

Permit Fact Sheet

General Information

Permit Number:	WI-0062154-03-0
Permittee Name:	Redtail Ridge Dairy LLC - Site 2
Address:	N8148 Schaefer Rd, Malone, WI 53049
Permit Term:	July 01, 2025 to June 30, 2030
Discharge Location:	N8148 Schaefer Rd. Malone, WI 53049 SW ¼ of the SW ¼ Sec. 24 T16N R18E
Receiving Water:	Unnamed tributaries within the Sheboygan River and De Neveu Creek-Frontal Lake Winnebago Watersheds and groundwaters of the state

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.)	49	0	0	0	
Milking and Dry Cows	2426	2478	0	0	
Heifers (400 lbs. to 800 lbs.)	263	438	0	0	
Heifers (800 lbs. to 1200 lbs.)	424	385	0	0	
Total	3162	2478	0	0	

Facility Description

Redtail Ridge Dairy LLC- Site 2 is a Concentrated Animal Feeding Operation (CAFO) owned and operated by Tyler Thome in the Malone Community of Fond du Lac, Wisconsin. It currently has 3,162 animal units and based on herd size, Redtail Ridge Dairy LLC- Site 2 has approximately 355 days of manure and waste storage. Redtail Ridge Dairy LLC- Site 2 generates approximately 24,000,000 gallons of liquid manure/process wastewater and 500 tons of solid manure annually and currently has 2,384 acres approved in their Nutrient Management Plan, of which 2,225 acres are available for manure application.

Substantial Compliance Determination

Enforcement During Last Permit: None

After a desk top review of all Redtail Ridge Dairy LLC- Site 2's discharge monitoring reports, CMARs, land app reports, compliance schedule items, and a site visit on January 14, 2025, this facility has been found to be in substantial compliance with their current permit. **Compliance determination made by Jean Weaver (WDNR CAFO Specialist) on 5/7/2025.**

Sample Point Designation For Animal Waste		
Sample Point Number	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)	
006	Miscellaneous Solid manure: Sample point (006) 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.	
007	WSF 1: Sample point (007) is for liquid waste storage facility 1 located west of the sand separator building. WSF 1 is a 1,000,000-gallon concrete lined waste storage pond constructed in 2009. Wastewater enters the pond from the sand barn through a gravity pipeline and flows to WSF 2.	
008	WSF 2: Sample point (008) is for liquid waste storage facility 2 located north of WSF 1. WSF 2 is a 9,000,000-gallon clay lined waste storage pond constructed in 2000. Wastewater enters the pond through a gravity pipeline from WSF 1 and flows to waste storage facility 3. WSF 2 will require an engineering evaluation due to the age of the storage facility, see Schedules section for due dates.	
009	WSF 3: Sample point (009) is for liquid waste storage facility 3 located north of WSF 2. WSF 3 is a 14,000,000-gallon clay lined waste storage pond constructed in 2009. Wastewater enters the pond through a gravity pipeline from WSF 2.	
010	WSF 4 (liquids): Sample point (010) is for the leachate collection basin located east of the FSA. The leachate collection basin acts as the feed storage area runoff controls and accepts feed leachate from the FSA. The leachate basin liquid is land applied in accordance with Redtail Ridge Site 2's NMP. No design documents or evaluations of the leachate collection system are on file with the department therefore an engineering evaluation to assess the leachate basin's ability to meet design standards will be required, see Schedules section of the permit for due dates.	
011	WSF 4 (Solids): Sample point 011 is for the leachate collection pad located north of the leachate collection basin at the feed storage area. This WSF accepts feed waste solids that are land applied in accordance with Redtail Ridge Site 2's NMP.	
012	Settled solid Manure: Sample point (012) is for any solid manure removed from the bottom of liquid waste storage facilities. This includes manure-laden sand solids, manure fiber solids, ect. Representative samples shall be taken from each waste storage facility.	
013	Feed Storage Area 1 & Runoff Control System: Sample point (013) is for visual monitoring and inspection of the existing feed storage area and associated runoff control system located on the southeast side of the production area. FSA 1 consists of multiple feed bunkers and a leachate collection basin. The proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program.	
014	Storm Water Runoff Control System: Sample point (014) 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.	
015	Sand Stacking Pad: Sample point 015 is for the sand stacking pad located south of WSF 1. Sand from the sand separator is stacked on the pad to be reused as bedding. The pad was constructed in 2009 and is sloped to allow any liquids to drain directly into WSF 1.	

