

Permit Fact Sheet

General Information

Permit Number:	WI-0064882-03-0
Permittee Name:	Crailoo Dairy Farm LLC
Address:	N2943 Oaklane Road, Brownsville, WI 53006
Permit Term:	May 01, 2026 to April 30, 2031
Receiving Water:	Kiefer Creek and unnamed tributaries within the Kummel Creek Watershed, and groundwater of the state
Discharge Type:	Existing source CAFO per NR 243.03 (23)

Animal Units					
Animal Type	Current AU		Proposed AU (Note: If all zeroes, expansions are not expected during permit term)		
	Mixed	Individual	Mixed	Individual	Date of Proposed Expansion
Dairy Calves (under 400 lbs.)	16	0	18	0	01/01/2029
Milking and Dry Cows	860	878	1196	1221	01/01/2029
Heifers (400 lbs. to 800 lbs.)	109	182	121	202	01/01/2029
Heifers (800 lbs. to 1200 lbs.)	211	192	233	212	01/01/2029
Steers or Cows (400 lbs. to market)	0	0	212	212	01/01/2029
Total	1196	878	1780	1221	

Facility Description

Crailoo Dairy Farm LLC is an existing Concentrated Animal Feed Operations (CAFO) owned and operated by Rose Van der Zwan and Tom Byl in the Town of Byron in Fond du Lac County, Wisconsin. Crailoo Dairy Farm LLC consists of a main production area located at N2943 Oaklane Road, Brownsville, WI 53006. It currently has 1,196 animal units with plans to expand to 1,780 animal units by 2029. Based on current herd size Crailoo Dairy has approximately 216 days of manure/process wastewater storage and currently has 1,501 acres approved in their nutrient management plan, of which 1,452 acres are available to receive manure. Under current storage conditions, the farm cannot support their expansion plans and will be required to submit plans and specifications to construct additional storage before expanding.

Substantial Compliance Determination

Enforcement During Last Permit: Crailoo Dairy Farm LLC was issued the following Notice of Noncompliance (NON). The facility has completed all required actions as part of the enforcement process.

- February 7, 2022: NON was issued for failure to adhere to their WPDES permit schedule for their feed storage area and waste storage facility 4 (WSF 4) engineering evaluations.
- The feed storage area and WSF 4 engineering evaluation originally due 01/01/2022 was submitted 01/03/2023. After department review, additional actions were required to complete the evaluations. Further actions were received 11/20/2025 and department approval was granted December 18, 2025.
- Return to compliance was issued on 01/08/2026.

After a desk top review of Crailoo Dairy’s 2024 annual report, 2025 nutrient management plan update, compliance schedule items, and a site visit on 4/8/2025, this facility has been found to be in substantial compliance with their current permit.

Sample Point Descriptions

Sample Point Designation For Animal Waste	
Sample Point Number	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
001	WSF 4: Sample point 001 is for liquid waste storage facility 4 (WSF 4) located at the Dairy Site. WSF 4 is a concrete lined storage located east of freestall barn 3. The facility has a capacity (Maximum Operating Level- MOL) of 197,645 gallons and was constructed in 2008. This storage accepts manure and process wastewater from freestall barn 3. WSF 4 was last evaluated in 2023 and met permit requirements.
002	WSF 1: Sample point 002 is for liquid waste storage facility 1 (WSF 1) located at the Dairy Site. WSF 1 is a concrete lined storage located to the west of freestall barn 1 and is irregularly shaped. The facility has a capacity (MOL) of 1,653,097 gallons and was constructed in 2009. This storage accepts manure and process wastewater from the milking parlor and freestall barn 1.
003	WSF 3: Sample point 003 is for liquid waste storage facility 3 (WSF 3) located at the Dairy Site. WSF 3 is a concrete lined storage located west of freestall barn 4. The facility has a capacity (MOL) of 1,054,396 gallons and was constructed in 2012. This storage accepts manure and process wastewater from freestall barn 4 and outdoor lot 6.
004	Miscellaneous Solid Manure: Sample point 004 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, steer manure, etc. Representative samples shall be taken for each manure source type.
005	Outdoor Lot 1 & Runoff Controls: Sample point 005 is for visual monitoring and inspection of outdoor lot 1 and associated runoff control system located east of the calf barn. 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 Schedules section for due dates for abandonment.
006	Feed Storage Area & Runoff Controls: Sample point 006 is for visual monitoring and inspection of the feed storage area and associated runoff control system located at the Dairy Site. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program. The feed storage area was last evaluated in 2023 and met permit requirements.
008	Settled Solid Manure: Sample point 008 is for any manure solids removed from bottom of liquid waste storage facilities. This includes manure-laden sand solids, manure fiber solids, etc. Representative samples shall be taken from each waste storage facility.

