Permit Modification Fact Sheet

Changes from the previous permit fact sheet are highlighted in grey.

General Information

Permit Number:	WI-0030830-08-1	
Permittee Name:	Dale Sanitary District No. 1	
Address:	PO Box 103	
City/State/Zip:	Dale WI 54931-0253	
Discharge Location:	West side of Depot Road about 3/10 mile South of Old Highway 10	
Receiving Water:	Unnamed tributary to the Rat River, located in the Arrowhead River and Daggets Creek Watershed in the Wolf River Basin	
Stream Flow ($Q_{7,10}$):	0 cfs	
Stream Classification:	At Outfall 001 Limited Aquatic Life (LAL); Unnamed tributary approx. 2 miles downstream of Outfall 001 Limited Forage Fish (LFF); Rat River approx. 3 miles downstream of Outfall 001 Warmwater Sport Fish (WWSF)	
Discharge Type:	Existing; Continuous	
Design Flow(s)	Daily Maximum	0.376 MGD
	Weekly Maximum	1.535 MGD
	Monthly Maximum	2.832 MGD
	Annual Average	0.060 MGD
Significant Industrial Loading?	None	
Operator at Proper Grade?	Facility Subclasses & Classification: Basic – A4 OIC Subclasses & Grade: Michael Pfankuch; Basic – A4	
Approved Pretreatment Program?	N/A	

Facility Description

The Dale Sanitary District No. 1 provides wastewater collection and treatment for the unincorporated community of Dale in southwest Outagamie County. The wastewater treatment facility consists of two aerated lagoons followed by a settling pond, designed for an average annual flow of 0.060 MGD. The facility also operates a submerged attached growth reactor tertiary treatment system for ammonia removal.

Substantial Compliance Determination

Enforcement During Last Permit: A Notice of Noncompliance (NON) was sent 2/3/22 for ammonia nitrogen daily max and monthly avg limit exceedances occurring February-August 2021. A second NON was sent 5/2/22 for ammonia nitrogen daily max and monthly avg limit exceedances occurring February-March 2022. The facility has completed all previously required actions as part of the enforcement process.

After a desk top review of all discharge monitoring reports, CMARs, land application reports, compliance schedule items, and a site visit on October 12, 2022, by Barti Oumarou, Wastewater Engineer, **this facility has been found to be in substantial compliance with their current permit**.

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	0.029 MGD (Avg. 2019-2023)	Influent - Representative samples shall be collected from the influent wet well.
001	0.026 MGD (Avg. 2019-2023)	Effluent - Representative samples shall be collected from the effluent flow channel.
002	Sludge was not removed during the current permit term and is not expected to be removed during the proposed permit term.	Lagoon Sludge - Liquid sludge that accumulates in the treatment lagoons. Representative samples shall be collected from various locations and depths within the lagoons and composited for analysis.

1 Influent - Monitoring Requirements

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	Weekly	3-Hr Comp	
Suspended Solids, Total		mg/L	Weekly	3-Hr Comp	

Changes from Previous Permit:

Influent monitoring requirements were re-evaluated for the proposed permit term and no changes were made from the previous permit.

Explanation of Limits and Monitoring Requirements

BOD_5 and Total Suspended Solids (TSS) – Monitoring and reporting of BOD_5 and TSS is required for percent removal requirements found in s. NR 210.05, Wis. Adm. Code.

2 Surface Water - Monitoring and Limitations

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	
CBOD5	Weekly Avg	25 mg/L	Weekly	3-Hr Comp	See the Standard Requirements permit section for Percent Removal.
CBOD5	Monthly Avg	16 mg/L	Weekly	3-Hr Comp	See the Standard Requirements permit section for Percent Removal.
Suspended Solids, Total	Monthly Avg	60 mg/L	Weekly	3-Hr Comp	
Suspended Solids, Total	Weekly Avg	27 lbs/day	Weekly	Calculated	
Suspended Solids, Total	Monthly Avg	17 lbs/day	Weekly	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 eDMR. See TMDL Calculations permit 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 eDMR. See TMDL Calculations permit section.
Dissolved Oxygen	Daily Min	4.0 mg/L	Weekly	Grab	
pH Field	Daily Min	6.0 su	3/Week	Grab	
pH Field	Daily Max	9.0 su	3/Week	Grab	
Chloride	Weekly Avg	490 mg/L	4/Month	3-Hr Comp	Interim limit. Sampling shall be conducted on four consecutive days one week per month. See the Chloride Variance - Implement Source Reduction Measures section and the Chloride

