Permit Fact Sheet

General Information

Permit Number	WI-0067473-01-0
Permittee Name and Address	Brightside Dairy LLC 7180 County Road D, Greenleaf WI 54126
Permitted Facility Name and Address	Brightside Dairy LLC 7180 County Road D, Greenleaf WI 54126
Permit Term	March 01, 2025 to February 28, 2030
Discharge Location	Unnamed tributaries withing the Plum and Kankapot Creek Watersheds and groundwaters of the state

Animal Units					
	Current AU		**Proposed AU** **(Note: If all zeroes, expansions are not expected during permit term)**		
Animal Type	**Mixed**	**Individual**	**Mixed**	**Individual**	**Date of Proposed Expansion**
Milking and Dry Cows	1130	1154	1680	1716	06/01/2026
Heifers (800 lbs. to 1200 lbs.)	64	58	110	100	06/01/2026
Total	1194	1154	1790	1716	

Facility Description

Brightside Dairy LLC is a Concentrated Animal Feeding Operation (CAFO) owned and operated by Conrad Liebergen and Brian Liebergen. It currently has 1,194 animal units (807 milking & dry cows, 58 heifers, and 0 calves) and based on current herd size, Brightside Dairy has approximately 319 days of liquid waste storage. Brightside Dairy generates 13,012,184 gallons of liquid manure annually and currently has 1,363 acres (489.4 owned and 873.6 controlled through contracts, rental agreements or leases, or under manure agreements) of which 1,297.9 are spreadable acres. Brightside Dairy is proposing an expansion to a herd size of 1,790 animal units (1,200 milking & dry cows, 82 heifers, and 0 calves) by 2026. By 2027, when a full expansion has been reached, Brightside Dairy is estimated to generate approximately 19,049,737 gallons of liquid manure annually.

Substantial Compliance Determination

Enforcement During Last Permit: This is Brightside Dairy's first WPDES Permit. Brightside Dairy was issued a Notice of Noncompliance and was required to submit a WPDES Permit Application.

After a desktop review of all the WPDES application materials and a site visit on March 19, 2024, the department has decided to move forward with permit issuance for Brightside Dairy.

Compliance determination made by Holly Stegemann, Agricultural Runoff Management Specialist on January 8, 2025.

Sample Point Designation For Animal Waste		
Sample Point Number	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**	
001	Sample point 001 is for liquid manure and process wastewater that is directly land applied from Waste Storage Facility 1 (WSF 1), located south of WSF 2. WSF 1 is an earthen lined facility that was constructed in 2014. It has a maximum operating level capacity of 2,946,440 gallons. This storage is the first in a three-celled system and accepts manure and process wastewater from the adjacent freestall barns and parlor. A weir structure between WSF 1 and WSF 2 allows liquid to overflow into WSF 2. An engineering evaluation shall be submitted according to the permit schedules section.	
002	Sample point 002 is for liquid manure and process wastewater that is directly land applied from Waste Storage Facility 2 (WSF 2), located north of WSF 1. WSF 2 is an earthen lined facility that was constructed in 2014. It has a maximum operating level capacity of 2,791,308 gallons. This storage is the second in a three-celled system and accepts manure and process wastewater from WSF 1. A pipe structure in the berm between WSF 2 and WSF 3 allows liquid to flow into WSF 3. An engineering evaluation shall be submitted according to the permit schedules section.	
003	Sample point 003 is for liquid manure and process wastewater that is directly land applied from Waste Storage Facility 3 (WSF 3), located west of WSFs 1 and 2. WSF 3 is an earthen lined facility that was constructed in 2001. It has a maximum operating level capacity of 4,553,659 gallons. This storage is the third in a three-celled system and accepts manure and process wastewater from WSF 2, the adjacent freestall barn, and parlor. An engineering evaluation shall be submitted according to the permit schedules section.	
004	Sample point 004 is for liquid manure and process wastewater that is directly land applied from the proposed Waste Storage Facility 4 (WSF 4), also called the Leachate Basin. This proposed concrete facility will be located to the southwest of WSF 3 and accept leachate and process wastewater from the feed storage area, located to the south. WSF 4 has a proposed maximum operating level capacity of 155,935 gallons.	
005	Sample point 005 is for manure solids land applied from waste storage facilities 1-4. These facilities are described in sample points 001, 002, 003, and 004 respectively. Representative samples shall be taken from each waste storage facility when land application occurs.	
006	Sample point 006 is for any miscellaneous solid manure directly land applied and not stored in a waste storage facility. This includes calf hutch manure, maternity pen bedpack, heifer bedpack, and any solids removed from the digester. Representative samples shall be taken for each manure source type.	
007	Sample point 007 is for visual monitoring and inspection of the feed storage area and associated runoff control system at the main dairy. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program. See the permit schedules section for additional requirements.	
008	Sample point 008 is for visual monitoring and inspection of all production site storm water conveyance systems. This includes roof gutter and downspout structures, drainage tile systems, grassed waterways and other diversion systems that transport uncontaminated storm water. Proper operation and maintenance is required to keep uncontaminated runoff diverted away from manure and process wastewater handling systems. Weekly inspections are required and shall be recorded according to monitoring program.	

1 Livestock Operations - Proposed Operation and Management

Production Area Discharge Limitations

Beginning on the effective date of the permit, the permittee may not discharge pollutants from the operation's production area (e.g., manure storage areas, outdoor animal lots, composting and leachate containment systems, milking center wastewater treatment/containment systems, raw material storage areas) to navigable waters, except in the event a 25-year, 24-hour rainfall event (or greater) causes the discharge from a structure which is properly designed and maintained to contain a 25-year, 24-hour rainfall event for this location as determined under s. NR 243.04. If an allowable discharge occurs from the production area, state water quality standards may not be exceeded.

