

Permit Fact Sheet

General Information

Permit Number	WI-0065161-03-0
Permittee Name and Address	Hornstead Dairy W397 Man-Cal Road, Brillion, WI 54110
Permitted Facility Name and Address	Hornstead Dairy W397 Man-Cal Rd Brillion
Permit Term	December 01, 2026 to November 30, 2031
Discharge Location	Unnamed tributaries to the East River Watershed, groundwaters 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.)	50	0	0	0	
Milking and Dry Cows	3156	3223	0	0	
Heifers (400 lbs. to 800 lbs.)	365	609	0	0	
Heifers (800 lbs. to 1200 lbs.)	838	762	0	0	
Total	4409	3223	0	0	

Facility Description

Hornstead Dairy LLC is a Concentrated Animal Feeding Operation (CAFO) owned and operated by Brian Horn. It currently has 4,409 animal units and based on current herd size, Hornstead Dairy has approximately 216 days of liquid waste storage and 59 days of solid waste storage. Hornstead Dairy generates 31,914,000 gallons of liquid manure and 1,000 tons of solid waste annually and currently has 4,794 acres, of which 4,447 are spreadable acres.

Substantial Compliance Determination

Enforcement During Last Permit: None.

After a desk top review of all compliance schedule items and a site visit on March 10, 2026, 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) located at the main site. WSF 1 is a two-celled storage, the west cell is liquid-tight concrete lined and the east cell is earthen lined, located on the south side of the production site. The facility has a capacity of 11,929,519 gallons and was modified in 2020. This storage accepts manure and process wastewater from the parlor and adjacent freestall barns. WSF 1 was last evaluated in 2015 and met permit requirements.	
002	WSF Solids: Sample point 002 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.	
003	Miscellaneous Solids: Sample Point 003 is for any miscellaneous solid manure directly land applied and not stored in a waste storage facility. This includes calf hutch manure, maternity bed pack, heifer bedpack, solids from the manure processing building, waste sand, and any solids removed from a digester. Representative samples shall be taken for each manure source type.	
004	WSF 3: Sample point 004 is for liquid waste storage facility 3 (WSF 3) located at the CTH PP site. WSF 3 is a concrete lined storage located on the northwest side of the production site. The facility has a capacity of 5,159,168 gallons and was constructed in 2015. This storage accepts manure and process wastewater from the adjacent barn and outdoor lots.	
007	Headland Stacking: Sample point 007 is for solid manure land applied from department approved headland stacking sites. Representative samples must be taken prior to land application. Stacks are defined as part of the production area and therefore subject to the production area discharge limitations of this permit. Weekly inspections of stack runoff controls are required and shall be recorded according to the monitoring and inspection program.	
008	Calf Hutch Area: Sample point 008 is for visual monitoring and inspection of the calf hutch areas. Hutches are bedded in straw on a concrete base. Proper operation and maintenance is required. Weekly inspections are required and shall be recorded according to monitoring program.	
009	Feed Storage Area: Sample point 009 is for visual monitoring and inspection of the feed storage area and associated runoff control system. Leachate and runoff is collected and pump to either the vegetated treatment area or WSF 2. Weekly inspections are required and shall be recorded according to monitoring program.	
010	Concrete lots: Sample Point 010 is for visual monitoring and inspection of the concrete feedlots at the CTH PP Site. Proper operation and maintenance is required. Weekly inspections are required and shall be recorded according to monitoring program.	
011	Stormwater: Sample point 011 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 to the stormwater pond. 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.	

Sample Point Designation For Animal Waste		
Sample Point Number	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)	
013	WSF 2: Sample point 013 is for liquid waste storage facility 2 (WSF 2) located at the main site. WSF 2 is a earthen lined storage located west of the feed storage area. The facility has a capacity of 459,981 gallons and was constructed in 2015. This storage accepts manure and process wastewater from the feed storage area.	

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 4,409.2 animal units (2,254 milking & dry cows, 1,371 heifers, and 250 calves), it is estimated that approximately 31,914,000 gallons of manure and process wastewater will be produced per year. The permittee owns *approximately* 860 acres of cropland and rents about 3,934. Given the rotation commonly used by the permittee, 4,447 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 1; 004- WSF 3, and 013- 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	
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 reflect the production site.

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- Miscellaneous Solids; 007- Headland Stacking

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 points 005 and 006 were removed and included in sample points 002 and 003 respectively. Sample point language was updated to more accurately reflect the production site.

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: 008- Calf Hutch Area; 009- Feed Storage Area; 010- Concrete Lots, and 011- Stormwater

1.3.1 Changes from Previous Permit

Sample point language was updated to more accurately reflect the production site.

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
Emergency Response Plan: Update the written Emergency Response Plan within 30 days of permit coverage, available to the Department upon request.	01/01/2027

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.	01/01/2027

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 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.	

