

Permit Fact Sheet

General Information

Permit Number:	WI-0066907-01-0
Permittee Name:	Creamery Creek Holsteins LLC
Address:	W1250 County Road U
City/State/Zip:	Bangor WI 54614
Discharge Location:	<p>Main Farm: W1250 County Road U, Bangor WI 54614, Lacrosse County, Town of Bangor, SW ¼ of NW ¼ Sec. 03 T16N R05W</p> <p>Robot Farm: W1017 County Road U, Bangor WI 54614, Lacrosse County, Town of Bangor, NE ¼ of NE ¼ Sec. 03 T16N R05W</p> <p>WSF 2: W990 County Road U, Bangor WI 54614, Lacrosse County, Town of Bangor, SE ¼ of SE ¼ Sec. 34 T17N R05W</p>
Receiving Water:	Unnamed tributaries within the Middle La Crosse River Watershed, and ground waters of the state.
Stream Classification:	La Crosse River 303d

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.)	30	0	70	0	11/01/2024
Milking and Dry Cows	903	922	2492	2545	11/01/2024
Heifers (400 lbs. to 800 lbs.)	48	80	0	0	11/01/2024
Heifers (800 lbs. to 1200 lbs.)	17	15	77	70	11/01/2024
Total	998	922	2639	2545	

Facility Description

Creamery Creek Holsteins LLC is a proposed Concentrated Animal Feeding Operation (CAFO). **Creamery Creek Holsteins LLC** is operated by **Justin Peterson**. The farm is currently under 1000 animal units. The farm has a planned expansion to **2,639** animal units. **(1,780 milking & dry cows, 70 heifers up to 1200 lbs, and 350 dairy/beef calves).**

Creamery Creek Holsteins LLC has a total of **3,111** acres available for land application of manure and process wastewater. Of this acreage, **0** acres are owned, and **3,254** acres are rented or controlled through manure agreements. **Creamery Creek Holsteins LLC** has a planned expansion during the proposed permit term. Approximately **22,482,537** gallons of manure and process wastewater and **830 tons** of solid manure in the first year of the permit term. The farm has a proposed **270 days** of liquid manure storage and at least 59 days of solid manure storage. The planned expansion is planned be completed in 2025. The expansion will include the construction of the Robot Barn, WSF 2, Sand Separation Facility, expanded feed storage and calf hutch area with a runoff collection waste storage facility. See schedule sections for dates.

Three facilities will be covered under **Creamery Creek Holsteins LLC** WPDES Permit. The main dairy site is located at W1250 County Road U, Bangor WI 54614 and is composed of 3 dairy freestall barns, milking parlor, heifer barn, calf hutch area, feed storage area, 2 solid stacking areas, and waste storage facility. The expansion will include the construction of the Robot Farm located at W1017 County Road U, Bangor WI 54614 and will be composed of one dairy freestall barn and robot milking facilities. The third site, WSF2, is located at W990 County Road U, Bangor WI 54614 will be composed of one waste storage facility.

Creamery Creek Holsteins LLC has submitted an application for issuance of a Wisconsin Pollutant Discharge Elimination System (WPDES) permit. The application is complete. This will be the first permit issuance for this facility. **Creamery Creek Holsteins LLC** has an approved Nutrient Management Plan (NMP) that is written according to WPDES permit and Chapter NR 243 Wis. Adm. Code requirements. **Creamery Creek Holsteins LLC** was also found to have at least 180 days of liquid manure storage.

Substantial Compliance Determination

Not Applicable to first time permit issuance.

Enforcement During Last Permit: This is the first issuance of a WPDES permit to Creamery Creek Holsteins LLC. No previous enforcement has occurred.

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Compliance determination entered by **Eric Struck** on **September 20, 2024**.

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 Farm. WSF 1 is a liquid-tight concrete storage (ACI-350 design and construction) located on the east side of the production area. The facility has a capacity of 4.8 million gallons and was constructed in 2012. This storage accepts manure and process wastewater from the parlor and three freestall barns via two reception tanks and associated transfers. One reception tank is located on the north side of the middle barn, the second transfer tank is located on the north side of the south barn and parlor. WSF 1 will require an engineering evaluation, see Schedules section for due dates.
002	Solid Stacking Areas: Sample point 002 is for two solid waste storage facilities located at the Main Farm. The solid stacking areas are concrete floor and side wall storages located outside the maternity barn east of the parlor and on the east side of the heifer barn. The facility is used to as a push out and storage for used bedding and bedpack manure from the maternity and heifer barns. The solid manure stacking areas at the main farm will require an engineering evaluation, see Schedules section for due dates. The areas can also

Sample Point Designation For Animal Waste	
Sample Point Number	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
	be abandoned and only used for clean sand and bedding storage.
003	Main Farm Miscellaneous Solid Manure: Sample point 003 is for solid manure sources that are directly land applied and not stored in a waste storage facility. This includes solid sources such as calf hutch manure, maternity pen bedpack, heifer bedpack, steer manure, settled manure solids, etc. Representative samples shall be taken for each manure source type.
004	WSF 3: Sample point 004 is for the proposed liquid waste storage facility 3 (WSF 3) located at the Main Farm. WSF 3 will be a liquid-tight concrete storage located on the south side of the feed storage area on the west side of the production area. The proposed facility will have the capacity to collect up to the 25-year 24-hour storm event to meet permit discharge limitations. This storage will accept manure and process wastewater from calf hutch area and expanded feed storage area. See Schedules section for due dates.
005	Calf Hutch Area Runoff Control System: Sample point 005 is for visual monitoring and inspection of the calf hutch area and associated runoff control system located at Main Farm. Proper operation and maintenance is required to ensure discharges meet permit requirements. Currently the calf hutch area is located on the north side of the production area. Weekly inspections are required and shall be recorded according to monitoring program. An engineering evaluation of the feedlot and runoff control system shall be submitted according to the Schedules section of the permit. Improvements are expected to be made during the permit term.
006	Feed Storage Area & Runoff Control System: Sample point 006 is for visual monitoring and inspection of the feed storage area and associated runoff control system located at Main Farm. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program. An engineering evaluation of the feed storage area and runoff control system shall be submitted according to the Schedules section of the permit. Improvements are expected to be made during the permit term.
007	WSF 2: Sample point 007 is for liquid waste storage facility 2 (WSF 2) located at the WSF 2 side north across the road from the robot farm. WSF 2 will be a liquid-tight concrete storage (ACI-350 design and construction) located on the north side of County Hwy U, across from the Robot Farm. The facility will have the capacity of 16.386 million gallons. This storage will accept manure and process wastewater from sand separation facility at the Robot Farm. WSF 2 had plans approved on March 8, 2024 (R-2024-0012), see Schedules section for due dates.
008	WSF 2 Solid Manure: Sample point 008 is for solid manure and waste sources that are directly land applied and not stored in a waste storage facility. This includes solid sources such as, stored bedpack manure, separated solid manure, and settled solids, etc. Representative samples shall be taken for each manure source type.
009	Sand Separation Building: Sample point 009 is the proposed sand separation building and associated liquid waste storages and transfer systems located at the Robot Farm. The sand separation system will be built within an existing structure located west of the Robot Farm and south of WSF 2. This storage accepts manure and process wastewater from the Robot Farm and possibly the Main Farm for processing. See Schedules section for due dates.
010	Miscellaneous Solid Manure Robot Farm: Sample point 010 is for solid manure and waste sources that are directly land applied and not stored in a waste storage facility. This includes solid sources such as calf

Sample Point Designation For Animal Waste	
Sample Point Number	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
	hutch manure, maternity pen bedpack, heifer bedpack, steer manure, separated and settled solids, etc. Representative samples shall be taken for each manure source type.
011	Headland Stacking Sites: Sample point 011 is for solid manure land applied from approved headland stacking sites. Stacks are defined as part of the production area and therefore subject to the production area discharge limitations section of this permit. Quarterly inspections while stacks are present are required and shall be recorded according to monitoring program.
012	Storm Water Runoff Control System: Sample point 012 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.

