

WPDES PERMIT

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

Ridge Breeze Dairy, LLC

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from the facility, located at W2686 390th Ave Maiden Rock

to

Unnamed tributary to the Rush River and to Plum Creek and Rush River Watersheds of the Lower Chippewa River Basin

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

The permittee shall not discharge after the date of expiration. If the permittee wishes to continue to discharge after this expiration date an application shall be filed for reissuance of this permit, according to Chapter NR 200, Wis. Adm. Code, at least 180 days prior to the expiration date given below.

	e Secretary	
Ву	Jeffrey Jackson Agricultural Runoff Management Specialist	
	Date Permit Signed/Issued for Modification	

PERMIT TERM: EFFECTIVE DATE - January 01, 2022 EFFECTIVE DATE OF MODIFICATION: August 01, 2024 **EXPIRATION DATE - December 31, 2026**

TABLE OF CONTENTS

I LIVESTOCK OPERATIONAL AND SAMPLING REQUIREMENTS	1
1.1 Production Area Discharge Limitations	1
1.2 RUNOFF CONTROL	1
1.2.1 Non-permanent feed storage areas	1
1.3 Manure and Process Wastewater Storage	2
1.3.1 Proper Operation and Maintenance	2
1.3.2 Discharge Prevention	3
1.3.3 Liquid Manure – 180-day storage	3
1.3.4 Facility Closure and Abandonment	3
1.4 SOLID MANURE STACKING	3
1.5 Ancillary Service and Storage Areas	4
1.6 NUTRIENT MANAGEMENT	4
1.6.1 General Spreading Restrictions	4
1.6.2 Non-Cropland Applications	5
1.6.3 Silurian Bedrock	5
1.6.4 Additional Nutrient Management Plan Requirements	5
1.6.5 Frozen or Snow Covered Ground – General Spreading Restrictions	6
1.6.6 Frozen or Snow Covered Ground – Solid Manure (12% solids or more)	6
1.6.7 Frozen or Snow Covered Ground – Allowances for Surface Applications of Liquid Manure (<12% solids)	7
1.6.8 Frozen or Snow Covered Ground – Process Wastewater	8
1.6.9 Spreading Sites Submittals	8
1.7 MONITORING AND SAMPLING REQUIREMENTS	8
1.7.1 Monitoring and Inspection Program	9
1.7.2 Sampling Requirements	9
1.8 SAMPLING POINT(S)	9
1.8.1 Manure and Process Wastewater Storage Facilities - Sampling Required	10
1.8.2 Composting System(s) - Sampling Required	12
1.8.3 Runoff Control System(s) - No Sampling Required	12
1.8.4 Sampling Point 001 - WSF 1 (Small Pit); 007- WSF 2 (Big Pit); 011- WSF-4 (2023); 012- WSF-5 (Future); 0	
6 (Future)	13
1.8.5 Sampling Point 002 - Miscellaneous Solids; 003- Dry Cow Barn Stacking Pad; 004- Separated Sand and Sol	
Main Farm Compost Pad; 008- Headland Stacking Sites, and 015- West Stacking Pad (Future)	15
2 SURFACE WATER REQUIREMENTS	18
2.1 SAMPLING POINT(S)	18
2.2 MONITORING REQUIREMENTS AND EFFLUENT LIMITATIONS	18
2.2.1 Sampling Point (Outfall) 013 - RO Permeate to Unnamed Tributary	18
3 SCHEDULES	23
3.1 EMERGENCY RESPONSE PLAN	23
3.2 MONITORING & INSPECTION PROGRAM	23
3.3 Annual Reports	23
3.4 NUTRIENT MANAGEMENT PLAN	23
3.5 FEED STORAGE RUNOFF CONTROLS - ENGINEERING EVALUATION	24
3.6 CALF HUTCH AREA RUNOFF CONTROLS - ENGINEERING EVALUATION	24
3.7 EFFLUENT LIMITATIONS FOR E. COLI	24
3.8 SUBMIT PERMIT REISSUANCE APPLICATION	26
4 STANDARD REQUIREMENTS	27
4.1 REPORTING AND MONITORING REQUIREMENTS FOR INDUSTRIAL DISCHARGES	27
4.1.1 Monitoring Results	27
4.1.2 Sampling and Testing Procedures	27
4.1.3 Recording of Results	27
Ŭ V	

WPDES Permit No. WI-0062928-04-2 Ridge Breeze Dairy

4.1.4 Reporting of Monitoring Results	28
4.1.5 Records Retention	28
4.1.6 Other Information	28
4.1.7 Reporting Requirements – Alterations or Additions	28
4.2 SYSTEM OPERATING REQUIREMENTS FOR INDUSTRIAL DISCHARGES	29
4.2.1 Noncompliance Reporting	29
4.2.2 Bypass	29
4.2.3 Scheduled Bypass	29
4.2.4 Controlled Diversions	30
4.2.5 Proper Operation and Maintenance	30
4.2.6 Operator Certification	30
4.2.7 Spill Reporting	30
4.2.8 Planned Changes	30
4.2.9 Duty to Halt or Reduce Activity	31
4.3 Surface Water Requirements for Industrial Discharges	31
4.3.1 Permittee-Determined Limit of Quantitation Incorporated into this Permit	31
4.3.2 Appropriate Formulas for Effluent Calculations	31
4.3.3 Effluent Temperature Requirements	31
4.3.4 Visible Foam or Floating Solids	32
4.3.5 Surface Water Uses and Criteria	32
4.3.6 Total Residual Chlorine Requirements (When De-Chlorinating Effluent)	32
4.3.7 Additives	33
4.3.8 Whole Effluent Toxicity (WET) Monitoring Requirements	33
4.3.9 Whole Effluent Toxicity (WET) Identification and Reduction	33
4.4 GENERAL CONDITIONS	34
4.4.1 Duty to comply	34
4.4.2 Permit Actions	34
4.4.3 Property Rights	34
4.4.4 Schedules	34
4.4.5 Inspection and Entry	34
4.4.6 Transfers	35
4.4.7 Duty to Mitigate	35
4.4.8 Duty to Provide Information	35
4.4.9 Recording of Results-Sampling	35
4.4.10 Recording of Results-Inspections	35
4.4.11 Spill Reporting	35
4.4.12 Planned Changes	35
4.4.13 Submittal of Plans and Specifications	36
4.4.14 Other Information	36
4.4.15 Reporting Requirements – Alterations or Additions	36
4.4.16 Noncompliance - 24 Hour Reporting	36
4.4.17 Reports and Submittal Certification	36
4.5 LIVESTOCK OPERATION GENERAL REQUIREMENTS	37
4.5.1 Responsibility for Manure and Process Wastewater	37
4.5.2 Distribution of Manure and Process Wastewater	37
4.5.3 Emergency Response Plans	37
4.5.4 Mortality Management	37
4.5.5 Department Review of Nutrient Management Plans	38
4.5.6 Existing Manure Storage Facilities Evaluation	38
4.5.7 Existing Runoff Control System(s) Evaluation	38
4.5.8 Existing Composting Storage Facilities and Leachate Containment Evaluation	39
4.5.9 Manure Storage Facility, Composting and Compost Leachate Containment Systems - Installation Plan	_
	39
4.5.10 Runoff Control Systems - Installation Plan Requirements	39
4.5.11 Record Keeping and Retention	40
4.5.12 Reporting Requirements	40

WPDES Permit No. WI-0062928-04-2
Ridge Breeze Dairy

4.5.13 Duty to Maintain Permit Coverage

40

5 SUMMARY OF REPORTS DUE

42

1 Livestock Operational and Sampling Requirements

1.1 Production Area Discharge Limitations

The permittee shall comply with the livestock performance standards and prohibitions in ch. NR 151. In accordance with s. NR 243.13, the permittee may not discharge manure or process wastewater pollutants to navigable waters from the production area, including approved manure stacking sites, unless all of the following apply:

- Precipitation causes an overflow of manure or process wastewater from a containment or storage structure.
- The containment or storage structure is properly designed, constructed and maintained to contain all manure and process wastewater from the operation, including the runoff and the direct precipitation from a 25-year, 24-hour rainfall event for this location as determined under s. NR 243.04.
- The production area is operated in accordance with the inspection, maintenance and record keeping requirements in s. NR 243.19.
- The discharge complies with surface water quality standards.

For all new or increased discharges to an ORW or ERW, any pollutant discharged shall not exceed existing levels of the pollutant immediately upstream of the discharge site.

All structures shall be designed and operated in accordance with ss. NR 243.15 and NR 243.17 to control manure and process wastewater for the purpose of complying with discharge limitations established above and groundwater standards.

The permittee may not discharge pollutants to navigable waters under any circumstance or storm event from areas of the production area, including manure stacks on cropland, where manure or process wastewater is not properly stored or contained by a structure.

NOTE: Wastewater treatment strips, grassed waterways or buffers are examples of facilities or systems that by themselves do not constitute a structure.

Production area discharges to waters of the state authorized under this permit shall comply with water quality standards, groundwater standards and may not impair wetland functional values.

1.2 Runoff Control

All runoff control systems shall be designed and maintained to comply with production area discharge limitations. Uncontaminated runoff shall be diverted away from manure and process wastewater storage and containment areas, raw materials storage and containment areas, and outdoor animal lots. All storage and containment structures associated with runoff control systems shall be operated in accordance with the "Proper Operations and Maintenance" section.

1.2.1 Non-permanent feed storage areas

All proposed non-permanent feed storage (e.g., silage bags) areas shall be submitted to the Department for approval. A permittee may not use non-permanent feed storage areas unless the permittee has obtained Department approval. Upon approval from the Department, the permittee shall comply with the following requirements, Production Area Discharge Limitations, and the table below when siting and operating non-permanent feed storage areas:

- Feed with over 75% moisture is not allowed on non-permanent areas.
- Stored feed may not be placed on bare ground and must be covered to prevent infiltration of precipitation. Significantly degraded or damaged covers shall be repaired or replaced.
- Stored feed must be moved annually to an area where feed wasn't stored within the previous 12 months.
- The area where feed was stored must be re-vegetated after the feed is moved.
- Clean water shall be diverted away from the area where the feed is stored.

• Spilled feed shall be removed, and all working faces shall be recovered to minimize potential spillage and exposure to precipitation.

Siting Criteria	Restriction
1. Hydrologic Soil Groups	B, C, D
2. Subsurface Separation Distance - Saturation	≥ 3'
- Bedrock	≥ 3'
 3. Surface Separation Distance Wells Lakes Sinkholes, or other Karst Features Quarries Streams Wetlands and Surface Inlets Open channel flow Land Slope 	≥ 250' ≥ 1,000' ≥ 1,000' ≥ 1,000' ≥ 300' ≥ 300' ≥ 100'
- Land Slope - Floodplain (100 yr)	≥ 100' ≤ 6% ≥ 100'

As part of the Department approval, the Department may require additional restrictions on non-permanent feed storage areas needed to protect water quality. The permittee shall manage the storage areas in compliance with the additional restrictions specified in the approval.

Storage area approvals may be rescinded by the Department based on documented impacts to waters of the state at or from the storage area, the presence of significant amounts of runoff or ponded runoff contaminated with leachate or stored feed or the permittee's failure to comply with siting and operational requirements.

NOTE: Ch. NR 429.04, Wis. Adm. Code, prohibits the burning of covers used for feed storage.

1.3 Manure and Process Wastewater Storage

All permittees shall have and maintain adequate storage for all manure and process wastewater generated at the operation to ensure that wastes can be properly stored and land applied in compliance with the conditions and timing restrictions of the permit, a Department approved nutrient management plan and s. NR 243.14(9).

1.3.1 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all manure and process wastewater facilities and systems in compliance with the conditions of this permit. The permittee shall comply with the permit and s. NR 243.17, including the following requirements:

- All liquid manure and process wastewater storage or containment facilities shall have the permanent markers specified in s. NR 243.15(3)(e) (margin of safety and maximum operating level for liquid manure and process wastewater storage and the 180-day storage marker for liquid manure storage).
- Chemicals and other pollutants may not be added to manure, process wastewater or stormwater storage facilities or treatment systems without prior Department approval.
- Liquid manure storage facilities or systems shall be emptied to the point that the 180-day level indicator is visible on at least one day between October 1 and November 30, except for liquid manure remaining due to unusual fall weather conditions prohibiting manure applications during this time period. The permittee shall record the day on which the 180-day level indicator was visible during this time period. Permittees unable to empty their storage facility to the 180-day level indicator between October 1 and November 30, shall notify the department in writing by December 5.
- The permittee shall maintain a design storage capacity of 180 days for liquid manure unless the Department approves a temporary reduction in design storage capacity to 150 days in accordance with s. NR 243.17(4).
- Prior to introducing any influent additives to a digester, other than manure, the permittee shall obtain written Department approval. If any materials other than manure are used in the digester, the permittee shall maintain daily records of the

volumes of all manure and non-manure components added to the digester influent. As part of its approval, the Department may apply additional requirements in accordance with s. NR 243.17(1). As part of the Department's review, the Department may also require amendments to the permittee's nutrient management plan and the permittee shall submit an amended plan to the Department to incorporate the additional requirements.

