Nitrate Nitrogen.
Acute WET		TUa	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.

- **Nitrogen, Ammonia-** Daily max, weekly average, and monthly average limits have been added.
- **E. coli-** Fecal coliform monitoring and limits have been replaced with Escherichia coli (E. coli) monitoring and limits.
- **Chloride** – Monthly monitoring in 2028 has been added.
- **PFOS and PFOA** – Monitoring once every two months is included in the permit in accordance with s. NR 106.98(2)(b), Wis. Adm. Code.
- **Total Nitrogen Monitoring (TKN, N02+N03 and Total N)-** Quarterly monitoring is required.

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 May 4th, 2026 by Nicole Krueger, Water Resources Engineer.

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. Sample frequencies are evaluated at permit reissuance. The Department has determined that no sample

frequency changes need to be made based on the current frequencies, the permittee's average flow, and the permittee's compliance.

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 779 lbs/yr for phosphorus and 80,749 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 facilities covered by the UFWRB TMDL are given monthly average and weekly average 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.

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 proposed permit was drafted, it was identified that the POTW has an indirect discharger(s) that may be a potential source of PFOS/PFOA.

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)
002	B	Liquid	Fecal Coliform	Volatile Solids Reduction; Injection; Incorporation	Land Application	92 metric tons
003	B	Cake	Fecal Coliform	Volatile Solids Reduction; Injection; Incorporation	Land Application	588 cu yards
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? Yes.						
If yes, special monitoring and recycling conditions will be included in the permit to track any potential problems in landapplying sludge from this facility						
Is a priority pollutant scan required? No.						

3.1 Sample Point Number: 002- Liquid Sludge

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	1/ 6 Months	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	1/ 6 Months	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	1/ 6 Months	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	1/ 6 Months	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	1/ 6 Months	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	1/ 6 Months	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	1/ 6 Months	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	1/ 6 Months	Composite	
Lead Dry Wt	High Quality	300 mg/kg	1/ 6 Months	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	1/ 6 Months	Composite	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Mercury Dry Wt	High Quality	17 mg/kg	1/ 6 Months	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	1/ 6 Months	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	1/ 6 Months	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	1/ 6 Months	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	1/ 6 Months	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	1/ 6 Months	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	1/ 6 Months	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	1/ 6 Months	Composite	
Radium 226 Dry Wt		pCi/g	1/ 6 Months	Composite	
Nitrogen, Total Kjeldahl		Percent	1/ 6 Months	Composite	
Nitrogen, Ammonium (NH ₄ -N) Total		Percent	1/ 6 Months	Composite	
Phosphorus, Total		Percent	1/ 6 Months	Composite	
Phosphorus, Water Extractable		% of Tot P	1/ 6 Months	Composite	
Potassium, Total Recoverable		Percent	1/ 6 Months	Composite	
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.

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, Ammonium – Monitoring added.

PCB – Monitoring removed, will be added to next permit reissuance.

PFAS –Monitoring is required annually pursuant to 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). Radium requirements are addressed in s. NR 204.07(3)(n).

Nitrogen, Ammonium – Monitoring was added to meet List 2 Nutrient requirements.

PFAS- The presence and fate of PFAS in municipal and industrial sludges is an emerging public health concern. EPA has developed a draft risk assessment to determine future land application rates and released this risk assessment in January of 2025. The department is evaluating this new information. Until a decision is made, the “Interim Strategy for Land Application of Biosolids and Industrial Sludges Containing PFAS” should be followed

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 this WPDES permit pursuant to ss. NR 214.18(5)(b) and NR 204.06(2)(b)9., Wis. Adm. Code.

3.2 Sample Point Number: 003- Cake Sludge

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	1/ 6 Months	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	1/ 6 Months	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	1/ 6 Months	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	1/ 6 Months	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	1/ 6 Months	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	1/ 6 Months	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	1/ 6 Months	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	1/ 6 Months	Composite	
Lead Dry Wt	High Quality	300 mg/kg	1/ 6 Months	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	1/ 6 Months	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	1/ 6 Months	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	1/ 6 Months	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	1/ 6 Months	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	1/ 6 Months	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	1/ 6 Months	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	1/ 6 Months	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	1/ 6 Months	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	1/ 6 Months	Composite	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Radium 226 Dry Wt		pCi/g	1/ 6 Months	Composite	
Nitrogen, Total Kjeldahl		Percent	1/ 6 Months	Composite	
Nitrogen, Ammonium (NH ₄ -N) Total		Percent	1/ 6 Months	Composite	
Phosphorus, Total		Percent	1/ 6 Months	Composite	
Phosphorus, Water Extractable		% of Tot P	1/ 6 Months	Composite	
Potassium, Total Recoverable		Percent	1/ 6 Months	Composite	
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.

