Permit Fact Sheet

General Information

Permit Number:	WI-0066494-02-0
Permittee Name:	Horsens Homestead Farms, LLC
Address:	W1980 County Road C
City/State/Zip:	Cecil WI 54111
Discharge Location:	W1980 County Road C, Cecil, WI 54111 ; SW ¼ of SW ¼ Section 5, T27N, R18E
Receiving Water:	Unnamed tributaries of the Oconto River within the Oconto 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**
Dairy Calves (under 400 lbs.)	60	0	0	0	
Milking and Dry Cows	1960	2002	0	0	
Heifers (400 lbs. to 800 lbs.)	90	150	0	0	
Heifers (800 lbs. to 1200 lbs.)	275	250	0	0	
Total	2385	2002	0	0	

Facility Description

Brief Facility Description Horsens Homestead Farms LLC is a proposed Concentrated Animal Feeding Operation (CAFO). Horsens Homestead Farms LLC is owned and operated by members of the Horsens family. It currently has 2,385 animal units and is not proposing an expansion during the permit term. Based on current herd size, Horsens Homestead Farms LLC has approximately 180 days of available liquid waste storage and generates approximately 20,919,944 gallons of manure and process wastewater annually. Horsens Homestead Farms LLC has submitted plans for an additional waste storage facility to be included in this permit. When the new waste storage facility is constructed, the farm will have approximately 19 million gallons of available liquid manure storage which equates to 364 days of storage. Horsens Homestead Farms LLC has a total of 2,415 acres available for land application of manure and process wastewater. Of this acreage, 943 acres are owned and 1472 acres are controlled through contracts, rental agreements, leases, or manure agreements. Of this acreage, 2,287 are considered spreadable acres.

Substantial Compliance Determination

Enforcement During Last Permit:

There was no enforcement actions taken during the previous permit term.

After a desk top review of all annual reports, inspection reports and application materials, compliance schedule items, and a site visit on **6/29/2023**, this facility has been found to be in substantial compliance with their current permit.

Compliance determination entered by Brian Hanson on 6/6/2024.

Sample Point Designation For Animal Waste		
Sample Point Number	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**	
001	Sample point 001 is for liquid waste storage pond #1 (WSF #1). WSF #1 is a concrete-lined impoundment located to the north of the existing freestall barns. This facility has a total volume of 1.5 million gallons and a maximum operating level capacity of 1.2 million gallons. This storage accepts manure and process wastewater from the original freestall barns to the south of the facility. WSF #1 was constructed in 2001 & last evaluated in 2019.	
002	Sample point 002 is for liquid waste storage pond #2 (WSF #2). WSF #2 is a concrete-lined impoundment located to the northeast of the existing freestall barns & east of WSF #1. This facility has a total volume of 2.6 million gallons and a maximum operating level capacity of 2.2 million gallons. This storage accepts manure and process wastewater from the original freestall barns to the south of the facility via overflow channel from WSF #1. WSF #2 was constructed in 2010 & last evaluated in 2019.	
003	Sample point 003 is for a liquid waste storage tank (WSF #3). WSF #3 is a concrete-lined structure located to the south of the existing freestall barns & east of the heifer barn. This facility has a total volume of 0.36 million gallons and a maximum operating level capacity of 0.17 million gallons. This storage accepts manure and process wastewater from the heifer barn & runoff from the calf hutch area. WSF #3 was constructed in 1990 & last evaluated in 2019.	
004	Sample point 004 is for liquid waste storage pond #3 (WSF #4). WSF #4 is a concrete-lined impoundment located to the northeast of WSF #2. This facility has a total volume of 5.4 million gallons and a maximum operating level capacity of 4.9 million gallons. This storage accepts manure and process wastewater from the original freestall barns via overflow pipe in WSF #2 & manure & process wastewater from the robot barn. WSF #3 was constructed in 2019 & & has not been evaluated since the time of construction.	
005	Sample point 005 is for leachate management pond (LMP). LMP is a concrete-lined impoundment located to the northwest of the feed storage area. This facility has a total volume of 2.7 million gallons and a maximum operating level capacity of 1.8 million gallons. This storage accepts leachate & runoff from the feed storage area. LMP was constructed in 2020 & has not been evaluated since the time of construction.	
006	Sample point 006 is for manure solids removed from bottom of all liquid waste storage facilities. This includes manure-laden sand solids, manure fiber solids, etc. Representative samples shall be taken from each waste storage facility.	

Sample Point Designation For Animal Waste		
Sample Point Number	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**	
007	Sample point 007 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, etc. Representative samples shall be taken for each manure source type.	
008	Sample point 008 is for visual monitoring and inspection of the feed storage area and associated runoff control system. The feed storage area is a series of bunkers located west of the freestall barns and is approximately 148,000 sq ft in area. Leachate & runoff from this facility gravity flow to the Leachate Management Pond (LMP). Proper operation and maintenance of these areas is required to ensure discharges meet permit requirements. Weekly inspections will be required and shall be recorded according to monitoring program. The feed storage area was last evaluated in 2019 and it was also expanded in 2019 according to approved plans & specifications.	
009	Sample point 009 is for visual monitoring and inspection of the calf hutch area and associated runoff control system. Runoff from this area will be transferred to the existing Waste Storage Tank(WSF #3). Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program.	
010	Sample point 010 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	
011	Sample point 011 is for proposed liquid waste storage pond #4 (WSF #5). WSF #5 is proposed to be a concrete-lined impoundment located approximately ¼ mile east of the production site. The facility has a proposed total volume of 11.75 million gallons and a proposed maximum operating volume of 10.5 million gallons. Manure from the main production site will be transferred to this facility via hose line or tanker trucks prior to land application. Engineering plans and specifications were submitted to the department on 4/25/2024 & will need to be approved prior to construction.	
012	Sample point 012 is for solid manure land applied from 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 monitoring program.	