1.3.2 Discharge Prevention

A permittee shall operate and maintain storage and containment facilities to prevent overflows and discharges to waters of the state.

- The permittee may not exceed the maximum operating level in liquid storage or containment facilities except as a result
 of recent precipitation or conditions that do not allow removal of material from the facility in accordance with permit
 conditions.
- The permittee shall maintain a margin of safety in liquid storage or containment facilities that levels of manure, process wastewater and other wastes placed in the storage or containment facility may not exceed. Materials shall be removed from the facility in accordance with the approved nutrient management plan to ensure that the margin of safety is not exceeded. Failure to maintain a margin of safety is permit noncompliance that must be reported to the Department in accordance with the timeframes specified in the Noncompliance-24 Hour Reporting subsection in the Standard Requirements.

1.3.3 Liquid Manure - 180-day storage

The permittee shall demonstrate compliance with the 180-day design storage capacity requirement at all the following times:

- As part of an application for permit reissuance.
- At the time of submittal of plans and specifications for proposed reviewable facilities or systems.
- In annual reports to the department.
- When an operation is proposing, at any time, a 20% expansion in animal units or an increase by an amount of 1,000 animal units or more unless the Department has approved reductions in design storage in accordance with s. NR 243.17(4).

1.3.4 Facility Closure and Abandonment

In accordance with s. NR 243.17, if the permittee plans to close or abandon structures or systems regulated by this permit, a closure or abandonment plan shall be submitted to the Department and written Department approval must be granted before closing the facility. Manure storage facilities shall be closed or abandoned in accordance with NRCS Standard 360 (December 2002). Closure or abandonment of a manure storage facility shall occur when manure has not been added or removed for a period of 24 months, unless the owner or operator can provide information to the Department that the structure is designed to store manure for a longer period of time or that the storage structure will be utilized within a specific period of time.

1.4 Solid Manure Stacking

All proposed stacking of solid manure outside of a Department approved storage facility shall be submitted to the department for approval and identified in the permittee's nutrient management plan. A permittee may not stack manure on a site unless the permittee has obtained Department approval to stack. Stacking practices shall comply with requirements of s. NR 243.141. Stacking approvals may be rescinded by the Department based on documented impacts to waters of the state at or from the stacking site or runoff onto another persons land. Stacking shall comply with following requirements:

- When piled in a stack, the solid manure stack must be able to maintain its shape with minimal sloughing such that an angle of repose of 45 degrees or greater is maintained when the manure is not frozen.
- Stacking of solid manure outside of a department approved manure storage facility shall, at a minimum, meet the specifications in NRCS Standard 313, Table 9, dated December 2005. Alternatively, stacks may be placed on sites with soils in the hydrologic soil group D provided the manure has a solids content of greater than 32% and all other criteria in NRCS Standard 313, Table 9, are met.

- The permittee shall implement any necessary additional best management practices to ensure stacking areas maintain compliance with the production area requirements in s. NR 243.13. Best management practices may include upslope clean water diversions or downslope containment structures.
- The stacked manure shall have minimal leaching so that leachate from the stack is contained within the designated stacking area and does not cause an exceedance of groundwater quality standards.
- Solid manure may not be stacked in a water quality management area.
- Stacks may only be placed on cropland.

As part of the Department approval, the Department may require additional restrictions on stacking of solid manure needed to protect water quality. The permittee shall manage the stack in compliance with the additional restrictions specified in the approval.

1.5 Ancillary Service and Storage Areas

The permittee may discharge contaminated storm water to waters of the state from ancillary service and storage areas provided the discharges of contaminated storm water comply with groundwater and surface water quality standards. The permittee shall take preventive maintenance actions and conduct periodic visual inspections to minimize the discharge of pollutants from these areas to surface waters. For CAFO outdoor vegetated areas, the permittee shall also implement the following practices:

- Manage stocking densities, implement management systems and manage feed sources to ensure that sufficient vegetative cover is maintained over the entire area at all times.
- Prohibit direct access of livestock or poultry to surface waters or wetlands located in or adjacent to the area unless
 approved by the Department.

1.6 Nutrient Management

Except as provided for in s. NR 243.142(2), the permittee is responsible for ensuring that the manure and process wastewater generated by the operation is land applied or disposed of in a manner that complies with the terms of this permit, the approved nutrient management plan and s. NR 243.14.

The permittee shall land apply manure and process wastewater in compliance with the Department approved nutrient management plan, s. NR 243.14 and the terms and conditions of this permit. Land application practices shall not exceed crop nutrient budgets determined in accordance with NRCS Standard 590, this permit and s. NR 243.14 and shall be based on manure and process wastewater analyses, soil tests, as well as other nutrient sources applied to a field. The permittee shall review and amend the nutrient management plan on an annual basis to reflect any changes in operations over the previous year (including incorporation of the previous year's amendments and new soil test results) and to include projected changes for the upcoming year. Annual updates are due in accordance with the Schedules section of the permit.

The management plan may be amended at any time provided the proposed amendments are approved in writing by the Department and meet the requirements of s. NR 243.14. Changes requiring a plan amendment include, but are not limited to, changes to application rates, new spreading sites, changes in the number of livestock, changes in manure storage procedures, or changes in the type of manure spreading equipment. Unless specified in the "Special Permit Conditions" section of the permit, an amendment does not become effective and may not be implemented until the Department has reviewed and approved the amendment. In addition, all approved amendments in a given year shall be included in the Annual Update.

The permittee shall maintain daily spreading records and submit annual reports relating to land application activities in accordance with s. NR 243.19.

1.6.1 General Spreading Restrictions

The permittee shall land apply manure and process wastewater in compliance with the following:

- Manure or process wastewater may not pond on the application site.
- During dry weather conditions, manure or process wastewater may not run off the application site, nor discharge to
 waters of the state through subsurface drains.
- Manure or process wastewater may not cause the fecal contamination of water in a well.
- Manure or process wastewater may not run off the application site nor discharge to waters of the state through subsurface
 drains due to precipitation or snowmelt except if the permittee has complied with all land application restrictions in NR
 243 and this permit, and the runoff or discharge occurs as a result of a rain event that is equal to or greater than a 25year, 24-hour rain event.
- Manure or process wastewater may not be applied to saturated soils.
- Land application practices shall maximize the use of available nutrients for crop production, prevent delivery of manure
 and process wastewater to waters of the state, and minimize the loss of nutrients and other contaminants to waters of the
 state to prevent exceedances of groundwater and surface water quality standards and to prevent impairment of wetland
 functional values. Practices shall retain land applied manure and process wastewater on the soil where they are applied
 with minimal movement.
- Manure or process wastewater may not be applied on areas of a field with a depth to groundwater or bedrock of less than 24 inches.
- Manure or process wastewater may not be applied within 100 feet of a direct conduit to groundwater.
- Manure or process wastewater may not be applied within 100 feet of a private well or non-community system as defined in ch. NR 812 or within 1000 feet of a community well as defined in ch. NR 811.
- Unless specified otherwise in this permit, where incorporation of land applied manure is required, the incorporation shall occur within 48 hours of application.
- Manure or process wastewater may not be surface applied when precipitation capable of producing runoff is forecast within 24 hours of the time of planned application.
- Manure or process wastewater may not be spread on surface waters, established concentrated flow channels, or nonharvested vegetative buffers.
- Fields receiving manure and process wastewater may not exceed tolerable soil loss ("T").

1.6.2 Non-Cropland Applications

Manure may be applied to non-cropland if pre-approval in writing is issued by the Department. Considerations for approval may include acceptable application timing, amounts and methods.

1.6.3 Silurian Bedrock

Mechanical applications of manure to cropland or pasture areas that meet the definition of Silurian bedrock under s. NR 151.015(17) shall comply with s. NR 151.075.

NOTE: This requirement applies only to applications of manure on Silurian bedrock which are areas where the bedrock consists of Silurian dolomite with a depth to bedrock of 20 feet or less. These areas comprise portions of the following counties; Brown, Calumet, Dodge, Door, Fond du Lac, Kenosha, Kewaunee, Manitowoc, Milwaukee, Ozaukee, Racine, Sheboygan, Walworth, Washington and Waukesha.

1.6.4 Additional Nutrient Management Plan Requirements

- If applicable, the permittee shall specify the method(s) of incorporation in its nutrient management plan.
- The permittee shall identify, to the maximum extent practicable, the presence of subsurface drainage systems in fields where its manure or process wastewater is applied as part of the nutrient management plan.
- In accordance with s. NR 243.14(3), the permittee shall account for 1st and 2nd year nutrient credits.
- On a field-by-field basis, the permittee shall select and implement one of the practices listed in s. NR 243.14(4) for manure and process wastewater applications in a SWQMA (defined in ch. NR 243), and include the selected practices in the nutrient management plan. Whenever manure or process wastewater is applied within a SWQMA, the permittee shall apply the material in compliance with the SWQMA practices specified in the approved nutrient management plan.
- On a field-by-field basis, the permittee shall select one of the methods specified in s. NR 243.14(5) for assessing and minimizing the potential delivery of phosphorus to surface waters, and include the selected method in the nutrient management plan. The permittee shall apply manure and process wastewater to fields in compliance with the

phosphorus methods specified in the approved nutrient management plan. On a field-by-field basis, the permittee shall select and implement one of the methods.

1.6.5 Frozen or Snow Covered Ground – General Spreading Restrictions

If the permittee applies manure on frozen or snow-covered ground, the permittee shall land apply the manure in compliance with all of the restrictions in s. NR 243.14(6)-(8). Some of these restrictions include:

- Any incorporation of manure on frozen or snow-covered ground must be done immediately after application.
- The permittee shall identify acceptable sites for allowable applications on frozen or snow-covered ground as part of its nutrient management plan.
- The permittee shall evaluate each field at the time of application to determine if conditions are suitable for applying manure and complying with the requirements of this permit. All surface applications of manure or process wastewater on frozen or snow-covered ground shall occur on those fields that represent the lowest risk of pollutant delivery to waters of the state and where the application results in a winter acute loss index value of 4 or less using the Wisconsin phosphorus index.
- Manure or process wastewater may not be land applied on fields when snow is actively melting such that water is flowing off the field.
- On fields with soils that are 60 inches thick or less over fractured bedrock, manure may not be applied on frozen ground or where snow is present.
- Manure may not be incorporated on areas of fields with greater than 4 inches of snow.

[NOTE: Please refer to ch. NR 243 for all requirements contained in s. NR 243.14(6)-(8).]

1.6.6 Frozen or Snow Covered Ground - Solid Manure (12% solids or more)

The permittee may surface apply solid manure on frozen or snow-covered ground in compliance with the following restrictions:

- Solid manure may not be surface applied on slopes greater than 9%.
- Solid manure may not be surface applied from February 1 through March 31 on areas of fields where an inch or more of snow is present or where the ground is frozen.
- The surface application shall comply with the restrictions in Table 1.

	Table 1	
Restrictions for Surface Applying Solid Manure on Frozen or Snow Covered Ground		
Criteria	Restrictions for fields with 0-6% slopes	Restrictions for fields with slopes > 6% and up to 9%
Required fall tillage practice prior to application	Chisel or moldboard plow, no-till or a department approved equivalent ^A	Chisel or moldboard plow, no-ti or department approved equivalent ^A
Minimum % solids allowed	12%	> 20%
Application rate (cumulative per acre)	Not to exceed 60 lbs. P ₂ O ₅ per winter season, the following growing season's crop P ₂ O ₅ budget taking into account nutrients already applied, or phosphorus application restrictions specified in a department approved nutrient management plan, whichever is less	Not to exceed 60 lbs. P ₂ O ₅ per winter season, the following growing season's crop P ₂ O ₅ budget taking into account nutrients already applied, or phosphorus application restrictions specified in a department approved nutrient management plan, whichever is less
Setbacks from surface waters	No application allowed within SWQMA	No application allowed within 2 x SWQMA

Table 1 Restrictions for Surface Applying Solid Manure on Frozen or Snow Covered Ground		
Criteria	Restrictions for fields with 0-6% slopes	Restrictions for fields with slopes > 6% and up to 9%
Setbacks from downslope areas of channelized flow, vegetated buffers, and wetlands	200 feet	400 feet
Setbacks from direct conduits to groundwater	300 feet	600 feet

A – All tillage and farming practices shall be conducted in accordance with the following requirements; 0-2% slope = no contouring required, >2-6% slope = tillage and practices conducted along the general contour, >6% slope = tillage and farming practices conducted along the contour. The department may approve alternative tillage practices on a case-by-case basis in situations where conducting practices along the contour is not possible. Allowances for application on no-till fields only apply to fields where no-till practices have been in place for a minimum of 3 years.