Explanation of Schedules

Annual reports 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.	06/01/2031

Explanation of Schedules

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

Attachments

Plan Approval Letter(s)

- Nutrient Management Plan Conditional Approval 09/01/2026
- Days of Storage No Further Actions Letter 08/25/2026
- Reissuance Inspection Report 03/10/2026

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: 09/17/2026



September 1st, 2026

Calumet County
Approval

Brian Horn
Hornstead Dairy
W391 Man-Cal Rd
Brillion, WI 54110

SUBJECT: Conditional Approval of Hornstead Dairy Nutrient Management Plan, WPDES Permit
No. 0065161-03-0

Dear Brian Horn:

After completing a review of Hornstead Dairy 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 Hornstead Dairy 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 4,409.2 animal units (2,254 milking & dry cows, 1,371 heifers, and 250 calves).
2. Manure generation and spreading records indicate your herd will annually generate approximately 31,914,000 gallons of manure and process wastewater and 1,000 tons of solid manure in the first year of the permit term.
3. The use of application restriction options 1, 2, & 5 within surface water quality management areas.
4. The use of phosphorus delivery method P Index.
5. That Hornstead Dairy currently has 4,794 acres (860 owned and 3,934 controlled through contracts, rental agreements or leases, or under manure agreements) of which 4,447 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 Hornstead Dairy 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 Field ID-Field ID:	DNR #:
MS21	FOREST JUNCTION SANITARY DISTRICT WWTF	CA12-1	108304
MS21A	FOREST JUNCTION SANITARY DISTRICT WWTF	CA12-1	108304
MS24	FOREST JUNCTION SANITARY DISTRICT WWTF	CA12-1	108304
MS24	FOREST JUNCTION SANITARY DISTRICT WWTF	CA12-3	108307
MS25	FOREST JUNCTION SANITARY DISTRICT WWTF	CA12-1	108304
MS25	FOREST JUNCTION SANITARY DISTRICT WWTF	CA12-2	108305
MS26	FOREST JUNCTION SANITARY DISTRICT WWTF	CA12-2	108305
MS28	FOREST JUNCTION SANITARY DISTRICT WWTF	CA12-2	108305

Prior to any manure applications on these fields Hornstead Dairy 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 Hornstead Dairy 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: Hornstead Dairy 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:
- TB1 (default soil test) - TB2 (default soil test) - JG4 (>200 ppm P)

If Hornstead Dairy 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 NH₄-N, percent NO₃-N, phosphorus, potassium, and sulfur.

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

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

7. Hornstead Dairy shall record daily manure applications by using the 'Daily Spreading Log' generated by Snap Plus. These forms shall be retained at the farm and provided to the department upon request.
8. Hornstead Dairy 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 'CAFO Annual Spreading Reports' generated by Snap Plus.

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:
- | | | |
|--------|----------|--------|
| - 4 | - B1 | - B3 |
| - JG1 | - JL 1-2 | - MS1 |
| - MS3 | - PKS 1 | - SF15 |
| - SF17 | - T2 | - T3 |
| - W14 | - Z1 | |
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.

HEADLAND STACKING

14. No headland stacking sites are approved.

NR243.143/151.075 SILURIAN BEDROCK PERFORMANCE STANDARDS

15. Manure generated by Hornstead Dairy 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.
- | | | |
|--------------------|----------------|-----------------|
| - Cottage | - DG Breit | - DG Breit West |
| - DG Dennis Home 1 | - DG Dietzen 1 | - DG Dietzen 2 |
| - DG1 | - DG2 | - DG3 |
| - DG6 | - KL1 | - LS West |

- MC Gem
- Tesch 1

- PE5

- RK2

MANURE & PROCESS WASTEWATER IRRIGATION

16. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

17. 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.
18. The farm 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.
19. All land in the NMP should remain in compliance with UW Recommendations in A2809 and NRCS 590. This can be done by following all recommendations laid out in Snap Plus to avoid over applications of nutrients, particularly Nitrogen and Phosphorus. Please note that fields which are not managed to be compliant with nutrient applications may not remain eligible to be in the farm NMP.
20. Please submit a revised set of restriction maps once the new layers are available in V3. There will be a reminder sent at the end of this year to touch base on this, with a deadline agreed upon once we know timelines for this layer in Snap Maps.

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 608-212-8460 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 Specialist (holly.stegemann@wisconsin.gov)
Erin Hanson, WDNR Watershed Field Supervisor (erin.hanson@wisconsin.gov)
Joe Baeten, WDNR Agricultural Runoff Section Manager (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)
Tony Salituro, WDNR CAFO Engineer (anthony.salituro@Wisconsin.gov)
Tony Real, Calumet County (reali.anthony@co.calumet.wi.us)
Nick Peltier, Brown County (nick.peltier@browncountywi.gov)
Cheyenne Behnke, Manitowoc County (cheyennebehnke@manitowoccountywi.gov)
Amy Haak, Country Vision Cooperative (amy.haak@cvcoop.com)
File



August 25, 2026

FILE REF: R-2026-0091
 WPDES Permit #: WI-0065161

Brian Horn
 Hornstead Dairy
 W397 Man-Cal Road
 Brillion, WI 54410

Subject: Days of Storage Review for Hornstead Dairy, NW¼ of T20N, R20E, Section 01 in Brillion Township, Calumet County – NO ADDITIONAL ACTION REQUIRED

Dear Mr. Horn:

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 Pat Roach, P.E., Roach & Associates, LLC on April 30, 2026 on behalf of Hornstead Dairy.