Runoff Control

The permit requires control of contaminated runoff from all elements of the production area to prevent a discharge of pollutants to navigable waters in accordance with the Production Area Discharge Limitations and to comply with surface water quality standards and groundwater standards. Beginning on the effective date of this permit, (if needed) interim measures shall be implemented to prevent discharges of pollutants to navigable waters. In addition, permanent runoff control system(s) shall be designed, operated and maintained in accordance with the requirements found in USDA Natural Resources Conservation Service standards and ch. NR 243, Wis. Adm. Code. If any upgrading or modifications to runoff controls are necessary, formal engineering plans and specifications must submitted to the Department for approval.

Manure and Process Wastewater Storage

The permit requires the operation to have adequate storage for manure and process wastewater and that storage or containment facilities are designed, operated and maintained to prevent overflows and discharges to waters of the state. In order to prevent overflows, the permittee must maintain levels of materials in liquid storage or containment facilities at or below certain levels including a one foot margin of safety that can never be exceeded. If any upgrading or modifications to the storage facilities are necessary, formal engineering plans and specifications must submitted to the Department for approval.

The permittee currently has approximately 319 days of storage for liquid manure. The permittee must maintain 180 days of storage, unless temporary reductions in required storage are approved by the Department.

Solid Manure Stacking

The operation has proposed to stack solid manure. All stacking of solid manure shall be done in accordance ch. NR 243, Wis. Adm. Code, which includes restrictions from NRCS Standard 313. Stacking of manure is considered to be part of the production area and is subject to the Production Area Discharge Limitations.

Ancillary Service and Storage Areas

The permittee shall take preventative maintenance actions and conduct visual inspections to minimize pollutant discharges from areas of the operation that are not part of the production area or land application areas. These areas are called ancillary service and storage areas and include access roads, shipping and receiving areas, maintenance areas, refuse piles and CAFO outdoor vegetated areas.

Nutrient Management

With 1,194 animal units (807 milking & dry cows, 58 heifers, and 0 calves), it is estimated that approximately 13,012,184 gallons of manure and process wastewater will be produced per year. The permittee owns *approximately* 489.4 acres of cropland and rents about 873.6. Given the rotation commonly used by the permittee, 1,297.9 acres are available (or open) to receive manure and process wastewater on an annual basis. The permit requires all landspreading of manure and process wastewater be completed in accordance with an approved nutrient management plan. The permit will require sampling and analysis of manure and process wastewater that will be landspread. Landspreading rates must be adjusted

based on sample analysis. The permit requires the permittee to maintain a daily log that documents landspreading activities. The permit also requires the submittal of an annual report that summarizes all landspreading activities. Plans must be updated annually to reflect cropping plans and other operational changes. Among the requirements, the plans must include detailed landspreading information including field by field nutrient budgets.

The permittee is required to implement a number or practices to address potential water quality impacts associated with the land application of manure and process wastewater. Among the permit conditions are restrictions on manure ponding, restrictions on runoff of manure and process wastewater from cropped fields, and setbacks from wells and direct conduits to groundwater (e.g., sinkholes, fractured bedrock at the surface). In addition, the permittee must implement a phosphorus based nutrient management plan that addresses phosphorus delivery to surface waters by basing manure and process wastewater applications on soil test phosphorus levels or the Wisconsin Phosphorus index. Additional phosphorus application restrictions apply to fields that are high in soil test phosphorus (>100 ppm).

The permitee must also implement conservation practices when applying manure near navigable waters and their conduits, referred to as the Surface Water Quality Management Area (SWQMA). These practices include a 100-foot setback from navigable waters and their conduits, a 35-foot vegetated buffer adjacent to the navigable water or conduit, or a practice that provides equivalent pollutant reductions equivalent to or better than the 100-foot setback.

In addition, the permittee must comply with restrictions on land application of manure and process wastewater on frozen or snow-covered ground. Included in these restrictions is a prohibition on surface applications of solid manure (≥12% solids) on frozen or snow-covered ground during February and March. Beginning March 1, 2025, non-emergency surface applications of liquid manure (<12%) on frozen or snow-covered ground are prohibited.

Monitoring and Sampling Requirements

The permittee must submit a monitoring and inspection program that outlines how the permittee will conduct self-inspections to determine compliance with permit conditions. These self-inspections include visual inspections of water lines, diversion devices, storage and containment structures and other parts of the production area. The permit requires periodic inspections and calibrations of landspreading equipment. The permittee must take corrective actions to problems identified inspections or otherwise notify the Department. Samples of manure, process wastewater and soils receiving land applied materials from the operation must also be collected and analyzed.

Sampling Points

The permit identifies the different sources of land applied materials (e.g., manure storage facilities, milking centers, egg-washing facilities) as "Sampling Points." For these Sampling Points, the permittee is required to sample and analyze the different sources for nutrients and other parameters which serve as the basis for determining rates of application for these materials. Other areas are also identified as Sampling Points as a means of identifying them as areas requiring action by the permittee, such as an upgrade or evaluation of a certain system or structure (e.g., runoff control systems), even though sampling is not actually required.

1.1 Sample Point Number: 001- WSF 1 (liquids); 002- WSF 2 (liquids); 003- WSF 3 (liquids); 004- WSF 4 (liquids)

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Total		lb/1000gal	2/Month	Grab	

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

1.1.1 Changes from Previous Permit

This is Brightside Dairy's first permit.

1.1.2 Explanation of Operation and Management Requirements

Liquid manure sources must be properly sampled and land applied according to the permit and nutrient management plan.

1.2 Sample Point Number: 005- WSF (solids); 006- Misc. Solids

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit 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	

1.2.1 Changes from Previous Permit

This is Brightside Dairy's first permit.

1.2.2 Explanation of Operation and Management Requirements

Solid manure sources must be properly sampled and land applied according to the permit and nutrient management plan.

1.3 Sample Point Number: 007- Feed Storage Area and 008- Stormwater

1.3.1 Changes from Previous Permit

This is Brightside Dairy's first permit.

1.3.2 Explanation of Operation and Management Requirements

Proper operation and maintenance are required to ensure unlawful discharges to waters of the state do not occur. Weekly or quarterly inspections are required and shall be recorded according to the monitoring plan.