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 355 days of total waste storage. The permittee must maintain 180 days of storage, unless temporary reductions in required storage are approved by the Department.

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 3,162 animal units (1,733 milking & dry cows, 823 heifers, and 244 calves), it is estimated that approximately 22,598,756 gallons of manure and process wastewater and 493 tons of solid manure will be produced per year. The permittee owns *approximately* 65 acres of cropland and controls 2,319 acres through contracts, rental agreements or leases, or under manure agreements. Given the rotation commonly used by the permittee, 2,324 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: 006- Miscellaneous Solid Manure; 011- WSF 4 (Solids); 012- Settled Solid Manure , and 015- Sand Stacking Pad

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	

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

1.1.1 Changes from Previous Permit

Sample points 006, 011, 012, and 015 were added to account for any solid manure land applied in accordance with Redtail Ridge Dairy LLC- Site 2's Nutrient Management Plan.

1.1.2 Explanation of Operation and Management Requirements

Solid manure is required to be sampled once per quarter that land application occurs. Samples are to be analyzed for the parameters listed in the table above. Land application shall occur in accordance with the operation's approved nutrient management plan. Solid manure storage structures shall be inspected according to the operation's monitoring and inspection program. Inspection findings shall be submitted to the department annually on January 31.

1.2 Sample Point Number: 007- WSF 1; 008- WSF 2; 009- WSF 3; 010- 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	
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	

1.2.1 Changes from Previous Permit

Sample points 007, 008, 009, and 010 were added to account for any liquid manure land applied in accordance with Redtail Ridge Dairy LLC- Site 2's Nutrient Management Plan.

1.2.2 Explanation of Operation and Management Requirements

Liquid manure and process wastewater is required to be sampled twice per calendar month that land application occurs. Samples are to be analyzed for the parameters listed in the table above. Land application shall occur in accordance to the

operation's monitoring and inspection program. Inspection findings shall be submitted to the department annually on January 31.

1.3 Sample Point Number: 013- Feed Storage Area and 014- Storm Water Runoff

1.3.1 Changes from Previous Permit

Sample point 013 and 014 were added to account for any runoff accumulated by the feed storage area or the storm water control system in accordance with their Monitoring and Inspection Program.

1.3.2 Explanation of Operation and Management Requirements

Runoff control systems are required to be inspected in accordance with the operation's monitoring and inspection program. Results shall be submitted to the department annually on January 31.

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.	07/31/2025

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. Use of the department's monitoring and inspection program template is encouraged, but optional.	07/31/2025

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.	

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.	03/31/2026
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.	03/31/2027
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.	03/31/2028
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.	03/31/2029
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.	03/31/2030
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

2.5 Manure Storage Facility 2 - Engineering Evaluation

This schedule item pertains to WSF 2 (sample point 008).

Required Action	Due Date
Retain Expert: Retain a qualified expert to complete an engineering evaluation for Waste Storage Facility 2 and report the name of the expert to the Department.	08/30/2025
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.)	07/30/2026

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.	01/30/2027
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.	01/30/2028

2.6 Runoff Control System - Engineering Evaluation

This schedule item pertains to WSF 4, the leachate collection basin (sample points 010 & 011).

Required Action	Due Date
Complete Engineering Evaluation: Retain a qualified expert to complete an engineering evaluation for the Feed Storage Area runoff control system and report the name of the expert to the Department.	08/30/2025
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.)	02/28/2026
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.	08/30/2027
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.	08/30/2029

2.7 Submit Permit Reissuance Application

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

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. Schedules for the following items have been incorporated into the permit to comply with s. NR 243 WPDES permit conditions:

Section 2.5- Manure Storage Facility 2- Engineering Evaluation (Sample point 008):

In accordance to s. NR 243.16 (2), Wis. Adm. Code, Waste Storage Facility 2 is required to submit an engineering evaluation due to the age of the facility. The WSF 2 was built in 2000, and no other evaluations are on file with the department for the facility.