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 Hornstead Dairy 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 4,409. The liquid waste volumes are based on the NRCS spreadsheet and other estimated or calculated values for a collection period of 365 days. Leachate and the first flush from the feed storage area is transferred to permanent storage, with the remainder diverted to the VTA on site. All runoff, up to the 25yr – 24hr storm, is collected from the outdoor lots and solid stacking area in permanent storage.

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	15,216,739	0	513,474	0	1,367,113	13,336,152
WSF2	5,998,325	0	201,204	192,089	529,894	5,075,138
WSF3	621,470	0	34,109	34,553	83,518	469,290
Total MOL Vol:						18,880,580
Days of Storage:						216

Liquids Collected/Stored	Annual Gallons
Manure and Bedding	20,375,073
Parlor Wastewater	5,695,725
Feed Storage Leachate	436,705
Feed Storage Runoff Collected	483,741
Net Precipitation on Storage Surfaces	3,343,852
Stacking Pad Runoff Collected	1,278,904
Offsite Waste	300,000
TOTAL:	31,914,000

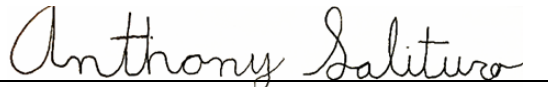
Should you have any questions, please contact Tony Salituro, DNR Madison office or your regional CAFO Specialist.

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



Tony Salituro, EIT
CAFO Review Engineer
Watershed Management Program

Email: Brian Horn; Hornstead Dairy
(920) 371-1542; hornsteaddairy@aol.com

Patrick Roach; Roach & Associates, LLC
(920) 833-6340; pat@jmroach.com

Tony Real; Calumet County
(920) 849-1493; reali.anthony@co.calumet.wi.us

Matt Woodrow; DATCP
(920) 427-8505; matthew.woodrow@wisconsin.gov

Holly Stegemann; DNR-Northeast Region
(920) 360-0794; Holly.Stegemann@wisconsin.gov

Erin Hanson; DNR-Northeast Region
(920) 360-7845; erine.hanson@wisconsin.gov

Anthony Salituro; DNR-Central Office
(608) 444-2869; anthony.salituro@wisconsin.gov

Ashley Scheel; DNR, Central Office
(608) 261-6419; ashley.scheel@wisconsin.gov

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
2984 Shawano Avenue
Green Bay WI 54313-6727

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



March 24, 2026

Brian Horn
Hornstead Dairy, LLC
W397 Man-Cal Road
Brillion, WI 54410

WPDES Permit No. WI-0065161-02-0
Calumet County

Subject: WPDES Permit Reissuance Walkover Inspection Report

Dear Mr. Brian Horn:

On March 10, 2026, the Department of Natural Resources (department) conducted a WPDES permit reissuance walkover inspection of Hornstead Dairy. Results and photos are included in the enclosed report.

A permit reissuance application is due May 1, 2026.

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: Hornstead Dairy 2026.03.10 Inspection Report

Electronic CC:
Tony Reali - Calumet LCD
Amy Haak – Country Visions Cooperative

CAFO Compliance Report (03/24/2026)

Inspection Date: 03/10/2026

Inspection Type: Reissuance

Operation Name: Hornstead Dairy

WPDES Permit No. WI-0065161-02-0

Operation Address: Main Farm: W397 Man-Cal Road, Brillion, WI 54110

PP Site: N9545 County Road PP, Brillion, WI 54110



On-Site Representative(s): Brian Horn, Owner/Operator

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

On March 10, 2026, Stegemann met with Horn, Amy Haak (Country Visions), and other staff to conduct a permit reissuance inspection of Hornstead Dairy. All facilities currently covered under Hornstead Dairy's WPDES were inspected, including the satellite facility located on County PP. Weather was cloudy with rain in the forecast. Follow up items are listed on page 4.

