Permit Fact Sheet

General Information

Permit Number	WI-0065650-02-0
Permittee Name and Address	DenMar Acres LLC 6489 County Road W, Greenleaf, WI 54126
Permitted Facility Name and Address	DenMar Acres LLC 6489 Cty Hwy W Greenleaf
Permit Term	June 01, 2026 to May 31, 2031
Discharge Location	Unnamed tributaries within the Branch River Watershed and groundwaters of the state
Discharge Type	Existing

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	1645	1680	0	0	
Total	1645	1680	0	0	

Facility Description

Denmar Acres LLC is a Concentrated Animal Feeding Operation (CAFO) owned and operated by Dennis, Jesse, and Jeff Zirbel. It currently has 1,716 animal units and based on current herd size, Denmar Acres has approximately 180 days of liquid waste storage. Denmar Acres generates 16,200,000 gallons of liquid manure and 0 tons of solid waste annually. Denmar Acres has a total of 1,978 acres available for land application of manure and process wastewater. Of this acreage, 1,956 are spreadable, 1,040 are owned, and 929 are rented or controlled through contacts.

Substantial Compliance Determination

Enforcement During Last Permit: None

After a desktop review of all compliance schedule items, and a site visit on 04/24/2025, 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 1 - Sample Point 001 is for liquid waste storage facility 1 (WSF 1). WSF 1 is a liquid-tight concrete lined storage located on the east side of the production area. The facility has a capacity of 8,026,914 gallons and was constructed in 2014. This storage accepts manure and process wastewater from the adjacent freestall barns as well as the runoff collection system for the feed storage area. WSF 1 was last evaluated in 2018 and met permit requirements.	
002	WSF Solids - Sample Point 002 is for manure solids land applied from WSF 1. This facility is described in sample point 001.	
003	Misc. Solids - Sample Point 003 is for miscellaneous solids manure directly land applied and not stored in a waste storage facility. This includes any calf hutch manure, maternity pen bed pack, heifer bed pack, steer manure, etc. Representative samples shall be taken for each manure source type.	
004	Feed Storage Runoff - Sample Point 004 is for visual monitoring and inspection of the feed storage area and associated runoff control system. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program.	
005	Stormwater - Sample Point 005 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.	

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 180 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 1,716 animal units (1,200 milking & dry cows), it is estimated that approximately 16,200,000 gallons of manure and process wastewater will be produced per year. The permittee owns *approximately* 1,049 acres of cropland and rents about 929. Given the rotation commonly used by the permittee, 1,956 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 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 (≥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 1

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	

1.1.1 Changes from Previous Permit

Sample point language was updated to more accurately describe the production area.

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: 002- WSF Solids; 003- 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

Sample point language was updated to more accurately describe the production area.

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: 004- Feed Storage Runoff and 005- Stormwater

1.3.1 Changes from Previous Permit

No changes.

1.3.2 Explanation of Operation and Management Requirements

The 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: Develop a written Emergency Response Plan within 30 days of permit coverage, available to the Department upon request.	07/01/2026

Explanation of Schedules

An emergency response plan is required to be developed per s. NR 243.13(6)(a) Wis. Admin. Code.

2.2 Monitoring & Inspection Program

Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the Monitoring and Sampling Requirements subsection, the permittee shall submit a proposed monitoring and inspection program within 30 days of the effective date of this permit.	07/01/2026

Explanation of Schedules

A monitoring and inspection program is required to be submitted per s. NR 243.19(1) Wis. Admin. Code.

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.	

Explanation of Schedules

Annual reports are required to be submitted per s. NR 243.19(3) Wis. Admin. Code.

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	03/31/2027

previous calendar or crop year, consistent with the requirements of department for 3400-025D.	
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.	

Explanation of Schedules

Nutrient management plan updates are required to be submitted per s. NR 243.19(3)Wis. Admin. Code.

2.5 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	12/01/2030

Explanation of Schedules

A permit reissuance application is required per s. NR 243.12(1)(d) Wis. Admin. Code.