Sample Point Designation For Groundwater Monitoring Systems			
System	Sample Pt Number	Well Name	Comments
Creamery Creek Holsteins LLC	811	MW-01	
	812	MW-02	
	813	MW-03	

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 be submitted to the Department for approval.

The permittee currently has approximately 270 days of storage for liquid manure. The permittee will be required to design and construct 180 days of liquid manure storage by February 1, 2026. Once the permittee has 180 days of liquid manure storage, it 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 with 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 2,639 animal units (1,780 milking & dry cows, 70 heifers up to 1200 lbs, and 350 dairy/beef calves), it is estimated that approximately 22,482,537 gallons of manure and process wastewater will be produced per year. The permittee owns approximately 0 acres of cropland and rents about 3,254. Given the rotation commonly used by the permittee, 3,111 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.

Sample Point Number: 001- WSF1-Liquid; 004- FSA Calf Hutch Collection; 007- WSF 2; 009- Sand separation system

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

This is the first issuance of a WPDES permit to Creamery Creek Holsteins LLC. Sample points were created to describe the operations collection and transfer of waste.

1.1.2 Explanation of Operation and Management Requirements

Waste shall be sample, stored, and land applied according to permit and nutrient management plan requirements per s. NR 243, Wis. Admin. Code.

Sample Point Number: 002- Solid Stacking Areas Main Farm; 003- Solid Misc. Manure Main Farm; 008- Solid Manure WSF 2; 010- Solid Misc. Manure Robot Farm; 011- Headland stacking sites

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

This is the first issuance of a WPDES permit to Creamery Creek Holsteins LLC. Sample points were created to describe the operations collection and transfer of waste.

1.1.4 Explanation of Operation and Management Requirements

Waste shall be sample, stored, and land applied according to permit and nutrient management plan requirements per s. NR 243, Wis. Admin. Code.

Sample Point Number: 005- Calf hutch area runoff control; 006- FSA Runoff, and 012- Stormwater Monitoring

1.1.5 Changes from Previous Permit

This is the first issuance of a WPDES permit to Creamery Creek Holsteins LLC. Sample points were created to describe the operations collection and transfer of waste.

1.1.6 Explanation of Operation and Management Requirements

Runoff controls should be visually monitored per the farms monitoring and inspection program and in accordance to s. NR 243, Wis. Admin. Code.

2 Groundwater – Monitoring and Limitations

2.1 Groundwater Monitoring System for Creamery Creek Holsteins LLC

Location of Monitoring system: W1250 County Road U, Bangor WI 54614, Lacrosse County

Groundwater Monitoring Well(s) to be Sampled: MW-01, MW-02, MW-03

Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality:

Groundwater Monitoring Well(s) Used for Point of Standards Application:

Parameter	Units	Preventative Action Limit	Enforcement Standard	Frequency
Depth To Groundwater	feet	N/A	N/A	Monthly
Groundwater Elevation	feet MSL	N/A	N/A	Monthly
Temperature	deg F	N/A	N/A	Monthly
Chloride Dissolved	mg/L	125	250	Monthly
pH Field	su	N/A	N/A	Monthly
COD	mg/L	N/A	N/A	Monthly
Carbon, Total Organic	mg/L	N/A	N/A	Monthly
Nitrogen, Total Kjeldahl Dissolved	mg/L	N/A	N/A	Monthly
Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	2.0	10	Monthly
Nitrogen, Ammonia Dissolved	mg/L	0.97	9.7	Monthly
Solids, Total Dissolved	mg/L	N/A	N/A	Monthly
Potassium Dissolved	mg/L	N/A	N/A	Monthly
E. coli	#/100 ml	0	0	Monthly

Changes from Previous Permit:

This is the first issuance of a WPDES permit to Creamery Creek Holsteins LLC. Groundwater monitoring was recommended based on a site assessment of soil and ground water conditions at the production areas.

Explanation of Limits and Monitoring Requirements

3 Schedules

3.1 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 90 days of the effective date of this permit.	12/01/2024

3.2 Emergency Response Plan

Required Action	Due Date
Develop Emergency Response Plan: Develop a written Emergency Response Plan within 30 days of permit coverage, available to the Department upon request.	12/01/2024

3.3 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 NM

Required Action	Due Date
Updates to the NMP 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).	12/01/2024
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 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.	

3.4 Annual Reports

Submit annual reports by January 31 of each year in accordance with the annual reports subsection in standard requirements.

Required Action	Due Date
Submit Annual Report #1: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2025
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.	

3.5 WSF 1: Manure Storage Facility - Engineering Evaluation

An evaluation was submitted with the permit application, pending the review of the evaluation further action maybe needed.

Required Action	Due Date
Written Report: Submit a written report evaluating the existing manure storage facility's ability to meet the conditions in the Production Area Discharge Limitations and Manure and Process Wastewater Storage subsections and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	11/01/2025
Plans and Specifications: Submit plans and specifications for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code, to permanently correct any adverse manure storage conditions.	02/01/2026
Corrections and Post Construction Documentation: Complete construction on the manure storage facility that permanently corrects any adverse conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	11/01/2027

3.6 Main Farm Solid Manure Storage Facility - Engineering Evaluation

Farm plans to no longer use the stacking areas, if further use is desired an evaluation is required.

Required Action	Due Date
Written Report: Submit a written report evaluating the existing manure storage facility's ability to meet the conditions in the Production Area Discharge Limitations and Manure and Process Wastewater Storage subsections and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	11/01/2025
Plans and Specifications: Submit plans and specifications for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code, to permanently correct any adverse manure storage conditions.	02/01/2026
Corrections and Post Construction Documentation: Complete construction on the manure storage facility that permanently corrects any adverse conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	11/01/2027

3.7 Calf Hutch Area Runoff Control System - Engineering Evaluation

Required Action	Due Date
Written Description of Existing System: Submit a written description of the existing runoff control system and its adequacy to permanently meet the conditions in the Production Area Discharge Limitations and Runoff Control subsections and s. NR 243.15, Wis. Adm. Code. (See Standard	11/01/2025

Requirements for report details.)	
Plans and Specifications: Submit plans and specifications for Department review and approval to permanently correct any adverse runoff control conditions in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code.	02/01/2026
Corrections and Post Construction Documentation: Complete construction of runoff controls that permanently correct any adverse runoff control conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	11/01/2027

3.8 Feed Storage Area Runoff Control System - Engineering Evaluation

Required Action	Due Date
Written Description of Existing System: Submit a written description of the existing runoff control system and its adequacy to permanently meet the conditions in the Production Area Discharge Limitations and Runoff Control subsections and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	11/01/2025
Plans and Specifications: Submit plans and specifications for Department review and approval to permanently correct any adverse runoff control conditions in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code.	02/01/2026
Corrections and Post Construction Documentation: Complete construction of runoff controls that permanently correct any adverse runoff control conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	11/01/2027

3.9 Sand Separation Facility - Installation

Required Action	Due Date
Plans and Specifications: Submit plans and specifications for the sand separation facility for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code. See Standard Requirements for plan content information.	01/01/2025
Complete Installation: Complete construction of the manure storage facility. The facility shall be functional and in operation by the specified Date Due. Post construction documentation shall be submitted within 60 days of completion of the project.	02/01/2026

3.10 WSF 2: Manure Storage Facility - Installation

Required Action	Due Date
Plans and Specifications: Submit plans and specifications for waste storage facility 2 for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code. See Standard Requirements for plan content information.	01/01/2025
Complete Installation: Complete construction of the manure storage facility. The facility shall be	02/01/2026

functional and in operation by the specified Date Due. Post construction documentation shall be submitted within 60 days of completion of the project.	
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3.11 Groundwater Monitoring Wells - Installation

Required Action	Due Date
Plans and Specifications: Submit plans and specifications for the installation of a ground water monitoring system to include a minimum of MW-1, MW-2, and MW-3 to be installed.	06/01/2027
Complete Installation: Complete monitoring well installation in accordance with ch NR 151, Wisconsin Administrative Code. (Note: Documentation of well construction must be submitted to the department with 60 days of installation.)	07/01/2028

3.12 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	03/30/2029

3.13 Explanation of Schedules

Schedules are included in the permit to ensure compliance with s. NR 243, Wis. Admin. Code, requirements.