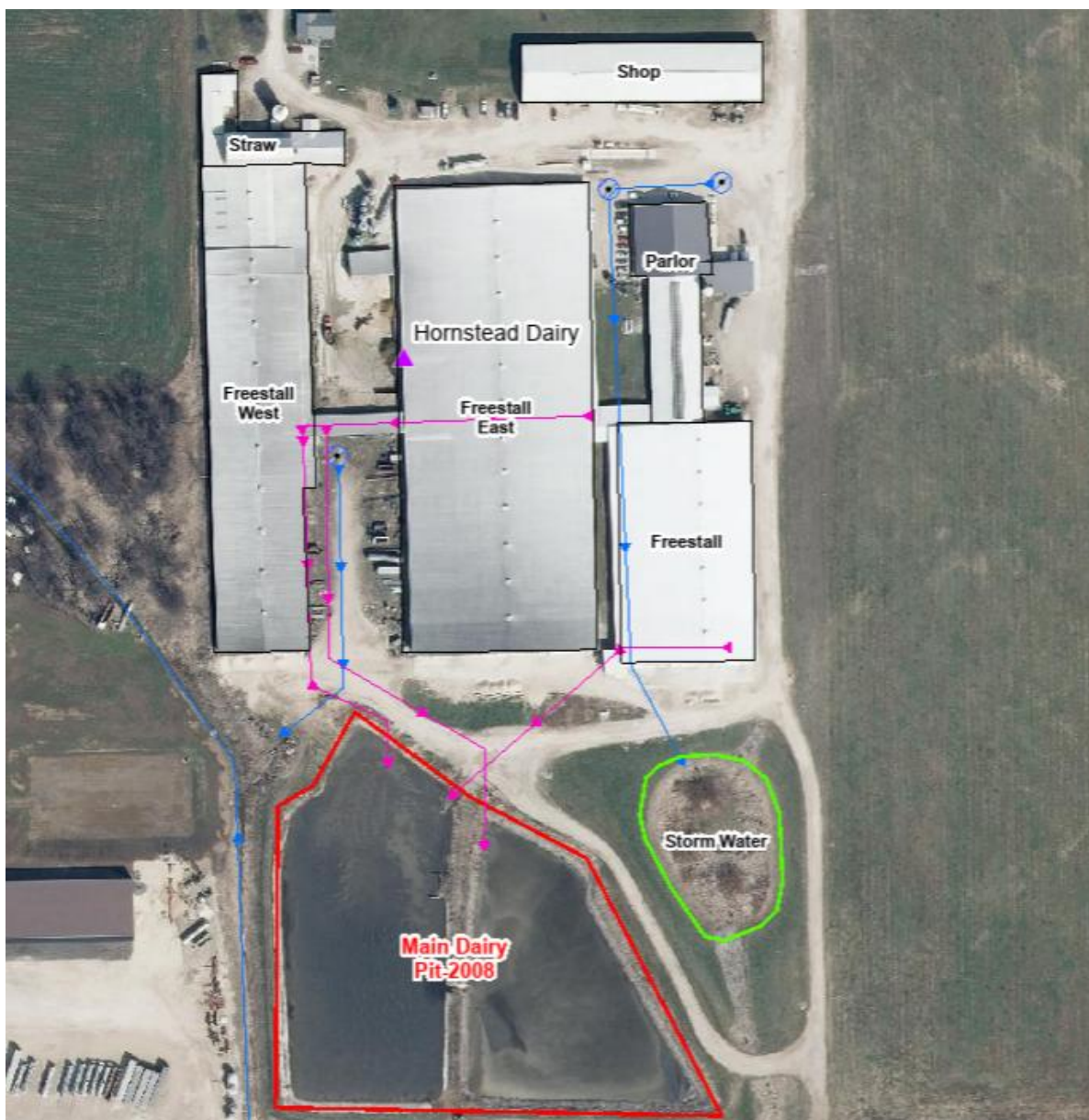


Figure 1. Aerial overview of Hornstead Dairy on the south side of Man-Cal Road. Blue arrows indicate approximate stormwater flow paths. Pink arrows indicate manure transfer systems.

