

## Permit Fact Sheet

### General Information

Permit Number	WI-0051128-08-0
Permittee Name and Address	BelGioioso Cheese Inc 4200 Main Street, Green Bay, WI 54311
Permitted Facility Name and Address	BelGioioso Cheese Inc 5850 County Road NN, Denmark, WI
Permit Term	October 01, 2025 to September 30, 2030
Discharge Location	5850 County Road NN, Denmark, WI 54208 (NE, SE, SE, Section 24, Town of Glenmore, Brown County) and approved landspreading sites and storage facilities located in Brown, Kewaunee, and Manitowoc counties
Receiving Water	Unnamed Trib. of Devils River & Groundwater of West Twin River in West Twin River of Twin-Kewaunee River in Brown County
Stream Flow (Q <sub>7,10</sub> )	0 cfs
Stream Classification	UT1: Warm Water Forage Fish (WWFF) UT2: Warm Water Forage Fish (WWFF) Devils River (Segment 3): Warm Water Sport Fish (WWSF)
Discharge Type	Existing, Continuous

### Facility Description

Belgioioso Cheese Inc. – Denmark (BC – Denmark) is an Italian cheese processor. The BC – Denmark WWTF treats wastewater from the Belgioioso Glenmore, Denmark, and New Denmark production facilities. Noncontact cooling water (NCCW) from the Glenmore and Denmark facilities are also discharged under the Belgioioso Cheese Inc. Denmark permit. NCCW from New Denmark is covered under the NCCW general permit. Cheese produced at this facility includes mascarpone, mozzarella, and provolone cheeses. Belgioioso brings in approximately 3.2 million pounds of milk per day. Whey produced in the cheese making process is hauled to another Belgioioso facility for treatment and disposal.

Wastewater enters a baffled equalization tank and then onto a strainer. Pretreatment of the wastewater continues with a dissolved air flotation (DAF) unit and then flows into an anoxic selector tank. After the selector tank wastewater flows to an aeration basin and then onto a screen filter prior to the membrane filter. Solids produced at the membrane filter can be used as return activated sludge (RAS) or sent as waste activated sludge (WAS) to the DAF unit followed by the sludge tank. RAS may be sent to the aeration basin or the anoxic selector tank. NCCW is combined with effluent process wastewater prior to discharge. Final effluent is discharged on a continuous basis via Outfall 007 to the south bank of an unnamed tributary (UT) of the Devil's River, approx. 350 ft upstream of the CTH NN bridge.

### Substantial Compliance Determination

**Enforcement During Last Permit:** The facility has completed all previously required actions as part of the enforcement process.

- A Notice of Noncompliance was issued on August 24, 2021 in addition to a Notice of Violation on June 6, 2022 for chloride exceedances and inadequate noncompliance reporting.
- A Notice of Noncompliance was issued on April 2, 2024 for a spill that was not reported appropriately.

After a desk top review of all discharge monitoring reports, CMARs, land app reports, compliance schedule items, and a site visit on April 26, 2024, this facility has been found to be in substantial compliance with their current permit.

Compliance determination made by Laura Gerold on September 13, 2024.

## 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)
007	0.39 MGD (2024)	Representative samples of noncontact cooling water combined with treated process wastewater shall be obtained prior to discharge to the creek.
005	35.8 gal (2019)	Land application of segregated high strength wastewater to Department approved sites and/or other methods of disposal. Representative samples shall be collected prior to landspreading on Department approved land application sites.
009	0.54 MGD (2024)	Land application of wastewater treatment plant sludge to Department approved land application sites and/or other methods of disposal. Representative samples shall be collected prior to landspreading on Department approved land application sites or disposal.
010	25.3 gal (2019)	Land application of the combination of segregated high strength wastewater and wastewater treatment plant sludge to Department approved sites and/or other methods of disposal. Representative samples shall be collected prior to disposal or landspreading on Department approved land application sites.