3.2.1 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.

List 1 – List 1 parameters were added.

Radium – Radium monitoring was added.

PFAS –Monitoring is required annually pursuant to s. NR 204.06(2)(b)9., Wis. Adm. Code.

3.2.2 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. Radium requirements are addressed in s. NR 204.07(3)(n).

List 1 – List 1 parameters (metals) were added to Outfall 003 to meet the requirements under NR 204.07(5), Wis. Adm. Code.

Radium – Monitoring was added to Outfall 003 due to radium being present in the water supply at a level greater than 2 pCi/liter.

PFAS- The presence and fate of PFAS in municipal and industrial sludges is an emerging public health concern. EPA has developed a draft risk assessment to determine future land application rates and released this risk assessment in January of 2025. The department is evaluating this new information. Until a decision is made, the “Interim Strategy for Land Application of Biosolids and Industrial Sludges Containing PFAS” should be followed

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 this WPDES permit pursuant to ss. NR 214.18(5)(b) and NR 204.06(2)(b)9., Wis. Adm. Code.

4 Schedules

4.1 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.	10/01/2027
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 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.	10/01/2028

4.1.1 Explanation of Schedule

As stated above, ch. NR 106 Subchapter VIII – Permit Requirements for PFOS and PFOA Dischargers became effective on August 1, 2022. Section 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.

4.2 Sludge Management Plan

An updated sludge management plan is required.

Required Action	Due Date
Sludge Management Plan Submittal: Submit a sludge management plan (SMP) to optimize the sludge management performance and demonstrate compliance with Ch. NR 204, Wis. Adm. Code, by the Due Date. This management plan shall include sufficient detail of the sludge management program for the facility. The plan shall include separate sections for each type of sewage sludge included in this permit. The SMP shall provide standardized information for communication to operators and the department including but not limited to the following: 1) Specify information on the sludge treatment processes for each sampling point and outfall; 2) Show and describe sample point and outfall monitoring locations on a schematic and provide photos of the specific sampling points; 3) Show, describe and tabulate the monitoring requirements at each sampling point and outfall locations; 4) Show, describe and explain sampling protocols for each location listing parameters to be monitored including: a) Pollutants, b) Nutrients, c) Pathogen treatment process requirements including treatment temperature, moisture content (total solids) and pathogen densities (fecal concentrations), d) Vector Reduction appropriate for the pathogen treatment process such as but not limited to temperatures, volatile solids reduction, moisture content, etc. as required by the WPDES permit and Ch. NR 204, Wis. Adm. Code; 5) Monitoring frequencies at each sample point and outfall; 6) Analytical methods with appropriate hold times and chain of custody procedures; 7) Documentation relating to temperature monitoring data recording, retrieval and printing out the data when requested; 8) Storage, verification monitoring, loading, transportation and discharge details associated with all outfalls; 9) Collection, storage, disposal information for sludge detailing pickups including loading and similar details; 10) Collection, storage and disposal processes of sludge when the sludge does not meet minimum requires to meet Class A and EQ requirements. [Note: EQ and Class A are similar, but are different. Explain.] 11) Identify land application sites; 12) Describe site limitations;	10/01/2027

13) Address vegetative cover management and removal including loading to crop needs, crop harvesting; 14) Specific the availability of storage for sludge; 15) Describe the type of transportation and spreading vehicles; 16) Track site loadings to facility's land application sites; 17) Address contingency plans for adverse weather and odor/nuisance abatement; 18) Address construction contingencies when treatment equipment is out of service; and 19) Include any other pertinent information. 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. Note: The SMP is a living document and should be designed and constructed to allow for future updates. Consider providing an overview to explain the facilities solids flow processes, then using sections and appendices to provide more details. The use of appendices to explain start up, operation and shutdown of the sludge treatment units is encouraged to show that all sludge particles meet applicable requirements.	
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4.2.1 Explanation of Schedule

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

Attachments

Water Quality Based Effluent Limitations for the Berlin Wastewater Treatment Facility WPDES Permit No. WI-0021229-11, Nicole Krueger, Water Resources Engineer, dated May 4, 2026

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: July 17th, 2026