2 Schedules

2.1 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.	04/01/2025

Explanation of Schedules

Schedule 2.1 is included in the permit as a general permit requirement.

2.2 Monitoring & Inspection Program

Use of the department's monitoring and inspection program template is encouraged, but optional.

Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the monitoring and sampling requirements subsection, the permittee shall develop and submit a proposed monitoring and inspection program within 30 days of the effective date of this permit.	04/01/2025

Explanation of Schedules

Schedule 2.2 is included in the permit as a general permit requirement.

2.3 Annual Reports

Submit annual reports by January 31 of each year in accordance with the annual reports subsection in standard requirements.

Required Action	Due Date
Submit Annual Report #1: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2026
Submit Annual Report #2: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2027

Submit Annual Report #3: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2028
Submit Annual Report #4: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2029
Submit Annual Report #5: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2030
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed.	

Explanation of Schedules

Schedule 2.3 is included in the permit as a general permit requirement.

2.4 Nutrient Management Plan

Submit annual nutrient management plan (NMP) updates by March 31 of each year. Note, in addition to annual NMP updates, submit NMP amendments and substantial revisions to the department for written approval prior to implementation of any changes to the NMP.

Required Action	Due Date
Management Plan Submittal: Submit any necessary updates to the Nutrient Management Plan to meet the conditions outlined in this permit (see conditions in the Livestock Operational and Sampling Requirements section).	
Submit NMP Update #1: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2025
Submit NMP Update #2: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2026
Submit NMP Update #3: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2027
Submit NMP Update #4: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2028
Submit NMP Update #5: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2029
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

Explanation of Schedules

Schedule 2.4 is included in the permit as a general permit requirement.

2.5 Manure Storage Facility - Engineering Evaluations

Applicable to WSF 1, WSF 2, and WSF 3.

Required Action	Due Date
Written Report: Submit a written report evaluating the existing manure storage facility's ability to meet the conditions in the Production Area Discharge Limitations and Manure and Process Wastewater Storage subsections and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	05/01/2025
Plans and Specifications: Submit plans and specifications for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code, to permanently correct any adverse manure storage conditions.	12/31/2025
Corrections and Post Construction Documentation: Complete construction on the manure storage facility that permanently corrects 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.	12/31/2026

Explanation of Schedules

Schedule 2.5 is included in the permit to evaluate WSFs 1, 2, and 3.

2.6 Runoff Control System - Installation

Applicable to the feed storage area.

Required Action	Due Date
Plans and Specifications: Submit plans and specifications for a permanent feed storage area runoff control system for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code. See Standard Requirements for plan content information.	05/01/2025
Complete Installation: Complete construction of runoff control system. System shall be functional and in operation by the specified Date Due. Post construction documentation shall be submitted within 60 days of completion of the project.	12/31/2025

Explanation of Schedules

Schedule 2.6 is included in the permit to install permanent feed storage area runoff controls.

2.7 Waste Transfer System - Engineering Evaluation

Applicable to all manure transfer lines and systems.

Required Action	Due Date
Written Report: Submit a written report evaluating the existing manure tranfer system's ability to meet the conditions in the Production Area Discharge Limitations and Manure and Process	05/01/2025

Wastewater Storage subsections and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	
Plans and Specifications: Submit plans and specifications for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code, to permanently correct any adverse manure storage conditions.	12/31/2025
Corrections and Post Construction Documentation: Complete construction on the manure storage facility that permanently corrects 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.	12/31/2026

Explanation of Schedules

Schedule 2.7 is included in the permit to evaluate all waste transfer systems.

2.8 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	09/01/2029

Explanation of Schedules

Schedule 2.8 is included in the permit as a general permit requirement.

Other Comments

N/A

Attachments

Plan Approval Letter(s)

- Preliminary Inspection Report – April 3, 2024
- Conditional Nutrient Management Plan Approval – December 2, 2024
- Days of Storage Review Letter – September 30, 2024

Justification Of Any Waivers From Permit Application Requirements

None

Prepared By: Holly Stegemann Agricultural Runoff Management Specialist Date: 01/08/2025

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

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Adam N. Payne, Secretary
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April 3, 2024

Conrad Liebergen
Brightside Dairy LLC
7180 county Road D
Green leaf, WI 54126

Brown County

Subject: **Notice of Noncompliance – Response Requested by July 1, 2024**

Dear Mr. Conrad Liebergen:

The Department of Natural Resources (Department) has reason to believe that Brightside Dairy LLC, located at 7180 County Road D, Greenleaf, Wisconsin, is in noncompliance with Statue NR 243 Wisconsin Administrative Code. Based on animal unit records received by the Department, the facility is not complying with the following requirements:

1. **S. NR 243.11(3), Wis. Admin. Code**:
   "…any person owning or operating a large CAFO that stores manure or process wastewater in a structure that is at or below grade or that land applies manure or process wastewater shall have a WPDES permit."

2. **S. NR 243.12(1)(a), Wis. Adm. Code:**
   "…a person who is proposing to own or operate a large CAFO that will store manure or process wastewater in a storage facility constructed at or below grade or that will land apply manure or process wastewater shall file a preliminary application for a WPDES permit at least 12 months prior to the intended date on which the operation will become a large CAFO." "The owner or operator shall then submit a completed final WPDES permit application under sub. (2) at least 180 days prior to the intended date on which the operation would become a large CAFO."

A large CAFO is defined as an animal feeding operation that has 1,000 animal units or more at any time. On February 1, 2024, Brightside Dairy reported a current herd of 1,193.6 animal units in a preliminary application for a WPDES permit that was submitted to the Department.

In response to this letter, please submit a complete WPDES permit application to the Department via the ePermitting System: http://dnr.wi.gov/permits/water/ **no later than July 1, 2024**. Below is a detailed list of materials required as part of the complete WPDES permit application.