Other Comments

N/A

Attachments

Plan Approval Letter(s)

- Nutrient Management Plan Conditional Approval – December 1, 2025
- Days of Storage Calculations – October 10, 2025
- Reissuance Inspection Report – April 24, 2025

Justification Of Any Waivers From Permit Application Requirements

No waivers requested or granted as part of this permit reissuance

Prepared By: Holly Stegemann Agricultural Runoff Management Specialist Date: 03/09/2026

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

Tony Evers, Governor
Karen Hyun, Ph.D., Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
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December 1st, 2025

Brown County
Approval

Jeff Zirbel
DenMar Acres LLC
6489 County Road W
Greenleaf, WI 54126

SUBJECT: Conditional Approval of DenMar Acres LLC Nutrient Management Plan, WPDES Permit No. 0065650-02-0

Dear Jeff Zirbel:

After completing a review of DenMar Acres 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 DenMar Acres 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 1,716 animal units (1,200 milking & dry cows). Currently there are no planned expansions in the next permit term.
2. Manure generation and spreading records indicate your herd will annually generate approximately 16,200,000 gallons of manure and process wastewater and 0 tons of solid manure in the first year of the permit term.
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 DenMar Acres LLC currently has 1,978 acres (1,049 owned and 929 controlled through contracts, rental agreements or leases, or under manure agreements) of which 1,956 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 DenMar Acres 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 have also been approved to receive industrial, municipal, or septage waste:

Field ID:	Other Permittee Name:	Other Permittee Site ID-Field	DNR #:
CV-N	NLC ENERGY DENMARK LL	VK33-2	115696
CV-N	NLC ENERGY DENMARK LL	VK34-2	115697
DH1	NLC ENERGY DENMARK LL	DH7-1	115718
DH2	NLC ENERGY DENMARK LL	DH18-1	116072
KS1	NLC ENERGY DENMARK LL	DM8-1	116014
KS1	NLC ENERGY DENMARK LL	KS7-1	116070
TK1	NLC ENERGY DENMARK LL	LD17-3	116018
TK2-4	NLC ENERGY DENMARK LL	LD17-1	116016
TK2-4	NLC ENERGY DENMARK LL	LD17-2	116017

   Prior to any manure applications on these fields DenMar Acres LLC shall contact the entities listed above to obtain recent spreading records and make the necessary adjustments to the planned manure application rates. At the end of each year DenMar Acres LLC shall contact each entity listed above to obtain spreading records from the previous year so that they can be properly tracked in the NMP. Please Note: DenMar Acres LLC is responsible for obtaining nutrient content values for all other wastes spread on any field in their NMP.

3. The following fields are prohibited from receiving applications of manure or process wastewater:
   - CV-N (expired soil test)
   - CV-S (expired soil test)
   - GL1 (expired soil test)
   - GL2 (expired soil test)
   - GL3 (expired soil test)
   - JL1 (expired soil test)
   - RL30 (expired soil test)
   - SFA Dad 1 (expired soil test)
   - SFA Dad 2 (expired soil test)

   If DenMar Acres 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.

4. 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.

5. 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.

6. 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, DenMar Acres LLC may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

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

7. DenMar Acres 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.

8. DenMar Acres 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 3200-123.

WINTER SPREADING

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

10. The following field(s) are approved for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure:
    - DH1 - DH2 - H1 - MK2

11. 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.

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

13. 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.

MANURE & PROCESS WASTEWATER IRRIGATION

14. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

15. 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)
Aaron O'Rourke, WDNR Nutrient Management Program Coordinator (aaron.orourke@Wisconsin.gov)
Falon French, WDNR Intake Specialist (falon.french@Wisconsin.gov)
Nick Peltier, Brown County (nick.peltier@browncountywi.gov)
Shawn Eckstein, Eckstein Agronomics, LLC (ecksteinag@tm.net)
File

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October 10, 2025

FILE REF: R-2025-0227
WPDES Permit #: WI-0065650

Jeremy Zirbel
DenMar Acres LLC
6489 County Road W
Greenleaf, WI 54126

Subject: Days of Storage Review for DenMar Acres LLCSW¼ of T22N, R21E, Section 31 in Glenmore Township, Brown County – NO ADDITIONAL ACTION REQUIRED

Dear Jeremy Zirbel:

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 August 31st, 2025 on behalf of DenMar Acres 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 DenMar Acres LLC has 180 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 1,716. The liquid waste volumes are based on the NRCS spreadsheet and other estimated or calculated values for a collection period of 365 days. All runoff up to the 25-year 24-hour storm is stored in permanent waste storage facility, WSF1.