Most of the Schedule items are typical for a large dairy facility like this one. The schedules contained in 3.1, 3.2, 3.3, 3.4, and 3.12 are standard permit schedules.

Schedule sections 3.5, 3.6, 3.7, and 3.8 were included as they are existing structures that have never been evaluated. WSF 1 has an existing evaluation pending review. The farm currently plans to submit plans and specifications for items 3.6, 3.7, and 3.8.

Schedule section 3.9 and 3.10 are part of the planned expansion related to the construction of the robot barn.

Schedule section 3.11 is for the phase I installation of ground water monitoring wells. The schedule section allows for 1 year of sampling to determine if further well installation is required.

Special Reporting Requirements

None

Other Comments:

None

Attachments:

Inspection report and site map(s): November 29, 2023

Nutrient Management Plan Approval Letter(s): July 29, 2024

Plan and Specification Approval and Days of Storage Letter(s): March 8, 2024

NR 140 Groundwater Memo: September 5, 2024

Public Notice

Expiration Date:

September 30, 2029

Justification Of Any Waivers From Permit Application Requirements

None

Prepared By: Eric Struck Agricultural Runoff Management Specialist

Date: September 30, 2029

Notice of Issuance was published in the La Crosse Tribune, 401 Third Street N, Lacrosse WI, 54601.



November 29, 2023

Creamery Creek Holsteins LLC
W1250 County Road U
Bangor, WI 54614

WPDES Permit # NA
La Crosse County

Subject: Inspection Report Summary

Justin and Louisa Peterson and Team

On November 9, 2023 the Wisconsin Department of Natural Resources (WDNR) conducted a site inspection for Creamery Creek Holstein as part of the WPDES permit issuance process. A copy of this inspection report is attached. Based on the site visit and conversations several existing structures will require evaluations as part of the final permit application.

Please review the attached site inspection report. The final permit reissuance material must be submitted through the ePermitting System located at <http://dnr.wi.gov/permits/water/>. The following is required for a complete permit application:

Permit Application Materials Required for Creamery Creek Holsteins:

- 3400-025 form (Livestock/Poultry Operation WPDES Permit Application)
- 3400-025A form (Animal Units Calculation Worksheet)
- 3400-025B form (Nutrient Management Plan Checklist)
- 3400-025C form (Reviewable Facilities of Systems Checklist)
- Soil survey map(s) for each site managed by your operation
- Labeled aerial map(s) showing the features and structures located at each site managed by your operation (clearly delineate what is existing and proposed)
- Calculations documenting a minimum of 180 days liquid manure (and process wastewater) storage
- Supporting documentation for 180-day 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)
- Engineering evaluations for all reviewable facilities and systems, including, but not limited to:
 - Existing waste storage facility and associated transfers
 - Evaluation of existing feed storage area and runoff controls
 - Evaluation of calf hutch areas runoff controls
 - *Plans and specifications for new reviewable facilities, including, waste storage facilities, sand separation, and manure and process wastewater transfers

*Note: Plans and specifications must be submitted through the ePermitting system as a separate submittal

If you have any questions regarding this letter, inspection report, or permit requirements, please contact me at (608) 712-2324 or tabatha.davis@wisconsin.gov.

Sincerely,



Tabatha Davis
Agricultural Runoff Management Specialist
Bureau of Watershed Management
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road, Fitchburg, WI 53711
Cell: (608)-712-2324
tabatha.davis@wisconsin.gov

CC: Laura Bub, Tyler Dix, Benjamin Uvaas - Wisconsin DNR
Matt Hanewall - La Crosse County Land Conservation

CAFO Inspection Report DRAFT



Inspection Date: 11/09/2023

Inspection Type: New CAFO Permit

Operation Name: Creamery Creek Holsteins LLC

Operation Address: W1250 County Road U, Bangor, WI 54614

On-Site Representative(s): Justin and Louisa Peterson (Creamery Creek), Jenise Anderson (MSA), Dave West (West Agronomics), Matt Hanewall (La Crosse County Land Conservation)

DNR Staff / Report Writer: Tabatha Davis (Agricultural Runoff Management Specialist), Benjamin Uvaas (CAFO Compliance/ Enforcement Coordinator), Tyler Dix (CAFO Permit Coordinator)

On November 9, 2023, at 10 am department representatives Tabatha Davis, Tyler Dix and Benjamin Uvaas met with Justin and Louisa Peterson of Creamery Creek Holsteins LLC (Creamery Creek), Jenise Anderson engineer with MSA, and representatives from La Crosse County to conduct a first-time permit issuance inspection. Creamery Creek Holsteins LLC is a farm located in La Crosse County owned and operated by Justin and Louisa Peterson. The operation is currently operating with 997.5 animal units. The preliminary WPDES permit application submitted on October 19, 2023, indicates that the dairy wishes to expand to 2639 animal units by fall 2024. The expansion will include the construction of second site consisting of a liquid waste storage facility, sand separation facility, and additional milking cow freestall barns. The permitting process was discussed as well as engineering evaluation requirements for the upcoming permit. Weather the day of the inspection was clear and mid-fifties. No water samples were taken during the inspection.

Site Maps



Figure 1. Aerial image of Creamery Creek existing Main Farm. Aerial image obtained from Wisconsin Department of Natural Resources Agricultural Runoff Viewer.