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
					Source Reduction Measures (Target Value) Schedule of the permit.
Phosphorus, Total	Monthly Avg	6.5 mg/L	Monthly	3-Hr Comp	This is an interim MDV limit effective through September 30, 2028. See the Phosphorus MDV Interim Limit Schedule of the permit.
Phosphorus, Total	Monthly Avg	1.0 mg/L	Monthly	3-Hr Comp	This is an interim MDV limit effective on October 1, 2028. See the Phosphorus MDV Interim Limit Schedule of 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 the Standard Requirements section of the permit 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 months that the MDV is in effect) for the calendar year on the Annual report form.
Acute WET	Daily Max	1.0 TUa	See Listed Qtr(s)	3-Hr Comp	See the Whole Effluent Toxicity (WET) Testing permit section.
Chronic WET	Monthly Avg	1.7 TUc	See Listed Qtr(s)	3-Hr Comp	See the Whole Effluent Toxicity (WET) Testing permit section.
Nitrogen, Ammonia (NH3-N) Total	Daily Max - Variable	mg/L	Weekly	3-Hr Comp	Applies year-round. See the Daily Maximum Ammonia Nitrogen (NH3-N) Limits permit section.
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	20 mg/L	Weekly	3-Hr Comp	Applies in October annually.

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	33 mg/L	Weekly	3-Hr Comp	Applies November through March annually.
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	6.8 mg/L	Weekly	3-Hr Comp	Applies in April annually.
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	7.4 mg/L	Weekly	3-Hr Comp	Applies May and June annually.
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	7.5 mg/L	Weekly	3-Hr Comp	Applies July through September annually.
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	7.9 mg/L	Weekly	3-Hr Comp	Applies in October annually.
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	13 mg/L	Weekly	3-Hr Comp	Applies November through March annually.
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	2.7 mg/L	Weekly	3-Hr Comp	Applies in April annually.
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	3.0 mg/L	Weekly	3-Hr Comp	Applies May through September annually.
Nitrogen, Total Kjeldahl		mg/L	See Listed Qtr(s)	3-Hr Comp	Annual monitoring in rotating quarters. See Nitrogen Series Monitoring permit section.
Nitrogen, Nitrite + Nitrate Total		mg/L	See Listed Qtr(s)	3-Hr Comp	Annual monitoring in rotating quarters. See Nitrogen Series Monitoring permit section.
Nitrogen, Total		mg/L	See Listed Qtr(s)	Calculated	Annual monitoring in rotating quarters. See Nitrogen Series Monitoring permit section. Total Nitrogen shall be calculated as the sum of reported values for Total Kjeldahl Nitrogen and Total Nitrite + Nitrate Nitrogen.
Temperature		deg F	Weekly	Grab	Monitoring only January through December, 2028.

Changes from Previous Permit:

- Addition of weekly average and monthly average mass limits for total suspended solids (TSS) due to the Upper Fox Wolf River Basin (UFWB) Total Maximum Daily Load (TMDL).
- Decreased chloride weekly average interim limit from 510 mg/L to 490 mg/L.

- Changed chloride monitoring frequency from 4/week to 4/month (four consecutive days one week per month).
- Addition of phosphorus MDV (Multi-Discharger Variance) interim limits and monitoring requirements.
- Acute WET (Whole Effluent Toxicity) and Chronic WET testing requirements have been updated. Testing is required once annually, in rotating quarters. The Chronic WET limit has also been updated to 1.7 TU_c.
- The variable daily maximum ammonia nitrogen limit table in the permit has been expanded to include applicable limits at a lower effluent pH.
- Addition of annual total nitrogen monitoring (TKN, NO_2+NO_3 and Total N) in rotating quarters throughout the permit term.
- Addition of weekly temperature monitoring during the fourth year of the permit (2028) to ensure enough data is available to determine reasonable potential at the next permit reissuance.