Total Liquid Waste Storage Capacity (gallons)						
Waste Storage	Total Vol. from Settled Top to Bottom	-Solids Storage	-25-yr, 24-hr Precip. on Storage	25-yr, 24-hr Collected Runoff	Freeboard Vol.	Max. Operating Level (MOL) Vol.
#1	9,142,275		252,079	185,740	707,511	7,996,945
					Total MOL Vol:	7,996,945
					Days of Storage:	**180**

Total Annual Liquid Waste Volume (NRCS Table Values)	
Liquids Collected/Stored	Annual Gallons
Manure and Bedding	9,822,849
Parlor Wastewater	3,485,400
Feed Storage Leachate	149,610
Feed Storage Runoff Collected	1,472,857
Net Precipitation on Storage Surface(s)	1,261,591
TOTAL:	16,192,307

Should you have any questions, please contact Tabby Feller, 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

Ariana Somma
CAFO Review Engineer Intern
Watershed Management Program

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Matt Woodrow; DATCP
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May 7, 2025

Jeff Zirbel
Denmar Acres
6589 County Road W
Greenleaf, WI 54126

WPDES Permit No. WI-00-065650-01-0
Brown County

Subject: WPDES Permit Walkover Inspection Report

Dear Mr. Zirbel:

On April 24, 2025, the Department of Natural Resources conducted a permit reissuance walkover inspection of Denmar Acres. Results and photos are included in the enclosed report.

Denmar Acres' current WPDES permit will expire February 28, 2026. A permit reissuance application is due September 1, 2025.

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
Agricultural Runoff Management Specialist

Enclosure: Denmar Acres Mid-Permit Inspection Report

Electronic CC:
Nick Peltier - Brown County LWD
Shawn Eckstein - Eckstein Agronomics
Joe Baeten - DNR

CAFO Compliance Report (05/07/2025)

Inspection Date: 04/24/2025

Inspection Type: Permit Reissuance

Operation Name: Denmar Acres

WPDES Permit No. WI-0065650-01-0

Operation Address: 6489 County Road W, Greenleaf, WI 54126

On-Site Representative(s): Jeff Zirbel, Owner/Operator

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

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On April 24, 2025, Stegemann met with Zirbel to conduct a permit reissuance inspection of Denmar Acres. All facilities under permit coverage were inspected. No precipitation had fallen prior to inspection, weather was cloudy and in the 70s. Zirbel discussed plans are being developed for construction a new rotary parlor west of the existing parlor.

Figure 1. Aerial overview of Denmar Acres. Pink arrows indicate manure transfer lines. Orange arrows indicate approximate contaminated runoff flow paths. Blue lines indicate Branch River. VTA has been abandoned.