Sample Point Designation For Animal Waste		
Sample Point Number	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)	
009	Headland Stacking Manure: Sample point 009 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 of runoff controls is required during use of stacking sites to ensure discharges meet permit requirements.	
012	Calf Hutch 1 & Runoff Controls: Sample point 012 is for visual monitoring and inspection of calf hutch area 1 and associated runoff control system located north of the calf barn. 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 Schedules section for due dates for abandonment.	
013	Calf Hutch 2 & Runoff Controls: Sample point 013 is for visual monitoring and inspection of calf hutch area 2 and associated runoff control system located at east of the calf barn. 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 Schedules section for due dates for abandonment.	
014	CAFO Outdoor Vegetated Area: Sample point 014 is for visual monitoring and inspection of CAFO outdoor vegetated areas located at the Dairy Site known as Yard 1-3. Proper operation and maintenance is required to ensure sufficient vegetative cover, as defined in s. NR 243.03 is sustained across the entire area. Quarterly inspections are required and shall be recorded according to monitoring program. A pasture management plan was received by the department in 2021.	
016	Storm Water Runoff Control System: Sample point 016 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.	
017	WSF 2: Sample point 017 is for liquid waste storage facility 2 (WSF 2) located at the Dairy Site. WSF 2 is a concrete lined storage located to the west of freestall barn 2. The facility has a capacity (MOL) of 855,815 gallons and was constructed in 2013. This storage accepts manure and process wastewater from freestall barn 2. Post construction documentation was received in 2013.	
018	Outdoor Lot 5 & Runoff Controls: Sample point 018 is for visual monitoring and inspection of outdoor lot 5 and associated runoff control system. Outdoor lot 5 is a concrete walled feedlot located south of barn 5 and east of Calf Hutch Area 1. Feedlot runoff is scraped daily and transported to a WSF. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program. An engineering evaluation of the outdoor lot and runoff control system shall be submitted according to the Schedules section of the permit.	
019	Outdoor Lot 6 & Runoff Controls: Sample point 019 is for visual monitoring and inspection of outdoor lot 6 and associated runoff control system. Outdoor lot 6 is a concrete walled feedlot located south of Barn 4 and east of WSF 3. Feedlot runoff is directed into WSF 3. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program. An engineering evaluation of the outdoor lot and runoff control system shall be submitted according to the Schedules section of the permit.	

Permit Requirements

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 be 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 be submitted to the Department for approval.

The permittee currently has approximately 216 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 1196 animal units (614 milking & dry cows, 374 heifers, and 80 calves), it is estimated that approximately 6,360,981 gallons of manure and process wastewater and 2,500 tons of solid manure will be produced per year with 8,903,581 gallons of manure and process wastewater and 2,600 tons of solid manure predicted to be produced with the planned expansion. The permittee owns *approximately* 925 acres of cropland and controls and additional 576 acres through contracts, rental agreements or leases, or manure agreements. Given the rotation commonly used by the permittee, 1,452 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 of 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 permittee 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 ($\geq 12\%$ solids) on frozen or snow-covered ground during February and March. 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 4; 002- WSF 1; 003- WSF 3; 017- WSF 2

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

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

1.1.1 Changes from Previous Permit

Sample points 001-WSF 4, 003-WSF 3, and 017-WSF 2 were edited to include a more accurate and up-to-date description.