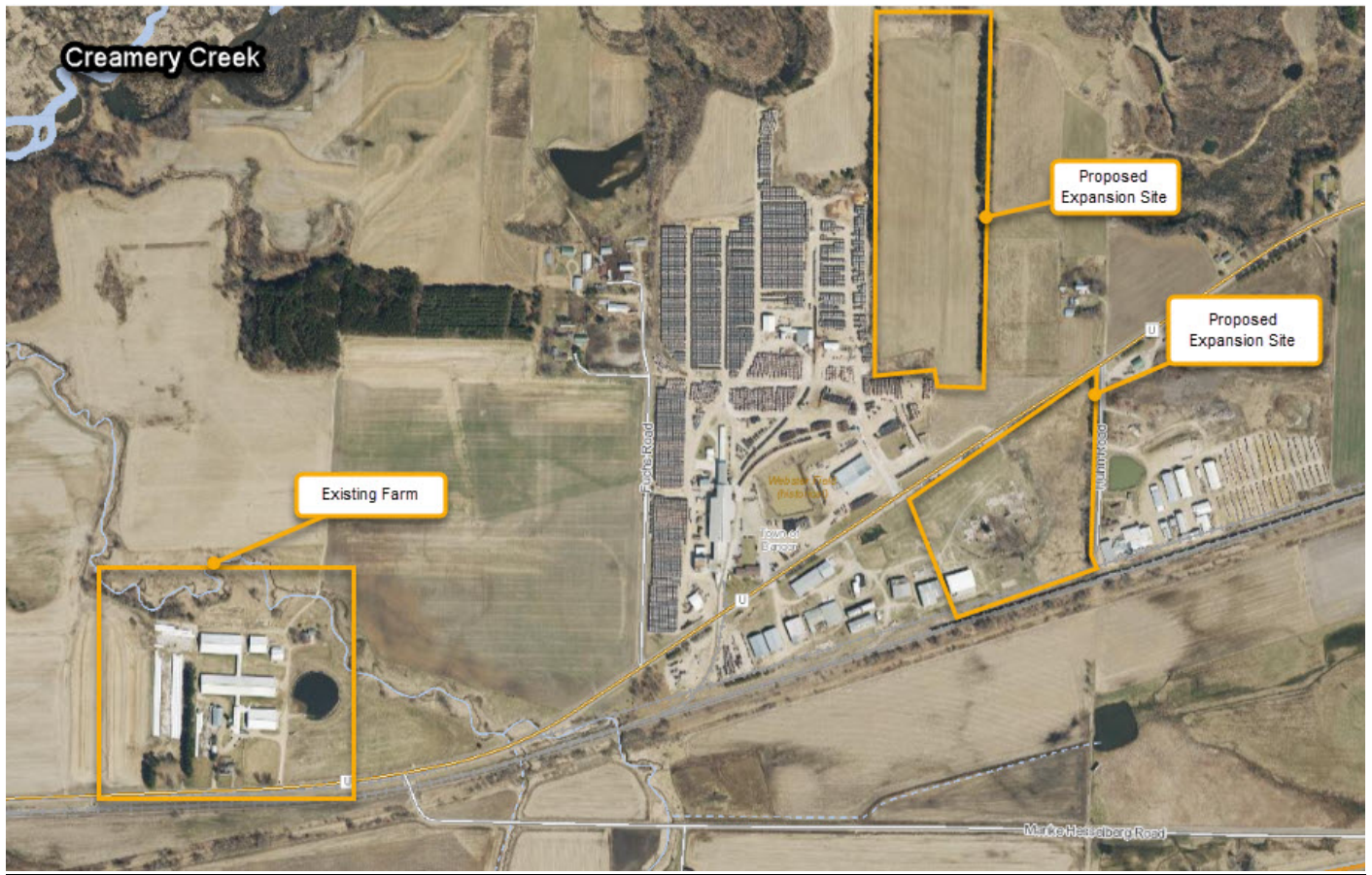


Figure 2. Aerial overview of proposed expansion site for Creamery Creek. Aerial image obtained from Wisconsin Department of Natural Resources Agricultural Runoff Viewer.

SITE OBSERVATIONS

Feedlot Runoff

Creamery Creek does not have any outdoor feedlots. All animals are housed under roof or in calf hutches.

Calf Hutch Areas

The farm is currently using 60-100 calf hutches to house calves until they are weaned. The current calf hutch area does not have runoff controls. The calf hutches are located on the north side of the production area north of the existing barns in close proximity to a tributary of the La Crosse River. The farm discussed placing the calf hutches on cropped fields and rotating annually or seasonally. An evaluation of the calf hutch areas and proposed rotation practice will be required as part of the final permit application. The evaluation should demonstrate how the areas meet production area discharge limitations.



Photo #:1	IMG_0680	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	South of calf hutch area facing north.
Description:	Eastern end of calf hutch area.		



Photo #:2	IMG 0681	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Southeast corner of calf hutch area facing northwest.
Description:	Eastern end of calf hutch area.		



Photo #:3	IMG 0684	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	South of calf hutch area facing east.
Description:	Middle of calf hutch area along looking at southern edge.		



Photo #:4	IMG 0685	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Middle of calf hutch area facing west.
Description:	North end of calf hutch area (right side of photo) slopes towards intermittent stream.		



Photo #:5	IMG 0686	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Northern edge of calf hutch area facing north.
Description:	Footprint of moved hutches on north side of calf hutch area.		



Photo #:6	IMG 0687	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Northern edge of calf hutch area facing north.
Description:	Footprint of moved hutches on northwest side of calf hutch area facing northwest.		



Photo #:7	IMG 0693	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Western end of calf hutch area facing east.
Description:	Western end of calf hutch area. Runoff flows north (left in photo) towards intermittent stream.		



Photo #:8	IMG 0694	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Western end of calf hutch area facing east.
Description:	Western end of calf hutch area. Runoff flows north (left in photo) towards intermittent stream.		

Waste Storage Facilities

Creamery Creek has one liquid waste storage facility (WSF), WSF 1, located on the east side of the production area. WSF 1 was built in 2011. Waste from the parlor and adjacent barn is collected in a reception tank and then transferred to WSF 1. A second reception tank is located between the two existing freestall barns; it collects waste from both barns, and then transfers waste to WSF 1. The Maximum Operating Level (MOL) marker and safety fencing was observed around WSF 1. Department staff discussed that WSF 1 will need an engineering evaluation as part of the final permit application. Additionally, department staff discussed 180 days of storage and permanent markers requirements.

Creamery Creek has several push out solid stacking areas for used bedding and waste. Storage options for solid waste were discussed, including headland stacking sites as part of the farm’s nutrient management plan. It was also discussed that solid stacking pads would need engineering evaluations or plans and specification as part of the final application.

Part of the proposed expansion also includes construction of a second production area including a WSF, waste transfer lines, and a sand separation facility. Plans and specifications for these structures are required permit application materials. The tentative location for the proposed waste storage, sand separation and freestall barn is on the grounds east of the tie manufacturing site and east of the existing main farm.



Photo #:9	IMG_0667	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Southern wall of WSF 1 facing east.
Description:	Southern wall of waste storage facility.		



Photo #:10	IMG_0669	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Western wall of WSF1 facing north.
Description:	Concrete wall of WSF 1.		



Photo #:11	IMG_0670	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Interior of WSF 1 facing east.
Description:	Interior of WSF 1.		



Photo #:12	IMG_0671	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Northern end of WSF 1 facing east.
Description:	Western wall of WSF 1.		



Photo #:13	IMG 0672	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Northern end of WSF 1 facing southwest.
Description:	One of the permanent markers installed on the WSF.		



Photo #:14	IMG 0674	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Northern wall of WSF 1.
Description:	Safety sign posted on Waste Storage Facility.		



Photo #:15	IMG 0675	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Northern wall of WSF1.
Description:	Wall on northern side of WSF.		



Photo #:16	IMG 0676	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Eastern wall of WSF facing west.
Description:	Joint patch along eastern wall on WSF.		



Photo #:17	IMG 0670	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	East side of waste storage facility facing west.
Description:	Access ramp on south side of waste storage facility.		



Photo #:18	IMG 0664	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	East side of waste storage facility facing east.
Description:	Tractor on top of waste storage facility ramp.		



Photo #:19	IMG 0661	Date:	11/09/2023	
Photo taken by:	B. Uvaas	Photo Location:	Southeast of southern freestall barn facing north.	
Description:	Pushout southeast of south freestall barn.			



Photo #:20	IMG 0663	Date:	11/09/2023	
Photo taken by:	B. Uvaas	Photo Location:	Southeast of southern freestall barn facing west.	
Description:	Pushout southeast of south freestall barn.			



Photo #:212	IMG_0690	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	East of heifer barn facing north.
Description:	Pushout area east of heifer barn.		



Photo #:22	IMG_0688	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	East of heifer barn facing north.
Description:	Pushout area east of heifer barn.		