Section 2.6- Runoff Control System- Engineering Evaluation (Sample point 010 & 011):

In accordance to s. NR 243.16 (2), Wis. Adm. Code, the feed storage area leachate collection basin is required to submit an engineering evaluation to ensure it meets current design standards. The department does not have any construction documents or previous evaluations on file for the leachate collection system.

Attachments

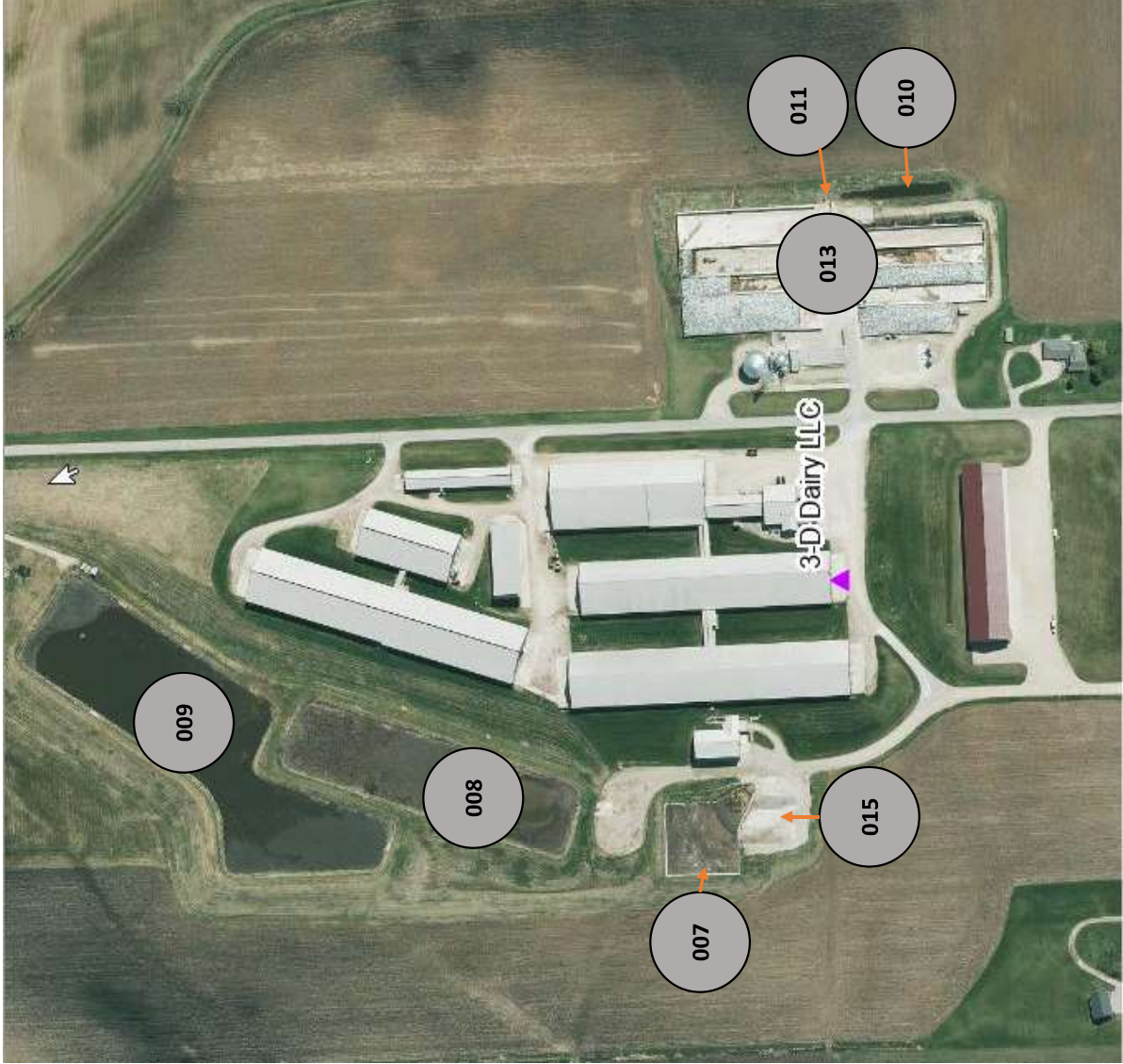
Farm overview and sample point map
Evaluation Review for Days of Storage Approval Letter
5-year NMP Conditional Approval Letter
Public Notice