1 Livestock Operations - Proposed Operation and Management

Production Area Discharge Limitations

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

Runoff Control

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

Manure and Process Wastewater Storage

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

The permittee currently has approximately 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 2,385 animal units (1,400 milking & dry cows, 400 heifers, and 300 calves), it is estimated that approximately 20,919,944 gallons & 1,287 tons of manure and process wastewater will be produced per year. The permittee owns *approximately* 943 acres of cropland and 1,472.4 are controlled through contracts, rental agreements or leases, or under manure agreements. Given the rotation commonly used by the permittee, 2,287 acres are available (or open) to receive manure and process wastewater on an annual basis.

The permit requires all landspreading of manure and process wastewater be completed in accordance with an approved nutrient management plan. The permit will require sampling and analysis of manure and process wastewater that will be landspread. Landspreading rates must be adjusted based on sample analysis. The permit requires the permittee to maintain a daily log that documents landspreading activities. The permit also requires the submittal of an annual report that summarizes all landspreading activities. Plans must be updated annually to reflect cropping plans and other operational changes. Among the requirements, the plans must include detailed landspreading information including field by field nutrient budgets.

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

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

In addition, the permittee must comply with restrictions on land application of manure and process wastewater on frozen or snow-covered ground. Included in these restrictions is a prohibition on surface applications of solid manure ($\geq$12% solids) on frozen or snow-covered ground during February and March.

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.

Sample Point Number: 001- WSF #1; 002- WSF #2; 003- WSF #3; 004- WSF #4 ; 005- LMP; 011- WSF #5

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 existing facilities. Sample point 011 was added to the permit to create a sample point for a proposed waste storage facility. Plans for this facility were submitted to the department on 4/25/2024.

1.1.2 Explanation of Operation and Management Requirements

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

Sample Point Number: 006- WSF Solids Removal and 012- 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	

1.1.3 Changes from Previous Permit

Sample point language was updated to more accurately describe existing facilities. Sample Point 012 was added to the permit to be available should the farm get any headland stacking sites approved.

1.1.4 Explanation of Operation and Management Requirements

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

Sample Point Number: 007- Misc. Solid Manure; 008- Feed Storage Area ; 009- Calf Hutch Area, and 010- Storm Water Runoff Control

1.1.5 Changes from Previous Permit

Sample point language was updated to more accurately describe existing facilities.

1.1.6 Explanation of Operation and Management Requirements

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

2 Schedules

2.1 Emergency Response Plan

Required Action	Due Date
Develop Emergency Response Plan: Update the written Emergency Response Plan within 30 days of permit coverage, and submit to the department.	09/01/2024

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 60 days of the effective date of this permit.	10/01/2024

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.	01/31/2025
Submit Annual Report #2: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2026
Submit Annual Report #3: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2027
Submit Annual Report #4: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2028
Submit Annual Report #5: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2029
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.	03/31/2025
Submit NMP Update #2: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2026
Submit NMP Update #3: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2027
Submit NMP Update #4: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2028
Submit NMP Update #5: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2029
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

2.5 Manure Analysis Update

Submit copies of manure hauling logs (form 3200-123A or department approved equivalent) and manure sample analysis results from the prior quarter to the department. Do this for the first four quarters following the permit effective date

Required Action	Due Date
Manure Analysis Quarterly Update #1: To include all manure sample analysis results & daily haul log from the prior 4 months.	10/01/2024
Manure Analysis Quarterly Update #2: To include all manure sample analysis results & daily haul log from the prior 3 months.	01/01/2025
Manure Analysis Quarterly Update #3: To include all manure sample analysis results & daily haul log from the prior 3 months.	04/01/2024
Manure Analysis Quarterly Update #4: To include all manure sample analysis results & daily haul log from the prior 3 months.	07/01/2025

2.6 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	02/01/2029

2.7 Explanation of Schedules

Emergency Response Plan, Monitoring and Inspection Program – Schedules consistent with permit requirements

Annual Reports, Nutrient Management Plan, Submit Permit Reissuance Application - Schedules consistent with

permit requirements.

Schedule 2.5 was included to address missing manure analysis data identified during the review of the 5-year nutrient management plan submitted with the permit reissuance application

Special Reporting Requirements

None

Other Comments:

None

Attachments:

Map(s)

Plan Approval Letter(s)

- 6/5/2024 Conditional NMP Approval Letter
- 5/20/2024 Days of Storage Review Letter
- 7/13/2023 Inspection Report
- R-2024-0111 Completeness determination letter

Public Notice

Expiration Date:

7/31/2029

Justification Of Any Waivers From Permit Application Requirements

N/A

Prepared By: Brian Hanson Wastewater Specialist Date: 6/6/2024

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
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Tony Evers, Governor
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June 5th, 2024

Shawano County
Approval

Ryan Horsens
Horsens Homestead Farms, LLC
W1980 County Road C
Cecil, WI 54111

SUBJECT: Conditional Approval of Horsens Homestead Farms, LLC Nutrient Management Plan, WPDES Permit No. 0066494-01-0