Photo #:23	IMG_0688	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	East of heifer barn facing south
Description:	Pushout area southeast of heifer barn.		

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

Parlor wastewater is transferred to the WSF 1.

Feed Storage Area Runoff

Creamery Creek currently has two feed storage areas. The smaller feed storage area is west of the parlor and old barn. The larger feed storage area is on the west side of the production area. The floor of the feed storage areas is concrete. Creamery Creek currently does not have engineered runoff controls installed on either of its feed storage areas. A leachate flow path was on the western side of the large feed storage area (FSA). The operation currently does not plan to expand the feed storage area. An evaluation of the feed storage area and associated runoff controls will be required in the upcoming permit.



Photo #:24	IMG_0695	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Northern end of large FSA facing south.
Description:	Concrete bottom of large FSA.		



Photo #:25	IMG_0696	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	North end of large FSA facing west.
Description:	Bagged feed on large FSA.		



Photo #:26	IMG 0697	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Northeast edge of large FSA facing West.
Description:	Northern edge of large FSA.		



Photo #:27	IMG 0698	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Northwest corner of large FSA facing east.
Description:	Waste from FSA flows to northwest corner. Waste feed shown on corner.		



Photo #:28	IMG 0700	Date:	11/09/2023	
Photo taken by:	B. Uvaas	Photo Location:	Norwest corner of large FSA facing south.	
Description:	Western side of large feed storage area.			



Photo #:29	IMG 0701	Date:	11/09/2023	
Photo taken by:	B. Uvaas	Photo Location:	Northwest of Feed Storage Area facing west.	
Description:	Runoff flow path observed west of large feed storage area.			



Photo #:30	IMG 0702	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	West of feed storage area facing east.
Description:	Runoff flow path observed west of large feed storage area.		



Photo #:31	IMG 0703	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Western edge of large FSA facing north.
Description:	Feed stacked at edge of FSA on western side.		



Photo #:32	IMG 0704	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Western edge of large FSA facing south.
Description:	Feed stacks near edge of FSA on western side.		



Photo #:33	IMG 0705	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	West end of large FSA facing east.
Description:	Middle of FSA facing east.		



Photo #:34	IMG 0707	Date:	11/09/2023	
Photo taken by:	B. Uvaas	Photo Location:	Western edge of large FSA.	
Description:	Leachate observed leaving western edge of FSA.			



Photo #:35	IMG 0710	Date:	11/09/2023	
Photo taken by:	B. Uvaas	Photo Location:	Southwest corner of large FSA facing north.	
Description:	Southwest corner of large WSF. Waste feed observed on corner.			



Photo #:36	IMG 0710	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Southwest corner of large FSA facing east.
Description:	Southern side of large WSF.		



Photo #:37	IMG 0712	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Southwest corner of small FSA facing north.
Description:	Western edge of small FSA.		



Photo #:38	IMG 0713	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Western side of small FSA facing south.
Description:	Western edge of small FSA.		



Photo #:39	IMG 0715	Date:	11/09/2023
Photo taken by:	B. Uvaas	Photo Location:	Southwest corner of FSA facing north.
Description:	Eastern edge of small feed storage area.		

Ancillary Service Areas

The driveways were clear of waste and feed. Most of the barns did not have rain gutters. Commodities are stored in grain bins. Three wells are currently used by the farm; 2 are located near the house and one is located southeast of the parlor.

RECORDS REVIEW

Creamery Creek submitted a complete preliminary application on October 19, 2023. The proposed expansion is scheduled to start Fall 2024. Record keeping and permit requirements were discussed along with the timeline of the permit process.

SUMMARY

Areas of Concern

1. Feed storage areas due to the lack of engineered runoff controls and proximity to water resources
2. Calf Hutch Area due to the lack of engineered runoff controls and proximity to water resources
3. Solid stacking areas due to lack of engineered runoff controls and proximity to water resources

Action Items

Submit a final permit application at least six months prior to surpassing 1,000 animal units. Final application shall include:

1. Evaluation of waste storage facility
2. Evaluation or plans and specifications for feed storage area runoff controls
3. Evaluation or plans and specifications for calf hutch area and runoff controls

Possible Items for First Permit Issuance

These items could be completed before permit issuance (with department approved plans and specifications), or after permit issuance and as part of the permit's schedule:

1. Construction of waste storage facility including permanent markers
2. Construction of sand separation facility and waste transfers
3. Potential upgrades for the feed storage and calf hutch areas dependent upon Action Items #2 and #3



July 29, 2024

La Crosse County
Approval

Justin Peterson
Creamery Creek Holsteins LLC
W1250 County Road U
Bangor, WI 54614

SUBJECT: Conditional Approval of Creamery Creek Holsteins LLC Nutrient Management Plan, WPDES Permit No. 0066907-01-0

Dear Mr. Peterson:

After completing a review of Creamery Creek Holsteins 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 Creamery Creek Holsteins 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 Creamery Creek Holsteins 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 Creamery Creek Holsteins 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 997.5 animal units (645 milking & dry cows, 95 heifers, and 150 calves). A planned herd size of 2,639 animal units (1,780 milking & dry cows, 70 heifers, and 350 calves) by 2025.
2. Manure generation and spreading records indicate your herd will annually generate approximately 17,191,087 gallons of manure and process wastewater and 830 tons of solid manure in the first year of the permit term. After the planned expansion, your herd will annually generate approximately 22,482,537 gallons of manure and process wastewater and 830 tons of solid manure.
3. The use of application restriction options 1, 2, and 5 within surface water quality management areas.

4. The use of phosphorus delivery method P Index.
5. That Creamery Creek Holsteins LLC currently has 3,254 acres (0 owned and 3,254 controlled through contracts, rental agreements or leases, or under manure agreements) of which 3,111 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 La Crosse River (listed 303(d) impaired water by ‘Total Phosphorus’) Little La Crosse River (listed 303(d) impaired water by ‘Total Phosphorus’).
7. That some fields included in the NMP are directly adjacent to or have high potential to deliver nutrients and sediment to outstanding/exceptional waters including Dutch Creek.
8. That 7 fields are tiled.

- | | | |
|-----------|----------|-----------|
| - HATZ 10 | - Home 3 | - Molco 1 |
| - NF 10 | - Z 13 | - Zabel1 |
| - Zabel2 | | |

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 Creamery Creek Holsteins 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 Field Name	DNR #
Ras1	LA CROSSE CITY	1	114180
Ras1	LA CROSSE CITY	2	114181
Ras2	LA CROSSE CITY	3	114182
RJ2	ROCKLAND WATER SEWER UTILITIES WWTF	5	67502
T Miller	LA CROSSE CITY	1	81548
T Miller	LA CROSSE CITY	2	81549
T Miller	LA CROSSE CITY	4	81550
T Miller	LA CROSSE CITY	5	81551
T Miller	LA CROSSE CITY	6	81552
T Miller	LA CROSSE CITY	7	81553
T Miller	LA CROSSE CITY	8	81554
T Miller	LA CROSSE CITY	9	81555

T Miller	LA CROSSE CITY	10	81556
T Miller	LA CROSSE CITY	11	81557
T Miller	LA CROSSE CITY	12	81558

Prior to any manure applications on these fields Creamery Creek Holsteins 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 Creamery Creek Holsteins 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: Creamery Creek Holsteins LLC is responsible for obtaining nutrient content values for all other wastes spread on any field in their NMP.