1.1.2 Explanation of Operation and Management Requirements

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

1.2 Sample Point Number: 004- Miscellaneous Solid Manure; 008- Settled Solid Manure; 009- Headland Stacking Manure

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

Sample point 004- Miscellaneous Solid Manure was edited to include a more accurate description.

1.2.2 Explanation of Operation and Management Requirements

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

1.3 Sample Point Number: 005- Outdoor Lot 1 & Runoff Control; 006- Feed Storage & Runoff Controls; 012- Calf Hutch 1 & Runoff Controls; 013- Calf Hutch 2 & Runoff Controls; 014- CAFO Outdoor Vegetated Area 1; 016- Storm Water Runoff Controls; 018- Outdoor Lot 5 & Runoff Control, and 019- Outdoor Lot 6 & Runoff Control

1.3.1 Changes from Previous Permit

- Sample points 006-Feed Storage & Runoff Controls and 014-CAFO Outdoor Vegetated Area were updated to include a more accurate and up-to-date description.
- Sample points 007- Outdoor lot 4 & Runoff Controls, 010- Outdoor lot 2 & Runoff Controls, 011-Outdoor lot 3 & Runoff Controls, and 015- CAFO Outdoor Vegetated Area 2 were removed from the permit after proper abandonment in previous permit term.
- Sample points 018-Outdoor Lot 5 & Runoff Controls and 019-Outdoor Lot 6 & Runoff Controls were added to more accurately represent the operation.

1.3.2 Explanation of Operation and Management Requirements

There is no required nutrient sampling for the runoff control sample points. Rather, weekly or quarterly inspections are required and shall be recorded according to the monitoring plan and submitted with the Annual Report.

2 Schedules

2.1 Emergency Response Plan

Required Action	Due Date
Develop Emergency Response Plan: Update the written Emergency Response Plan within 30 days of permit coverage, available to the Department upon request.	06/01/2026

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 submit a proposed monitoring and inspection program within 30 days of the effective date of this permit.	06/01/2026

2.3 Annual Reports

Submit Annual Reports by January 31st 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.	01/31/2027
Submit Annual Report #2: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2028
Submit Annual Report #3: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2029
Submit Annual Report #4: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2030
Submit Annual Report #5: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2031
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed.	

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.	03/31/2027
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.	03/31/2028
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.	03/31/2029
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.	03/31/2030
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.	03/31/2031
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

2.5 Outdoor Lot 1, Calf Hutch Area 1 & 2 - Abandonment

Submit final abandonment documentation outlined in the November 12, 2025 evaluation report [R-2025-0280] for outdoor lot 1, calf hutch area 1, and calf hutch area 2 (sample points 005, 012, 013).

Required Action	Due Date
Complete Abandonment: Complete abandonment as approved by the Department.	05/31/2027

2.6 Outdoor Lot 5 & 6 Runoff Control System - Engineering Evaluation

This schedule item pertains to barn lots 5 and 6 (sample points 018 & 019).

Required Action	Due Date
Complete Engineering Evaluation: Retain a qualified expert to complete an engineering evaluation for barn lot 5 & 6 runoff control systems and report the name of the expert to the Department.	05/31/2027
Written Description of Existing System: Submit a written description of the existing runoff control system 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.)	11/30/2027
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.	05/31/2028
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.	05/31/2029

2.7 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	11/01/2030

2.8 Explanation of Schedules

The following schedule items are standard permit requirements to monitor and fulfill requirements of discharge limitations, and ensure compliance with s. NR243, Wis. Admin. Code, Requirements: Emergency Response Plan, Monitoring and Inspection Program, Annual Reports, Nutrient Management Plan, Submit Permit Reissuance Application.

- An emergency response plan is required to be developed per s. NR 243.13(6)(a) Wis. Admin. Code.
- A monitoring and inspection program is required to be submitted per s. NR 243.19(1) Wis. Admin. Code.
- Annual reports are required to be submitted per s. NR 243.19(3) Wis. Admin. Code.
- Nutrient management plan updates are required to be submitted per s. NR 243.19(3) Wis. Admin. Code.
- A permit reissuance application is required per s. NR 243.12(1)(d) Wis. Admin. Code.