1.6.7 Frozen or Snow Covered Ground – Allowances for Surface Applications of Liquid Manure (<12% solids)

The permittee is prohibited from surface applying liquid manure during February and March, and is prohibited from surface applying liquid manure on frozen or snow-covered ground except for the following conditions:

- The permittee may surface apply liquid manure on frozen or snow covered ground, including during February and March, on an emergency basis in accordance with Table 2 and s. NR 243.14(7)(d) on fields the Department has approved for emergency applications. The permittee must notify the department verbally prior to the emergency application. Unless the emergency application is necessitated by imminent impacts to the environment or human or animal health, the permittee may not apply manure to a field on an emergency basis until the department has verbally approved the application. The permittee shall submit a written description of the emergency application and the events leading to the emergency application to the department within 5 days of the emergency application.
- Liquid manure that is frozen and cannot be transferred to a manure storage facility may be surface applied on frozen or snow-covered ground, including during February and March, in accordance with the restrictions in Tables 2 and s. NR 243.14(7)(f). Surface applications of frozen liquid manure do not require prior department approval or notification provided application sites for frozen liquid manure are identified in the approved nutrient management plan. During February and March, the permittee shall notify the department if the permittee expects to surface apply frozen liquid manure more than 5 days in any one month.

Table 2 Restrictions for Surface Applications of Liquid Manure on Frozen or Snow Covered Ground		
Criteria	Restrictions for fields with 0- 2% slopes	Restrictions for fields with >2-6% slopes
Required fall tillage practice prior to application	Chisel or moldboard plow or department approved equivalent ^A	Chisel or moldboard plow or department approved equivalent ^A
Application rate (cumulative per acre)	Maximum application volume of 7,000 gallons per acre per winter season, not to exceed 60 lbs. P ₂ O ₅ , the following growing season's crop P ₂ O ₅ budget taking into account nutrients already applied or other phosphorus	Maximum application volume of 3,500 gallons per acre per winter season, not to exceed 30 lbs. P ₂ O ₅ , the following growing season's crop P ₂ O ₅ budget taking into account nutrients already applied, or

Restrictions for Surface Ap	plications of Liquid Manure on Froz	en of Show Covered Orbuild
Criteria	Restrictions for fields with 0- 2% slopes	Restrictions for fields wi >2-6% slopes
	application restrictions specified in a department approved nutrient management plan, whichever is less	other phosphorus applicatio restrictions specified in a department approved nutrie management plan, whicheve is less
Setbacks from surface waters	No application allowed within SWQMA	No application allowed with SWQMA
Setbacks from downslope areas of channelized flow, vegetated buffers, wetlands	200 feet	200 feet
Setbacks from direct conduits to groundwater	300 feet	300 feet

 $\bf A$ – All tillage and farming practices shall be conducted along the contour in accordance with the following requirements; 0-2% slope = no contouring required, >2-6% slope = tillage and practices conducted along the general contour. The department may approve alternative tillage practices on a case-by-case basis in situations where conducting practices along the contour is not possible

1.6.8 Frozen or Snow Covered Ground - Process Wastewater

If a permittee land applies process wastewater on frozen or snow-covered ground, the permittee shall land apply the process wastewater in compliance with s. NR 214.17(2) through (6) and the other land application restrictions in this permit, except for the restrictions in the "Frozen or Snow Covered Ground – Solid Manure (12% solids or more)" and "Frozen or Snow Covered Ground – Allowances for Surface Applications of Liquid Manure (<12% solids)" sections of this permit.

1.6.9 Spreading Sites Submittals

Permittee requests to amend a nutrient management plan to include landspreading sites not found in an approved management plan shall include the following information:

- The location of the site on maps and aerial photographs, and soil survey maps.
- A unique site identification number
- Information used to verify the site meets locational requirements of the permit,
- A nutrient budget for the site consistent with permit requirements. This includes a completed worksheet outlining the
 process in determining appropriate spreading rates for each additional site, including a crop history identifying the
 previous season's crops and future cropping plans for each site and estimated nutrient uptake.
- A demonstration that the field(s) in question meets tolerable soil loss rate.
- Maps that show where land application is prohibited or restricted on a map or aerial photograph of the site.
- Soil samples if available for one-time applications. If the permittee wishes to use the site for subsequent applications, soil samples shall be submitted prior to additional landspreading.

1.7 Monitoring and Sampling Requirements

The permittee shall comply with the monitoring and sampling requirements specified below for the listed sampling point(s), and the following conditions.

1.7.1 Monitoring and Inspection Program

As specified in the Schedules section of this permit, the permittee shall submit a monitoring and inspection program designed to determine compliance with permit requirements. The program shall be consistent with the requirements of this section and shall identify the areas that the permittee will inspect, the person responsible for conducting the inspections and how inspections will be recorded and submitted to the department.

Visual inspections shall be completed by the permittee or designee in accordance with the following frequencies:

- Daily inspections for leakage of all water lines that potentially come into contact with pollutants or drain to storage or containment structures or runoff control systems, including drinking or cooling water lines.
- Weekly inspections to ensure proper operation of all storm water diversion devices and devices channeling contaminated runoff to storage or containment structures.
- Weekly inspections of liquid storage and containment structures. For liquid storage and containment facilities,
 the berms shall be inspected for leakage, seepage, erosion, cracks and corrosion, rodent damage, excessive
 vegetation and other signs of structural weakness. In addition, the level of material in all liquid storage and
 containment facilities shall be measured and recorded in feet or inches above or below the margin of safety
 level.
- Quarterly inspections of the production area, including outdoor animal pens, barnyards and raw material storage areas. CAFO outdoor vegetated areas shall be inspected quarterly.
- Periodic inspections and calibration of landspreading equipment to detect leaks and ensure accurate application rates for manure and process wastewater. An initial calibration of spreading equipment shall be followed by additional calibration after any equipment modification that may impact application of manure or process wastewater or after changes in product or manure or process wastewater consistency. Spreading equipment for both liquid and solid manure shall be inspected just prior to the hauling season, and equipment used for spreading liquids shall be inspected at least once per month during months when hauling occurs.
- Inspections of fields each time manure or process wastewater is surface applied on frozen or snow-covered ground to determine if applied materials have run off the application site. Inspections shall occur during and shortly after application.

The permittee shall take corrective actions as soon as practicable to address any equipment, structure or system malfunction, noncompliance, failure or other problem identified through monitoring or inspections. If the permittee fails to take corrective actions within 30 days of identifying a malfunction, noncompliance, failure or other problem, the permittee shall contact the Department immediately following the 30-day period and provide an explanation for its failure to take action.

1.7.2 Sampling Requirements

The permittee shall collect and analyze representative samples of land applied manure and process wastewater for the parameters outlined in the monitoring requirements for each sample point. The permittee shall also collect and analyze soils from fields used for manure or process wastewater applications at least once every four years. Sampling of manure, process wastewater and soils shall be done in accordance with s. NR 243.19(1)(c).

1.8 Sampling Point(s)

The permittee is authorized to use only the facilities identified below, in accordance with the conditions specified in this permit. The permittee may not install or use new facilities or structures or land apply manure or other process wastewaters from these facilities unless written Department approval is received. A new facility is any facility that is not specifically identified in this permit. If a new facility is approved in writing by the Department, the conditions in the corresponding 'New Facility' sampling point (e.g. Manure Storage Facilities, Runoff Control Systems) will apply.

1.8.1 Manure and Process Wastewater Storage Facilities - Sampling Required

In accordance with the Production Area Discharge Limitations subsection, manure and process wastewater storage facilities shall be operated and maintained to prevent discharges to navigable waters and to comply with surface water quality standards. In addition, manure and process wastewater storage facilities shall be operated and maintained to minimize leakage for the purpose of complying with groundwater standards. Unless specifically approved and designated by the Department as a sampling point, in-field unconfined storage of manure (manure stacking) is prohibited. The permittee is authorized to use facilities identified below, in accordance with the conditions specified in this permit.

Sampling Point Designation		
Sampling Point Number	Sampling Point Location, System Description (including capacity, legal location, and action needed as applicable), and Treatment Description	
001	Sample point 001 is for a liquid waste storage facility located at the Main Farm. WSF 1 (small pit) is an in-place earthen storage constructed in 1999. WSF 1 has a usable volume of 1,575,220 gallons. This storage system accepts manure and process wastewater manure treatment system, typically concentrate from the ultra-filtration process. The manure treatment system can be bypassed. If this occurs, then WSF 1 may receive manure and process wastewater directly from the sand and fiber separation building (Manure Building).	
002	Sample point 002 is for solid manure sources that are directly land applied and not stored in a waste storage facility. This includes solid sources such as calf hutch manure, maternity pen bedpack, heifer bedpack, etc. Representative samples shall be taken for each manure source type.	
003	Sample point 003 is for solid waste storage facility 3 (WSF 3) located at the Heifer/Dry Cow Site. WSF 3 has clay walls, a concrete floor, and a concrete ramp. It is located to the west of the Dry Cow Barn. The facility has a capacity of 65 tons and was constructed in 1997. This storage accepts solids from the dry cow barn.	
004	Sample point 004 is for separated solids (fiber and sand). Solids are stored within the Manure Building and is either directly land applied or reused as bedding. Separated solids may also be distributed to another party according to Department approval and Distribution of Manure and Process Wastewater section of permit.	
007	Sample point 007 is for the liquid waste storage facility located at the Main Farm. WSF 2 (Big Pit) is an in-place earthen storage constructed in 1999. WSF 2 has a usable volume of 4,627,126 gallons. This storage system accepts manure and process wastewater from the feed storage area, runoff from the adjacent composting pad, and concentrate from the reverse osmosis process from the manure treatment system. The manure treatment system can be bypassed. If this occurs, then WSF 2 may receive manure and process wastewater directly from the sand and fiber separation building (Manure Building).	
008	Sample point 008 is for solid manure stacked in approved headland stacking locations. Representative samples shall be taken of this manure prior to land application. Note: Headland stacking sites are subject to production site discharge limitations; weekly visual monitoring is required during use of stacking sites to ensure discharges meet permit requirements.	
011	Sample point 011 is for liquid waste storage facility WSF-4. WSF 4 is located west of the Manure Processing Building. WSF-4 is a concrete-lined structure constructed in 2023 and has with a Maximum Operating Level (MOL) capacity of approximately 9.45 million gallons.	
012	Sample point 012 is for liquid waste storage facility WSF-5. WSF-5 is located south of the future feed storage area. WSF-5 is a concrete-lined structure constructed in 2024 and collects silage leachate and feed storage area runoff. This structure has an approximate storage volume of 4.60 million gallons. After taking account for a 25-year/24-hour precipitation event from the feed storage area, the structure has a Maximum Operating Level (MOL) capacity of approximately 699,154 gallons.	
014	Sample point 014 is for liquid waste storage facility WSF-6. WSF-6 is located east of WSF-4. WSF-6 is a concrete-lined structure to be constructed in 2025. This structure has an approximate Maximum Operating Level (MOL) capacity of approximately 39,857,486 gallons.	
015	Sample point 015 is for the West Separated Solid Stacking Pad. This structure is a 100' by 100' concrete pad located west of the original freestall barns. Used animal bedding and separated manure solids will	

be stored here before being land applied.

Manure and Process Wastewater Storage Facilities - Action Needed: For manure and process wastewater storage facilities that are to be installed, evaluated or abandoned (as indicated in the above table), see the Schedules section herein for actions required. Although this permit may require actions for installing permanent facilities, or controls, or modifications to existing facilities, interim measures shall be immediately implemented to prevent discharges of pollutants to navigable waters. Specifically, if monitoring or inspection reports indicate discharges to navigable waters from a storage facility in violation of the Production Area Discharge Limitations subsection, the permittee shall immediately install interim control measures to contain the discharges. Plans and specifications for permanent facilities must be submitted to the Department for review and approval in accordance with Chapter 281.41, Wis. Statutes, and Chapter NR 243, Wis. Adm. Code.

1.8.2 Composting System(s) - Sampling Required

The permittee shall identify in the Nutrient Management Plan the amount and source of manure to be composted. If the permittee proposes a change to the amount to be composted, a Nutrient Management Plan Amendment must be submitted. In accordance with the Production Area Discharge Limitations subsection, composting systems shall be operated and maintained to prevent discharges to navigable waters and to comply with surface water quality standards. In addition, composting systems shall be operated and maintained to minimize leakage for the purpose of complying with groundwater standards. The permittee is authorized to use the systems identified below, in accordance with the conditions specified in this permit.