3. The following fields are prohibited from receiving applications of manure or process wastewater due to soil test P levels being >200ppm P:

- 1494-3
- 1494-5
- 1494-5A
- 1494-7
- JJH 05A

If Creamery Creek Holsteins LLC wishes to use these fields for applications of manure or process wastewater all necessary information shall be submitted to the Department prior to application to demonstrate compliance with NR 243 and other applicable codes. Written Department approval amending this condition approval must be received prior to application.

4. If existing fields yield a soil test results equal to or greater than 200 ppm P, those fields would be prohibited from receiving manure or process wastewater applications, unless you obtain Department approval in accordance with NR 243.14(5)(b)2., Wis. Adm. Code.
5. All liquid manure samples collected may be analyzed, at a minimum, for percent dry matter, total nitrogen, percent NH₄-N, percent NO₃-N, phosphorus, potassium, and sulfur.
6. If manure sample results have a dry matter (DM) content less than 2.0% and the percent ammonium (NH₄⁺) is greater than 75% of the total N, Creamery Creek Holsteins LLC may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

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

7. Creamery Creek Holsteins LLC shall record daily manure applications by using form 3200-123A. These forms shall be retained at the farm and provided to the department upon request.
8. Creamery Creek Holsteins LLC shall annually submit a spreading report that summarizes the land application activities listed under NR 243.19(3)(c)5., Wis. Adm. Code by using form 3200-123.

WINTER SPREADING

9. Liquid manure applications during winter conditions, as defined by NR 243.14(7), Wis. Adm. Code, are prohibited with the exception of emergency applications.
10. The following field(s) are approved for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure:
- Home 2
 - JJ1
 - RJ1
 - Vault

11. The following field(s) are denied for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure:

- North and South Johnson field (no map)
- JJ5 (lack of adequate acres)
- RJ2 (lack of adequate acres)
- Hatz 1 (no map)

12. Winter spreading of solid and liquid manure may not occur during the “high risk runoff period” pursuant to s. NR 243.14(6)(c) and NR 243.14(7)(c), respectively.

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

14. Liquid applications shall be limited to 3,500 gallons per acre or 30 lbs. P per acre, whichever is less, on slopes 2-6% and 7,000 gallons per acre or 60 lbs. P per acre, whichever is less, on slopes 0-2%. Winter applications of solid manure shall be limited to 60 lbs. P per acre.

HEADLAND STACKING

15. The following sites are approved for non-winter and winter headland stacking of solid manure with 32% or greater solid content.

- Hatz Stack Site #3

16. The following sites are denied for headland stacking.

- Kroner Stack Site #1 (surrounding slopes are too steep)
- Hatz Stack Site #2 (surrounding slopes are too steep)

MANURE & PROCESS WASTEWATER IRRIGATION

17. The following fields are approved for process wastewater applications using a traveling gun irrigation system.

- 1494-1A
- Home 1
- Home 2
- Home 3
- Home 4

18. Irrigation application rates shall be limited to 10,000 gallons per acre (may be less in SWQMAs), per application event or 10,000 gallons per acre over a 5 day period if split applications are used.

19. Creamery Creek Holsteins LLC shall allow a rest period of 5 days or more between each application event.

20. Irrigation applications during daytime hours shall not occur if sustained wind speeds of 10 miles per hour or more are documented. Sustained wind shall be defined as the average wind speed over a 15 minute period.

21. Nighttime applications are prohibited.

22. Irrigation applications shall not occur when wind gusts exceed 20 miles per hour.

23. Creamery Creek Holsteins LLC shall visually monitor fields receiving manure irrigation applications every 2 hours or more frequently. Visual monitoring results shall be documented using the 'Irrigation Application Record Sheet' form. Copies of these forms shall be submitted to the department annually with the NMP Update and provided to the department upon request.
24. If Creamery Creek Holsteins LLC receives approval from an adjacent dwelling resident to apply within 250 feet, the reduced setback does not become effective until a copy of the agreement is submitted to the department.
25. If additional fields are selected by Creamery Creek Holsteins LLC for irrigation applications, those fields cannot be used for that purpose until department review and written approval is obtained.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

26. A copy of this conditional approval shall be included in all future annual Nutrient Management Plan Updates in addition to the NR 243 and NRCS 590 checklists.

This conditional approval does not limit the Department's regulatory authority to require NMP revisions (based upon new information or manure irrigation research findings) or request additional information in order to confirm or ensure your farm operation remains in compliance with NR 243 and your WPDES permit conditions. If additional information, project changes or other circumstances indicate a possible need to modify this approval, the Department may ask you to provide further information relating to this activity.

Please keep in mind that approval by the Department of Natural Resources – Runoff Management Program does not relieve you of obligations to meet all other applicable federal, state or local permits, zoning and regulatory requirements.

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

Sincerely,



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

cc: Sam Wettach, WDNR Agricultural Runoff Specialist (Samuel.Wettach@Wisconsin.gov)
Laura Bub, WDNR Watershed Field Supervisor (Laura.Bub@Wisconsin.gov)
Chris Clayton, WDNR Ag Runoff Section Chief (Christopherr.Clayton@Wisconsin.gov)
Ashley Scheel, WDNR CAFO NMP Reviewer (Ashley.Scheel@Wisconsin.gov)
Falon French, WDNR Intake Specialist (Falon.French@Wisconsin.gov)
Matt Hanewall, La Crosse County (mhanewall@lacrossecounty.org)

Dave West, West Agronomics (dwestagro@gmail.com)
File



March 8, 2024

FILE REF: R-2024-0012
WPDES Permit #: WI-0066907

Justin Peterson
Creamery Creek Holsteins LLC
W1250 County Road U
Bangor, WI 54614

Subject: Conditional Approval of Plans & Specifications for a Proposed Waste Storage Facility #2, Stjernholm Sand Separation System, Waste Transfer System, and a Well Setback Alternative Practice or Design Approval at Creamery Creek Holsteins LLC in T16N, R05W, Section 03, Bangor Township, La Crosse County

Dear Mr. Peterson:

This letter is to inform you that the Wisconsin Department of Natural Resources (Department) has reviewed and conditionally approves the above referenced plans and specifications, submitted under certification by Jenise Anderson, P.E., MSA Professional Services and received on January 22, 2024 with revisions received on March 6, 2024 and March 8, 2024. The review was conducted in accordance with s. 281.41, Wis. Stats., chs. NR 151 and NR 243, Wis. Adm. Code, and applicable NRCS Standards. The attached engineering report describes the project, lists standards that apply and provides compliance analysis. Questions may be directed to the assigned regional staff or the review engineer Rob Davis (contact information is at the end of this letter).

Proposed Project: The proposed project includes the following facilities that are reviewable under s. NR 243.15, Wis. Adm. Code: Proposed Waste Storage Facility #2, Stjernholm Sand Separation System, Waste Transfer System, and a Well Setback Alternative Practice or Design Approval.

Conditions of Approval: The plans and specifications for project number R-2024-0012 are hereby approved and subject to chs. NR 151 and NR 243, Wis. Adm. Code, and the conditions listed below:

1. **Design, Operation or Practices:** The following conditions are authorized to address potential pollutant discharge, based on the site specific factors listed in s. NR 243.15(1)(d), Wis. Adm. Code, and described in the attached engineering report.
 - a. Using the existing industrial building for sand stacking is conditional upon the findings of the floor thickness and rebar size and spacing. When the floor is cut to install the wall for sand stacking, the floor thickness and rebar configuration (size and spacing) must be observed to confirm adherence to the criteria in NRCS 522 Table 1. Results must be provided to DNR prior to concrete placement in the sand separation building. Results must also be submitted in the post-construction documentation. If the concrete thickness and rebar configuration do not meet the design criteria in NRCS 522, Table 1, it will be necessary to modify the design or enact other agreed upon mitigating measures to allow for sand stacking.
2. **Revisions:** If revisions are made to the approved plans and specifications, revised plans and specifications shall be submitted for approval modification, in accordance with ss. NR 108.03 and NR 108.04, Wis. Adm. Code, and s. 281.41(1)(c), Wis. Stats. Submit revised plans and specifications via the Department's e-Permitting System. **Note:** This includes revisions for local permitting. If a formal approval modification may not be warranted, contact the review engineer to confirm.
3. **Approval Period:** In accordance with ss. NR 243.15(1)(a)1., and NR 108.04(2)d., Wis. Adm. Code, if construction is not commenced within 2 years from the approval date, the approval is void, and a new approval must be obtained prior to commencing construction.