- Form 3400-025 (Livestock/Poultry Operation WPDES Permit Application)
- Form 3400-025A (Animal Units Calculation Worksheet)

- Form 3400-025B (Nutrient Management Plan Checklist)
- Form 3400-025C (Reviewable Facilities of Systems Checklist)
- A soil survey map of all production areas to be covered under the WPDES Permit
- A labeled aerial map showing the existing and proposed features and structures of the production areas to be covered under the WPDES Permit
- Calculations documenting days of liquid manure and process wastewater storage
- Supporting documentation for days of storage calculations
- A complete 5-year Nutrient Management Plan (NMP). If necessary, include a description of permanent spray irrigation systems and any other landspreading or treatment systems (proposed or active)
- Environmental Analysis Questionnaire
- Engineering evaluations for existing facilities that store or transfer manure or process wastewater, including:
    - Liquid waste storage facilities
    - Solid waste storage facilities
    - Feed storage areas and associated runoff control systems
    - Outdoor feedlots
    - Other permanent manure and process wastewater transfer systems
- Engineering plans and specifications for any proposed facilities or systems

It should be noted that Brightside Dairy is in noncompliance, and will remain in noncompliance, until a complete permit application is received by the Department. Failure to respond in a timely manner may escalated enforcement actions.

On March 19, 2024, Department staff conducted a pre-permit site inspection at Brightside Dairy and met with you to discuss WPDES CAFO permit application requirements. Department observations from the site inspection are included in the enclosed report.

If you have any questions regarding this letter or your WPDES permit requirements, please contact me at (920) 360-0794 or at holly.stegemann@wisconsin.gov.

Sincerely,

Holly Stegemann

Holly Stegemann
Agricultural Runoff Management Specialist

Enclosure: Brightside Dairy Inspection Report

Electronic CC:
Nick Peltier, Jon Bechle - Brown County LWD
Brittany Newman, Amy Haak - Country Visions Cooperative
Joe Baeten, McKenna Arnoldi, Falon French - DNR

CAFO Compliance Report (04/03/2024)

Inspection Date: 03/19/2024

Inspection Type: Permit Issuance

Operation Name: Brightside Dairy

WPDES Permit No. N/A

Operation Address: 7180 County Road D, Greenleaf, WI 54126

On-Site Representative(s): Conrad Liebergen, Brian Liebergen – Owners/Operators

DNR Staff / Report Writer: Holly Stegemann, Agricultural Runoff Management Specialist

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On March 19, 2024, Stegemann, Joe Baeten (DNR NER Watershed Management Team Supervisor) and McKenna Arnoldi (DNR NMP Specialist), met with Conrad Liebergen, Brian Liebergen, and Brittany Newman (Country Visions Co-op) to conduct a permit issuance inspection of Brightside Dairy. All facilities to be covered under a WPDES permit were inspected. The farm does not utilize any satellite facilities. A preliminary application was received on 02/10/2024. No liquid precipitation had fallen 24 hours prior to the inspection, the weather was cloudy and windy. Follow up items are listed on page 3.