Dear Ryan Horsens:

After completing a review of Horsens Homestead Farms, LLC 2024-2028 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 Horsens Homestead Farms, LLC review the NMP with those individuals involved with manure applications to ensure all remain familiar with the approved manure spreading protocol, spreading maps, field and map verification, record keeping requirements, and all the conditions of this approval. Specifically, some fields in Horsens Homestead Farms, LLC may have:

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

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

FINDINGS OF FACT

The Department confirms that:

1. A current dairy herd size of 2,385 animal units (1,400 milking & dry cows, 400 heifers, and 300 calves). Currently there are no planned expansions in the next permit term.
2. Manure generation and spreading records indicate your herd will annually generate approximately 14,965,000 gallons of manure and process wastewater and 1,287 tons of solid manure in the first year of the permit term. Approximately 6,176,028 gallons of feed leachate and runoff is collected and managed separately. Between

all liquid sources the farm would generate 21,141,028 gallons of manure, process wastewater and leachate annually.

3. The use of application restriction options 1 and 5 within surface water quality management areas.
4. The use of phosphorus delivery method P Index.
5. That Horsens Homestead Farms, LLC currently has 2,415.2 acres (942.8 owned and 1,472.4 controlled through contracts, rental agreements or leases, or under manure agreements) of which 2,287.4 are spreadable acres.
6. That some fields included in the NMP are directly adjacent to or have high potential to deliver nutrients and sediment to Oconto River (listed 303(d) impaired water by 'unknown pollutant'), Unnamed WBIC (326100) (303(d) impaired water by 'total phosphorus').
7. That no fields are directly adjacent to or have high potential to deliver nutrients and sediment to outstanding/exceptional waters.
8. That 16 fields are tiled.

- 001	- 16	- H1	- H2
- H3	- HOP N	- HOP SE	- HOP W
- HR-1	- JO-1	- LH-1	- LH-3
- OF-1	- PB-1	- PB-2	- W-1

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

CONDITIONAL NUTRIENT MANAGEMENT PLAN APPROVAL

The Department hereby approves the 2024-2028 Horsens Homestead Farms, 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 Name	Other Permittee Name	Other Permittee Site/Field Name	DNR #
Cty R	St Paper LLC	Bret 2	104194

Prior to any manure applications on these fields Horsens Homestead Farms, 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 Horsens Homestead Farms, 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: Horsens Homestead Farms, LLC is responsible for obtaining nutrient content values for all other wastes spread on any field in their NMP.

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

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

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

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

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

7. Horsens Homestead Farms, 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

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:

- Cty R	- Dut W	- G-1
- H1	- H2	- H3
- Hop W	- Hop N	- HR-1
- J&L	- JO-1	- LK-1
- LH-1	- LH-2	- LH-3
- N-2	- N-3	- N-5
- N-6	- OF-1	- OF-2
- OF-3	- RJ-1	- ST-1
- ST-2	- W-1	

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 currently approved**. For future sites to be approved the farm must have up to date solid manure samples which demonstrate suitability to stack, and revised stacking site maps.

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.
16. The farm is required within their permit to sample solid and liquid manure at the followingFol density and timing: one quarterly solid manure sample per source when hauling takes place, two monthly liquid manure samples per source when hauling takes place.

FOLLOW UP ACTIONS

17. There are fields observed with over application of nitrogen on the compliance check from the information dated on June 3rd, 2024. These applications are not able to be intentionally planned and would require revision by no later than June 14th, 2024. New reports required would be compliance check, 590 assessment, sorted by crop (all years) and nutrient mass balance report to document these updates.
18. The farm has been applying excessive applications of starter fertilizer which exceed the 20 lb allotment for commercial fertilizer on higher testing P fields. A future plan needs to be written for the department about how the farm will remedy this issue and maintain future compliance by no later than June 14th, 2024.
19. Please submit a minimum of two solid manure samples by no later than July 26th, 2024.
20. If headland stacking sites are needed, submit updated maps with the revised solid samples and these can be utilized to approve stacking sites at that time.

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

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

Cc: Brian Hanson, WDNR Agricultural Runoff Specialist (Brian.Hanson@Wisconsin.gov)
Joseph Baeten, WDNR Watershed Field Supervisor (Joseph.Baeten@Wisconsin.gov)
Christopher Clayton, WDNR Runoff Management Section Chief (Christopherr.Clayton@Wisconsin.gov)
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File

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WISCONSIN DEPT. OF NATURAL RESOURCES

May 20, 2024

FILE REF: R-2024-0037
WPDES Permit #: WI-0066494

Ryan Horsens
Horsens Homestead Farms LLC
W1980 County Road C
Cecil, WI 54111

Subject: Days of Storage Review for Horsens Homestead Farms LLC, SW ¼ Town 27N, Range 18E, Section 05 in Green Valley Township, Shawano County – NO ADDITIONAL ACTION REQUIRED

Dear Mr. Horsens:

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 Douglas Gatrell, GHD on February 1, 2024 & with revisions submitted on 5/13/2024, on behalf of Horsens Homestead Farms 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 Horsens Homestead Farms 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 2,385. No expansion is proposed during the permit term, however, plans for a new waste storage facility have been submitted to the department which would increase the storage volume by 10.4 million gallons & would provide for a total of 364 days of liquid manure storage. The liquid waste volumes are based on the NRCS spreadsheet and other estimated or calculated values. The liquid waste volumes are based upon a collection period of 365 days. Full runoff collection, up to the 25yr-24hr storm is provided for the Calf Hutch Area & Feed Storage Area. The size of these collection areas is 38,719 sq ft & 147,879 sq ft respectively.