Section 2.5 Outdoor Lot 1, Calf Hutch Area 1 & 2- Abandonment

Abandonment plans are required per NR 243.17(7)(a) Wis. Admin. Code. Submitted timelines referenced in abandonment plans received by the department on November 12, 2025 are reflected in the permit schedule for outdoor lot 1, calf hutch area 1, and calf hutch area 2 (sample points 005, 012, 013).

Section 2.6 Outdoor Lot 5 & 6 Runoff Control System- Engineering Evaluation

An engineering evaluation of outdoor lot 5 and 6 (sample point 18 & 19) is required to satisfy NR 243.12(2)(a)4 Wis. Admin. Code due to the lack of engineering records on file for the feedlots.

Attachments

Farm Overview and Sample Point Map

Evaluation Review for Days of Storage Letter [10/17/2025]

5-year NMP Conditional Approval Letter [11/5/2025]

Return to Compliance Letter [1/8/2026]

Justification Of Any Waivers From Permit Application Requirements

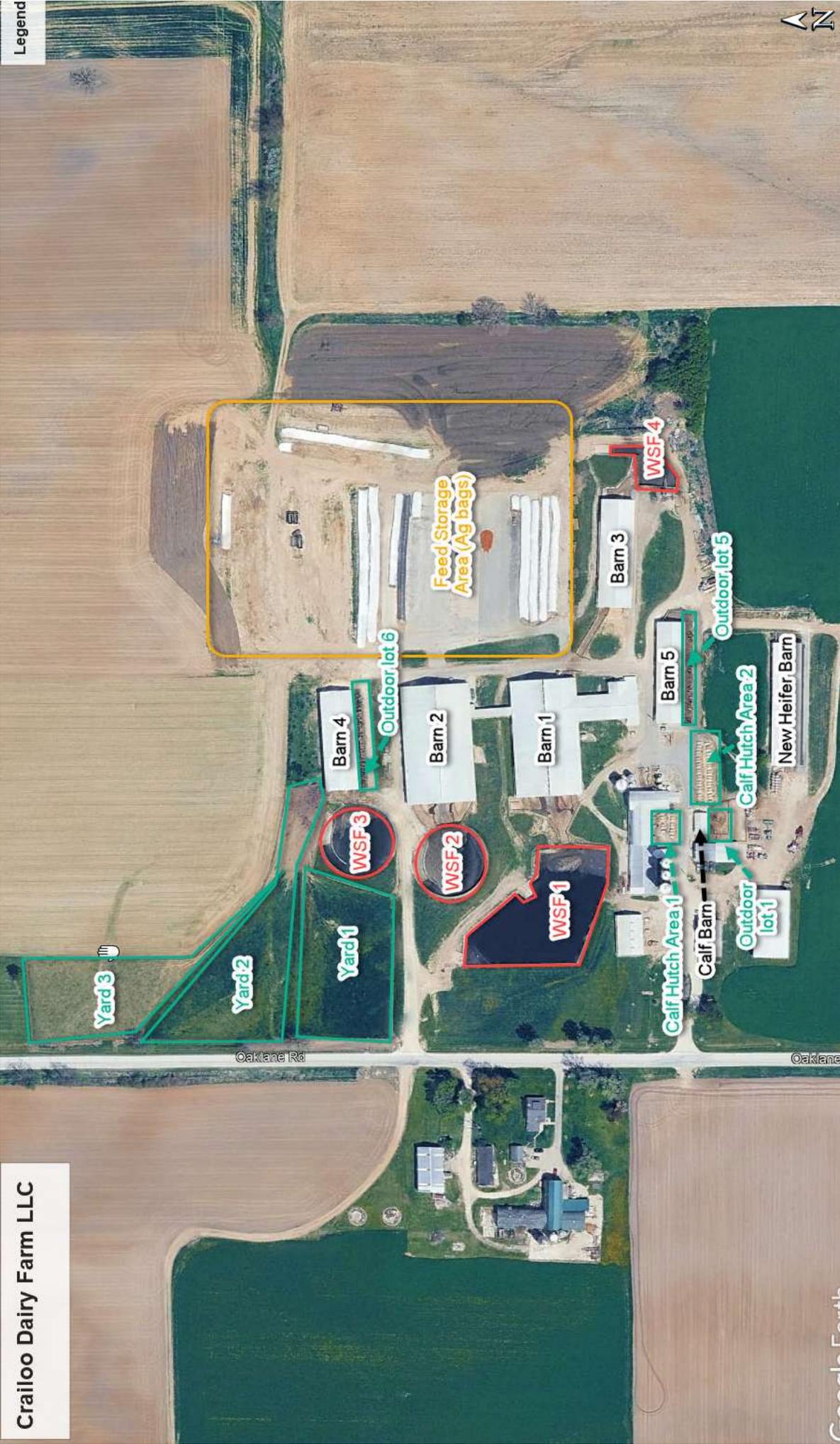
No waivers requested or granted as part of this permit reissuance.