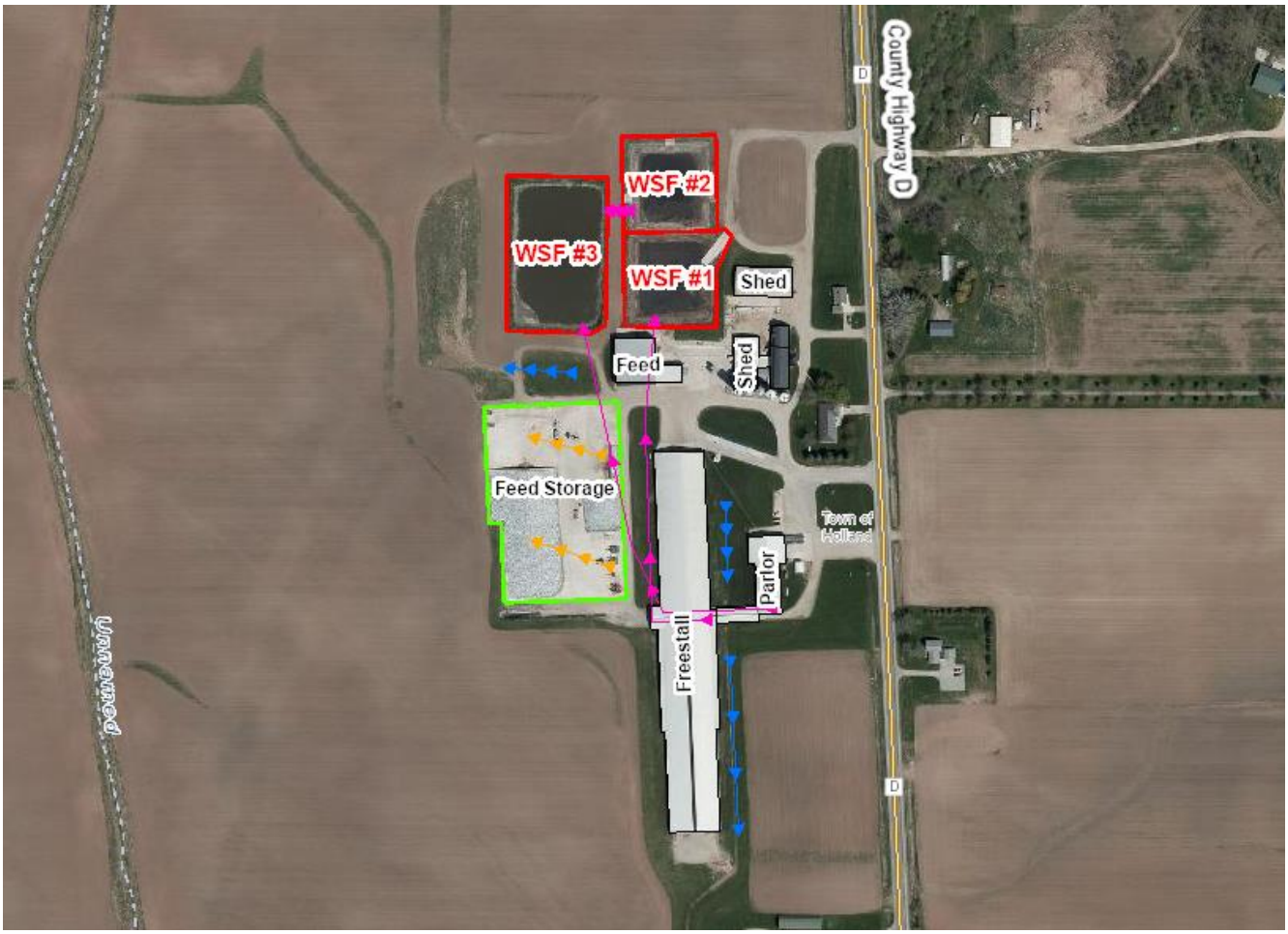

Figure 1. Aerial overview of Brightside Dairy. Blue arrows indicate approximate stormwater flow paths. Pink arrows indicate manure transfer lines. Orange arrows indicate approximate contaminated runoff flow paths.

Figure 2. Aerial overview of Brightside Dairy in relation to surface water features. Areas shaded in green represent designated wetlands. Dotted blue lines indicate intermittent streams. Solid blue lines represent perennial streams.

SITE OBSER

Feedlot Runoff

Brightside Dairy does not utilize any outdoor feed lots or open air feed lanes.

Calf Hutch Areas

Brightside Dairy does not utilize any calf hutch areas. Calves are raised out of state.

Waste Storage Facilities

Manure and process wastewater is stored in three waste storage facilities on the production site. Recycled manure solids are utilized for bedding.

WSF 1 is an earthen lined facility with a concrete floor that was constructed in 2014. It has a total useable volume of 3,040,002 gallons. A concrete ramp is located on the northeast corner. This storage accepts manure and process wastewater from the adjacent barn and parlor. WSF is the first cell in the three celled system.

WSF 2 is an earthen lined facility that was constructed in 2014. It has a total useable volume of 2,893,745 gallons. This storage accepts manure from an overflow weir from WSF 1. WSF 2 is the second cell in a three celled system.

WSF 3 is an earthen lined facility that was constructed in 2001. It has a total useable volume of 4,179,707 gallons. Scour protection is located under the overflow from WSF 2 to protect the berm from erosion. This storage accepts manure from an overflow from the adjacent barn, parlor, and WSF 2. WSF 3 is the third cell in the three celled system.

Proposed construction of a Leachate Basin is anticipated. This will be a concrete storage with an estimated volume of 155,935 gallons. Plans and specifications for this proposed facility shall be submitted with the final application.

Solid and liquid waste storage facilities are managed to not have current or past indicators of discharges. Solid and liquid waste storage structures are well-maintained and in good repair. Liquid waste storage facilities do not have permanent markers. Partial fencing is installed, only fence posts were observed during the inspection.

Process Wastewater (other than feed storage area leachate/runoff)
Process wastewater and milkhouse waste are stored in WSF 1. Process wastewater sources (milking center, wash water, etc.) are managed to not have current or past indicators of discharges.

Feed Storage Area Runoff
Brightside Dairy utilizes one concrete feed pad on the west side of the production site. This pad is pitched to convey runoff to the center of the pad and then north where a proposed leachate collection basin will be installed. Brightside plans to submit plans and specifications for this project with the final permit application. During the inspection, the farm stated they were approved for EQIP funding and the potential for installation of interim runoff controls were discussed.

Dry haylage bags are normally placed to the south of the feed storage pad, west of the barn. Brightside Dairy no longer utilizes the harvestore silos onsite.

Feed storage areas and associated process wastewater (leachate, runoff) are managed to not have current or past indicators of discharges.

Animal Mortality Disposal
Animal mortalities are picked up as needed by OJ Krull. Animal mortalities are managed to not have current or past indicators of discharges.

Ancillary Service Areas
Preventative maintenance actions are occurring to minimize pollutant discharges from ancillary service and storage areas (i.e. storm water conveyance systems, driveways, etc.).

SUMMARY
Areas of Concern

- Feed storage area does not have a permanent runoff control system and may lead to unpermitted discharges from the production area
- Waste storage facilities do not have permanent markers installed or complete fencing in place

Materials Required as part of the Permit Application
Required materials must be submitted together as a complete permit application through the ePermitting System: http://dnr.wi.gov/permits/water/. The system will not allow you to electronically sign and submit your application until all of the following are included:
• 3400-025 form (Livestock/Poultry Operation WPDES Permit Application)
• 3400-025A form (Animal Units Calculation Worksheet)
• 3400-025G form (Evaluated Facilities of Systems Checklist)
• 3400-025C form (Reviewable Facilities of Systems Checklist)
• A soil survey map of the dairy's production area 12
• A labeled aerial map showing the existing and proposed features and structures of the dairy's production area
• Calculations documenting days liquid manure and process wastewater storage
• Supporting documentation for days storage calculations
• A complete 5-year Nutrient Management Plan (NMP). If necessary, include a description of permanent spray irrigation systems and any other landspreading or treatment systems (proposed or active)
• Plans and specifications for any proposed facilities

Photo #:	2252
Date/Time of Photo:	March 19, 2024 10:08am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the east side of WSF 1, looking southwest towards the commodity shed.

Photo #:	2253
Date/Time of Photo:	March 19, 2024 10:08am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the east side of WSF 1, looking west.

Photo #:	2254
Date/Time of Photo:	March 19, 2024 10:09am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the east side of WSF 1, looking northwest toward WSF 2.

Photo #:	2255
Date/Time of Photo:	March 19, 2024 10:09am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the east side of WSF 1, looking northwest toward WSF 2.

Photo #:	2256
Date/Time of Photo:	March 19, 2024 10:09am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the northeast corner of WSF 1, facing southwest towards the commodity shed.