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Waste Storage	Total Vol. from Settled Top to Bottom	Solids Storage	25-yr, 24hr Precip. On Storage	25-yr, 24-hr Collected Runoff	Freeboard Volume	Max. Operating Level (MOL) Vol.
#1	1,519,165	0	90,100	0	246,057	1,183,008
#2	2,596,792	0	111,985	0	309,751	2,175,056
#3	5,385,600	0	117,810	0	336,600	4,931,190
WST	359,040	0	21,913	101,366	59,840	175,921
LMP	2,697,745	0	125,910	387,185	349,510	1,835,140
					Total MOL Vol:	10,300,315
					Days of Storage:	**180**

Liquids Collected/Stored	Annual Gallons
Manure, Bedding & Wastewater	14,965,000
Total Calf Hutch Runoff Collected	744,560
Total Feed Storage Area Runoff Collected:	2,843,689
Net Precipitation on Storage Surfaces:	2,254,496
Total:	**20,919,944**

Should you have any questions, please contact Brian Hanson, DNR Shawano 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

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

Brian Hanson

Brian Hanson
Ag Runoff Management Specialist
Watershed Management Program

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Douglas Gatrell; GHD Services Inc
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Aaron O'Rourke; DNR, Eau Claire
(715) 839-3775; aaron.orourke@wisconsin.gov

Matt Woodrow; DATCP
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Brian Hanson; DNR-Northeast Region
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7/13/2023

Ryan Horsens
Horsens Homestead Farms LLC
W1980 County Road C
Cecil, WI 54111

WPDES Permit No. WI-0066494-01-0
Shawano County

Subject: 6/29/2023 Permit Compliance Inspection

Dear Mr. Horsens:

On June 29th , 2023 the Department of Natural Resources met with the representatives of Horsens Homestead Farms LLC to conduct a full compliance inspection of your facility for permit reissuance. Department observations, including photographs, and a record of our conversations are included in the enclosed report.

The final pages of the report include a summary section identifying areas of concern the farm should continue to monitor.

If you have any questions regarding this letter or your WPDES permit requirements, please contact me at 920-366-3302 or brian.hanson@wisconsin.gov.

Sincerely,

Brian Hanson

Brian Hanson
Agricultural Runoff Management Specialist

Enc: 6/29/2023 Inspection Report

Electronic copy: Scott Frank - Shawano County LCD
Falon French, Joe Baeten - DNR
Bill Schaumberg – Tilth Agronomy

CAFO Compliance Inspection Report

Inspection Date: 6/29/2023

Report Final Date: 7/13/2023

Operation Name: Horsens Homestead Farms LLC

WPDES Permit #: WI-0066494-01-0

Farm Address: **Main Dairy** - W1980 County Road C , Cecil, WI 54111

On-Site Representative(s): Ryan Horsens, Jeff Horsens

Report Author: Brian Hanson: DNR Agricultural Runoff Specialist

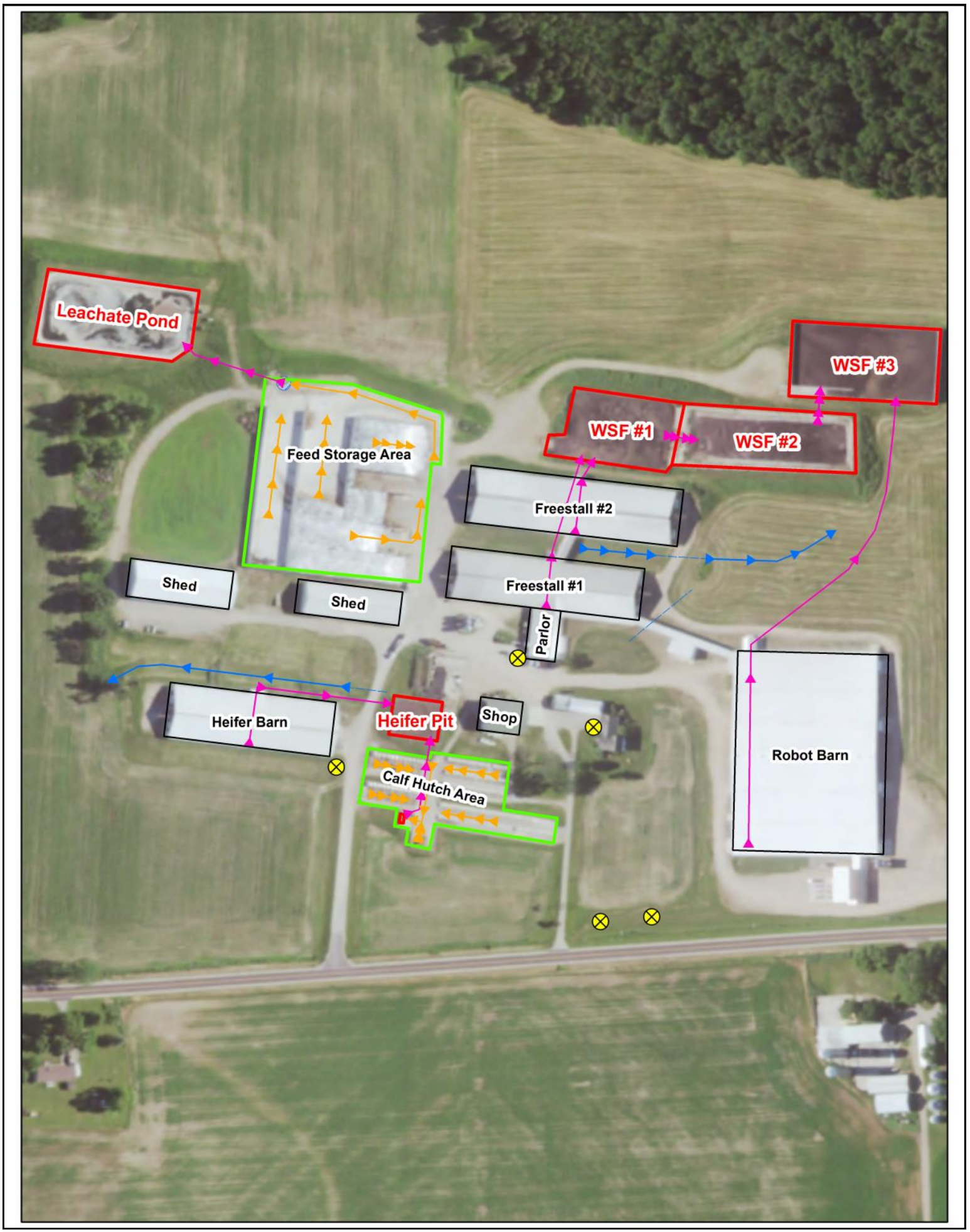
Other Participating Agencies: McKenna Arnoldi—DNR