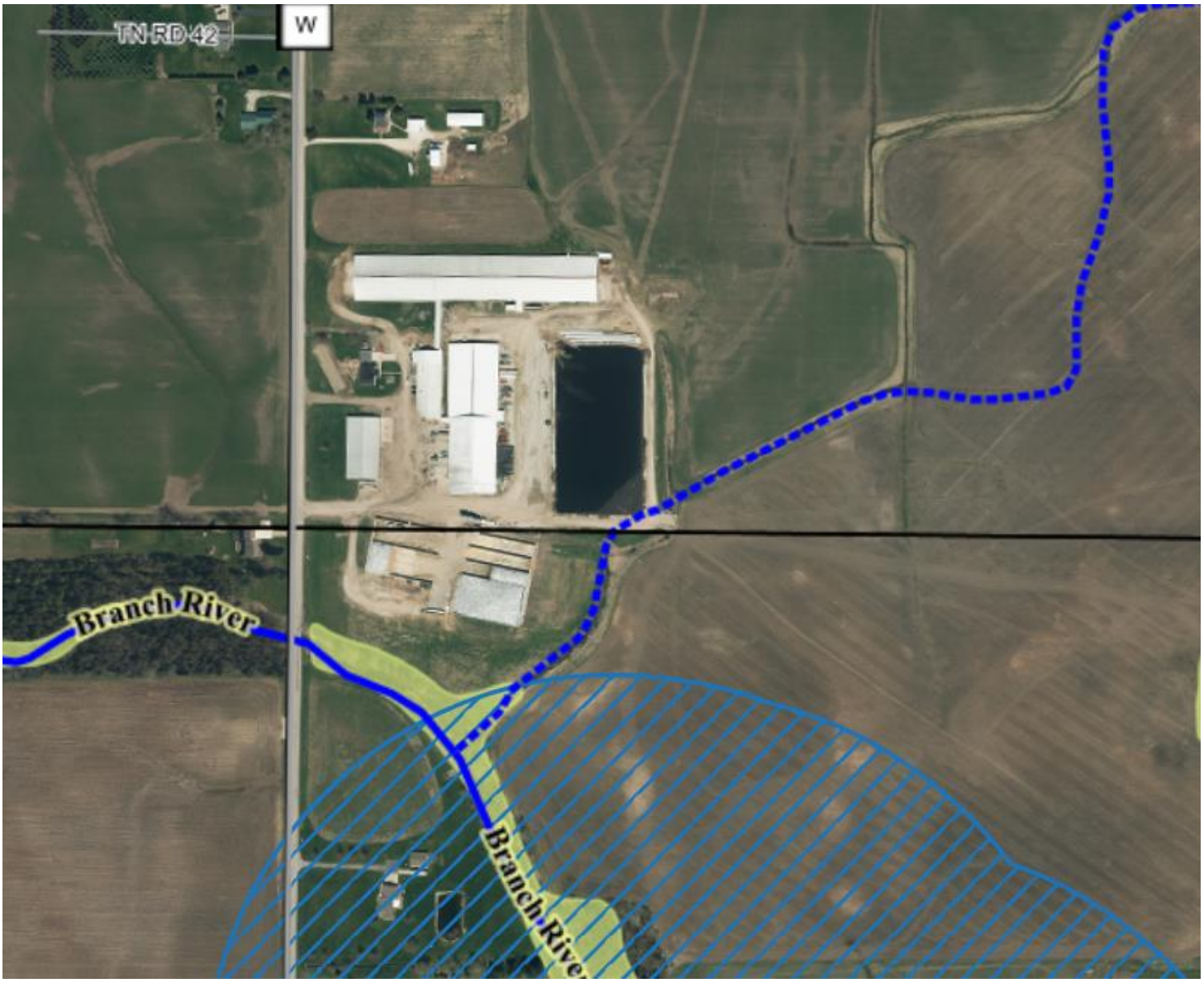

Figure 2. Aerial overview of Denmar Acres in relation to surface water features. Green areas represent designated wetlands. Image obtained from SNAP Maps v.18.

SITE OBSERVATIONS

Feedlot Runoff
Denmar Acres does not utilize any feed lots or outdoor areas.

Calf Hutch Areas
Denmar Acres does not utilize calf hutch areas.

Waste Storage Facilities
All manure and process wastewater is stored in one waste storage facility on site. Denmar Acres utilizes sand for cattle bedding. Solid manure and bed pack are stacked on the ramp of WSF 1 with runoff draining into WSF1.

WSF1 is a concrete lined storage constructed in 2014. WSF 1 has a maximum operating level of 8,026,914 gallons. At the time of inspection, waste storage facility 1 had permanent markers and safety fencing in place.

Solid and liquid waste storage facilities are managed to not have current or past indicators of discharges (includes headland stacking sites). Solid and liquid waste storage structures are well-maintained, in good repair, and in compliance with permit requirements. Liquid waste storage facilities have permanent markers installed.

Process Wastewater (other than feed storage area leachate/runoff)
Waste from the milking parlor is stored in WSF1. Process wastewater sources (milking center, wash water, etc.) are managed to not have current or past indicators of discharges.

Feed Storage Area Runoff
All feed is kept under plastic in concrete bunkers on the south side of the production site. The concrete is pitched to convey runoff north and then east towards a designated collection tank that is then pumped to WSF 1. Upgrades to the feed storage area runoff collection system were completed in 2024 (R-2023-0162) which included abandonment of the vegetated treatment area for 100% collection.