	Sampling Point Designation		
Sampling Point Number	Sampling Point Location, System Description (including capacity, legal location, and action needed as applicable), and Treatment Description		
005	Sample point 005 is for the asphalt compost pad located to the east of WSF 2 at the Main Farm. The facility has a capacity of 4,000 tons and was constructed in 2017. This storage accepts manure and bedding from the heifer barn, dry cow barn, calf hutch area, and fiber/sand from the separation processes.		

Composting System(s) - Action Needed: For composting systems that are to be installed, evaluated or abandoned (as indicated in the above table), see the Schedules section herein for actions required. Although this permit may require permanent control measures, interim measures shall be implemented to prevent discharges of pollutants to navigable waters. Specifically, if monitoring or inspection reports indicate composting systems may not be able to prevent discharges to navigable waters in accordance with conditions in the Production Area Discharge Limitations subsection, the permittee shall immediately install interim control measures to contain the discharges. Plans and specifications for permanent systems must be submitted to the Department for review and approval in accordance with Chapter 281.41. Wis. Statutes, and Chapter NR 243, Wis. Adm. Code.

1.8.3 Runoff Control System(s) - No Sampling Required

In accordance with the Production Area Discharge Limitations subsection, the permittee shall control contaminated runoff from all elements of the livestock operation to prevent a discharge of pollutants to navigable waters and to comply with surface water quality standards and groundwater standards.

Sampling Point Designation		
Sampling Point Number	Sampling Point Location, System Description (including capacity, legal location, and action needed as applicable), and Treatment Description	

01	0	Sample point 010 is for visual monitoring and inspection of the feed storage area and associated runoff
		control system. Proper operation and maintenance is required to ensure discharges meet permit
		requirements. Weekly inspections are required and shall be recorded according to monitoring program.

Runoff Control System(s) - Action Needed: For runoff control systems that are to be installed, evaluated or abandoned (as indicated in the above table), see the Schedules section herein for actions required. Although permanent control measures may be required by this permit, interim measures shall be implemented to prevent discharges of pollutants to navigable waters. Specifically, if monitoring or inspection reports indicate discharges to navigable waters from a runoff control facility or practice in violation of the Production Area Discharge Limitations subsection, the permittee shall immediately install interim control measures to contain the discharges. Plans and specifications for permanent runoff controls must be submitted to the Department for review and approval in accordance with Chapter 281.41. Wis. Statutes, and Chapter NR 243, Wis. Adm. Code.

1.8.4 Sampling Point 001 - WSF 1 (Small Pit); 007- WSF 2 (Big Pit); 011- WSF-4 (2023); 012- WSF-5 (Future); 014- WSF-6 (Future)

Monitoring Requirements and Limitations							
Parameter	Limit Type	Limits and	Sample	Sample	Notes		
		Units	Frequency	Type			
Nitrogen, Total		lb/1000gal	2/Month	Grab			
Nitrogen, Available		lb/1000gal	2/Month	Calculated			
Phosphorus, Total		lb/1000gal	2/Month	Grab			
Phosphorus,		lb/1000gal	2/Month	Calculated			
Available							
Solids, Total		Percent	2/Month	Grab			

Reporting: Sampling test results shall be submitted with the Annual Report. Sampling is only required when land application has actually occurred.

Daily Log Requirements

The permittee shall document all discharge and monitoring activities on daily log report form 3200-123A or a Department approved equivalent log sheet. Originals of the daily log reports shall be kept by the permittee as described under Record Keeping and Retention in the Standard Requirements section, and if requested, made available to the Department.

Parameters	Units		
Date of Application	Date		
Field ID	Number/Name		
Acres Applied	Number of Acres		
Manure/Process Wastewater Source	Specify Storage Facility or Barn		
Spreader Volume	Tons or Gallons		
Number of Loads	Number		

Daily Log Requirements

The permittee shall document all discharge and monitoring activities on daily log report form 3200-123A or a Department approved equivalent log sheet. Originals of the daily log reports shall be kept by the permittee as described under Record Keeping and Retention in the Standard Requirements section, and if requested, made available to the Department.

Parameters	Units		
Soil Conditions	Dry, Wet, Frozen, Snow Covered		
Temperature During Application	°F		
Precipitation During Application	Describe Precipitation		
Application Method	Surface Applied, Injected, Incorporated		

Annual Report

The permittee shall submit an Annual Report, including Form 3200-123 or a Department approved equivalent, that summarizes all landspreading activities and includes the information identified below, the lab analyses of the manure and other waste landspread, the "T" compliance worksheet for all fields, and the soil test frequency in the past four years. The Annual Report is due each year by the date specified in the Schedules section of this permit. Nitrogen and phosphorus from all sources applied to a given field, including commercial fertilizers, shall be included in the "Total Nitrogen" and "Total Phosphorus" sections of the Annual Report.

Parameters	Units	Sample Type
Date of Application	Date	-
Field ID	Number/Name	-
Acres Applied	Number of Acres	-
Slope	Percent	-
Soil Test P Ave.	ppm	-
Manure Source	-	Composite
Current Crop	-	-
Crop Nitrogen Needs (per soil test)	Pounds/Acre	-
Crop P ₂ O ₅ Needs (per soil test)	Pounds/Acre	-
Manure/Process Wastewater Analysis: Available Nitrogen	Pounds/1000 Gallons	Calculated
Manure/Process Wastewater Analysis: Available P ₂ O ₅	Pounds/1000 Gallons	Calculated
Manure/Process Wastewater Application Rate	Gallons/Acre	-
Manure/Process Wastewater Applied: Nitrogen	Pounds/Acre	-

Annual Report

The permittee shall submit an Annual Report, including Form 3200-123 or a Department approved equivalent, that summarizes all landspreading activities and includes the information identified below, the lab analyses of the manure and other waste landspread, the "T" compliance worksheet for all fields, and the soil test frequency in the past four years. The Annual Report is due each year by the date specified in the Schedules section of this permit. Nitrogen and phosphorus from all sources applied to a given field, including commercial fertilizers, shall be included in the "Total Nitrogen" and "Total Phosphorus" sections of the Annual Report.

Parameters	Units	Sample Type
Manure/ Process Wastewater Applied: P ₂ O ₅	Pounds/Acre	-
Previous Crop	-	-
Legume Nitrogen Credit	Pounds/Acre	-
Second Year Manure Credit	Pounds/Acre	-
Additional Fertilizer: Nitrogen	Pounds/Acre	-
Additional Fertilizer: P ₂ O ₅	Pounds/Acre	-
Total Nitrogen Applied	Pounds/Acre	-
Total P ₂ O ₅ Applied	Pounds/Acre	-
Soil Conditions	Dry, Wet, Frozen, Snow Covered	-
Application Method	Surface Applied, Injected, Incorporated	-
Banked	Yes/No	-
Field Restrictions	Per Nutrient Management Plan	-

1.8.5 Sampling Point 002 - Miscellaneous Solids; 003- Dry Cow Barn Stacking Pad; 004- Separated Sand and Solids; 005- Main Farm Compost Pad; 008- Headland Stacking Sites, and 015- West Stacking Pad (Future)

Monitoring Requirements and Limitations							
Parameter	Limit Type	Limits and Units	Sample Frequency	Sample Type	Notes		
Nitrogen, Total		lbs/ton	Quarterly	Grab			
Nitrogen, Available		lbs/ton	Quarterly	Calculated			
Phosphorus, Total		lbs/ton	Quarterly	Grab			
Phosphorus, Available		lbs/ton	Quarterly	Calculated			
Solids, Total		Percent	Quarterly	Grab			

Reporting: Sampling test results shall be submitted with the Annual Report. Sampling is only required when land application has actually occurred.

Daily Log Requirements

The permittee shall document all discharge and monitoring activities on daily log report form 3200-123A or a Department approved equivalent log sheet. Originals of the daily log reports shall be kept by the permittee as described under Record Keeping and Retention in the Standard Requirements section, and if requested, made available to the Department.

A	1		
Parameters	Units		
Date of Application	Date		
Field ID	Number/Name		
Acres Applied	Number of Acres		
Manure/Process Wastewater Source	Specify Storage Facility or Barn		
Spreader Volume	Tons or Gallons		
Number of Loads	Number		
Soil Conditions	Dry, Wet, Frozen, Snow Covered		
Temperature During Application	°F		
Precipitation During Application	Describe Precipitation		
Application Method	Surface Applied, Injected, Incorporated		

Annual Report

The permittee shall submit an Annual Report, including Form 3200-123 or a Department approved equivalent, that summarizes all landspreading activities and includes the information identified below, the lab analyses of the manure and other waste landspread, the "T" compliance worksheet for all fields, and the soil test frequency in the past four years. The Annual Report is due each year by the date specified in the Schedules section of this permit. Nitrogen and phosphorus from all sources applied to a given field, including commercial fertilizers, shall be included in the "Total Nitrogen" and "Total Phosphorus" sections of the Annual Report.

Parameters	Units	Sample Type
Date of Application	Date	-
Field ID	Number/Name	-
Acres Applied	Number of Acres	-
Slope	Percent	-
Soil Test P Ave.	ppm	-
Manure Source	-	Composite
Current Crop	-	-
Crop Nitrogen Needs (per soil test)	Pounds/Acre	-
Crop P ₂ O ₅ Needs (per soil test)	Pounds/Acre	-
Manure Analysis: Available Nitrogen	Pounds/Ton	Calculated

Annual Report

The permittee shall submit an Annual Report, including Form 3200-123 or a Department approved equivalent, that summarizes all landspreading activities and includes the information identified below, the lab analyses of the manure and other waste landspread, the "T" compliance worksheet for all fields, and the soil test frequency in the past four years. The Annual Report is due each year by the date specified in the Schedules section of this permit. Nitrogen and phosphorus from all sources applied to a given field, including commercial fertilizers, shall be included in the "Total Nitrogen" and "Total Phosphorus" sections of the Annual Report.

Parameters	Units	Sample Type
Manure Analysis: Available P ₂ O ₅	Pounds/Ton	Calculated
Manure Application Rate	Tons/Acre	-
Manure/Process Wastewater Applied: Nitrogen	Pounds/Acre	-
Manure/ Process Wastewater Applied: P ₂ O ₅	Pounds/Acre	-
Previous Crop	-	-
Legume Nitrogen Credit	Pounds/Acre	-
Second Year Manure Credit	Pounds/Acre	-
Additional Fertilizer: Nitrogen	Pounds/Acre	-
Additional Fertilizer: P ₂ O ₅	Pounds/Acre	-
Total Nitrogen Applied	Pounds/Acre	-
Total P ₂ O ₅ Applied	Pounds/Acre	-
Soil Conditions	Dry, Wet, Frozen, Snow Covered	-
Application Method	Surface Applied, Injected, Incorporated	-
Banked	Yes/No	-
Field Restrictions	Per Nutrient Management Plan	-

2 Surface Water Requirements

2.1 Sampling Point(s)

Sampling Point Designation					
Sampling					
Point	applicable)				
Number					
013	This sample point represents the RO permeate discharge from the waste treatment facility used to separate and treat water from dairy manure. Samples shall be taken following treatment and prior to discharge to a grassed waterway that flows to an unnamed stream via Outfall 013. The samples taken shall be representative of the RO permeate discharge that consists solely of the RO permeate				
	before mixing with any other water.				

2.2 Monitoring Requirements and Effluent Limitations

The permittee shall comply with the following monitoring requirements and limitations.

2.2.1 Sampling Point (Outfall) 013 - RO Permeate to Unnamed Tributary

	Monito	ring Requirem	ents and Effluen	t Limitations	
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gpd	Daily	Continuous	
BOD ₅ , Total	Daily Max	8.2 mg/L	Monthly	24-Hr Flow Prop Comp	
BOD ₅ , Total	Weekly Avg	5.0 mg/L	Monthly	24-Hr Flow Prop Comp	Limits are effective May through October
BOD ₅ , Total	Monthly Avg	5.0 mg/L	Monthly	24-Hr Flow Prop Comp	
BOD ₅ , Total	Daily Max	16 mg/L	Monthly	24-Hr Flow Prop Comp	
BOD ₅ , Total	Weekly Avg	10 mg/L	Monthly	24-Hr Flow Prop Comp	Limits are effective November through April
BOD ₅ , Total	Monthly Avg	10 mg/L	Monthly	24-Hr Flow Prop Comp	
Suspended Solids, Total	Daily Max	16 mg/L	Monthly	24-Hr Flow Prop Comp	
Suspended Solids, Total	Monthly Avg	10 mg/L	Monthly	24-Hr Flow Prop Comp	
pH Field	Daily Min	6.0 su	Monthly	Grab	
pH Field	Daily Max	9.0 su	Monthly	Grab	
Dissolved Oxygen	Daily Min	7.0 mg/L	Monthly	Grab	See Section 2.2.1.2 for sampling point location.
Nitrogen, Ammonia (NH ₃ -N) Total	Daily Max - Variable	mg/L	Weekly	24-Hr Flow Prop Comp	Daily maximum ammonia limit varies with effluent
Nitrogen, Ammonia Variable Limit		mg/L	Weekly	24-Hr Flow Prop Comp	pH. See Section 2.2.1.3 for limits.