Photo #:	2257
Date/Time of Photo:	March 19, 2024 10:09am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the northeast corner of WSF 1, facing west.

Photo #:	2258
Date/Time of Photo:	March 19, 2024 10:10am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the east side of WSF 2, facing southwest toward the barrier between WSF 1 and WSF 2.

Photo #:	2259
Date/Time of Photo:	March 19, 2024 10:10am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the east side of WSF 2, facing northwest.

Photo #:	2260
Date/Time of Photo:	March 19, 2024 10:12am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the north side of WSF 2, looking southeast towards the machine shed.

Photo #:	2261
Date/Time of Photo:	March 19, 2024 10:12am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the north side of WSF 2, looking south towards WSF 1 and commodity shed.

Photo #:	2262
Date/Time of Photo:	March 19, 2024 10:13am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the east side of WSF 3, looking southwest towards the feed storage area on the southwest corner of the production site.

Photo #:	2263
Date/Time of Photo:	March 19, 2024 10:13am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the northeast corner of WSF 3, looking west.

Photo #:	2264
Date/Time of Photo:	March 19, 2024 10:15am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the north side of WSF 3, looking southeast toward the transfer pipe from WSF 2.

Photo #:	2265
Date/Time of Photo:	March 19, 2024 10:15am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the north side of WSF 3, looking south toward the feed storage area.

Photo #:	2266
Date/Time of Photo:	March 19, 2024 10:17am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the west side of WSF 3, looking southeast towards the commodity shed.

Photo #:	2267
Date/Time of Photo:	March 19, 2024 10:21am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the west side of the production site, looking west.

Photo #:	2268
Date/Time of Photo:	March 19, 2024 10:21am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the northwest corner of the feed storage area, looking southwest.

Photo #:	2269
Date/Time of Photo:	March 19, 2024 10:21am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the northwest corner of the feed storage area, looking southeast.

Photo #:	2270
Date/Time of Photo:	March 19, 2024 10:21am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the northwest corner of the feed storage area, looking northwest.

Photo #:	2271
Date/Time of Photo:	March 19, 2024 10:22am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the northwest corner of the feed storage area, looking southeast towards B1.

Photo #:	2272
Date/Time of Photo:	March 19, 2024 10:23am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the west side of the feed storage area, looking west.

Photo #:	2273
Date/Time of Photo:	March 19, 2024 10:23am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the west side of the feed storage area, looking southeast towards B1.

Photo #:	2274
Date/Time of Photo:	March 19, 2024 10:23am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the west side of the feed storage area, looking east towards B1.

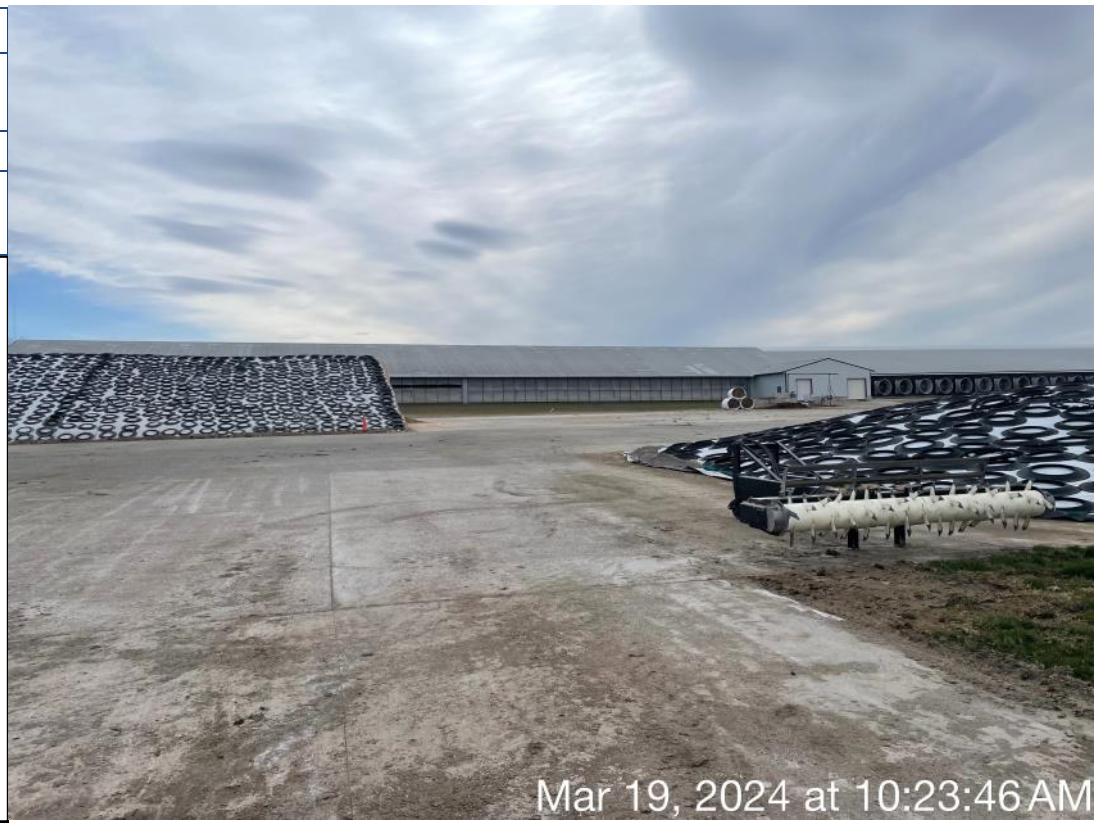

Photo #:	2275
Date/Time of Photo:	March 19, 2024 10:23am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the south side of the feed storage area, looking north.

Photo #:	2276
Date/Time of Photo:	March 19, 2024 10:23am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the southwest corner of the feed storage area, looking northeast towards B1 and commodity shed.

Photo #:	2277
Date/Time of Photo:	March 19, 2024 10:25am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from south side of feed storage area, looking southeast towards haylage bags and B1.