Explanation of Limits and Monitoring Requirements

Monitoring Frequencies – The monitoring frequencies 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 fairness and 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.

The monitoring frequency for chloride was changed from weekly to 4/week (4 consecutive days/month); this data is used for reasonable potential determinations, as well as calculating the 4-day P99, per s. NR 106.05(3)(b), Wis. Adm. Code.

Categorical Limits

BOD5, Total Suspended Solids, pH, and Dissolved Oxygen – Standard municipal wastewater requirements for total suspended solids and pH are included based on ch. NR 210, Wis. Adm. Code, 'Sewage Treatment Works' requirements for discharges to fish and aquatic life streams. Monitoring and reporting of BOD_5 and total suspended solids is required for percent removal requirements found in s. NR 210.05, Wis. Adm. Code, and in the Standard Requirements section of the permit. Chapter NR 102, Wis. Adm. Code, 'Water Quality Standards for Surface Waters' also specifies requirements for pH for fish and aquatic life streams.

Water Quality-Based Limits

Refer to the WQBEL memo, Water Quality-Based Effluent Limitations for Dale Sanitary District No. 1 WPDES Permit No. WI-0030830-08, for the detailed calculations, prepared by the Water Quality Bureau, Nicole Krueger, Water Resources Engineer, dated April 4, 2023, used for this reissuance.

Ammonia – Current acute and chronic ammonia toxicity criteria for the protection of aquatic life are included in Tables 2C and 4B of ch. NR 105, Wis. Adm. Code. Subchapter IV of ch. NR 106 establishes the procedure for calculating water quality-based effluent limitations (WQBELs) for ammonia.

Chloride – Acute and chronic chloride toxicity criteria for the protection of aquatic life are included in Tables 1 and 5 of ch. NR 105, Wis. Adm. Code. Subchapter VII of ch. NR 106 establishes the procedure for calculating WQBELs for chloride. Effluent limits are necessary in accordance with the reasonable potential analysis presented in the April 4, 2023 WQBEL memo. Section NR 106.83 of subchapter VII also provides for some permittees to obtain temporary relief from a chloride WQBEL through the use of a chloride variance. The Dale Sanitary District No. 1 applied for a chloride variance, under the provisions of s. NR 106.83, Wis. Adm. Code, with its application for permit reissuance. The previous permit also included a chloride variance.

The Department reviewed Dale Sanitary District's application for a chloride variance. The information supplied in the application supports the establishment of an interim effluent limit. The permittee and the Department have reached agreement on an interim chloride limit of 490 mg/L (expressed as a weekly average), a target value of 460 mg/L,

implementation of chloride source reduction measures, and submittal of annual progress reports each year by March 31st. The chloride source reduction measures that are required to be implemented can be found in the proposed permit.

The Department concludes that the Dale Sanitary District No. 1 is qualified for a variance from the water quality standard for chloride and proposes reissuance of this permit with the proposed variance.

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 are TMDL-based mass limits of 0.33 lbs/day as a monthly average and 0.11 lbs/day as a six-month average and were to become effective as scheduled unless a variance was granted. For this permit term, the permittee has 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. 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 effluent limit for total phosphorus is 6.5 mg/L as a monthly average limit effective at permit reissuance. The limit was derived using DMR data from 3/21/2018 to 12/27/2022. Additionally, an MDV interim limit of 1.0 mg/L as a monthly average limit has been added and goes into effect per a compliance schedule.

Conditions of the MDV require the permittee to optimize phosphorus removal throughout the proposed 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. By March 1 of each year the permittee shall make a payment(s) to participating county(s) of $64.75 per pound of phosphorus discharged during the previous year in excess of the target value of 0.2 mg/L.

Total Nitrogen Monitoring (TKN, NO2+NO3 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: **October – December 2024; July – September 2025; April – June 2026; January – March 2027; and October – December 2028**.