	Monito	ring Requiremen	nts and Effluen	nt Limitations	
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Ammonia (NH ₃ -N) Total	Weekly Avg	8.4 mg/L	Weekly	24-Hr Flow Prop Comp	Limits are effective
Nitrogen, Ammonia (NH ₃ -N) Total	Monthly Avg	3.4 mg/L	Weekly	24-Hr Flow Prop Comp	October through March
Nitrogen, Ammonia (NH ₃ -N) Total	Weekly Avg	5.3 mg/L	Weekly	24-Hr Flow Prop Comp	Limits are effective April
Nitrogen, Ammonia (NH ₃ -N) Total	Monthly Avg	2.1 mg/L	Weekly	24-Hr Flow Prop Comp	through May
Nitrogen, Ammonia (NH ₃ -N) Total	Weekly Avg	3.7 mg/L	Weekly	24-Hr Flow Prop Comp	Limits are effective June
Nitrogen, Ammonia (NH ₃ -N) Total	Monthly Avg	1.5 mg/L	Weekly	24-Hr Flow Prop Comp	through September
Nitrogen, Total		mg/L	Monthly	24-Hr Flow Prop Comp	
Nitrogen, Total	Annual Total	2,379 lbs/yr	Annual	Calculated	
Chlorine, Total Residual	Daily Max	19 μg/L	Monthly	Grab	
Chlorine, Total Residual	Monthly Avg	7.3 μg/L	Monthly	Grab	
Chlorine, Total Residual	Weekly Avg	7.3 μg/L	Monthly	Grab	
Temperature Maximum	Daily Max	deg F	Weekly	Grab	Temperature limits vary by the month. See Section
Temperature Maximum	Weekly Avg	deg F	Weekly	Grab	2.2.1.2 for sampling point location and Section 2.2.1.4 for limits.
Hardness, Total as CaCO ₃	Daily Min	52 mg/L	Monthly	Grab	See Section 2.2.1.5 for sampling point location.
Cadmium, Total Recoverable		μg/L	Monthly	Grab	1 51
Phosphorus, Total		mg/L	Monthly	24-Hr Flow Prop Comp	
Fecal Coliform	Geometric Mean - Monthly	400 #/100 ml	Monthly	Grab	Interim limit effective May through September annually until the final E. coli limit goes into effect per the Effluent Limitations for E. coli Schedule.
E. coli		#/100 ml	Monthly	Grab	Monitoring only May through September annually until the final limit goes into effect per the Effluent Limitations for E. coli Schedule. See E. coli compliance schedule for more info.

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
E. coli	Geometric Mean - Monthly	126 #/100 ml	Monthly	Grab	Limit Effective May through September annually per the Effluent Limitations for E. coli Schedule. See E. coli compliance schedule for more info.
E. coli	% Exceedance	10 Percent	Monthly	Grab	Limit Effective May through September annually per the Effluent Limitations for E. coli Schedule. See section 2.2.1.6 below and the compliance schedule for more info. Enter the result in the DMR on the last day of the month.
Acute WET		TUa	See Listed Qtr(s)	24-Hr Flow Prop Comp	See section 2.2.1.7 below
Chronic WET	Monthly Avg	1.0 TUc	See Listed Qtr(s)	24-Hr Flow Prop Comp	for more info.

2.2.1.1 Annual Average Design Flow

The annual average design flow of the permittee's wastewater treatment facility is 0.018 million gallons per day (MGD).

2.2.1.2 Sampling Point for Dissolved Oxygen and Maximum Temperature

Representative grab samples for dissolved oxygen and maximum temperature shall be taken following the effluent pipe riprap but prior to discharge to the grassed waterway.

2.2.1.3 Variable Daily Maximum Ammonia Limits

Daily maximum ammonia limits apply throughout the year. Weekly ammonia (NH3-N) sampling shall occur on the same day pH levels are monitored. Report the applicable variable limit on the Discharge Monitoring Report (DMR) in the Ammonia Variable Limit column. Note that pH values should be rounded to the 0.1 s.u. before using the table below. For example, if the pH field reading is 8.04, the value of 8.0 should be used. If the pH field reading is 8.06, the value of 8.1 should be used

Effluent pH	Limit	Effluent pH	Limit	Effluent pH	Limit
s.u.	mg/L	s.u.	mg/L	s.u.	mg/L
$6.0 < pH \le 6.1$	54	$7.0 < pH \le 7.1$	33	$8.0 < pH \le 8.1$	6.9
$6.1 < pH \le 6.2$	53	$7.1 < pH \le 7.2$	30	$8.1 < pH \le 8.2$	5.7
$6.2 < pH \le 6.3$	52	$7.2 < pH \le 7.3$	26	$8.2 < pH \le 8.3$	4.7
$6.3 < pH \le 6.4$	51	$7.3 < pH \le 7.4$	23	$8.3 < pH \le 8.4$	3.9
$6.4 < pH \le 6.5$	49	$7.4 < pH \le 7.5$	20	$8.4 < pH \le 8.5$	3.2
$6.5 < pH \le 6.6$	47	$7.5 < pH \le 7.6$	17	$8.5 < pH \le 8.6$	2.7
$6.6 < pH \le 6.7$	45	$7.6 < pH \le 7.7$	14	$8.6 < pH \le 8.7$	2.2

$6.7 < pH \le 6.8$	42	$7.7 < pH \le 7.8$	12	$8.7 < pH \le 8.8$	1.8
$6.8 < pH \le 6.9$	39	$7.8 < pH \le 7.9$	10	$8.8 < pH \le 8.9$	1.6
$6.9 < pH \le 7.0$	36	$7.9 < pH \le 8.0$	8.4	$8.9 < pH \le 9.0$	1.3

2.2.1.4 Temperature Monitoring & Limits

For manually measuring effluent temperature, grab samples should be collected at 6 evenly spaced intervals during the 24-hour period. Alternative sampling intervals may be approved if the permittee can show that the maximum effluent temperature is captured during the sampling interval. For monitoring temperature continuously, collect measurements in accordance with s. NR 218.04(13). This means that discrete measurements shall be recorded at intervals of not more than 15 minutes during the 24-hour period. In either case, report the maximum temperature measured during the day on the DMR. For seasonal discharges collect measurements either manually or continuously during the period of operation and report the daily maximum effluent temperature on the DMR.

Temperature limits are as follows:

MONTH	Weekly Average Limit (°F)	Daily Maximum Limit (°F)
JANUARY	49	76
FEBRUARY	50	76
MARCH	52	77
APRIL	55	No daily maximum limit
SEPTEMBER	73	82
OCTOBER	61	80
NOVEMBER	49	77

2.2.1.5 Sampling Point for Total Hardness

Representative grab samples for total hardness shall be taken following final treatment and hardness dosing. The permittee shall provide a single grab measurement of total recoverable cadmium, chromium, copper, lead, nickel, and zinc at the same sampling point and provide the results with the next permit reissuance application.

2.2.1.6 E. coli Percent Limit

No more than 10 percent of *E. coli* bacteria samples collected in any calendar month may exceed 410 #/100 ml. Bacteria samples may be collected more frequently than required. All samples shall be reported on the monthly discharge monitoring reports (DMRs). The following calculation should be used to calculate percent exceedances.

$$\frac{\textit{\# of Samples greater than 410 \#/100}}{\textit{Total \# of samples}} \times 100 = \% \textit{ Exceedance}$$

2.2.1.7 Whole Effluent Toxicity (WET) Testing

Primary Control Water: A grab sample collected from an unnamed tributary to Rush River, upstream and out of the influence of the discharge or a standard laboratory water if no receiving water flow is available. **Instream Waste Concentration (IWC):** 100%

Dilution series: At least five effluent concentrations and dual controls must be included in each test.

- Acute: 100, 50, 25, 12.5, 6.25% and any additional selected by the permittee.
- Chronic: 100, 75, 50, 25, 12.5% and any additional selected by the permittee.

WET Testing Frequency:

Acute tests shall be conducted three times per permit term to collect seasonal information about the discharge. Tests are required during the following quarters.

- 1st Quarter (Jan March) 2023
- 2nd Quarter (April June) 2025

Acute WET testing shall continue after the permit expiration date (until the permit is reissued) in accordance with the WET requirements specified for the last full calendar year of this permit. For example, the next test would be required in 2nd Quarter (April – June) 2027.

Chronic tests shall be conducted <u>once each year</u> in different quarters in order to collect seasonal information about the discharge. Tests are required during the following quarters.

- 1st Quarter (Jan March) 2022
- 3rd quarter (July Sept) 2023
- 4th Quarter (Oct Dec) 2024
- 2nd Quarter (April June) 2025
- 1st Quarter (Jan March) 2026

Chronic WET testing shall continue after the permit expiration date (until the permit is reissued) in accordance with the WET requirements specified for the last full calendar year of this permit. For example, the next test would be required in 2nd Quarter (April – June) 2027.

Effluent Sample Adjustment for Chronic WET Tests: In order to remove ion deficiency as a potential source of chronic toxicity, effluent samples used in chronic WET tests may be adjusted to 45 mg/L alkalinity and hardness, as needed based on levels measured upon arrival at the lab. Parallel tests of adjusted and unadjusted samples are not required.

Testing: WET testing shall be performed during normal operating conditions. Permittees are not allowed to turn off or otherwise modify treatment systems, production processes, or change other operating or treatment conditions during WET tests.

Reporting: The permittee shall report test results on the Discharge Monitoring Report form, and also complete the "Whole Effluent Toxicity Test Report Form" (Section 6, "*State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2nd Edition*"), for each test. The original, complete, signed version of the Whole Effluent Toxicity Test Report Form shall be sent to the Biomonitoring Coordinator, Bureau of Water Quality, 101 S. Webster St., P.O. Box 7921, Madison, WI 53707-7921, within 45 days of test completion. The Discharge Monitoring Report (DMR) form shall be submitted electronically by the required deadline.

Determination of Positive Results: An acute toxicity test shall be considered positive if the Toxic Unit - Acute (TU_a) is greater than 1.0 for either species. The TU_a shall be calculated as follows: $TU_a = 100 \div LC_{50}$. A chronic toxicity test shall be considered positive if the Toxic Unit - Chronic (TU_c) is greater than 1.0 for either species. The TU_c shall be calculated as follows: $TU_c = 100 \div IC_{25}$.

Additional Testing Requirements: Within 90 days of a test which showed positive results, the permittee shall submit the results of at least 2 retests to the Biomonitoring Coordinator on "Whole Effluent Toxicity Test Report Forms". The 90 day reporting period shall begin the day after the test which showed a positive result. The retests shall be completed using the same species and test methods specified for the original test (see the Standard Requirements section herein).

3 Schedules

3.1 Emergency Response Plan

Required Action	Due Date
Develop Emergency Response Plan: Develop a written Emergency Response Plan within 30 days of permit coverage, available to the Department upon request.	02/01/2022

3.2 Monitoring & Inspection Program

Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the Monitoring and Sampling Requirements subsection, the permittee shall submit a proposed monitoring and inspection program within 30 days of this permit being modified.	08/30/2024

3.3 Annual Reports

Required Action	Due Date
Submit Annual Report #1:	01/31/2022
Submit Annual Report #2:	01/31/2023
Submit Annual Report #3:	01/31/2024
Submit Annual Report #4:	01/31/2025
Submit Annual Report #5:	01/31/2026
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed.	