Photo #:	2278
Date/Time of Photo:	March 19, 2024 10:26am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo taken from the southwest corner of feed storage area, looking north towards commodity shed.

Photo #:	2279
Date/Time of Photo:	March 19, 2024 10:29am
Photo By:	Stegemann
Photo Location:	Brightside Dairy

Photo Description:

Photo of grassed waterway on the south side of the production site, looking south.

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster St., PO Box 7921
Madison, WI 53707

Tony Evers, Governor
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

December 2nd, 2024

Brown County
Approval

Conrad Liebergen
Brightside Dairy, LLC
7180 County Road D
Greenleaf, WI 54126

SUBJECT: Conditional Approval of Brightside Dairy, LLC Nutrient Management Plan, WPDES Permit No. 0067473-01-0

Dear Conrad Liebergen:

After completing a review of Brightside Dairy, LLC 2025-2029 Nutrient Management Plan (NMP) the Wisconsin Department of Natural Resources (Department) is providing conditional approval that it is consistent with Nutrient Management Requirements in s. NR 243, Wis. Adm. Code. This part of your WPDES permit application is now ready for the public notice and comment process as required by Ch. 283 Stats.

Before applying manure onto approved fields each season, the Department recommends Brightside Dairy, LLC review the NMP with those individuals involved with manure applications to ensure all remain familiar with the approved manure spreading protocol, spreading maps, field and map verification, record keeping requirements, and all the conditions of this approval. Specifically, some fields in Brightside Dairy, LLC may have:

- Soils that may have bedrock or groundwater within 24 inches of surface,
- Multiple setback areas due to streams, conduits to streams, grassed waterways, wetlands or wells, and
- Evidence of possible soil erosion/flow channels. Note: road ditches or other man made channels may be considered flow channels or conduits to navigable water and may be subject to a SWQMA and setback.

Reviewing the NMP and checking fields for these features and soil conditions prior to manure applications will help Brightside Dairy, LLC maintain compliance with their WPDES permit and Ch. NR 243 requirements.

FINDINGS OF FACT

The Department confirms that:

1. A current dairy herd size of 1,194 animal units (807 milking & dry cows, 58 heifers, and 0 calves). A planned herd size of 1,790 animal units (1,200 milking & dry cows, 82 heifers, and 0 calves) by 2026.
2. Manure generation and spreading records indicate your herd will annually generate approximately 13,012,184 gallons of manure and process wastewater and 0 tons of solid manure in the first year of the permit term. By year 2027 when full expansion has been reached, it is estimated the farm will generate approximately 19,049,737 gallons of manure and process wastewater.
3. The use of application restriction options 1 and 5 within surface water quality management areas.
4. The use of phosphorus delivery method P Index.

5. That Brightside Dairy, LLC currently has 1,363 acres (489.4 owned and 873.6 controlled through contracts, rental agreements or leases, or under manure agreements) of which 1,297.9 are spreadable acres.
6. That some fields included in the NMP are directly adjacent to or have high potential to deliver nutrients and sediment to Plum Creek, East River (listed 303(d) impaired water by 'total phosphorus').
7. That no fields are directly adjacent to or have high potential to deliver nutrients and sediment to outstanding/exceptional waters.
8. That 15 fields are tiled.

- 1	- 2	- 3	- 6
- 7	- 8	- 9	- 10
- 11	- 13	- 14	- 15
- 16	- 23	- 31	

9. That all fields will be checked for the following features prior to/during manure or process wastewater applications: soil areas with possible shallow groundwater (i.e., within 24 inches of surface) at the time of manure application; required setbacks associated with wells, navigable waters, conduits to navigable waters, grassed waterways, wetlands, possible soil erosion/flow channels.
10. That surface applications of manure will not be completed when precipitation capable of producing runoff is forecasted within 24 hours of the time of planned application.

CONDITIONAL NUTRIENT MANAGEMENT PLAN APPROVAL

The Department hereby approves the 2025-2029 Brightside Dairy, LLC Nutrient Management Plan subject to the following conditions and the applicable requirements of Ch. NR 243, Wis. Adm. Code:

FIELD AND MANURE MANAGEMENT

1. Fields not included in the NMP and new fields shall not receive manure or process wastewater applications until they have been properly soil sampled, entered into Snap Plus, evaluated for their nutrient needs, and approved by the Department.

2. The following fields are prohibited from receiving applications of manure or process wastewater:

- 28 (expired soil test)	- 29 (expired soil test)	- 34 (expired soil test)

   If Brightside Dairy, LLC wishes to use these fields for applications of manure or process wastewater all necessary information shall be submitted to the Department prior to application to demonstrate compliance with NR 243 and other applicable codes. Written Department approval amending this condition approval must be received prior to application.

3. If existing fields yield a soil test results equal to or greater than 200 ppm P, those fields would be prohibited from receiving manure or process wastewater applications, unless you obtain Department approval in accordance with NR 243.14(5)(b)2., Wis. Adm. Code.

4. All liquid manure samples collected may be analyzed, at a minimum, for percent dry matter, total nitrogen, percent NH_4-N, percent NO_3-N, phosphorus, potassium, and sulfur.

5. If manure sample results have a dry matter (DM) content less than 2.0% and the percent ammonium (NH_4^+) is greater than 75% of the total N, Brightside Dairy, LLC may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

$$\text{First-Year Available N} = NH_4\text{-N} + [0.25 \times (\text{Total N} - NH_4\text{-N})]$$

6. Brightside Dairy, LLC shall record daily manure applications by using form 3200-123A. These forms shall be retained at the farm and provided to the department upon request.

7. Brightside Dairy, LLC shall annually submit a spreading report that summarizes the land application activities listed under NR 243.19(3)(c)5., Wis. Adm. Code by using form 'CAFO Annual Spreading Report'.

WINTER SPREADING

8. Liquid manure applications during winter conditions, as defined by NR 243.14(7), Wis. Adm. Code, are prohibited with the exception of emergency applications.