Feed storage areas and associated process wastewater (leachate, runoff) are managed to not have current or past indicators of discharges. Feed storage areas and runoff control systems are well-maintained, in good repair.

Animal Mortality Disposal
Mortalities are temporarily placed north of WSF1 prior to pick up by Sandy Bay. Animal mortalities are managed to not have current or past indicators of discharges.

Ancillary Service Areas
Barn gutters and culverts are in place to divert clean water from coming into contact with manure sources. Preventative maintenance actions and visual inspections are occurring to minimize pollutant discharges from ancillary service and storage areas.

Unnamed tributary east of the waste storage facility and feed storage area was clear in color and free of any feed/solids.

RECORDS REVIEW

The permittee has current WPDES Permit and Nutrient Management Plan onsite.
The permittee provided complete production site inspection records that are required to be retained.
The permittee provided adequate documentation that the facility has a minimum of 180 days of liquid manure storage capacity.
The permittee provided land application records to demonstrate compliance with nutrient management plan requirements.
The permittee has copies of their emergency response and monitoring and inspection plans onsite.
The permittee is up to date on required reporting and actions as specified in the Schedules section of permit.

SUMMARY

Substantial Compliance
The permittee is in substantial compliance with the permit.

Areas of Concern
None

Permit Violations
None

Action Items
None

Items for Next Permit Term

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)
- 3400-025B form (Nutrient Management Plan Checklist)
- 3400-025C form (Reviewable Facilities of Systems Checklist)
- A soil survey map of the dairy's production area
- 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 (none where discussed during the inspection)

Photo #:	986
Date/Time of Photo:	04/24/2025 10:21
Photo By:	Stegemann
Photo Location:	WSF 1

Photo Description:

View of WSF 1, looking north.

Photo #:	987
Date/Time of Photo:	04/24/2025 10:21
Photo By:	Stegemann
Photo Location:	WSF 1

Photo Description:

View of WSF 1, looking east.

Photo #:	989
Date/Time of Photo:	04/24/2025 10:24
Photo By:	Stegemann
Photo Location:	WSF 1

Photo Description:

View of WSF 1, looking southwest.

Photo #:	990
Date/Time of Photo:	04/24/2025 10:24
Photo By:	Stegemann
Photo Location:	WSF 1

Photo Description:

View of WSF 1, looking southwest.

Photo #:	985
Date/Time of Photo:	04/24/2025 10:20
Photo By:	Stegemann
Photo Location:	WSF 1

Photo Description:

View of outlet from feed storage area to WSF 1, looking northeast.

Photo #:	973
Date/Time of Photo:	04/24/2025 10:15
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of west feed storage area wall with perimeter tile line, looking south.

Photo #:	976
Date/Time of Photo:	04/24/2025 10:18
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of feed storage area, looking east.

Photo #:	978
Date/Time of Photo:	04/24/2025 10:18
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of feed storage area, looking south. Arrows indicate approximate runoff flow paths.

Photo #:	981
Date/Time of Photo:	04/24/2025 10:19
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of feed storage area runoff collection, looking east. Arrow indicates approximate runoff flow path.

Photo #:	982
Date/Time of Photo:	04/24/2025 10:20
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of feed storage area runoff collection tanks and pump. Arrow indicates approximate runoff flow path.

Photo #:	984
Date/Time of Photo:	04/24/2025 10:20
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of feed storage area runoff collection tanks and pump, looking west. Arrow indicates approximate runoff flow path.

Photo #:	992
Date/Time of Photo:	04/24/2025 10:25
Photo By:	Stegemann
Photo Location:	Stormwater inlet

Photo Description:

View of stormwater inlet located north of WSF 1, looking north. Arrow indicates approximate stormwater flow path.

Photo #:	993
Date/Time of Photo:	04/24/2025 10:26
Photo By:	Stegemann
Photo Location:	Stormwater inlet

Photo Description:

View of roof runoff flow path carrying clean sand, looking west. Arrow indicates approximate stormwater flow path.

Photo #:	968
Date/Time of Photo:	04/24/2025 9:57
Photo By:	Stegemann
Photo Location:	Office

Photo Description:

View of up to date CAFO calendar.