Introduction

On Thursday June 29, 2023 Hanson & Arnoldi met with Horsens & Horsens at 10:00 at Horsens Homestead Farms LLC site to conduct a permit reissuance walkover inspection. The only site in the permit & inspected was the main farm. No liquid precipitation had fallen recently and the temperature was in the 80's and sunny. No permit violations were observed, and no water samples were collected. Hanson & Arnoldi departed at approximately 11:15.

Site Overview Diagram (Main Dairy)

Site Overview Diagram (Main Dairy: orange lines =potential runoff flow path, blue lines = stormwater flow, pink lines = waste transfer system, yellow circles=well locations)



SITE OBSERVATIONS :

Feedlot Runoff

The only outdoor animal lot on the farm is associated with the calf hutch area. All runoff from these areas is collected by the calf hutch area runoff collection system & transferred to the Heifer Pit.

Calf Hutch Areas (See photos on pages 5-7)

There is 1 calf hutch area located on the farm at this time just south of the heifer pit. The calf hutch area is sloped so all runoff flows to a runoff collection system that was installed in 2019. The calf hutch area also has 2 solid manure stacking areas which runoff is also collected from. Runoff is collected through a surface inlet in the southwest corner which drains to a reception tank. The runoff then gets pumped to the heifer pit for long-term storage. This solids settling area & surface inlet area needs to be kept clean & free of debris in order for the runoff collection system to properly operate.

Waste Storage Facilities (See photos on pages 7-17)

There are 5 liquid waste storage facilities located on the farm. 4 are used for manure collection and the 5th is used for storage of leachate & runoff collected from the feed storage area.

WSF #1 is a concrete-lined impoundment located directly north of the freestall barns that was constructed in 2001. This facility accepts manure and process wastewater from the northern 2 freestall barns & parlor via 2 waste transfer systems. This facility also accepts waste from the Heifer Pit via manual transfers. This facility has a concrete access ramp located in the southwest corner to aid in the removal of sand-laden manure solids. WSF #1 is connected to WSF #2 via a concrete overflow channel

WSF #2 is a concrete-lined impoundment located directly east of WSF #1 that was constructed in 2010. This facility does not directly accept manure, but WSF #1 overflows into this facility & WSF #3 is connected via gravity pipe.

WSF #3 is a vertical wall concrete structure located northeast of WSF #2 that was constructed in 2019. This facility accepts manure and process wastewater from the robot milking barn & parlor via waste transfer system. This facility has a concrete access ramp located in the southwest corner to aid in the removal of sand-laden manure solids. WSF #3 is connected to WSF #2 via a gravity pipe.

Heifer Pit is a vertical wall concrete structure located east of the heifer barn that was constructed in 1990. Manure from the heifer barn is collected in a concrete channel & reception tank and is then pumped directly to the heifer pit. Runoff from the calf hutch area flows to a reception tank which is also pumped directly to the heifer pit. When the heifer pit reaches it's Maximum Operating Level, the heifer pit is manually pumped to WSF #1 through a temporary hose.

Leachate Pond (Water Pit) is a concrete-lined impoundment located northwest of the feed storage area that was constructed in 2020 This facility does not directly accept any manure, but may be used in cases of emergency. Leachate and feed pad runoff are collected and gravity-flow to the Leachate Pond for long-term storage.

Solid manure from the calf hutch area is stacked in one of two locations in the calf hutch area. Runoff from these areas is collected by the calf hutch area runoff controls.

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. See photo log for details.

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

Milking parlor wash water at the Main Dairy is collected and mixed with the manure from the dairy barns and transferred to long-term storage.