## Permit Requirements

### 1 Surface Water - Monitoring and Limitations

#### 1.1 Sample Point Number: 007- NCCW & TREATED PROCESS WW

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Total Daily	
BOD5, Total	Daily Max	8.7 mg/L	3/Week	Flow Prop Comp	Effective May - October.
BOD5, Total	Daily Max	17 mg/L	3/Week	Flow Prop Comp	Effective November - April.
BOD5, Total	Weekly Avg	5.0 mg/L	3/Week	Flow Prop Comp	Effective May - October.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
BOD5, Total	Weekly Avg	10 mg/L	3/Week	Flow Prop Comp	Effective November - April.
BOD5, Total	Monthly Avg	5.0 mg/L	3/Week	Flow Prop Comp	Effective May - October.
BOD5, Total	Monthly Avg	10 mg/L	3/Week	Flow Prop Comp	Effective November - April.
BOD5, Total	Daily Max	132 lbs/day	3/Week	Calculated	
BOD5, Total	Monthly Avg	66 lbs/day	3/Week	Calculated	
Suspended Solids, Total	Daily Max	17 mg/L	3/Week	Flow Prop Comp	
Suspended Solids, Total	Weekly Avg	10 mg/L	3/Week	Flow Prop Comp	
Suspended Solids, Total	Monthly Avg	10 mg/L	3/Week	Flow Prop Comp	
Suspended Solids, Total	Daily Max	72 lbs/day	3/Week	Calculated	
Suspended Solids, Total	Monthly Avg	36 lbs/day	3/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 below.
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 below.
pH Field	Daily Max	9.0 su	3/Week	Grab	
pH Field	Daily Min	6.0 su	3/Week	Grab	
Dissolved Oxygen	Daily Min	7.0 mg/L	Daily	Grab	
Chlorine, Total Residual	Daily Max	19 ug/L	Weekly	Grab	
Chlorine, Total Residual	Monthly Avg	7.3 ug/L	Weekly	Grab	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Chlorine, Total Residual	Weekly Avg	7.3 ug/L	Weekly	Grab	
Nitrogen, Ammonia Variable Limit		mg/L	3/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	Weekly Avg	5.3 mg/L	3/Week	Flow Prop Comp	Effective April - May.
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	3.7 mg/L	3/Week	Flow Prop Comp	Effective June - September.
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	8.4 mg/L	3/Week	Flow Prop Comp	Effective October - March.
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	2.1 mg/L	3/Week	Flow Prop Comp	Effective April - May.
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	1.5 mg/L	3/Week	Flow Prop Comp	Effective June - September.
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	3.4 mg/L	3/Week	Flow Prop Comp	Effective October - March.
Phosphorus, Total	Monthly Avg	0.84 mg/L	3/Week	Flow Prop Comp	
Phosphorus, Total	Monthly Avg	2.0 lbs/day	3/Week	Calculated	Limit effective October 2029. See Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus compliance schedule.
Phosphorus, Total	6-Month Avg	0.67 lbs/day	3/Week	Calculated	Limit effective October 2029. See Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus compliance schedule.
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

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
					Calculations section below.
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 below.
Chloride	Daily Max	620 mg/L	3/Week	Flow Prop Comp	
Chloride	Monthly Avg	400 mg/L	3/Week	Flow Prop Comp	
Chloride	Weekly Avg	400 mg/L	3/Week	Flow Prop Comp	
Chloride	Weekly Avg	1,400 lbs/day	3/Week	Calculated	
Nitrogen, Total Kjeldahl		mg/L	Quarterly	Flow Prop Comp	
Nitrogen, Nitrite + Nitrate Total		mg/L	Quarterly	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.
Temperature Maximum	Daily Max	86 deg F	Daily	Continuous	Limit effective throughout permit term. See table in Temperature Limits section of the permit for final limits following compliance schedule.
Temperature Maximum	Daily Max	deg F	Daily	Continuous	See final limits in table in Temperature Limits section of the permit.
Temperature Maximum	Weekly Avg	deg F	Daily	Continuous	See final limits in table in Temperature Limits section of the permit.
Acute WET		TUa	See Listed Qtr(s)	24-Hr Flow Prop Comp	See the Whole Effluent Toxicity (WET) Testing section.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Chronic WET		TUa	See Listed Qtr(s)	24-Hr Flow Prop Comp	2x/year in rotating quarters. See the Whole Effluent Toxicity (WET) Testing section.