3.4 Nutrient Management Plan

Required Action	Due Date
Management Plan Annual Update #1: Submit an Annual Update to the Nutrient Management Plan by March 31st of each year. Note: In addition to Annual Updates, submit Management Plan Amendments to the Department for written approval prior to implementation of any changes to nutrient management practices, in accordance with the Nutrient Management requirements in the Livestock Operational and Sampling Requirements section.	
Management Plan Annual Update #2: Submit an Annual Update to the Nutrient Management Plan.	03/31/2023
Management Plan Annual Update #3: Submit an Annual Update to the Nutrient Management Plan.	03/31/2024
Management Plan Annual Update #4: Submit an Annual Update to the Nutrient Management Plan.	03/31/2025

Management Plan Annual Update #5: Submit an Annual Update to the Nutrient Management Plan.	03/31/2026
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

3.5 Feed Storage Runoff Controls - Engineering Evaluation

Required Action	Due Date
Retain Qualified Expert: The permittee shall retain a qualified expert to complete an engineering evaluation for the feed storage area and runoff controls and report the name of the expert to the Department.	01/31/2022
Written Description of Existing System: Submit an engineering evaluation that includes a written description of the existing feed storage area runoff control system and its adequacy to meet the conditions found in the Production Area Discharge Limitations subsection and NR 243.15, Wis. Adm. Code.	04/30/2022
Plans and Specifications: Submit plans and specifications for Department review and approval to permanently correct any adverse conditions identified as part of the engineering evaluation for the feed storage area in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code.	12/31/2022
Corrections and Post Construction Documentation: Complete construction of improvements to permanently correct any adverse conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	12/31/2023

3.6 Calf Hutch Area Runoff Controls - Engineering Evaluation

Required Action	Due Date
Complete Engineering Evaluation: Retain a qualified expert to complete an engineering evaluation for the calf hutch area and runoff control system and report the name of the expert to the Department.	01/31/2022
Written Description of Existing System: Submit a written description of the existing runoff control system for the calf hutch area and its adequacy to permanently meet the conditions in the Production Area Discharge Limitations and Runoff Control subsections and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	04/30/2022
Plans and Specifications: Submit plans and specifications for Department review and approval to permanently correct any adverse runoff control conditions in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code.	12/31/2022
Corrections and Post Construction Documentation: Complete construction of runoff controls that permanently correct any adverse runoff control conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	12/31/2023

3.7 Effluent Limitations for E. coli

Required Action	Due Date
Status Update: The permittee shall submit information within the discharge monitoring report (DMR) comment section documenting the steps taken in preparation for properly monitoring and testing for E. coli including, but not limited to, selected test method and location of sampling.	02/21/2022
Operational Evaluation Report: The permittee shall prepare and submit an Operational Evaluation Report to the Department for review and approval. The report shall include an evaluation of collected effluent data and proposed operational improvements that will optimize efficacy of disinfection at the treatment plant during the period prior to complying with final E. coli limitations and, to the extent possible, enable compliance with the final E. coli limitations. The report shall include a plan and schedule for implementation of the operational improvements. These improvements shall occur as soon as possible, but not later than 04/30/2023. The report shall state whether the operational improvements are expected to result in compliance with the final E. coli limitations.	11/30/2022
The permittee shall implement the operational improvements in accordance with the approved plan and schedule specified in the Operational Evaluation Report and in no case later than 04/30/2023.	
If the Operational Evaluation Report concludes that the operational improvements are expected to result in compliance with the final E. coli limitations, the permittee shall comply with the final E. coli limitations by 04/30/2023 and the permittee is not required to comply with subsequent milestones identified below in this compliance schedule ('Submit Facility Plan', 'Final Plans and Specifications', 'Treatment Plant Upgrade to Meet Limitations', 'Construction Upgrade Progress Report', 'Complete Construction', 'Achieve Compliance').	
FACILITY PLAN - If the Operational Evaluation Report concludes that operational improvements alone are not expected to result in compliance with the final E. coli limitations, the permittee shall initiate development of a facility plan for meeting final E. coli limitations and comply with the remaining required actions in this schedule of compliance.	
If the Department disagrees with the conclusion of the report, and determines that the permittee can achieve final E. coli limitations using the existing treatment system with only operational improvements, the Department may reopen and modify the permit to include an implementation schedule for achieving the final E. coli limitations sooner than 04/30/2026.	
Submit Facility Plan: If the Operational Evaluation Report concluded that the permittee cannot achieve final E. coli limitations with operational improvements alone, the permittee shall submit a Facility Plan per s. NR 110.09, Wis. Adm. Code. The permittee may submit an abbreviated facility plan if the Department determines that the modifications are minor.	04/30/2023
Final Plans and Specifications: The permittee shall submit final construction plans to the Department for approval pursuant to ch. NR 108, Wis. Adm. Code, specifying treatment plant upgrades that must be constructed to achieve compliance with final E. coli limitations and a schedule for completing construction of the upgrades by the complete construction date specified below.	03/31/2024
Treatment Plant Upgrade to Meet Limitations: The permittee shall initiate bidding, procurement, and/or construction of the project. The permittee shall obtain approval of the final construction plans and schedule from the Department pursuant to s. 281.41. Stats., prior to initiating activities defined as construction under ch. NR 108, Wis. Adm. Code. Upon approval of the final construction plans and schedule by the Department pursuant to s. 281.41, Stats., the permittee shall construct the treatment plant upgrades in accordance with the approved plans and specifications.	09/30/2024
Construction Upgrade Progress Report: The permittee shall submit a progress report on construction upgrades.	09/30/2025
Complete Construction: The permittee shall complete construction of wastewater treatment system	03/31/2026

upgrades.	
Achieve Compliance: The permittee shall achieve compliance with final E. coli limitations.	04/30/2026

3.8 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	07/01/2026

4 Standard Requirements

NR 205, Wisconsin Administrative Code (Conditions for Industrial Dischargers): The conditions in ss. NR 205.07(1) and NR 205.07(3), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements. Some of these requirements are outlined in the Standard Requirements section of this permit. Requirements not specifically outlined in the Standard Requirement section of this permit can be found in ss. NR 205.07(1) and NR 205.07(3).

4.1 Reporting and Monitoring Requirements for Industrial Discharges

4.1.1 Monitoring Results

Monitoring results obtained during the previous month shall be summarized and reported on a Department Wastewater Discharge Monitoring Report. The report may require reporting of any or all of the information specified below under 'Recording of Results'. This report is to be returned to the Department no later than the date indicated on the form. A copy of the Wastewater Discharge Monitoring Report Form or an electronic file of the report shall be retained by the permittee.

Monitoring results shall be reported on an electronic discharge monitoring report (eDMR). The eDMR shall be certified electronically by a responsible executive or officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

If the permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included on the Wastewater Discharge Monitoring Report.

The permittee shall comply with all limits for each parameter regardless of monitoring frequency. For example, monthly, weekly, and/or daily limits shall be met even with monthly monitoring. The permittee may monitor more frequently than required for any parameter.

4.1.2 Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed in accordance with Chapters NR 218 and NR 219, Wis. Adm. Code and shall be performed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sample collection and analysis shall be performed in accordance with ch. NR 140, Wis. Adm. Code. The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation. If the required level cannot be met by any of the methods available in NR 219, Wis. Adm. Code, then the method with the lowest limit of detection shall be selected. Additional test procedures may be specified in this permit.

4.1.3 Recording of Results

The permittee shall maintain records which provide the following information for each effluent measurement or sample taken:

- the date, exact place, method and time of sampling or measurements;
- the individual who performed the sampling or measurements;
- the date the analysis was performed;
- the individual who performed the analysis;
- the analytical techniques or methods used; and
- the results of the analysis.

4.1.4 Reporting of Monitoring Results

The permittee shall use the following conventions when reporting effluent monitoring results:

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.
- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.
- For purposes of calculating NR 101 fees, the 2 mg/l lower reporting limits for BOD₅ and Total Suspended Solids shall be considered to be limits of quantitation
- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a "0" (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.
- If no discharge occurs through an outfall, flow related parameters (e.g. flow rate, hydraulic application rate, volume, etc.) should be reported as "0" (zero) at the required sample frequency specified for the outfall. For example: if the sample frequency is daily, "0" would be reported for any day during the month that no discharge occurred.

4.1.5 Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings or electronic data records for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 3 years from the date of the sample, measurement, report or application, except for sludge management forms and records, which shall be kept for a period of at least 5 years.

4.1.6 Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or correct information to the Department.

4.1.7 Reporting Requirements – Alterations or Additions

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is only required when:

- The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source.
- The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification requirement applies to pollutants which are not subject to effluent limitations in the existing permit.
- The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use of disposal sites not

reported during the permit application process nor reported pursuant to an approved land application plan. Additional sites may not be used for the land application of sludge until department approval is received.

4.2 System Operating Requirements for Industrial Discharges

4.2.1 Noncompliance Reporting

The permittee shall report the following types of noncompliance by a telephone call to the Department's regional office within 24 hours after becoming aware of the noncompliance:

- any noncompliance which may endanger health or the environment;
- any violation of an effluent limitation resulting from a bypass;
- any violation of an effluent limitation resulting from an upset; and
- any violation of a maximum discharge limitation for any of the pollutants listed by the Department in the permit, either for effluent or sludge.

A written report describing the noncompliance shall also be submitted to the Department as directed at the end of this permit within 5 days after the permittee becomes aware of the noncompliance. On a case-by-case basis, the Department may waive the requirement for submittal of a written report within 5 days and instruct the permittee to submit the written report with the next regularly scheduled monitoring report. In either case, the written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.

A scheduled bypass approved by the Department under the 'Scheduled Bypass' section of this permit shall not be subject to the reporting required under this section.

NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources immediately of any discharge not authorized by the permit. The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at 1-800-943-0003.

4.2.2 Bypass

Except for a controlled diversion as provided in the 'Controlled Diversions' section of this permit, any bypass is prohibited and the Department may take enforcement action against a permittee for such occurrences under s. 283.89, Wis. Stats. The Department may approve a bypass if the permittee demonstrates all the following conditions apply:

- The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance. When evaluating feasibility of alternatives, the department may consider factors such as technical achievability, costs and affordability of implementation and risks to public health, the environment and, where the permittee is a municipality, the welfare of the community served; and
- The bypass was reported in accordance with the 'Noncompliance Reporting' section of this permit.

4.2.3 Scheduled Bypass

Whenever the permittee anticipates the need to bypass for purposes of efficient operations and maintenance and the permittee may not meet the conditions for controlled diversions in the 'Controlled Diversions' section of this permit,

the permittee shall obtain prior written approval from the Department for the scheduled bypass. A permittee's written request for Department approval of a scheduled bypass shall demonstrate that the conditions for unscheduled bypassing are met and include the proposed date and reason for the bypass, estimated volume and duration of the bypass, alternatives to bypassing and measures to mitigate environmental harm caused by the bypass. The department may require the permittee to provide public notification for a scheduled bypass if it is determined there is significant public interest in the proposed action and may recommend mitigation measures to minimize the impact of such bypass.

4.2.4 Controlled Diversions

Controlled diversions are allowed only when necessary for essential maintenance to assure efficient operation provided the following requirements are met:

- Effluent from the wastewater treatment facility shall meet the effluent limitations established in the permit. Wastewater that is diverted around a treatment unit or treatment process during a controlled diversion shall be recombined with wastewater that is not diverted prior to the effluent sampling location and prior to effluent discharge;
- A controlled diversion may not occur during periods of excessive flow or other abnormal wastewater characteristics;
- A controlled diversion may not result in a wastewater treatment facility overflow; and
- All instances of controlled diversions shall be documented in wastewater treatment facility records and such records shall be available to the department on request.

4.2.5 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training as required in ch. NR 114, Wis. Adm. Code, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

4.2.6 Operator Certification

The wastewater treatment facility shall be under the direct supervision of a state certified operator. In accordance with s. NR 114.53, Wis. Adm. Code, every WPDES permitted treatment plant shall have a designated operator-incharge holding a current and valid certificate. The designated operator-in-charge shall be certified at the level and in all subclasses of the treatment plant, except laboratory. Treatment plant owners shall notify the department of any changes in the operator-in-charge within 30 days. Note that s. NR 114.52(22), Wis. Adm. Code, lists types of facilities that are excluded from operator certification requirements (i.e. private sewage systems, pretreatment facilities discharging to public sewers, industrial wastewater treatment that consists solely of land disposal, agricultural digesters and concentrated aquatic production facilities with no biological treatment).

4.2.7 Spill Reporting

The permittee shall notify the Department in accordance with ch. NR 706 (formerly NR 158), Wis. Adm. Code, in the event that a spill or accidental release of any material or substance results in the discharge of pollutants to the waters of the state at a rate or concentration greater than the effluent limitations established in this permit, or the spill or accidental release of the material is unregulated in this permit, unless the spill or release of pollutants has been reported to the Department in accordance with s. NR 205.07 (1)(s), Wis. Adm. Code.

4.2.8 Planned Changes

In accordance with ss. 283.31(4)(b) and 283.59, Stats., the permittee shall report to the Department any facility expansion, production increase or process modifications which will result in new, different or increased discharges of pollutants. The report shall either be a new permit application, or if the new discharge will not violate the effluent limitations of this permit, a written notice of the new, different or increased discharge. The notice shall contain a description of the new activities, an estimate of the new, different or increased discharge of pollutants and a description of the effect of the new or increased discharge on existing waste treatment facilities. Following receipt of this report, the Department may modify this permit to specify and limit any pollutants not previously regulated in the permit.

4.2.9 Duty to Halt or Reduce Activity

Upon failure or impairment of treatment facility operation, the permittee shall, to the extent necessary to maintain compliance with its permit, curtail production or wastewater discharges or both until the treatment facility operations are restored or an alternative method of treatment is provided.