Feed Storage Area Runoff (See photos on pages 17-21)

All feed storage areas (FSA) and runoff controls are located at the Main Dairy and located in the northwest corner of the production area. Surface drainage of leachate and runoff is directed to a centralized collection point at the northwest corner of the FSA which gravity-flows to the Leachate Pond. There is also a perimeter drain system (gravel french drain) used to collect any leachate that seeps through the cracks of the bunker walls along the western wall. This system was evident on the west side of the FSA and appeared to be collecting all leachate. Operation and maintenance is required to make sure gravel drain continues to function as designed. At the time of the inspection there was evidence of leachate that had flowed through the south bunker wall/floor joint and had ponded up in the grass swale between the feed storage area & the shed. According to the farm, this was an older section of the bunker and did not have the perimeter drain which is why the leachate was able to pond up and kill the vegetation.

Except as noted above, the feed storage areas and runoff control systems are well-maintained, in good repair, and in compliance with permit requirements.

Animal Mortality Disposal

Mortalities are moved to central location on the west side of Freestall #2 and picked up daily as needed by Circle R.

Ancillary Service Areas See photos on pages 21-22)

Preventative maintenance actions and visual inspections are occurring to minimize pollutant discharges from ancillary service and storage areas (i.e. storm water conveyance systems, driveways, etc.). At the time of the inspection, all stormwater channels were well-vegetated and other areas were free of manure & feed solids. Farm should continue to manage these areas to minimize the chance of runoff from the production area.

The farm does not have any CAFO outdoor vegetated areas as part of their operation.

RECORDS REVIEW

The permittee has current WPDES Permit and Nutrient Management Plan onsite, located in the office.

The permittee provided complete production site inspection records that are required to be retained. Daily hauling logs, CAFO calendar for required inspections, and manure pit volume logs were all available for inspection.

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.

Water Supply Wells

The farm currently has 5 known wells on the property. 4 wells are used to supply water for the dairy operation and considered a high-capacity well. The 5th well is located near the farmhouse and only supplies water to the house & shop. See photo log & map for further details.

Photo #:	6807
Date/Time of Photo:	6/29/2023 10:50
Photo By:	Brian Hanson
Photo Location:	Calf Hutch Area

Photo Description:

Standing on the west side of calf hutch area looking east: View of calf hutches & drive by feeding area on western half of lot. Arrows indicate direction of flow.

Photo #:	6816
Date/Time of Photo:	6/29/2023 10:52
Photo By:	Brian Hanson
Photo Location:	Calf Hutch Area

Photo Description:

Standing in the center of the calf hutch area looking east: View of the east half of the calf hutch area. Arrows indicate direction of runoff flow.

Photo #:	6825
Date/Time of Photo:	6/29/2023 10:52
Photo By:	Brian Hanson
Photo Location:	Calf Hutch Area

Photo Description:

Standing on the north side of calf hutch area looking south: View of center alley of calf hutch area used to convey runoff to collection system.

Photo #:	6808
Date/Time of Photo:	6/29/2023 10:51
Photo By:	Brian Hanson
Photo Location:	Calf Hutch Area

Photo Description:

Standing on the south side of calf hutch area looking southeast: View of solid stacking area at south end of calf hutch area near the runoff collection system. Arrows indicate direction of runoff flow.

Photo #:	6814
Date/Time of Photo:	6/29/2023 10:51
Photo By:	Brian Hanson
Photo Location:	Calf Hutch Area

Photo Description:

Standing on south side of calf hutch area looking west: View of runoff collection system for calf hutch area. Solids settle out on basin and runoff flows to underground tank, which is pumped to Heifer Pit.

Photo #:	6739
Date/Time of Photo:	6/29/2023 10:33
Photo By:	Brian Hanson
Photo Location:	WSF #1

Photo Description:

Standing on the north side of WSF #1 looking southeast: View of center section of WSF #1. WSF #1 normally operates near MOL as it is controlled by a gravity overflow channel into WSF #2.

Photo #:	6742
Date/Time of Photo:	6/29/2023 10:34
Photo By:	Brian Hanson
Photo Location:	WSF #1

Photo Description:

Standing at the northwest corner of WSF #1 looking south: View of west edge of WSF #2.

Photo #:	6744
Date/Time of Photo:	6/29/2023 10:34
Photo By:	Brian Hanson
Photo Location:	WSF #1

Photo Description:

Standing on the west side of WSF #1 looking east: View of southwest corner of WSF #1 at access ramp. Ramp used to aid in sand & solids removal.

Photo #:	6734
Date/Time of Photo:	6/29/2023 10:32
Photo By:	Brian Hanson
Photo Location:	WSF #1

Photo Description:

Standing on east side of WSF #1 looking northwest: View of permanent markers in WSF #1. Metal rebars embedded in concrete & painted green.

Photo #:	6702
Date/Time of Photo:	6/29/2023 10:18
Photo By:	Brian Hanson
Photo Location:	WSF #2

Photo Description:

Standing on the south side of WSF #2 looking northwest: View of western edge of WSF #2. Notice manure entering the facility via concrete overflow channel from WSF #1.

Photo #:	6705
Date/Time of Photo:	6/29/2023 10:24
Photo By:	Brian Hanson
Photo Location:	WSF #2

Photo Description:

Standing on the south side of WSF #2 looking northeast: View of east half of WSF #2.

Photo #:	6711
Date/Time of Photo:	6/29/2023 10:26
Photo By:	Brian Hanson
Photo Location:	WSF #2

Photo Description:

Standing at the northeast corner of WSF #2 looking west: View of northeast corner of WSF #2.

Photo #:	6732
Date/Time of Photo:	6/29/2023 10:32
Photo By:	Brian Hanson
Photo Location:	WSF #1 & WSF #2

Photo Description:

Standing on the concrete berm separating WSF #1 & WSF #2 looking south: View of concrete overflow channel used to connect the 2 facilities.