Prepared By: Jean Weaver Agricultural Runoff Management Specialist

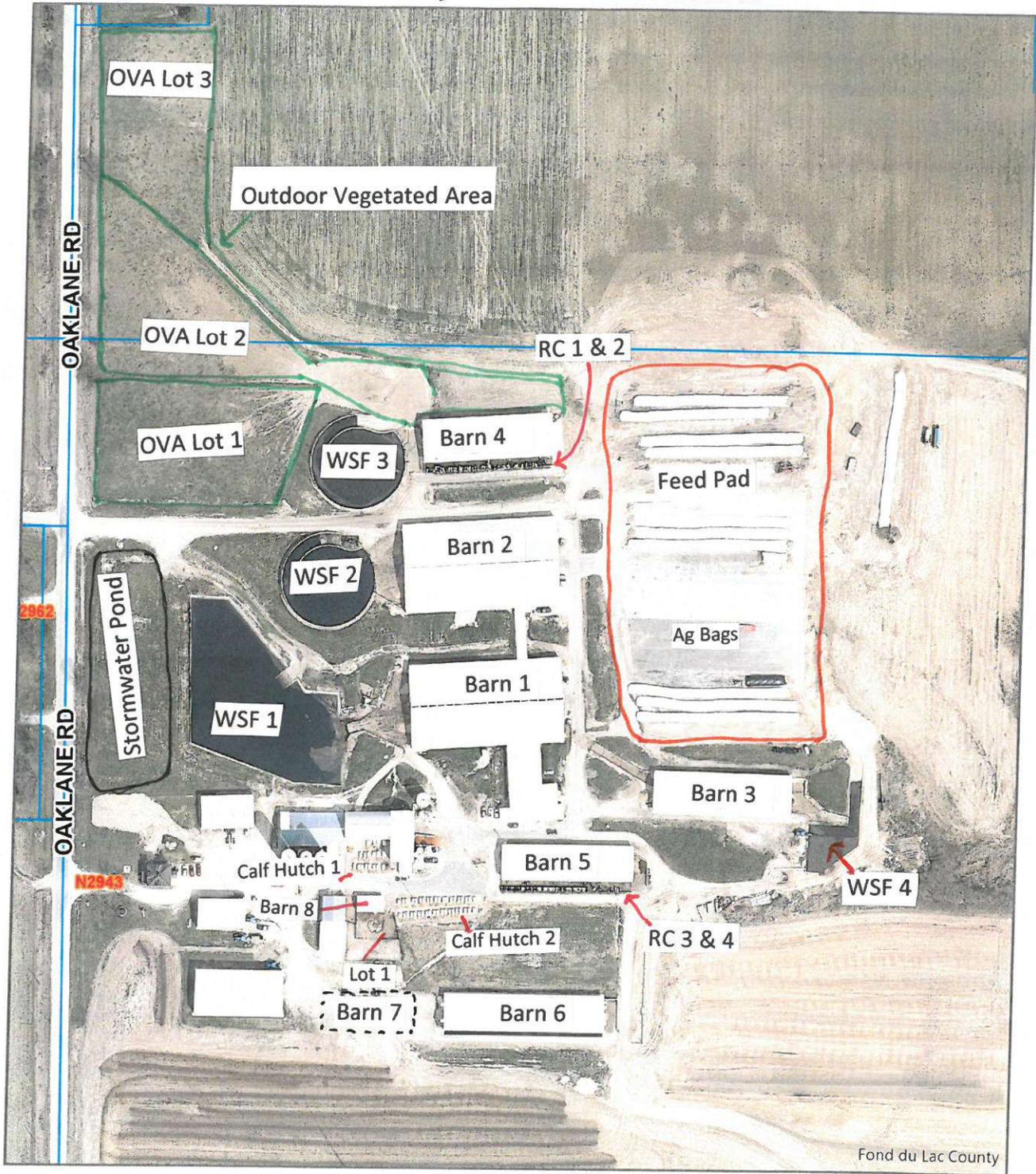
Date: 2/5/2026

Craillou Dairy Farm LLC

Legend



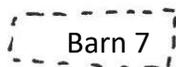
Crailoo Dairy Farmstead Production Area



Disclaimer: Map and parcel data are believed to be accurate, but accuracy is not guaranteed. This is not a legal document and should not be substituted for a title search, appraisal, survey, or for zoning verification.

Map Scale
1 inch = 200 feet
6/9/2025

Notes:



Barn 7 Barn slated for construction in fall of 2025

Barn 8 and associated Lot 1 planned for abandonment after construction of Barn 7. A new calf barn will be rebuilt on this location and the use of the calf hutches will be eliminated. Projected for 2026.



October 17, 2025

FILE REF: R-2025-0167a
 WPDES Permit #: WI-0064882

Rose Van Der Zwan
 Crailoo Dairy Farm LLC
 W6976 County F
 Brownsville, WI 53006

Subject: Amended Days of Storage Review for Crailoo Dairy Farm LLC, SW¼ SW¼ of T14N, R17E, Section 29 in Byron Township, Fond Du Lac County – NO ADDITIONAL ACTION REQUIRED

Dear Ms. Van Der Zwan:

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 Eric Otte, JE Arthur and Associates, Inc on July 8, 2025 with revisions received on September 12, 2025 on behalf of Crailoo Dairy Farm LLC. Additional revisions that removed net precipitation incorrectly included in the hauling logs was received on September 30, 2025 and require an amended days of storage approval letter to document. The original approval letter was submitted on September 16, 2025 and this letter supersedes it.