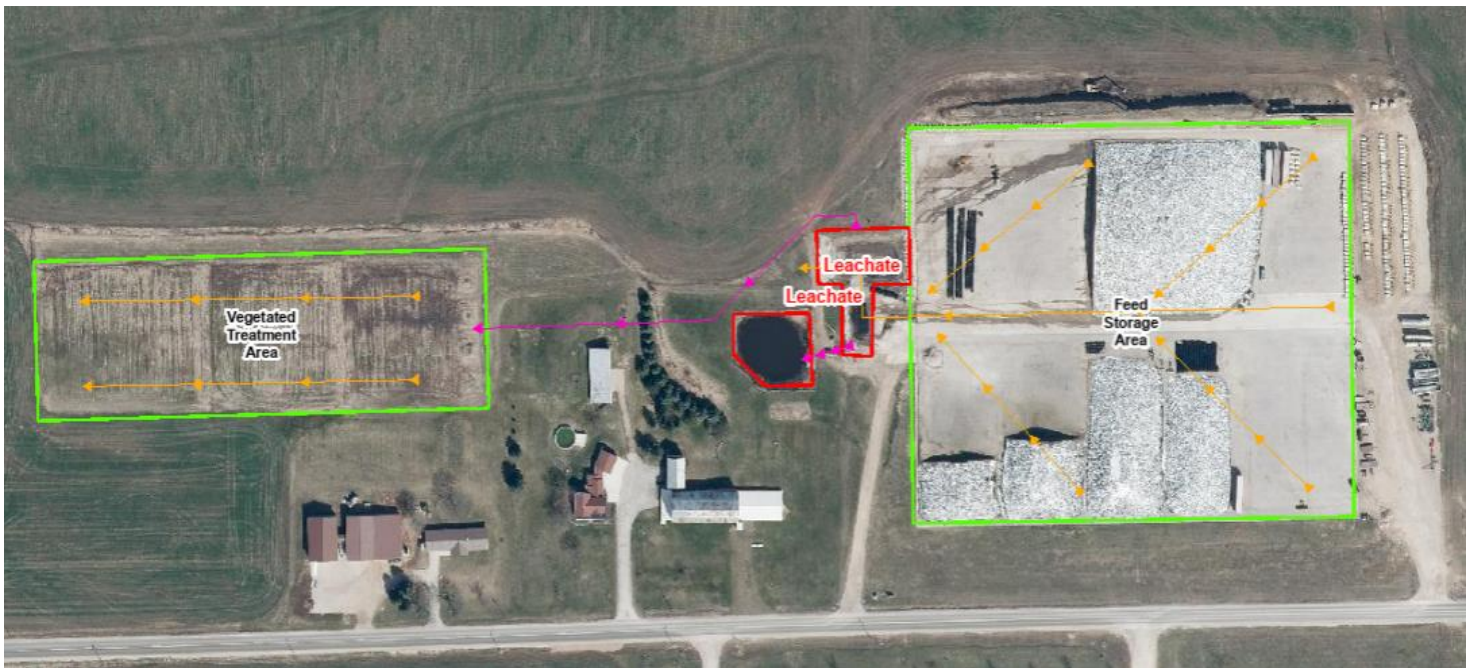


Figure 2. Aerial overview of Hornstead Dairy, north of Man-Cal Road. Pink arrows indicate manure transfer systems and yellow arrows indicate approximate contaminated runoff flow paths.



Figure 3. Aerial overview of Hornstead Dairy's PP Site. Pink arrows indicate manure transfer systems, blue arrows indicate approximate stormwater runoff flow paths, and yellow arrows indicate approximate contaminated runoff flow paths

SITE OBSERVATIONS

Feedlot Runoff

All animals on the main site are kept under roof. Hornstead Dairy does utilize open-air feed lanes at the PP site. These lots are scraped as needed and solid waste is manually stacked on the stacking pad or the concrete on the side of WSF 2.

Calf Hutch Areas

Hornstead Dairy keeps calf hutches around the perimeter of the feed storage area. Runoff from these hutches is collected by the leachate collection system. Runoff from these hutches is directed to flow towards WSF 3.

Waste Storage Facilities

Hornstead Dairy utilizes two waste storage facilities on the main farm and one waste storage facility at the County Road PP site. The dairy uses sand for cattle bedding as well as a shredded pallet sawdust mix. Solid waste is stacked on a newly constructed concrete pad on the south side of WSF 2 that is pitched to convey any runoff into WSF 2. Solid waste is also stacked on the northeast concrete corner of WSF 2.

WSF 1 is located on the main dairy and was originally constructed in 2008 and partially upgraded in 2015. This storage is divided into two sections by an earthen weir. The west cell of this storage pond is concrete lined, while the east cell is earthen lined. There are two manure transfer lines coming from the two freestall barns on site, with a manual valve located between the two barns. One transfer line moves manure and process wastewater into the west cell and the other transfer line moves manure and process wastewater into the east cell. This storage has a maximum operating level of 11,929,519 gallons. At the time of inspection, permanent markers and safety fencing were present.

WSF 2 is a concrete lined storage, located at the County Road PP site, that was constructed in 2014. This storage accepts manure and process wastewater from the two barns and outdoor lots on site as well as leachate from WSF 3 as needed to thin manure. This storage has a maximum operating level of 5,159,168 gallons. At the time of inspection, permanent markers and safety fencing were present.

WSF 3 is the leachate basin located to the west of the feed storage area. This concrete lined facility was constructed in 2015 and has a maximum operating level of 459,981 gallons. When needed, collected leachate and runoff is transferred to WSF 2 to help thin the manure. At the time of inspection, permanent markers were present. Safety fencing requires maintenance.

Solid and liquid waste storage facilities are managed to not have current or past indicators of discharges. Solid and liquid waste storage structures are well-maintained, in good repair, and in compliance with permit requirements.

Process Wastewater (other than feed storage area leachate/runoff)

Wastewater from the parlor is flushed through the manure transfer lines pumped into WSF 1. Process wastewater sources are managed to not have current or past indicators of discharges.