Photo #:	6738
Date/Time of Photo:	6/29/2023 10:32
Photo By:	Brian Hanson
Photo Location:	WSF #2

Photo Description:

Standing on the west side of WSF #2 looking southeast: View of west 1/2 of WSF #2.

Photo #:	6719
Date/Time of Photo:	6/29/2023 10:28
Photo By:	Brian Hanson
Photo Location:	WSF #3

Photo Description:

Standing on the north side of WSF #3 looking west: View of wall exterior of WSF #3. A few minor hairline cracks visible, but no leaking of manure present.

Photo #:	6721
Date/Time of Photo:	6/29/2023 10:30
Photo By:	Brian Hanson
Photo Location:	WSF #3

Photo Description:

Standing on the south side of WSF #3 looking northeast: View of center section of WSF #3.

Photo #:	6724
Date/Time of Photo:	6/29/2023 10:30
Photo By:	Brian Hanson
Photo Location:	WSF #3

Photo Description:

Standin at the southwest corner of WSF #3 looking east: View of concrete access ramp in Southwest corner of WSF #3 used to aid in the removal of sand & other solids.

Photo #:	6726
Date/Time of Photo:	6/29/2023 10:30
Photo By:	Brian Hanson
Photo Location:	WSF #3

Photo Description:

Close up view of depth markers painted on access ramp wall used by farm to measure waste depth.

Photo #:	6798
Date/Time of Photo:	6/29/2023 10:49
Photo By:	Brian Hanson
Photo Location:	Heifer Pit

Photo Description:

Standing on the north side of the Heifer Pit looking east: View of the north wall of the heifer pit. No visible signs of leakage.

Photo #:	6801
Date/Time of Photo:	6/29/2023 10:50
Photo By:	Brian Hanson
Photo Location:	Heifer Pit

Photo Description:

Standing on the west side of the Heifer Pit looking east: View of south wall of Heifer Pit.

Photo #:	6828
Date/Time of Photo:	6/29/2023 10:53
Photo By:	Brian Hanson
Photo Location:	Heifer Pit

Photo Description:

Standing on the east side of Heifer Pit looking northwest: View of calf hutch area runoff control outlet pipe.

Photo #:	6759
Date/Time of Photo:	6/29/2023 10:38
Photo By:	Brian Hanson
Photo Location:	Leachate Pit

Photo Description:

Standing at the northwest corner of Feed Storage Area looking northwest: General view of Leachate Pit.

Photo #:	6764
Date/Time of Photo:	6/29/2023 10:39
Photo By:	Brian Hanson
Photo Location:	Leachate Pit

Photo Description:

Standin on the south side of Leachate Pit looking northeast: View of southwest corner of leachate pit. Water was dark brown in color and had a whitish brown film floating on top.

Photo #:	6767
Date/Time of Photo:	6/29/2023 10:40
Photo By:	Brian Hanson
Photo Location:	Leachate Pit

Photo Description:

Standing at northwest corner of Leachate Pit looking south: View of western edge of Leachate Pit.

Photo #:	6771
Date/Time of Photo:	6/29/2023 10:41
Photo By:	Brian Hanson
Photo Location:	Leachate Pit

Photo Description:

Standing on the south side of Leachate Pit looking west: View of southern edge of Leachate Pit.

Photo #:	6746
Date/Time of Photo:	6/29/2023 10:35
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area (FSA)

Photo Description:

Standing on the east side of the FSA looking south: View of the east edge of the feed storage area. Arrow indicated direction of runoff flow.

Photo #:	6747
Date/Time of Photo:	6/29/2023 10:35
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing on the east side of the FSA looking north: View of east side of FSA where runoff controls divert flow to the north side of the FSA. Arrows indicate direction of runoff flow.

Photo #:	6750
Date/Time of Photo:	6/29/2023 10:36
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing on the north side of FSA looking west: View of north edge of FSA that acts as runoff collection channel.

Photo #:	6756
Date/Time of Photo:	6/29/2023 10:37
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing at the northwest corner of FS looking northwest: View of runoff collection inlet grate located in northwest corner of FSA. Runoff enters this grate and gravity-flows to Leachate Pit located in the background.

Photo #:	6786
Date/Time of Photo:	6/29/2023 10:45
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing on the west side of FSA looking north: View of the exterior of the bunker wall. Notice a few areas of leachate seeping through the floor/wall joint. A gravel drain is installed next to the concrete footer with subsurface drain to collect this leachate. No signs of leachate getting past the gravel into the grassed area.

Photo #:	6789
Date/Time of Photo:	6/29/2023 10:46
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing on the south side of FSA looking northwest: View of southwest corner of bunker walls. Leachate also seeping through floor/wall joint in this location. Gravel drain present to collect this leachate.

Photo #:	6790
Date/Time of Photo:	6/29/2023 10:46
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing on the south side of FSA looking west: View of south side of FSA bunker wall. This is one of the older bunker and does not have a gravel drain to collect leachate. Notice leachate had ponded in stormwater channel and killed the vegetation. Not actively flowing due to bunker being empty.

Photo #:	6791
Date/Time of Photo:	6/29/2023 10:47
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing at the southeast corner of the FSA looking west: View of stormwater channel just east of previous picture. No sign of leachate or dead vegetation at this location.