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 Crailoo Dairy Farm LLC has 216 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 1,196. The liquid waste volumes are based on manure hauling logs for a collection period of 365 days. The hauling logs account for any solid manure stored in the structures during February and March that is hauled as liquid manure. No runoff contributing areas are present on the production area and all WSFs have a concrete bottom for annual cleaning of solid manure accumulated on the bottom.

Waste Storage	Total Vol. from Settled Top to Bottom	Remaining Waste	25yr, 24hr Precip. on Storage	25yr, 24hr Collected Runoff	Freeboard Vol.	Max. Operating Level (MOL) Vol.
WSF1	2,007,886	0	97,851	0	256,938	1,653,097
WSF2	992,907	0	37,810	0	99,282	855,815
WSF3	1,191,488	0	37,810	0	99,282	1,054,396
WSF4	235,861	0	10,540	0	27,676	197,645
Total MOL Vol:						3,760,953
Days of Storage:						216

Liquids Collected/Stored	Annual Gallons
Manure Hauling Log Value (5-Years)	6,361,116
TOTAL:	6,361,116

A proposed expansion to increase Animal Units to 1,568 is proposed as part of the submittal. Under current storage conditions, the farm cannot support this expansion and will be required to submit plans and specifications to construct additional storage before expanding. Should you have any questions, please contact Tony Salituro, DNR Madison office or your regional CAFO Specialist.