4. **Notification:** Prior to construction and when construction is complete, notify the Department's regional contact and county contact provided a copy of the approval (contact information is at the end of this letter).
5. **Inspection:** During the construction of critical components, inspection shall be performed by a Wisconsin registered professional engineer or other qualified third party (excludes the owner and construction contractor and their employees).
6. **Post-Construction Documentation:** In accordance with the permit, a post-construction report must be submitted to the DNR's e-Permitting website (<http://dnr.wi.gov/permits/water>) within 60 days of completing construction. The report must include documentation specified by s. NR 243.15(10), Wis. Adm. Code.

Alternative Design or Practice Well Setback: In accordance with s. NR 243.15(1)(c), Wis. Adm. Code, a waiver is hereby granted from s. NR 243.15(1)(a)2., Wis. Adm. Code, to allow portions of the waste transfer system (transfer pipe, reception tank, auger channel, manhole) to be located within 250 ft of a groundwater supply well, based on justifications set forth in the request and recommendations to approve the request by Ian Anderson, DNR Hydrogeologist, dated March 5, 2024. The well in question is LU850. Another well (ET545) will be abandoned and therefore the setback distance will no longer be in question.

Limitation of Approval: The Department reserves the right to order changes or additions should conditions arise making this necessary. This approval is not to be construed as a determination on the issuance of a Wisconsin Pollutant Discharge Elimination System Permit or opinion as to the ability of the proposed system to comply with effluent limitations in such a permit, approval of an Environmental Impact Statement that may be prepared, or approval for any activities requiring a permit under chs. 30 or 31, Wis. Stats. Where necessary, plans and specifications should be submitted to the Department of Safety and Professional Services or other state or local agencies to ensure conformance with applicable codes or regulations of such agencies.

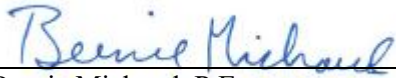
Tax Treatment: Tangible personal property, that becomes part of a waste treatment or pollution abatement plant or equipment, may be exempt from sales tax under s. 77.45(26), Wis. Stats. Similarly, property purchased or constructed as a waste treatment facility and used for industrial waste treatment may be exempt from general property taxes under s. 70.11(21), Wis. Stats. A prerequisite to exemption is filing a statement on prescribed forms. To obtain the forms, and information about this sales tax exemption, please contact the Department of Revenue, P.O. Box 8933, Madison, WI 53708, or check their website <http://www.revenue.wi.gov/>.

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
For the Secretary



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

Enclosures: Wisconsin DNR Engineering Report

Well Setback Alternative Design or Practice

Email: Justin Peterson; Creamery Creek Holsteins LLC
(608) 461-0553; justin_peterson@live.com

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

Matt Hanewall; LaCrosse County Land Conservation
(608) 785-9746; mhanewall@lacrosecounty.org

Jenise Anderson, P.E.; MSA Professional Services
(608) 355-8885; jranderson@msa-ps.com

Eric Struck; DNR, South Central Region
(608) 422-1512; eric.struck@wisconsin.gov

Laura Bub; DNR, South Central Region
(608) 712-249; Laura.Bub@wisconsin.gov

Rob Davis, P.E.; DNR, Central Office
(608) 225-2720; Robert.Davis@Wisconsin.gov

WISCONSIN DEPARTMENT OF NATURAL RESOURCES ENGINEERING REPORT

GENERAL INFORMATION

Farm Name: Creamery Creek Holsteins LLC

WPDES Permit#: WI-0066907

Location Address: W1250 County Road U, Bangor

DNR Project #: R-2024-0012

Engineering Plans Certified by:

Initial Submittal:

Revised Submittal(s):

Jenise Anderson, P.E.

January 22, 2024

March 6, 2024

March 8, 2024

Site Assessment: Geographical features of the site include soils that are primarily Mindoro sand and Impact sand. The nearest stream is approximately 2,200 ft to the north of the proposed WSF. The nearest wetland is approximately 300 ft to the east of the proposed construction area and is a small pocket wetland. Clean runoff will be diverted around waste handling areas to existing waterways. No karst features are known to exist within 1,000 ft of the proposed facilities or systems. The site soils below the proposed facilities meet the definition of “site susceptible to groundwater contamination” in s. NR 151.015(18), Wis. Adm. Code. One ground water supply well (LU850) is located within 250 feet of the proposed facilities or systems. An alternative well setback was requested. Another well (ET545) will be abandoned and therefore no longer a concern for setback distances.

Soil investigations were performed in October 2023 consisting of 33 test pits in the proposed project area, which found the primary subsoils consist of sand (SP) and loamy sand (SP). Soil samples were gathered but were not sent to the lab due to the coarse nature of the soils. Instead, the design was modified to remove the need for liner soils. Bedrock was not found. Saturation was found in many of the test pits. In some areas it was at depths greater than the required separation distance. In other area, the reception tanks were designed to be in saturation, as allowed in NRCS 634 based on the provided calculations showing the reception tanks are able to withstand the anticipated hydrostatic loads and uplift (buoyancy).

PROJECT SUMMARY: Creamery Creek proposes to expand to a second site a mile to the east of the Home Farm. The proposed expansion site is called the Robot Farm. The Robot Farm would include a freestall barn with associated waste transfer, parlor and associated waste transfer, Stjernholm sand separation system (to be located inside an existing industrial building) and associated waste transfer, and waste storage facility with a long distance waste transfer line across County Hwy U.

Proposed Facilities:

Waste Storage (WSF2): The proposed design was submitted to meet NRCS 313 (10/17) and NRCS 522 (06/21) Table 3, Column A. The design is compliant with s. NR 243.15(3), Wis. Adm. Code. The proposed WSF2 will be located across Highway U (on the north side of Hwy U) from the proposed Robot Farm expansion. Below is a summary of what is proposed.

- The proposed WSF2 will be rectangular shaped with interior top dimensions of 320 ft x 230 ft x 18 ft deep. The embankment side walls and floor are designed with 5 inch and 6 inch thick concrete respectively.
- The proposed WSF2 will be constructed to NRCS “Liquid Tight” concrete with waterstop design criteria due to lack of liner soils on the site. It will have a w/cm ratio of 0.42 max and a compressive strength of 5,000 psi.
- The proposed storage will have a total and maximum operating level (MOL) volume of 6,804,657 and 5,775,051 gallons respectively.
- The floor elevation will be 732.0 ft and the MOL elevation will be 748.5 ft. Interior and exterior embankment slopes will be 2.5:1 and 4:1 respectively with a berm width of 10 ft on three sides and 20 ft on the south side for access. The berm elevation will be 750.0.
- The sump will be 30 ft x 30 ft x 2 ft deep. A 20 ft wide ramp will extend down the southwest corner of the proposed storage pond at a slope of 8:1.

Waste Transfer System: The proposed design was submitted to meet with NRCS Standard 634 (11/22). The design is compliant with s. NR 243.15(4), Wis. Adm. Code.