### 1.1.1 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.

- **BOD5, Total** - Daily max concentration limits and weekly average limits added. Monthly concentration limits changed.
- **Suspended Solids, Total** – Daily max and monthly average concentration limits changed. Weekly concentration limits added.
- **Dissolved Oxygen** – Daily minimum limit added.
- **Chlorine, Total Residual** – Parameter and limits added.
- **Nitrogen, Ammonia (NH3-N) Total** – Weekly and monthly average limits changed.
- **Phosphorus, Total** – Mass (lbs/day) monthly and six-month averages added.
- **Phosphorus TMDL Limits**- An interim limit of 0.84 mg/L goes into effect upon reissuance and will remain in effect 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 3 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 0.67 lbs/day as a six-month average and 2.0 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** – Weekly mass average limit changed.
- **Total Nitrogen Monitoring (TKN, N02+N03 and Total N)**- Quarterly monitoring is required.
- **Temperature** – Daily and weekly max limits added, effective following a compliance schedule.
- **Chronic WET** – Testing added.

### 1.1.2 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 **June 10, 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.

**Total Nitrogen Monitoring (NO<sub>2</sub>+NO<sub>3</sub>, 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.

**Northeast Lakeshore Total Maximum Daily Load (TMDL):** The permitted facility is located within the Northeast Lakeshore Total Maximum Daily Load (NEL TMDL), which was approved by EPA October 30, 2023. 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 209 lbs/yr for phosphorus and 23,332 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 2023 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 NEL 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 0.84 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 industrial facilities covered by the NEL TMDL are given monthly average and daily max mass limits.

Facilities with NEL 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.

## 2 Land Application - Sludge/By-Product Solids (industrial only)

### 2.1 Sample Point Number: 005- LANDSPREAD LIQUIDS

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Chloride		mg/L	Monthly	Grab	
Nitrogen, Total Kjeldahl		mg/L	Monthly	Grab	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Phosphorus, Total		mg/L	Quarterly	Grab	
Solids, Total		Percent	Annual	Grab	
PFOA + PFOS		ug/kg	Annual	Calculated	
PFAS Dry Wt			Annual	Grab	Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.

### 2.1.1 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.

**PFAS** –Monitoring is required annually pursuant to s. NR 214.18(5)(b), Wis. Adm. Code.

### 2.1.2 Explanation of Limits and Monitoring Requirements

Requirements for land application of industrial sludge are determined in accordance with ch. NR 214 Wis. Adm. Code.

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

## 2.2 Sample Point Number: 009- WWTP SLUDGE

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	Annual	Composite	
Nitrogen, Total Kjeldahl		Percent	Annual	Composite	
Chloride		Percent	Annual	Composite	
pH Field		su	Annual	Composite	
Nitrogen, Ammonia		Percent	Annual	Composite	



Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
(NH3-N) Total					
Nitrogen, Organic Total		Percent	Annual	Composite	
Phosphorus, Total		Percent	Annual	Composite	
Potassium, Total Recoverable		Percent	Annual	Composite	
Lead Dry Wt		mg/kg	Annual	Composite	
Zinc Dry Wt		mg/kg	Annual	Composite	
Copper Dry Wt		mg/kg	Annual	Composite	
Cadmium Dry Wt		mg/kg	Annual	Composite	
Nickel Dry Wt		mg/kg	Annual	Composite	
PFOA + PFOS		ug/kg	Annual	Calculated	
PFAS Dry Wt			Annual	Grab	Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.

### 2.2.1 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.

**PFAS** –Monitoring is required annually pursuant to s. NR 214.18(5)(b), Wis. Adm. Code.

### 2.2.2 Explanation of Limits and Monitoring Requirements

Requirements for land application of industrial sludge are determined in accordance with ch. NR 214 Wis. Adm. Code.

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

## 2.3 Sample Point Number: 010- High Strength and WWTP Sludge

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	Monthly	Grab	
Nitrogen, Total Kjeldahl		Percent	Monthly	Grab	
Chloride		Percent	Monthly	Grab	
pH Field		su	Monthly	Grab	
Nitrogen, Ammonium (NH <sub>4</sub> -N) Total		Percent	Monthly	Grab	
Nitrogen, Organic Total		Percent	Monthly	Grab	
Phosphorus, Total		Percent	Monthly	Grab	
Phosphorus, Water Extractable		% of Tot P	Monthly	Grab	
Potassium, Total Recoverable		Percent	Monthly	Grab	
Lead Dry Wt		mg/kg	Annual	Composite	
Zinc Dry Wt		mg/kg	Annual	Composite	
Copper Dry Wt		mg/kg	Annual	Composite	
Cadmium Dry Wt		mg/kg	Annual	Composite	
Nickel Dry Wt		mg/kg	Annual	Composite	
PFOA + PFOS		ug/kg	Annual	Calculated	
PFAS Dry Wt			Annual	Grab	Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.