NOTICE OF APPEAL RIGHTS

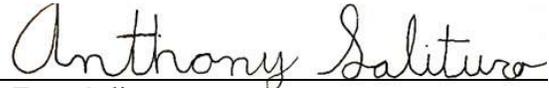
If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to WIS. STAT. §§ 227.52 and 227.53, 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
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November 5, 2025

Fond du Lac County
Approval

Rose Van Der Zwan
Crailoo Dairy Farm LLC
W6976 County F
Brownsville, WI 53006

SUBJECT: Conditional Approval of Crailoo Dairy Farm LLC Nutrient Management Plan, WPDES Permit No. 0064882-03-0

Dear Rose Van Der Zwan:

After completing a review of Crailoo Dairy Farm LLC 2026-2030 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 Crailoo Dairy Farm 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.

FINDINGS OF FACT

The Department confirms that:

1. A current dairy herd size of 1196 animal units (614 milking & dry cows, 374 heifers, and 80 calves). A planned herd size of 1780 animal units (854 milking & dry cows, 414 heifers, 90 calves, and 212 steers) by 2029.
2. Manure generation and spreading records indicate your herd will annually generate approximately 6,360,981 gallons of manure and process wastewater and 2,500 tons of solid manure in the first year of the permit term, and 8,903,581 gallons of manure and process wastewater and 2,600 tons of solid manure by 2029.
3. The use of application restriction options 1, 2, and 5 within surface water quality management areas.
4. The use of phosphorus delivery method P Index.
5. That Crailoo Dairy Farm LLC currently has 1501 acres (925 owned and 576 controlled through contracts, rental agreements or leases, or under manure agreements) of which 1452 are spreadable acres.
6. 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.
7. 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 2026-2030 Crailoo Dairy Farm 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 until updated soil samples can be taken:
 - BB02

If Crailoo Dairy Farm 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 NH₄-N, percent NO₃-N, phosphorus, potassium, and sulfur.
5. If manure sample results have a dry matter (DM) content less than 2.0% and the percent ammonium (NH₄⁺) is greater than 75% of the total N, Crailoo Dairy Farm LLC may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

$$\text{First-Year Available N} = \text{NH}_4\text{-N} + [0.25 \times (\text{Total N} - \text{NH}_4\text{-N})]$$

6. Crailoo Dairy Farm LLC shall record daily manure applications by using the SnapPlus Daily Spreading Log. These forms shall be retained at the farm and provided to the department upon request.
7. Crailoo Dairy Farm 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 the SnapPlus 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. Please note that W soils may not receive manure unless depth to groundwater can be verified.
9. The following field(s) are approved for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure:

• H01	• H05	• LB7 8	• RJ17	• RJ19
• H04	• H15	• LB09	• RJ18	• ST6

10. The following field(s) are approved for winter spreading of solid manure. Emergency applications of liquid manure and frozen liquid manure are prohibited due to the presence of Silurian bedrock:
- B3
 - B4
 - B5
 - D14
 - D15
 - ST1
 - ST2
 - ST3
11. The following field(s) are denied for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure: B6
12. 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.
13. Winter applications of liquid manure shall only occur under emergency situations, after notifying the Department and receiving verbal approval.
14. 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

15. The following sites are approved for non-winter and winter headland stacking of manure with >32% solids:
- HS 1
 - HS 2
 - HS 3
 - HS 4
 - HS 5
 - HS 6
 - HS 7
 - HS 8
 - HS 9

These headland stacking sites are approved for use during February and March, or when ground is not frozen or snow-covered during remainder of the year. These sites are subject to the outlined use guidelines referenced below:

- Prior to headland stacking, manure must be tested to verify the solids content complies with the conditions of this approval.
- Sites may only be used for 1 year out of every 2 years.
- Stacking site area may not exceed $\leq 40,000$ cubic feet.
- Stacking interval not to exceed 8 months.
- No manure less than 32% solids can be stacked here due to the slope range of 2-6%.

16. No headland stacking sites are approved for winter headland stacking with 16-32% solids.

NR243.143/151.075 SILURIAN BEDROCK PERFORMANCE STANDARDS

17. Manure generated by Crailoo Dairy Farm 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.

- B1
- B3
- B4
- B5
- B6
- BERG 4
- C1
- C2
- D01
- D02
- D03
- D04
- D05
- D06
- D07
- D10
- D11A
- D11B
- D12
- D13
- D14
- D15
- H06
- K02
- K03
- K04
- K05
- K06
- LB02
- LB04
- LB05
- SC1
- SM1
- SM2
- ST1
- ST2
- ST3
- ST4
- ST5
- W1
- W2
- W3

MANURE & PROCESS WASTEWATER IRRIGATION

18. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

19. 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.