Prepared By: Jean Weaver Agricultural Runoff Management Specialist

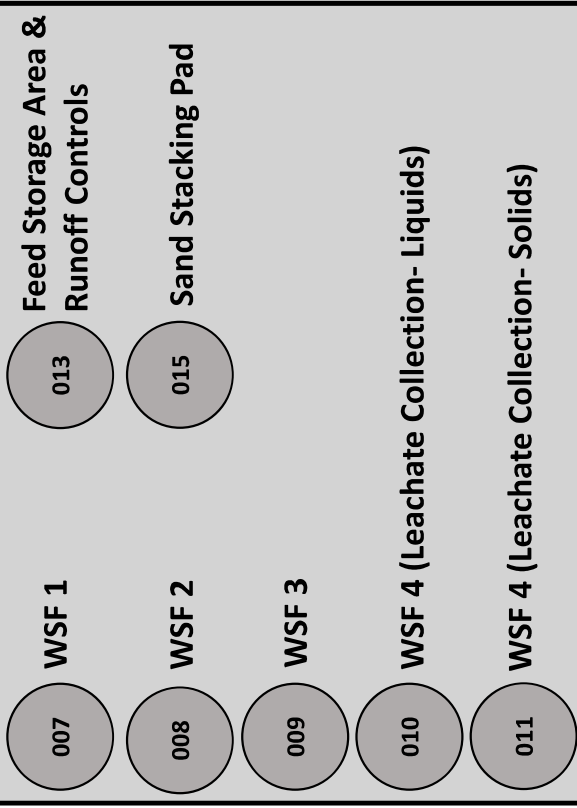
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Redtail Ridge Dairy LLC- Site 2

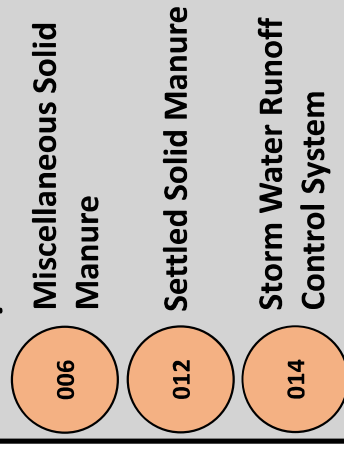




Sample Points – Production Area



Sample Points – Facility Wide





December 30, 2024

FILE REF: R-2024-0269
WPDES Permit #: WI-0062154

Tyler Thome
Redtail Ridge Dairy LLC
W3367 Ledge Road
Malone, WI 53049

Subject: Days of Storage Review for 3D Dairy LLC/Redtail Ridge Dairy LLC Site 2 T16N, R18E,
Section 24 in Taycheedah Township, Fond Du Lac County – NO ADDITIONAL ACTION REQUIRED

Dear Mr. Thome:

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 by Tyler Thome, Redtail Ridge Dairy LLC on September 30, 2024 with revisions received on December 19, 2024.

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 Redtail Ridge Dairy LLC has 355 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 3,162. The liquid waste volumes are based on manure hauling logs for a collection period of 365 days. No runoff from the feed storage area is captured in permanent storage. All WSFs can be fully emptied and no solids were found remaining in the bottom when last emptied.