PFOS/PFOA – NR 106 Subchapter VIII – Permit Requirements for PFOS and PFOA Dischargers became effective on August 1, 2022. Pursuant to s. NR 106.98(3)(b), 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, the Department has determined the permittee does not need to sample for PFOS or PFOA as part of this permit reissuance. The Department may re-evaluate the need for sampling at the next permit reissuance if new information becomes available that suggests PFOS or PFOA may be present in the discharge.

Whole Effluent Toxicity (WET) – 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. The chronic WET limit is decreased due to using more accurate background low flows at the Rat River. Acute and Chronic WET tests are scheduled in the following rotating quarters: **October – December 2024; July – September 2025; April – June 2026; January – March 2027; and October – December 2028**.

Thermal- Requirements for Temperature are included in NR 102 Subchapter II Water Quality Standards for Temperature and NR 106 Subchapter V Effluent Limitations for Temperature. Thermal discharges must meet the Public Health

criterion of 120 degrees F and the Fish & Aquatic Life criteria which are established to protect aquatic communities from lethal and sub-lethal thermal effects. Weekly temperature monitoring has been added during the fourth year of the permit.

TMDL Derived Limits for TSS – TMDL Approved - Waste load allocations (WLAs) specified in TMDLs are expressed as WQBELs (water quality-based effluent limits). The waste load allocated-derived WQBELs are consistent with the assumptions and requirements of the approved UFWB TMDL.

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 reduction	Injection; Incorporation	Land application – if sludge is removed	No sludge was removed during the 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						

Sample Point Number: 002- Lagoon Sludge

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Solids, Total		Percent	Once	Composite	List 1 parameters. See the Requirements for Potential and/or Unscheduled Land Application of Sludge section of the permit.
Arsenic Dry Wt	High Quality	41 mg/kg	Once	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Once	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Once	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Once	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Once	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Once	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Once	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Once	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Once	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Once	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Once	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Once	Composite	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nickel Dry Wt	Ceiling	420 mg/kg	Once	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Once	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Once	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Once	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Once	Composite	
Nitrogen, Total Kjeldahl		Percent	Per Application	Composite	List 2 parameters. Monitoring required only if sludge is land applied. See List 2 Analysis section of the permit.
Nitrogen, Ammonium (NH4-N) Total		Percent	Per Application	Composite	
Phosphorus, Total		Percent	Per Application	Composite	
Phosphorus, Water Extractable		% of Tot P	Per Application	Composite	
Potassium, Total Recoverable		Percent	Per Application	Composite	
PCB Total Dry Wt	High Quality	10 mg/kg	Once	Composite	See the Requirements for Potential and/or Unscheduled Land Application of Sludge permit section, the Sludge Analysis for PCBs permit section, and the Standard Requirements section of the permit for Monitoring and Calculating PCB Concentrations in Sludge.
PCB Total Dry Wt	Ceiling	50 mg/kg	Once	Composite	
PFOA + PFOS		ug/kg	Once	Calculated	Report the sum of PFOA and PFOS. See PFAS Permit Sections for more information.
PFAS Dry Wt			Once	Grab	Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.

Changes from Previous Permit:

- The year in which PCB monitoring is required has been updated to 2025.

- Addition of once per permit term PFAS (PFOA + PFOS) monitoring pursuant to 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). Radium requirements are addressed in s. NR 204.07(3)(n).

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.

Water Extractable Phosphorus (WEP) – WEP is the coefficient for determining plant available phosphorus from measured total phosphorus. In Wisconsin, the Penn State Method is utilized and is expressed in percent. While a total P may be significant, the WEP may show that only a small percentage of the P is available to plants because of factors such as treatment processes and chemical addition that "tie-up" phosphorus limiting the amount of phosphorus that is plant available. As part of the Wisconsin's nutrient management plan (NMP) requirements, the accounting of all fertilizers must be included over the NMP cycle. The fertilizer value of the waste needs to be communicated to the farmer and accounted for in the NMP.

4 Schedules

4.1 Chloride Source Reduction Measures (Target Value)

As a condition of the variance to the water quality based effluent limitation(s) for chloride granted in accordance with s. NR 106.83(2), Wis. Adm. Code, the permittee shall perform the following actions.