20. Crailoo Dairy Farm LLC is approved to use book values for future manure application planning, as it represents a more conservative estimate of the nutrient content based on samples available. If manure begins to show higher nutrient content, Crailoo Dairy Farm LLC should adjust planning values accordingly. Please note: It is required to take a minimum number of manures samples to meet permit requirements as follows:

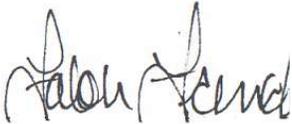
- Solid Manure: One solid sample per source on a quarterly basis when hauling occurs.
- Liquid Manure: Two liquid samples per source on a monthly basis when hauling occurs.

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 local permits, zoning and regulatory requirements.

If you have any questions regarding this approval I can be reached at (608) 228-5265 or Falon.French@Wisconsin.gov.

Sincerely,



Falon French
WDNR CAFO Intake/Nutrient Management Specialist
Wisconsin Department of Natural Resources

cc: Jean Weaver, WDNR Agricultural Runoff Specialist (jeanm.weaver@wisconsin.gov)
Michelle M Scott, WDNR Watershed Field Supervisor (Michelle.Scott@wisconsin.gov)
Erin Hanson, WDNR Acting Agricultural Runoff Section Manager (ErinE.Hanson@wisconsin.gov)
Aaron O'Rourke, WDNR Nutrient Management Program Coordinator (Aaron.Orourke@Wisconsin.gov)
Ashley Scheel, WDNR CAFO Nutrient Management Plan Reviewer (Ashley.Scheel@Wisconsin.gov)
Tony Salituro, WDNR CAFO Engineer (anthony.salituro@wisconsin.gov)
Brad Murry, Fond du Lac County (bradly.murry@fdlco.wi.gov)
Amy Haak, Country Visions Cooperative (amy.haak@cvcoop.com)
File



01/08/2026

Tom Byl/Rose Van der Zwan
Crailoo Dairy Farm LLC
W6976 County Road F
Brownsville, WI 53006

WPDES Permit No.: WI-0064882-02-0

SUBJECT: Return to Compliance- Failure to Adhere to Permit Schedule
Crailoo Dairy Farm LLC, W6976 County Road F, Brownsville

Dear Mr. Byl/Ms. Van der Zwan:

On February 7, 2022, the Department of Natural Resources issued Crailoo Dairy Farm LLC a Notice of Noncompliance (NON) for failing to adhere to the permit schedule of Wisconsin Pollution Discharge Elimination System Permit Number WI-0064882-02-0. The following permit requirements have been satisfied:

Permit Section 2.6 Feed Storage- Engineering Evaluation

- The feed storage area engineering evaluation originally due 01/01/2022 was submitted 01/03/2023. After department review, additional actions were required to complete the evaluations. Further actions were received 11/20/2025 and department approval was granted December 18, 2025.

Permit Section 2.8 Manure Storage Facility- Engineering Evaluation

- The manure storage facility engineering evaluation for waste storage facility 4 originally due 01/01/2022 was submitted 01/03/2023. After department review, additional actions were required to complete the evaluations. Further actions were received 11/20/2025 and department approval was granted December 18, 2025.

Due to the actions taken by Crailoo Dairy Farm, LLC, no further enforcement action related to the NON is required by the department at this time. However, please be advised that the department reserves the right to reconsider its decision if violations occur in the future.

If you have any questions regarding this letter or the enforcement process, please contact me at 920-400-7014.

Sincerely,

Jean Weaver
Agricultural Runoff Management Specialist

cc: Amy Haak, Country Visions Cooperative
Michelle Anhalt, J.E. Arthur
Michelle Scott, DNR
James Salscheider, DNR
Bradly Murry & Eric Redeker, Fond du Lac County