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.
WSF1	1,319,808	0	70,040	0	175,099	1,074,669
WSF2	9,169,702	0	299,547	0	748,868	8,121,287
WSF3	14,880,451	0	397,311	0	993,277	13,489,863
Total MOL Vol:						22,685,819
Days of Storage:						355

Annual Manure and Process Wastewater Application Volumes			
Year	Gallons Applied	Avg. Yearly AUs	Gallons/AU
2024	19,309,001	2,675	7,218
2023	16,778,386	2,620	6,404
2022	17,289,194	2,457	7,037
2021	20,784,413	2,389	8,700
2020	18,319,296	2,433	7,530
Average Volume/AU			7,378
Average Annual Volume for Current AUs			23,328,318

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

NOTICE OF APPEAL RIGHTS

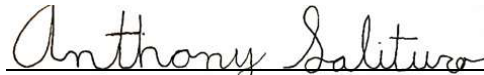
If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to WIS. STAT. §§ 227.52 and 227.53,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

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March 17, 2025

Fond Du Lac County
Approval

Tyler Thome
Redtail Ridge Site 2
N8148 Schaefer Rd.
Malone, WI 53049

SUBJECT: Conditional Approval of Redtail Ridge Site 2 Nutrient Management Plan, WPDES
Permit No. 0062154-03-0

Dear Mr. Thome:

After completing a review of Redtail Ridge Site 2 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 Redtail Ridge Site 2 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 3,162 animal units (1,733 milking & dry cows, 823 heifers, and 244 calves). A planned herd size of 3,376 animal units (1,850 milking & dry cows, 875 heifers, and 280 calves) by 2029
2. Manure generation and spreading records indicate your herd will annually generate approximately 22,598,756 gallons of manure and process wastewater and 493 tons of solid manure in the first year of the permit term. After the proposed expansion your herd will annually generate approximately 24,044,375 gallons of manure and process wastewater and 573 tons of solid manure.
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 Redtail Ridge Site 2 currently has 2,384 acres (65 owned and 2,319 controlled through contracts, rental agreements or leases, or under manure agreements) of which 2,324 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 2025-2029 Redtail Ridge Site 2 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:
 - CS7 (outdated soil tests)

If Redtail Ridge Site 2 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 $\text{NH}_4\text{-N}$, percent $\text{NO}_3\text{-N}$, 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, Redtail Ridge Site 2 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. Redtail Ridge Site 2 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. Redtail Ridge Site 2 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 SNAP Plus form 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:

JDD1

JDD2

JDD9

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.

MANURE & PROCESS WASTEWATER IRRIGATION

14. Irrigation of manure or process wastewater is prohibited.

NR243.143/151.075 SILURIAN BEDROCK PERFORMANCE STANDARDS

15. Manure generated by Redtail Ridge Site 2 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. Any fields not on this list that are identified as <20ft to Silurian bedrock must abide by the same rules:

CS7	JLK2	JLK7
DJS1	JLK3	JLK8
JDD9	JLK4	MD1
JLK1	JLK5	WD10
JLK10	JLK6	WD8

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 local permits, zoning and regulatory requirements.

If you have any questions regarding this approval I can be reached at 715-214-5503 or Aaron.Orourke@Wisconsin.gov.

Sincerely,

A handwritten signature in black ink, appearing to be 'AOR', written over a light blue horizontal line.

Aaron O'Rourke
WDNR Nutrient Management Program Coordinator
Wisconsin Department of Natural Resources

cc: Jean Weaver, WDNR Agricultural Runoff Specialist (Jeanm.Weaver@Wisconsin.gov)
Michelle Scott, WDNR Watershed Field Supervisor (Michelle.Scott@Wisconsin.gov)
Chris Clayton, WDNR Ag Runoff Section Chief (Christopherr.Clayton@Wisconsin.gov)
Ashley Scheel, WDNR CAFO NMP Reviewer (Ashley.Scheel@Wisconsin.gov)
Falon French, WDNR Intake Specialist (Falon.French@Wisconsin.gov)
Justin Loehrke, Fond du Lac County (justin.loehrke@fdlco.wi.gov)
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