Photo #:	6697
Date/Time of Photo:	6/29/2023 10:16
Photo By:	Brian Hanson
Photo Location:	Storm Water

Photo Description:

Standing north of the robot barn looking west" View of culvert outlets carrying stormwater from Freestall #1 & #2 out to crop field. Area is well-vegetated.

Photo #:	6837
Date/Time of Photo:	6/29/2023 10:59
Photo By:	Brian Hanson
Photo Location:	Stormwater

Photo Description:

Standing off the southwest corner of the robot barn: View of stormwater channel used to convey runoff from the farmstead and buildings towards the road ditch.

Photo #:	6803
Date/Time of Photo:	6/29/2023 10:50
Photo By:	Brian Hanson
Photo Location:	Well Locations

Photo Description:

Standing on the west side of calf hutch area looking west: View of well off southeast corner of heifer barn. Identified as Hi Cap well # 92584: Unique well ID TI729

Photo #:	6830
Date/Time of Photo:	6/29/2023 10:54
Photo By:	Brian Hanson
Photo Location:	Well Locations

Photo Description:

Standing off the southeast corner of parlor looking northeast: View of well location. Well located in manhole below ground at red arrow. Identified as Hi Cap # 92583:
Unique Well ID IJ829

Photo #:	6831
Date/Time of Photo:	6/29/2023 10:56
Photo By:	Brian Hanson
Photo Location:	Well Locations

Photo Description:

Standing on the west side of the farm residence looking south: View of well location that only serves the house & shop. Does not appear to be connected with Hi Capacity application. No record of well construction report found. Well Cap shows B. Young Well Drilling, Gillet, WI.

Photo #:	6835
Date/Time of Photo:	6/29/2023 10:58
Photo By:	Brian Hanson
Photo Location:	Well Locations

Photo Description:

Standing on the driveway southeast of the calf hutch area looking east: View of 2 new Hi Cap wells drilled in 2019 along road ditch.

Hi Cap # 92585 & 92586

Unique Well ID: ZF640 & ZF643

SUMMARY:

Substantial Compliance

- The permittee is currently in substantial compliance with the permit.

Areas of Concern

- There was evidence of leachate seeping through the western & southern bunker wall of the feed storage area. Currently the western wall leachate was being collected by a gravel drain system. Proper operation and maintenance is required to ensure this system functions as designed to prevent any unpermitted discharges from the feed storage area. Continue monitoring during weekly & quarterly inspections. The southern wall does not have this same drain system and evidence of leachate ponding was visible in the adjacent grass area.

Permit Violations

- No violations were observed during the inspection.

Action Items

- Clean up all leachate & contaminated soil along south bunker wall. Regrade & revegetate the area between the feed storage area & shed. To prevent future discharges, perform any necessary maintenance of south bunker wall to contain the leachate; or install a collection system to collect & transfer the runoff to the leachate pond. Engineering plans may need to be submitted for approval prior to installation depending on the solution you choose.
- Submit permit reissuance application as required by WPDES permit schedule 2.9. Due date of 1/2/2024.

May Be Required in Next Permit Term

- No specific requirements now, but will be reviewed after complete application is submitted and compliance status at time of permit reissuance.

Materials Required as part of the Permit Application

Required materials must be submitted together as a complete permit application through the ePermitting System: http://dnr.wi.gov/permits/water/. The system will not allow you to electronically sign and submit your application until all of the following are included:

3400-025 form (Livestock/Poultry Operation WPDES Permit Application)

3400-025A form (Animal Units Calculation Worksheet)

3400-025G form (Evaluated Facilities of Systems Checklist)

3400-025C form (Reviewable Facilities of Systems Checklist)

A soil survey map of the dairy's production area

A labeled aerial map showing the existing and proposed features and structures of the dairy's production area

Calculations documenting days of liquid manure and process wastewater storage

Supporting documentation for days of storage calculations

A complete 5-year Nutrient Management Plan (NMP). If necessary, include a description of permanent spray irrigation systems and any other landspreading or treatment systems (proposed or active)

Plans and specifications for any proposed facilities

State of Wisconsin
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May 29, 2024

File Ref: R-2024-0111

Ryan Horsens
Horsens Homestead Farms LLC
W1980 County Road C
Cecil, WI 54111

Subject: Completeness Determination Letter

The Wisconsin Department of Natural Resources (the Department) received a plan and specification submittal on behalf of Horsens Homestead Farms LLC by Douglas M Gatrell, GHD Services Inc. on April 25, 2024 for Waste storage pond #4 and waste transfer modifications (waste storage, transfer pipe and days of storage), to be reviewed by the Department in accordance with s. 281.41 Wis Stats. A completeness review was conducted to determine if the submittal is complete. The submitted plans and specifications have been deemed complete. The complete date is set at May 28, 2024 and the 90 day due date is August 26, 2024.

In accordance with s. NR 243.15(1)(a) and s. NR 108.03(1), an owner or operator may not commence or cause to be commenced, construction of a proposed reviewable facility or system until plans and specifications have been approved by the department in writing. Also, s. NR 108.04(5) states, "The Department may not approve plans and specifications for any project for which construction has commenced. The department may review the plans and specifications and require changes to components which may adversely affect public health, the operation of the proposed or existing facility and the determination of permit compliance. This review does not prohibit the department from taking enforcement action under s. NR 108.03."

Please contact Rob Davis (contact information below) should you have any questions.

Sincerely,

Tabatha Davis
Watershed Management Program

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