Required Action	Due Date
Annual Chloride Progress Report: Submit an annual chloride progress report related to the source reduction activities for the previous year. The annual chloride progress report shall: Indicate which chloride source reduction measures or activities in the Source Reduction Plan have been implemented and state which, if any, source reduction measures from the Source Reduction Plan were not pursued and why. Include an assessment of whether each implemented source reduction measure appears to be effective or ineffective at reducing pollutant discharge concentrations and identify actions planned for the upcoming year; Include an analysis of trends in weekly, monthly and annual average chloride concentrations and total mass discharge of chloride based on chloride sampling and flow data; and Include an analysis of how effluent chloride varies with time and with significant loadings of chloride. Note that the interim limitation listed in the Surface Water section of this permit remains enforceable until new enforceable limits are established in the next permit issuance. The first annual chloride progress report is to be submitted by the Date Due.	03/31/2025

Annual Chloride Progress Report #2: Submit the chloride progress report, related to the source reduction activities for the previous year, as defined above.	03/31/2026
Annual Chloride Progress Report #3: Submit the chloride progress report, related to the source reduction activities for the previous year, as defined above.	03/31/2027
Annual Chloride Progress Report #4: Submit the chloride progress report, related to the source reduction activities for the previous year, as defined above.	03/31/2028
Final Chloride Report: Submit the final chloride report documenting the success in meeting the chloride target value of 460 mg/L, as well as the anticipated future reduction in chloride sources and chloride effluent concentrations. The report shall: Summarize chloride source reduction measures that have been implemented during the current permit term and state which, if any, source reduction measures from the Source Reduction Plan were not pursued and why; Include an assessment of which source reduction measures appear to have been effective or ineffective. Evaluate any needed changes to the pollutant reduction strategy accordingly; Include an analysis of trends in weekly, monthly and annual average chloride concentrations and total mass discharge of chloride based on chloride sampling and flow data during the current permit term; and Include an analysis of how influent and effluent chloride varies with time and with significant loadings of chloride as identified in the source reduction plan. If the permittee intends to reapply for a chloride variance, for the reissued permit, proposed target limits and a detailed source reduction measures plan, outlining the source reduction activities proposed for the upcoming permit term, shall also be included per ss. NR 106.90 (5) and NR 106.83 (4), Wis. Adm. Code. An updated source reduction measures plan shall: Include an explanation of why or how each source reduction measure will result in reduced discharge of the target pollutant; and Evaluate any available information on pollutant sources, timing, and concentration to update the mass balance assumptions and expected sources of the pollutant, and Identify any information needs that would help to better determine pollutant sources and make plans to collect that information. Note that the target value is the benchmark for evaluating the effectiveness of the chloride source reduction measures but is not an enforceable limitation under the terms of this permit.	03/31/2029
Annual Chloride Reports After Permit Expiration: In the event that this permit is not reissued by the date the permit expires the permittee shall continue to submit annual chloride reports for the previous year following the due date of Annual Chloride Progress Reports listed above. Annual Chloride Progress Reports shall include the information as defined above.	

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

The permittee shall comply with the 1.0 mg/L MDV interim effluent limit by the end of this compliance schedule.

Required Action	Due Date
Submit Final Plans & Specifications: The permittee shall submit final construction plans to the Department for approval pursuant to s. 281.41, Wis. Stats., specifying treatment plant upgrades that	09/30/2025

must be constructed to achieve compliance with the interim phosphorus effluent limit and a schedule for completing construction of the upgrades by the 'Complete Construction' date specified below.	
Treatment Plant Upgrade: Upon approval of the final construction plans and schedule by the Department and pursuant to s. 281.41, Wis. Stats., the permittee shall initiate construction of the treatment plant upgrades in accordance with the approved plans and specifications.	09/30/2026
Construction Upgrade Progress Report: The permittee shall submit a progress report on construction upgrades.	09/30/2027
Complete Construction: The permittee shall complete construction of the proposed treatment plant upgrades.	09/30/2028
Achieve Compliance: The permittee shall achieve compliance with the phosphorus interim effluent limit of 1.0 mg/L.	10/01/2028

4.3 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.	