9. The following field(s) are approved for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure:
   - 8 - 11 - 12
   - 14 - 21 - 40

10. Winter spreading of solid and liquid manure may not occur during the "high risk runoff period" pursuant to s. NR 243.14(6)(c) and NR 243.14(7)(c), respectively.

11. Winter applications of liquid manure shall only occur under emergency situations, after notifying the Department and receiving verbal approval.

12. Liquid applications shall be limited to 3,500 gallons per acre or 30 lbs. P per acre, whichever is less, on slopes 2-6% and 7,000 gallons per acre or 60 lbs. P per acre, whichever is less, on slopes 0-2%. Winter applications of solid manure shall be limited to 60 lbs. P per acre.

HEADLAND STACKING

13. No headland stacking sites are approved.

NR243.143/151.075 SILURIAN BEDROCK PERFORMANCE STANDARDS

14. Manure generated by Brightside Dairy, LLC that is mechanically applied to the following approved fields meet planning requirements under NR243.143/151.075, Silurian bedrock performance standards. The following fields are required to meet all requirements under NR243.143/151.075, Silurian bedrock performance standards immediately following this approval.
   - 71 - 72 - 73
   - 74 - 75 - 76

MANURE & PROCESS WASTEWATER IRRIGATION

15. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

16. A copy of this conditional approval shall be included in all future annual Nutrient Management Plan Updates in addition to the NR 243 and NRCS 590 checklists.

This conditional approval does not limit the Department's regulatory authority to require NMP revisions (based upon new information or manure irrigation research findings) or request additional information in order to confirm or ensure your farm operation remains in compliance with NR 243 and your WPDES permit conditions. If additional information, project changes or other circumstances indicate a possible need to modify this approval, the Department may ask you to provide further information relating to this activity.

Please keep in mind that approval by the Department of Natural Resources – Runoff Management Program does not relieve you of obligations to meet all other applicable federal, state or locate permits, zoning and regulatory requirements.

If you have any questions regarding this approval I can be reached at 608-212-8460 or Ashley.Scheel@Wisconsin.gov.

Sincerely,

Ashley Scheel, CCA
WDNR Nutrient Management Plan Reviewer
Wisconsin Department of Natural Resources

cc:
Holly Stegemann, WDNR Agricultural Runoff Management Specialist (Holly.Stegemann@Wisconsin.gov)
Joe Baeten, WDNR Watershed Field Supervisor (Joseph.Baeten@Wisconsin.gov)
Christopher Clayton, WDNR Runoff Management Section Chief (Christopherr.Clayton@Wisconsin.gov)
Aaron O'Rourke, WDNR Nutrient Management Program Coordinator (Aaron.Orourke@Wisconsin.gov)
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File

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WISCONSIN DEPT. OF NATURAL RESOURCES

September 30, 2024

FILE REF: R-2024-0170
WPDES Permit #: WI-0067473

Conrad Liebergen
Brightside Dairy LLC
7180 County Road D
Greenleaf, WI 54126

Subject: Days of Storage Review for Brightside Dairy LLC, NE¼ of T21N, R19E, Section 15 in Holland Township, Brown County – NO ADDITIONAL ACTION REQUIRED

Dear Mr. Liebergen:

This letter is to inform you that the Wisconsin Department of Natural Resources (Department) has completed its review of the calculation of days of storage submitted under certification by Emily Micolichek, Miller Engineers & Scientists on June 26, 2024 with revisions received on September 26, 2024 on behalf of Brightside Dairy LLC.

The Department reviewed the submitted calculations in accordance with ss. NR 243.14(9) and NR 243.15(3)(i) to (k), Wis. Adm. Code. Under s. NR 243.17(3)(c), Wis. Adm. Code, the permittee shall demonstrate compliance with the 180-day design storage capacity requirement at specified times. For the following liquid manure storage calculations, the Department has determined **no additional actions** on your part are required.

Days of Available Liquid Waste Storage: The submitted information states that Brightside Dairy LLC has 319 days of liquid waste storage based on the volumes listed in the table below with respect to s. NR 243.15(3)(i) to (k), Wis. Adm. Code. The current number of animal units provided for the calculation is 1,194. An expansion of the site to 1,790 animal units is proposed and will be reviewed as part of future plans and specifications submitted. The WSFs will require evaluations be submitted as part of the upcoming permit schedule, and days of storage are subject to change following review. The liquid waste volumes are based on the NRCS spreadsheet and other estimated or calculated values for a collection period of 365 days. No runoff controls are present on site and will be submitted as part of the proposed plans and specifications. All WSFs include 2 ft of remaining waste.

Waste Storage	Total Vol. from Settled Top to Bottom	Remaining Waste	25-yr, 24-hr Precip. on Storage	25-yr, 24-hr Collected Runoff	Freeboard Vol.	Max. Operating Level (MOL) Vol.
#1	3,552,880	178,692	111,288	0	316,460	2,946,440
#2	3,422,010	196,364	113,003	0	321,335	2,791,308
#3	5,990,739	663,687	201,216	0	572,177	4,553,659
					Total MOL Vol:	10,291,407
					Days of Storage:	**319**

Liquids Collected/Stored	**Annual Gallons**
Manure and Bedding	7,399,934
Parlor Wastewater	2,344,030
Net Precipitation on Storage Surfaces	2,046,870
TOTAL:	**11,790,834**

Should you have any questions, please contact Tony Salituro, DNR Madison office or your regional CAFO Specialist.

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to WIS. STAT. §§ 227.52 and 227.53, you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to WIS. STAT. § 227.42, you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with WIS. ADMIN. CODE § NR 2.05(5), and served on the Secretary in accordance with WIS. ADMIN. CODE § NR 2.03. The filing of a request for a contested case hearing does not extend the 30-day period for filing a petition for judicial review.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

Bernie Michaud, P.E.
CAFO Engineer Supervisor
Watershed Management Program

Tony Salituro, E.I.T.
CAFO Review Engineer
Watershed Management Program

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