Feed Storage Area Runoff

All feed is stored under plastic on the concrete feed pad located on the north side of Man-Cal Road. The concrete is pitched to convey runoff towards a designated collection tank and overflow basin on the west side of the pad. First flush is collected and pumped to WSF 3 where it is held until it is transferred to WSF 2 or directly land applied. Additional runoff is captured and transferred via automated pumping system to the bubblers on the VTA. The VTA is mowed two to three times a year and baled vegetation is fed to the animals on site. During the time of inspection, the VTA was saturated due to snow melt. Areas of channelized flow and burn out were observed. Gravel spreader bars were clogged with vegetation. Feed storage areas and associated process wastewater (leachate, runoff) are managed to not have current or past indicators of discharges.

Animal Mortality Disposal

Animal mortalities are picked up as needed by Sandy Bay Mink Ranch. Animal mortalities are managed to not have current or past indicators of discharges.

Ancillary Service Areas

Hornstead Dairy utilizes manholes and culverts to divert clean runoff. A stormwater pond is located at the southeast corner of the main site, next to WSF 1. Preventative maintenance actions and visual inspections are occurring to minimize pollutant discharges from ancillary service and storage areas.

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

Areas of Concern

- VTA has potential for unpermitted discharges from the production area
- WSF 3 safety fencing requires maintenance

Permit Violations

None

Action Items

- Please submit photo documentation to the Department, no later than **10/31/2026**, of maintenance to the vegetated treatment area in accordance with the operation and maintenance plan. To include, but not limited to, removal of vegetation from the gravel spreader bars and regrading and reseeding of soils where channelized flow paths were observed.
- Please submit photo documentation to the Department, no later than **10/31/2026**, of repairs made to the safety fencing of WSF 3.

Photo #:	1
Date/Time of Photo:	03/10/2026 12:01
Photo By:	Stegemann
Photo Location:	PP Site

Photo Description:

View of outdoor lot on the north side of the PP site, looking southwest.



Photo #:	2
Date/Time of Photo:	03/10/2026 12:03
Photo By:	Stegemann
Photo Location:	PP Site

Photo Description:

View of outdoor lot on the north side of the PP site, looking southeast.



Photo #:	3
Date/Time of Photo:	03/10/2026 12:09
Photo By:	Stegemann
Photo Location:	PP Site

Photo Description:

View of outdoor lot on the south side of the PP site, looking northwest.

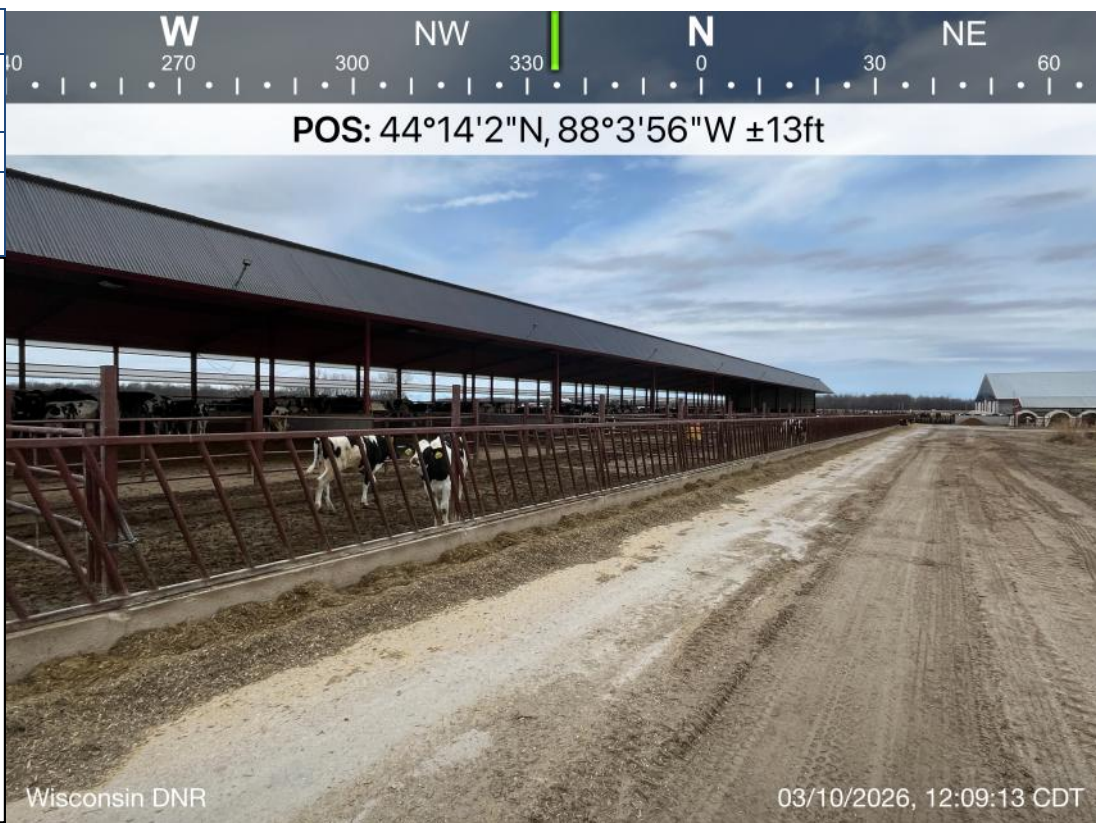


Photo #:	4
Date/Time of Photo:	03/10/2026 12:10
Photo By:	Stegemann
Photo Location:	PP Site

Photo Description:

View of calf hutches in an old outdoor lot at the PP site, looking northeast.