### 2.3.1 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.

**PFAS** –Monitoring is required annually pursuant to s. NR 214.18(5)(b), Wis. Adm. Code.

### 2.3.2 Explanation of Limits and Monitoring Requirements

Requirements for land application of industrial sludge are determined in accordance with ch. NR 214 Wis. Adm. Code.

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

### 3 Schedules

#### 3.1 Temperature Limits Compliance

This compliance schedule requires the permittee to achieve compliance by the specified date.

Required Action	Due Date
<b>Preliminary Compliance Report:</b> Submit a preliminary compliance report indicating alternatives to achieve the final temperature limits. Informational Note: Refer to NR 106 Subchapters V & VI or NR 102.26, Wis. Adm. Code, for information regarding the re-evaluation of limits.	10/01/2026
<b>Action Plan:</b> Submit an action plan for complying with all applicable effluent temperature limits.	10/01/2027
<b>Construction Plans:</b> Submit construction plans (if construction is required for complying with effluent temperature limits) and include plans and specifications with the submittal.	10/01/2028
<b>Initiate Actions:</b> Initiate actions identified in the plan.	10/01/2029
<b>Complete Actions:</b> Complete actions necessary to achieve compliance with effluent temperature limits.	09/30/2030

##### 3.1.1 Explanation of Schedule

**Temperature Limits (Industrial Facilities)** – This schedule allows time for the permittee to investigate thermal compliance, create an action plan, and implement actions to come into compliance with the effluent temperature limits.

#### 3.2 Land Application Management Plan

A management plan is required for the land application system.

Required Action	Due Date
<b>Land Application Management Plan:</b> Submit a management plan to optimize the land application system performance and demonstrate compliance with Wisconsin Administrative Code NR 214.	01/01/2026

##### 3.2.1 Explanation of Schedule

**Land Application Management Plan (industrial)-** An up-to-date Land Application Management plan is a standard requirement in reissued industrial permits per s. NR 214.17(6)(c), Wis. Adm. Code.

#### 3.3 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
<p><b>Final Plans and Specifications:</b> Unless the permit has been modified, revoked and reissued, or reissued to include Adaptive Management or Water Quality Trading measures or to include a revised schedule based on factors in s. NR 217.17, Wis. Adm. Code, the permittee shall submit final construction plans to the Department for approval pursuant to s. 281.41, Stats., specifying treatment plant upgrades that must be constructed to achieve compliance with final phosphorus WQBELs, and a schedule for completing construction of the upgrades by the complete construction date specified below. (Note: Permit modification, revocation and reissuance, and reissuance are subject to s. 283.53(2), Stats.)</p> <p>Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.</p>	09/30/2026
<p><b>Treatment Plant Upgrade to Meet WQBELs:</b> The permittee shall initiate construction of the upgrades. The permittee shall obtain approval of the final construction plans and schedule from the Department pursuant to s. 281.41, Stats. Upon approval of the final construction plans and schedule by the Department pursuant to s. 281.41, Stats., the permittee shall construct the treatment plant upgrades in accordance with the approved plans and specifications. Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.</p>	12/31/2026
<p><b>Complete Construction:</b> The permittee shall complete construction of wastewater treatment system upgrades. Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.</p>	09/30/2029
<p><b>Achieve Compliance:</b> The permittee shall achieve compliance with final phosphorus WQBELs. Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.</p>	10/01/2029

### 3.3.1 Explanation of Schedule

**WQBELs for Total Phosphorus** - 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 September 30, 2030 (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 provides the appropriate length of time for the permittee to evaluate these options, implement the chosen option and meet the final phosphorus limits (WQBELs).

## Attachments

Water Quality-Based Effluent Limitations for Belgioioso Cheese Inc. – Denmark WPDES Permit No. WI-0051128-08-0, by Michael Polkinghorn, dated June 10, 2025

Technology-Based Effluent Limitations for Belgioioso Cheese Inc. – Denmark WPDES Permit No. WI-0051128-08-0, by Michael Polkinghorn, dated June 10, 2025

## **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 10, 2025