4.3 Surface Water Requirements for Industrial Discharges

4.3.1 Permittee-Determined Limit of Quantitation Incorporated into this Permit

For pollutants with water quality-based effluent limits below the Limit of Quantitation (LOQ) in this permit, the LOQ calculated by the permittee and reported on the Discharge Monitoring Reports (DMRs) is incorporated by reference into this permit. The LOQ shall be reported on the DMRs, shall be the lowest quantifiable level practicable, and shall be no greater than the minimum level (ML) specified in or approved under 40 CFR Part 136 for the pollutant at the time this permit was issued, unless this permit specifies a higher LOQ.

4.3.2 Appropriate Formulas for Effluent Calculations

The permittee shall use the following formulas for calculating effluent results to determine compliance with average concentration limits and mass limits and total load limits:

Weekly/Monthly/Six-Month/Annual Average Concentration = the sum of all daily results for that week/month/six-month/year, divided by the number of results during that time period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

Weekly Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the week.

Monthly Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the month.

Six-Month Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the six-month period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

Annual Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the entire year.

Total Monthly Discharge: = monthly average concentration (mg/L) x total flow for the month (MG/month) x 8.34.

Total Annual Discharge: = sum of total monthly discharges for the calendar year.

12-Month Rolling Sum of Total Monthly Discharge: = the sum of the most recent 12 consecutive months of Total Monthly Discharges.

4.3.3 Effluent Temperature Requirements

Weekly Average Temperature – The permittee shall use the following formula for calculating effluent results to determine compliance with the weekly average temperature limit (as applicable): Weekly Average Temperature = the sum of all daily maximum results for that week divided by the number of daily maximum results during that time period.

Cold Shock Standard — Water temperatures of the discharge shall be controlled in a manner as to protect fish and aquatic life uses from the deleterious effects of cold shock. 'Cold Shock' means exposure of aquatic organisms to a rapid decrease in temperature and a sustained exposure to low temperature that induces abnormal behavior or physiological performance and may lead to death.

Rate of Temperature Change Standard – Temperature of a water of the state or discharge to a water of the state may not be artificially raised or lowered at such a rate that it causes detrimental health or reproductive effects to fish or aquatic life of the water of the state.

4.3.4 Visible Foam or Floating Solids

There shall be no discharge of floating solids or visible foam in other than trace amounts.

4.3.5 Surface Water Uses and Criteria

In accordance with NR 102.04, Wis. Adm. Code, surface water uses and criteria are established to govern water management decisions. Practices attributable to municipal, industrial, commercial, domestic, agricultural, land development or other activities shall be controlled so that all surface waters including the mixing zone meet the following conditions at all times and under all flow and water level conditions:

- a) Substances that will cause objectionable deposits on the shore or in the bed of a body of water, shall not be present in such amounts as to interfere with public rights in waters of the state.
- b) Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in waters of the state.
- c) Materials producing color, odor, taste or unsightliness shall not be present in such amounts as to interfere with public rights in waters of the state.
- d) Substances in concentrations or in combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are acutely harmful to animal, plant or aquatic life.

4.3.6 Total Residual Chlorine Requirements (When De-Chlorinating Effluent)

Test methods for total residual chlorine, approved in ch. NR 219 - Table B, Wis. Adm. Code, normally achieve a limit of detection of about 20 to 50 micrograms per liter and a limit of quantitation of about 100 micrograms per liter. Reporting of test results and compliance with effluent limitations for chlorine residual and total residual halogens shall be as follows:

- Sample results which show no detectable levels are in compliance with the limit. These test results shall be reported on Wastewater Discharge Monitoring Report Forms as " $< 100 \,\mu g/L$ ". (Note: 0.1 mg/L converts to $100 \,\mu g/L$)
- Samples showing detectable traces of chlorine are in compliance if measured at less than 100 µg/L, unless there is a consistent pattern of detectable values in this range. These values shall also be reported on Wastewater Discharge Monitoring Report Forms as "<100 µg/L." The facility operating staff shall record actual readings on logs maintained at the plant, shall take action to determine the reliability of detected results (such as re-sampling and/or calculating dosages), and shall adjust the chemical feed system if

necessary to reduce the chances of detects.

- Samples showing detectable levels greater than 100 μg/L shall be considered as exceedances, and shall be reported as measured.
- To calculate average or mass discharge values, a "0" (zero) may be substituted for any test result less than 100 μg/L. Calculated values shall then be compared directly to the average or mass limitations to determine compliance.

4.3.7 Additives

In the event that the permittee wishes to commence use of a water treatment additive, or increase the usage of the additives greater than indicated in the permit application, the permittee must get a written approval from the Department prior to initiating such changes. This written approval shall provide authority to utilize the additives at the specific rates until the permit can be either reissued or modified in accordance with s. 283.53, Stats. Restrictions on the use of the additives may be included in the authorization letter.

4.3.8 Whole Effluent Toxicity (WET) Monitoring Requirements

In order to determine the potential impact of the discharge on aquatic organisms, static-renewal toxicity tests shall be performed on the effluent in accordance with the procedures specified in the "State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2nd Edition" (PUB-WT-797, November 2004) as required by NR 219.04, Table A, Wis. Adm. Code). All of the WET tests required in this permit, including any required retests, shall be conducted on the Ceriodaphnia dubia and fathead minnow species. Receiving water samples shall not be collected from any point in contact with the permittee's mixing zone and every attempt shall be made to avoid contact with any other discharge's mixing zone.

4.3.9 Whole Effluent Toxicity (WET) Identification and Reduction

Within 60 days of a retest which showed positive results, the permittee shall submit a written report to the Biomonitoring Coordinator, Bureau of Water Quality, 101 S. Webster St., PO Box 7921, Madison, WI 53707-7921, which details the following:

- A description of actions the permittee has taken or will take to remove toxicity and to prevent the recurrence of toxicity;
- A description of toxicity reduction evaluation (TRE) investigations that have been or will be done to identify potential sources of toxicity, including some or all of the following actions:
 - (a) Evaluate the performance of the treatment system to identify deficiencies contributing to effluent toxicity (e.g., operational problems, chemical additives, incomplete treatment)
 - (b) Identify the compound(s) causing toxicity
 - (c) Trace the compound(s) causing toxicity to their sources (e.g., industrial, commercial, domestic)
 - (d) Evaluate, select, and implement methods or technologies to control effluent toxicity (e.g., in-plant or pretreatment controls, source reduction or removal)
- Where corrective actions including a TRE have not been completed, an expeditious schedule under which corrective actions will be implemented;

• If no actions have been taken, the reason for not taking action.

The permittee may also request approval from the Department to postpone additional retests in order to investigate the source(s) of toxicity. Postponed retests must be completed after toxicity is believed to have been removed.

4.4 General Conditions

NR 205, Wisconsin Administrative Code: The conditions in s. NR 205.07(1), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements. Some of these requirements are outlined in the Standard Requirements section of this permit. Requirements not specifically outlined in the Standard Requirement section of this permit can be found in s. NR 205.07(1).

4.4.1 Duty to comply

The permittee shall comply with all conditions of the permit. Any permit noncompliance is a violation of the permit and is grounds for enforcement action; permit termination, revocation and reissuance or modification; or denial of a permit reissuance application. If a permittee violates any terms of the permit, the permittee is subject to the penalties established in ch. 283, Wis. Stats.

4.4.2 Permit Actions

As provided in s. 283.53, Wis. Stats., after notice and opportunity for a hearing the permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

4.4.3 Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. The permit does not authorize any injury or damage to private property or any invasion of personal rights, or any infringement of federal, state or local laws or regulations.

4.4.4 Schedules

Reports of compliance or noncompliance with interim and final requirements contained in any schedule of the permit shall be submitted in writing within 14 days after the schedule date, except that progress reports shall be submitted in writing on or before each schedule date for each report. Any report of noncompliance shall include the cause of noncompliance, a description of remedial actions taken and an estimate of the effect of the noncompliance on the permittee's ability to meet the remaining schedule dates.

4.4.5 Inspection and Entry

The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to:

- enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records are required under the conditions of the permit;
- have access to and copy, at reasonable times, any records that are required under the conditions of the permit:
- inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under the permit; and
- sample or monitor at reasonable times, for the purposes of assuring permit compliance, any substances or parameters at any location.

4.4.6 Transfers

A permit is not transferable to any person except after notice to the Department. In the event of a transfer of control of a permitted facility, the prospective owner or operator shall file a new permit application and shall file a stipulation of permit acceptance with the Department WPDES permit section. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and to reflect the requirements of ch. 283, Stats.

4.4.7 Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any adverse impact on the waters of the state resulting from noncompliance with the permit.

4.4.8 Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking or reissuing the permit or to determine compliance with the permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by the permittee.

4.4.9 Recording of Results-Sampling

For each manure, process wastewater or soil sample taken by the permittee, the permittee shall record the following information:

- The date, exact place, method and time of sampling or measurements,
- The individual or lab that performed the sampling or measurements,
- The date of the analysis was performed,
- The individual who performed the analysis,
- The analytical techniques or methods used
- The results of the analysis.

4.4.10 Recording of Results-Inspections

For each inspection conducted by the permittee, the permittee shall record the following information:

- The date and name of the person(s) performing the inspection,
- An inspection description, including components inspected,
- Details of what was discovered during the inspection,
- Recommendations for repair or maintenance,
- Any corrective actions taken.

4.4.11 Spill Reporting

The permittee shall notify the Department in in the event that a spill or accidental release of any material or substance results in the discharge of pollutants to the waters of the state at a rate or concentration greater than the effluent limitations or restrictions established in this permit, or the spill or accidental release of the material that is unregulated in this permit, unless the spill or release of pollutants has been reported to the Department in accordance with s. NR 205.07 (1)(s), Wis. Adm. Code, and the "Noncompliance - 24 Hour Reporting," section of this permit.

4.4.12 Planned Changes

The permittee shall report to the Department any facility or operation expansion, production increase or process modifications which will result in new, different or increased amount of manure or process wastewater produced or handled by the permittee or which will result in new, different or increased discharges of pollutants to waters of the

state. The report shall either be a new permit application, or if the new discharge will not violate the conditions of this permit, a written notice of the planned change. The report shall contain a description of the planned change, an estimate of the new, different or increased discharge of pollutants and a description of the effect of change will on current manure and process wastewater handling practices. Changes cannot be implemented prior to reporting changes to the Department. Following receipt of this report, the Department may require that the permittee submit plans and specifications, or modify its nutrient management plan to address the planned change. Changes requiring Department action or approval may not be initiated prior to Department action or approval.

4.4.13 Submittal of Plans and Specifications

In accordance with s. NR 243.15, the permittee shall submit plans and specifications for proposed new or upgraded reviewable facilities or systems to the Department for approval prior to construction. Post construction documentation for these projects shall be submitted within 60 days of completion of the project, or as otherwise specified by the Department.

4.4.14 Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the department, it shall promptly submit such facts or correct information to the department.

4.4.15 Reporting Requirements – Alterations or Additions

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is only required when:

- The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source.
- The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification requirement applies to pollutants which are not subject to effluent limitations in the existing permit.
- The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use of disposal sites not reported during the permit application process nor reported pursuant to an approved land application plan. Additional sites may not be used for the land application of sludge until department approval is received.

4.4.16 Noncompliance - 24 Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. This includes any upset which exceeds any effluent limitation in the permit, or violations of the discharge limitations listed in the permit.

NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources **immediately** of any discharge not authorized by the permit. The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at **1-800-943-0003**.

4.4.17 Reports and Submittal Certification

Signature(s) on reports required by this permit shall certify to the best of the permittee's knowledge the reports to be true, accurate and complete. All reports required by this permit shall be signed by:

- a responsible executive officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or
- a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code.

4.5 Livestock Operation General Requirements

4.5.1 Responsibility for Manure and Process Wastewater

The permittee is responsible for the storage, management and land application of all manure and process wastewater generated by the operation. The permittee is also responsible for any manure or process wastewater received from non-permitted operations that are accepted by the permittee for storage, management or land application.

4.5.2 Distribution of Manure and Process Wastewater

All manure and process wastewater generated by the permittee is the responsibility of the permittee and shall be stored and applied in compliance with the terms and conditions of this permit and the approved nutrient management plan, except if the manure or process wastewater is distributed to another person in accordance with s. NR 243.142 and the Department has approved the transfer of responsibility in writing.

To transfer responsibility for handling, storage and application of manure or process wastewater, a permittee shall submit a written request to the Department. At minimum the request shall indicate how the permittee will comply with all conditions identified in ch. NR 243.142(3), Wis. Adm. Code. If approved, the permittee will be responsible for the following recordkeeping and reporting:

- Update the nutrient management plan to include the estimated amount of manure and process wastewater to be transferred, and record the actual amount transferred at the time of transfer.
- Maintain records that identify the name and address of the recipient of the manure or process wastewater, quantity, and dates of transfer.
- Provide the recipient with written information regarding the nutrient content (nitrogen and phosphorus at minimum) of the manure and process wastewater.
- Submit transfer reports to the Department with the annual report.
- Records shall be maintained for at least 5 years.