4.4 Phosphorus Schedule - Optimization Plan

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

Required Action	Due Date
Optimization Plan: The permittee shall prepare an Optimization Plan and submit it for Department approval. The plan shall include an evaluation of collected effluent data, possible source reduction measures and operational improvements to optimize performance to control phosphorus discharges. The plan shall contain a schedule for implementation of the measures and improvements. Once the plan is approved by the Department, the permittee shall take the steps called for in the Optimization Plan and follow the schedule of implementation as approved.	09/30/2025
Progress Report #1: Submit a progress report on optimizing removal of phosphorus.	09/30/2026
Progress Report #2: Submit a progress report on optimizing removal of phosphorus.	09/30/2027
Progress Report #3: Submit a progress report on optimizing removal of phosphorus. This schedule item is contingent upon continued federal authorization of the MDV. See "MDV Reopener Clause" in the Surface Water section of this permit.	09/30/2028
Progress Report #4: Submit a progress report on optimizing removal of phosphorus. This schedule item is contingent upon continued federal authorization of the MDV. See "MDV Reopener Clause" in the Surface Water section of this permit.	09/30/2029

Explanation of Schedules

Chloride Source Reduction Measures (Target Value) – This schedule is required to ensure that the permittee maintains compliance with the conditions and requirements of the chloride variance.

Phosphorus Multi-Discharger Variance Interim Limit (1.0 mg/L) – Subsection 283.16(6), Wis. Stats., establishes required interim phosphorus effluent limits that must be met for multi-discharger variance (MDV) eligibility. Subsection 283.16(6)(am), Wis. Stats., allows a technology based phosphorus limit of 1.0 mg/L as the MDV interim limit if a permittee certifies that its treatment facility cannot achieve compliance with the MDV interim limit without a major facility upgrade. The permittee qualifies for a 1.0 mg/L total phosphorus MDV interim limit and this schedule provides the permittee with four years to comply with that limit.

Phosphorus Payment per Pound to County – Subsection 283.16(6)(b), Wis. Stats., requires permittees that have received approval for the multi-discharger variance (MDV) to implement a watershed project that is designed to reduce non-point sources of phosphorus within the HUC 8 watershed in which the permittee is located. The permittee has selected the “Payment to Counties” watershed option described in s. 283.16(8), Wis. Stats. Under this option the permittee shall make annual payment(s) to participating county(s) that are calculated based on the amount of phosphorus actually discharged during a calendar year in pounds per year less the amount of phosphorus that would have been discharged had the permittee discharged phosphorus at a target value concentration of 0.2 mg/L. The pounds of phosphorus discharged in excess of the target value is multiplied by a per pound phosphorus charge that will equal $64.75 per pound. This schedule requires the permittee to submit Form 3200-151 to the Department indicating the total amount remitted to the participating county(s).

Phosphorus Schedule - Optimization Plan – 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 prepare an optimization plan with a schedule for implementation and submit it for Department approval. The permittee shall take the steps called for in the optimization plan and submit annual progress reports on optimizing the removal of phosphorus.

Attachments:

~~WQBEL Memo: Water Quality-Based Effluent Limitations for Dale Sanitary District No. 1 WPDES Permit No. WI-0030830-08, by Nicole Krueger, Water Resources Engineer, dated April 4, 2023~~

~~Chloride Variance EPA Data Sheet~~

~~SRM (Source Reduction Measures) Plan, dated June 2024~~

~~Phosphorus Multi-Discharger Variance Application for Municipal Facilities, signed September 2, 2021~~

~~Multi-Discharger Variance Application Evaluation Checklist, signed September 13, 2021~~

~~Conditional Approval of a Multi-Discharger Phosphorus Variance letter, dated and signed September 13, 2021~~

Expiration Date:

September 30, 2029

Justification Of Any Waivers From Permit Application Requirements:

No waivers from permit application requirements were granted.

Prepared By: Sarah Donoughe, Wastewater Specialist-Adv **Date:** July 26, 2024

Revised By: Sarah Donoughe, Wastewater Specialist-Adv **Date:** May 7, 2025

Notice of this modification is published in the Post Crescent, 306 W Washington St, Appleton, WI 54911-4745.