Photo #:	5
Date/Time of Photo:	03/10/2026 12:13
Photo By:	Stegemann
Photo Location:	PP Site

Photo Description:

View of abandoned outdoor lot on the east side of the PP site, looking north.



Photo #:	6
Date/Time of Photo:	03/10/2026 12:13
Photo By:	Stegemann
Photo Location:	PP Site

Photo Description:

View of outdoor lot on the east side of the PP site, looking northeast.



Photo #:	7
Date/Time of Photo:	03/10/2026 11:29
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of calf hutches on the east side of the feed storage area, looking north.



Photo #:	8
Date/Time of Photo:	03/10/2026 11:33
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of calf hutches along the north side of the feed storage area, looking northwest. Arrow indicates runoff flow direction.



Photo #:	9
Date/Time of Photo:	03/10/2026 11:15
Photo By:	Stegemann
Photo Location:	Main Farm
Photo Description:	
View of the west cell of WSF 1, looking west.	



Photo #:	10
Date/Time of Photo:	03/10/2026 11:15
Photo By:	Stegemann
Photo Location:	Main Farm
Photo Description:	
View of the west cell of WSF 1, looking southwest.	



Photo #:	11
Date/Time of Photo:	03/10/2026 11:15
Photo By:	Stegemann
Photo Location:	Main Farm
Photo Description:	
View of the weir between the connected cells of WSF 1, looking southwest. Permanent marker located on south berm of the west cell.	



Photo #:	12
Date/Time of Photo:	03/10/2026 11:15
Photo By:	Stegemann
Photo Location:	Main Farm
Photo Description:	
View of the east cell of WSF 1, looking southeast.	



Photo #:	13
Date/Time of Photo:	03/10/2026 11:16
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of the east cell of WSF 1, looking southeast.



Photo #:	14
Date/Time of Photo:	03/10/2026 12:04
Photo By:	Stegemann
Photo Location:	PP Site

Photo Description:

View of WSF 2, looking northwest.



Photo #:	15
Date/Time of Photo:	03/10/2026 12:04
Photo By:	Stegemann
Photo Location:	PP Site

Photo Description:

View of solids along side of WSF 2, looking north.



Photo #:	16
Date/Time of Photo:	03/10/2026 12:04
Photo By:	Stegemann
Photo Location:	PP Site

Photo Description:

View of permanent marker in southwest corner of WSF 2, looking northwest.



Photo #:	17
Date/Time of Photo:	03/10/2026 12:04
Photo By:	Stegemann
Photo Location:	PP Site

Photo Description:

View of WSF 2, looking northeast.



Photo #:	18
Date/Time of Photo:	03/10/2026 12:05
Photo By:	Stegemann
Photo Location:	PP Site

Photo Description:

View of sand stacking pad, looking south. Arrow indicates runoff flow path towards WSF 2.



Photo #:	19
Date/Time of Photo:	03/10/2026 12:05
Photo By:	Stegemann
Photo Location:	PP Site

Photo Description:

View of sand stacking pad runoff, looking north. Arrow indicates runoff flow path towards WSF 2.