Upon written approval from the Department, the permittee is not responsible for the land application, use or disposal of distributed manure or process wastewater if the manure or process wastewater is distributed in compliance with the conditions of the Department approval and s. NR 243.142.

4.5.3 Emergency Response Plans

Within 30 days of the effective date of the permit, the permittee shall develop a written emergency response plan, or update an existing plan if necessary, in accordance with s. NR 243.13(6). The plan shall be made available to the Department upon request. The emergency response plan shall be reviewed and, if appropriate or necessary, amended whenever the operation undergoes significant expansions or other changes that affect the volume or location of potential unauthorized spills or discharges. The plan shall be amended as needed to reflect changes in available equipment, available clean-up contractors or procedures to address unauthorized spills or discharges, or amended in accordance with comments provided by the department. The plan shall be retained at the production area and the permittee shall notify all employees involved in manure and process wastewater handling of the location of the plan.

4.5.4 Mortality Management

Animal carcasses may not be disposed of in a manner that results in a discharge of pollutants to surface waters, violates groundwater standards or impairs wetland functional values. Animal carcasses may not be disposed of directly into waters of the state. In addition, carcasses may not be disposed of in liquid manure or process wastewater containment, storage or treatment facilities unless the containment, storage or treatment facility is adequately designed to contain and treat carcasses and the facility has been approved by the department for that use.

The permittee shall record the date and method of carcass disposal.

[NOTE: The permittee should be aware that there are additional restrictions on the disposal of animal carcasses in ch. 95, Stats., and ATCP 3, Wis. Adm. Code. Furthermore, there may be local regulations regarding disposal of carcasses. If a carcass is disposed of off-site, the disposal may be subject to the requirements in ch. NR 502.12 or 518, Wis. Adm. Code]

4.5.5 Department Review of Nutrient Management Plans

The Department reserves the right to review the Nutrient Management Plan at any time for application rates and cover crop nutrient removal rates, as well as the timing and methods of application. If the Department determines that a landspreading site is no longer acceptable for manure and process wastewater applications, the permittee shall modify the Nutrient Management Plan to remove the site from the plan. In addition, if the Department determines application rates need to be adjusted for individual fields, the permittee shall modify the Nutrient Management Plan. All Department initiated modifications shall be completed by the permittee within 3 months of written notification from the Department.

4.5.6 Existing Manure Storage Facilities Evaluation

The following information shall be included in any required written report evaluating existing manure storage facilities:

- a narrative providing general background and operational information on the existing storage facility(s);
- the adequacy of each facility's linings to prevent exfiltration of manure contaminants to groundwater, and the facility's ability to permanently meet the conditions in the Production Area Discharge Limitations and Manure and Process Wastewater Storage subsections;
- the proximity of bedrock and the water table to the floors of the facility(s);
- scaled drawings showing the locations of each storage unit, any surface water, water supply wells, property boundaries, and other pertinent information;
- any post construction documentation available, including the date and materials of construction;
- an assessment of the ability of the facility to meet the design requirements for manure storage in s. NR 243.15; and
- any proposed actions to address issues identified as part of the evaluation.

4.5.7 Existing Runoff Control System(s) Evaluation

The following information shall be included in any required written report evaluating existing runoff control system(s) or practice(s):

- a narrative providing general background and operational information on the existing runoff control system(s), including a full description of each system's components;
- the adequacy of the system(s) to permanently meet the conditions in the Production Area Discharge Limitations and Runoff Control subsections;
- scaled drawings showing the locations of the runoff control system, any surface water, water supply wells, property boundaries, and other pertinent information;
- any post construction documentation available, including the date and materials of construction.
- an assessment of the ability of the facility to meet the design requirements for runoff control in s. NR 243.15; and

• any proposed actions to address issues identified as part of the evaluation

4.5.8 Existing Composting Storage Facilities and Leachate Containment Evaluation

The following information shall be included in any required written report evaluating existing composting storage facility(s) and leachate containment system(s):

- a narrative providing general background and operational information on the existing storage facility(s)/system(s);
- the adequacy of each facility's linings to prevent exfiltration of manure contaminants to groundwater, and the facility's ability to permanently meet the conditions in the Production Area Discharge Limitations and Manure and Process Wastewater Storage subsections;
- the proximity of bedrock and the water table to the floors of the facility(s);
- scaled drawings showing the locations of each storage unit, any surface water, water supply wells, property boundaries, and other pertinent information;
- any post construction documentation available, including the date and materials of construction;
- an assessment of the ability of the facility(s)/system(s) to meet the applicable design requirements in s. NR 243.15 and ch. NR 213; and
- any proposed actions to address issues identified as part of the evaluation.

4.5.9 Manure Storage Facility, Composting and Compost Leachate Containment Systems - Installation Plan Requirements

New construction of manure storage/composting facilities shall be in accordance with s. NR 243.15. Exemptions to the design criteria may be given on a case-by-case basis. Prior written approval is required. The following (minimum) information shall be included in the plans and specifications submitted for the new construction of a manure storage facility(s) or composting system(s) (three complete copies are required):

- a narrative describing the proposed facility(s)/system(s);
- a written management and site assessment;
- an operation and maintenance plan;
- an assessment of the ability of the facility(s)/system(s) to meet the applicable design requirements in s. NR 243.15:
- the adequacy of each facility's proposed linings to prevent exfiltration of manure and other contaminants to groundwater and the facility's ability to permanently meet the conditions in the Production Area Discharge Limitations and Manure and Process Wastewater Storage subsections;
- the proximity of bedrock and the water table to the proposed elevation of each facility's floors verified through on-site soil test borings or pits;
- scaled drawings showing the design details and locations of each proposed storage unit, any surface water, water supply wells, property boundaries, and other pertinent information;
- details concerning the proposed materials of construction; and
- relevant engineering calculations.

4.5.10 Runoff Control Systems - Installation Plan Requirements

New construction of runoff control systems shall be in accordance with s. NR 243.15. Exemptions to the design criteria may be given on a case-by-case basis. Prior written approval is required. The following (minimum) information shall be included in the plans and specifications submitted for the new construction of a runoff control system(s) (three complete copies are required):

• a narrative describing the proposed system including a full description of the system's proposed components;

- a written management and site assessment;
- an operation and maintenance plan;
- an assessment of the ability of the system(s) to meet the applicable design requirements in s. NR 243.15;
- the adequacy of each proposed system to permanently meet the conditions in the Production Area Discharge Limitations and Runoff Control subsections;
- the proximity of bedrock and the water table to the proposed elevation of each system's floors verified through on-site soil test borings or pits;
- scaled drawings showing the design details and locations of each proposed system, any surface water, water supply wells, property boundaries, and other pertinent information;
- details concerning the proposed materials of construction; and
- relevant engineering calculations.

4.5.11 Record Keeping and Retention

The permittee shall keep records associated with production area and land application activities in accordance with s. NR 243.19(2). The permittee shall retain these records and copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 5 years from the date of the sample, measurement, report or application. The Department may request that this period be extended by issuing a public notice to modify the permit to extend this period. These records shall be made available to the Department upon request.

Note: A form for recording daily land application activities (Form 3200-123A) can be obtained at regional offices of the Department or the Department's Bureau of Watershed Management, 101 S. Webster St., P.O. Box 7921, Madison, Wisconsin 53707.

4.5.12 Reporting Requirements

The permittee shall submit the following reports in accordance with s. NR 243.19(3)

- Corrective Actions: If the permittee fails to take corrective action within 30 days of identifying a malfunction, failure, permit noncompliance or other identified problem, the permittee shall contact the Department immediately following the 30-day period and provide an explanation for its failure to take action.
- **Quarterly Reports:** The permittee shall summarize the results of inspections conducted at the production area in a written quarterly report. The permittee shall maintain the quarterly reports onsite until the quarterly report is submitted to the Department as part of the annual report.
- **Annual Reports:** The permittee shall submit written annual reports to the department by the date specified in the Schedules section of permit for all manure and other process wastewater that is generated by the permittee. These annual reports shall cover quarterly reports, annual spreading activities and other information required in s. NR 243.19(3) for the previous calendar year or cropping year, as specified in this permit.

Note: Form 3200-123 (Annual Spreading Report) can be obtained at regional offices of the department or the department's Bureau of Watershed Management, 101 S. Webster St., P.O. Box 7921, Madison, Wisconsin 53707.

4.5.13 Duty to Maintain Permit Coverage

The permittee shall submit a reissuance application in accordance with s. NR 243.12(2)(b) at least 180 days prior to the expiration date of its current WPDES permit, unless the permittee submits a letter to the Department documenting all of the following:

• That the permittee has ceased operation or is no longer defined as a large CAFO under s. NR 243.03(28).

WPDES Permit No. WI-0062928-04-2 Ridge Breeze Dairy

• That the permittee has demonstrated to the Department's satisfaction that it has no remaining potential to discharge of manure or process wastewater pollutants to waters of the state that was generated while the operation was a CAFO.

5 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Emergency Response Plan -Develop Emergency Response Plan	February 1, 2022	23
Monitoring & Inspection Program -Proposed Monitoring and Inspection Program	August 30, 2024	23
Annual Reports -Submit Annual Report #1	January 31, 2022	23
Annual Reports -Submit Annual Report #2	January 31, 2023	23
Annual Reports -Submit Annual Report #3	January 31, 2024	23
Annual Reports -Submit Annual Report #4	January 31, 2025	23
Annual Reports -Submit Annual Report #5	January 31, 2026	23
Annual Reports -Ongoing Annual Reports	See Permit	23
Nutrient Management Plan -Management Plan Annual Update #1	March 31, 2022	23
Nutrient Management Plan -Management Plan Annual Update #2	March 31, 2023	23
Nutrient Management Plan -Management Plan Annual Update #3	March 31, 2024	23
Nutrient Management Plan -Management Plan Annual Update #4	March 31, 2025	23
Nutrient Management Plan -Management Plan Annual Update #5	March 31, 2026	24
Nutrient Management Plan -Ongoing Management Plan Annual Updates	See Permit	24
Feed Storage Runoff Controls - Engineering Evaluation -Retain Qualified Expert	January 31, 2022	24
Feed Storage Runoff Controls - Engineering Evaluation - Written Description of Existing System	April 30, 2022	24
Feed Storage Runoff Controls - Engineering Evaluation -Plans and Specifications	December 31, 2022	24
Feed Storage Runoff Controls - Engineering Evaluation -Corrections and Post Construction Documentation	December 31, 2023	24
Calf Hutch Area Runoff Controls - Engineering Evaluation - Complete Engineering Evaluation	January 31, 2022	24
Calf Hutch Area Runoff Controls - Engineering Evaluation - Written Description of Existing System	April 30, 2022	24
Calf Hutch Area Runoff Controls - Engineering Evaluation -Plans and Specifications	December 31, 2022	24
Calf Hutch Area Runoff Controls - Engineering Evaluation -Corrections and Post Construction Documentation	December 31, 2023	24
Effluent Limitations for E. coli -Status Update	February 21, 2022	25
Effluent Limitations for E. coli -Operational Evaluation Report	November 30, 2022	25
	1	

Effluent Limitations for E. coli -Submit Facility Plan	April 30, 2023	25
Effluent Limitations for E. coli -Final Plans and Specifications	March 31, 2024	25
Effluent Limitations for E. coli -Treatment Plant Upgrade to Meet Limitations	September 30, 2024	25
Effluent Limitations for E. coli -Construction Upgrade Progress Report	September 30, 2025	25
Effluent Limitations for E. coli -Complete Construction	March 31, 2026	26
Effluent Limitations for E. coli -Achieve Compliance	April 30, 2026	26
Submit Permit Reissuance Application -Reissuance Application	July 1, 2026	26
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	27

Report forms shall be submitted electronically in accordance with the reporting requirements herein. Any facility plans or plans and specifications for municipal, industrial, industrial pretreatment and non industrial wastewater systems shall be submitted to the Bureau of Water Quality, P.O. Box 7921, Madison, WI 53707-7921. Any plans and specifications for proposed new, modified or upgraded reviewable facilities or systems, nutrient management plan updates and annual reports, and WPDES permit reissuance or modification applications shall be submitted online through the Department's ePermitting System. This system is accessed through the Water Permit Applications web portal page located at http://dnr.wi.gov/permits/water.

All other submittals required by this permit shall be submitted to: CAFO Program West Central Region - Baldwin, 890 Spruce Street, Baldwin, WI 54002