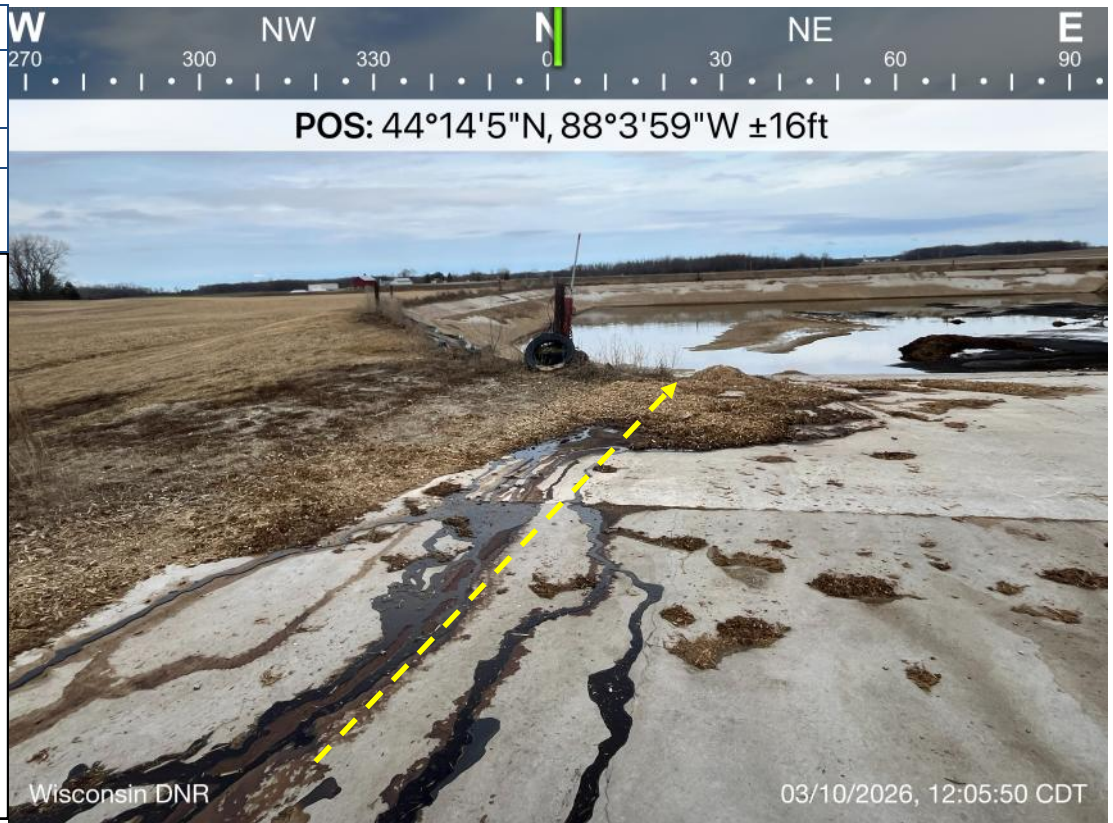


Photo #:	20
Date/Time of Photo:	03/10/2026 12:06
Photo By:	Stegemann
Photo Location:	PP Site

Photo Description:

View of sand stacking pad, looking north. Arrow indicates runoff flow path towards WSF 2.



Photo #:	21
Date/Time of Photo:	03/10/2026 11:40
Photo By:	Stegemann
Photo Location:	Main Farm
Photo Description:	
View of WSF 3, looking south.	



Photo #:	22
Date/Time of Photo:	03/10/2026 11:40
Photo By:	Stegemann
Photo Location:	Main Farm
Photo Description:	
View of WSF 3, looking southeast. Note, safety fencing in need of repairs.	



Photo #:	23
Date/Time of Photo:	03/10/2026 11:39
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of permanent markers along concrete ramp of WSF 3, looking west.



Photo #:	24
Date/Time of Photo:	03/10/2026 11:26
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of feed storage area, looking northeast.



Photo #:	25
Date/Time of Photo:	03/10/2026 11:38
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of manure solids stacked on the feed storage area, looking southwest. Arrow indicates runoff flow path.



Photo #:	26
Date/Time of Photo:	03/10/2026 11:36
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of flow path from feed storage area to the leachate collect area, looking south. Arrow indicates runoff flow path.



Photo #:	27
Date/Time of Photo:	03/10/2026 11:37
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of leachate collection basin, looking west.



Photo #:	28
Date/Time of Photo:	03/10/2026 11:39
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of leachate collection basin, looking north.



Photo #:	29
Date/Time of Photo:	03/10/2026 11:37
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of leachate overflow basin, looking west.



Photo #:	30
Date/Time of Photo:	03/10/2026 11:38
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of leachate overflow basin, looking northwest.



Photo #:	31
Date/Time of Photo:	03/10/2026 11:43
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of bubblers for vegetated treatment area, looking southwest.



Photo #:	32
Date/Time of Photo:	03/10/2026 11:43
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of bubbler for vegetated treatment area, looking south.



Photo #:	33
Date/Time of Photo:	03/10/2026 11:43
Photo By:	Stegemann
Photo Location:	Main Farm



Photo #:	34
Date/Time of Photo:	03/10/2026 11:43
Photo By:	Stegemann
Photo Location:	Main Farm



Photo #:	35
Date/Time of Photo:	03/10/2026 11:48
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of gravel spread bar within vegetated treatment area, looking south.



Photo #:	36
Date/Time of Photo:	03/10/2026 11:48
Photo By:	Stegemann
Photo Location:	Main Farm

Photo Description:

View of gravel spread bar within vegetated treatment area, looking north.



Photo #:	37
Date/Time of Photo:	03/10/2026 11:13
Photo By:	Stegemann
Photo Location:	Main Farm
Photo Description:	
View of dry stormwater pond, looking southwest.	



Photo #:	38
Date/Time of Photo:	03/10/2026 11:13
Photo By:	Stegemann
Photo Location:	Main Farm
Photo Description:	
View of dry stormwater pond, looking southwest.	