- The manure auger transfer channel made of 2 ft wide x 2 ft deep with 8 inch thick reinforced concrete walls and 8 inch thick reinforced concrete floor with waterstop at the floor to wall joint. The cast-in-place auger channel will be 235 ft long.
- Manure from the auger channel will be directed to a 2-cell reception tank. The proposed transfer tank will have a 15 ft wide x 20 ft long x 10 ft deep wet cell and a 15 ft wide x 12 ft long x 10 ft deep dry cell and uses NRCS Detail WI-760A which incorporates NRCS “Reduced Seepage” concrete design. The proposed tank will be placed in high groundwater and was evaluated for both hydrostatic loads and uplift. The dry cell will house a Houle 7.5 HP Electromix piston pump and transfer contents through approximately 350 LF of 8 inch diameter DR 11 HDPE pipe to the Stjernholm Pill Tank.
- Wastewater from the parlor will gravity drain to a 3000 gallon precast reception tank. The reception tank will house a 3 HP Houle 3” Pump that will transfer contents to the Stjernholm Flush Tank via approximately 585 LF of 4 inch diameter DR 11 HDPE pipe. The floor of the precast reception tank is more than 2.5 ft above the encountered groundwater and therefore did not require hydrostatic loads or uplift to be evaluated.
- Following the Stjernholm sand separation process, liquids will be pumped from the sand free manure tank to WSF2 via a long distance pipeline. The pipes will be twin 1,560 LF of 10 inch diameter DR 11 HDPE. Approximately 100 ft of the pipeline will be installed using HDD to cross County Highway U. A Frac Out plan is provided for the HDD work. The pump will be a KSB LCC-H pump that is housed in the common dry well with an intake in the sand free manure tank. One pipe will be used for the Stjernholm system constructed with this project and the other pipe will be for the future Stjernholm system.
- Velocities and pressures of all pipes were evaluated and provided in the submittal package.
- The submitted plans include a request for an alternative design or practice well setback for the proposed waste transfer system from existing well LU850 (existing well ET545 will be abandoned). The well meets NR 812 setbacks. The attached memo from DNR Hydrogeologist Ian Anderson recommends that these alternative practice or design well setbacks be approved per s. NR 243.15(1)(c), Wis. Adm. Code.

Sand Separation/Storage: The proposed design was submitted to meet with NRCS Standards 522 (06/21), 632 (11/22), and 634 (11/22). The design is compliant with NR s. 243.15(4), Wis. Adm. Code. The proposed sand separation system will be located inside of the existing industrial building that is located near the southwest corner of the proposed Robot Farm. Below is a summary of what is proposed.

- The Stjernholm pill tank consists of cast-in-place concrete with waterstop with a complex network of pipes, pumps, and agitators/mixers. The pill tank was structurally engineered by MSA with calculations provided. The tank is 34 ft long x 16 ft wide x 12 ft deep. It is designed to be in saturation with hydrostatic and uplift calculations provided.
- The existing industrial building will be renovated into the sand separation building. Portions of the floor will be saw-cut and removed for installation of the dry cell, flush tank, and sand free manure tanks. Additionally, a wall will be cut into the floor to separate the Stjernholm area from the sand stacking area. All cut areas will be connected to the existing with a liquid tight connection. The floor will be inspected when it is saw-cut to evaluate the concrete thickness and rebar size and spacing in order to compare with the design criteria in NRCS 522, Table 1.
- The sand separation building is 100 ft x 150 ft with the sand storage portion being 20 ft x 100 ft and contained within proposed walls.
- The floor to wall connection is unknown, but the floor slopes to an existing drain which will be removed. A new drain will be installed to collect liquid draining from the sand.
- Stjernholm process tanks. All tanks in the proposed Stjernholm building are NRCS “Reduced Seepage” cast-in-place concrete with waterstop and structurally designed by MSA. They were also designed to be in saturation with hydrostatic and uplift calculations provided. Waterstop is placed in all concrete joints to create a liquid tight connection. Hydrophilic caulk will be placed along wall to

slab and new to existing slab interfaces. Pipe penetrations into tanks will have a liquid tight connection.

- Common Dry Well: The dry cell is a 24 ft wide x 25 ft long x 10 ft deep structure that will be installed below the existing sand separation floor. This dry cell will house up to four 7.5 HP Electromix pumps and two KSB LCC pumps at full capacity. Only two Electromix pumps and one KSB LCC pump are proposed at this time.
- Flush Tank: The flush tank is a 16 ft wide x 10 ft long x 10 ft deep wet cell.
- Sand Free Manure Tank: The sand free manure tank is the same size as the flush tank at 16 ft wide x 10 ft long x 10 ft deep wet cell. The KSB LCC pump will withdraw liquids out of this tank for transport to WSF2. The Sand Free Manure Tank and Flush Tank are connected in their shared wall by a PVC coupler to equalize the volumes in the tanks.
- Two pressurized 4 inch diameter HDPE DR11 will transfer waste into the Stjernholm system from the pill tank.
- Four below-grade 8-inch HDPE DR11 suction lines will transfer manure from the proposed pill tank to the Stjernholm sand separation system. The transfer lines will each utilize a Houle 7.5 HP Electromix piston pump in the dry cell in the sand separation building. Two of these suction lines are for future use (future second Stjernholm system) and will have a gate valve installed on the lines inside the drywell.
- One 6 inch diameter HDPE DR11 gravity line will transfer overflow or reject manure from the sand separators back to the proposed pill tank.

DAYS OF AVAILABLE LIQUID WASTE STORAGE: The submitted information states that Creamery Creek Holsteins LLC will have 270 days of liquid waste storage after the proposed Robot Farm Expansion project based on the volumes listed in the table below with respect to s. NR 243.15(3)(i) to (k), Wis. Adm. Code. These calculations are based on the proposed WSF2 as well as the existing WSF1 on the Home Farm. The existing WSF1 recently had an evaluation submitted, but it has not yet been reviewed. The current number of animal units provided for the calculation is 2,219 and is based on the proposed expansion for the Robot Farm. The liquid waste volumes are based on the NRCS spreadsheet and other estimated or calculated values and based upon a collection period of 365 days. There are currently no runoff controls in place. Feed is stored at the Home Farm. Runoff controls for feed storage are in the conceptual design phase and will be submitted as a future project in accordance with the timelines of the WPDES Permit.

Total Liquid Waste Storage:	12,282,503 gallons
Total Solids Storage:	247,327 gallons
Total 25-yr, 24-hr Precipitation on Storage:	469,154 gallons
Total 25-yr, 24-hr Collected Runoff:	0 gallons
Total Freeboard Volume:	979,551 gallons
Total MOL Liquid Waste Storage:	10,586,471 gallons

Manure and Bedding:	9,591,196 gallons
Parlor Wastewater:	2,870,340 gallons
Total Feed Storage Leachate:	0 gallons
Total Feed Storage Runoff Collected:	0 gallons
Net Precipitation on Storage Surfaces:	1,853,492 gallons
Total Liquid Waste Stored Below the MOL:	14,315,028 gallons

PURPOSE OF THIS REPORT: This report documents review of plans and specifications for each structure or practice indicated below, including findings regarding the structure or practice’s compliance with applicable standards. The reviewer considered if management and site assessment were conducted, documented, and reflected in the final design, and if proper construction and related plans (operation and

maintenance, inspection, erosion control if applicable) were provided, and demonstrated compliance with applicable rules standards.

DECISION RECOMMENDATION: Based on my review completed on March 8, 2024, the proposed plans and specifications meet ch. NR 243, Wis. Adm. Code, and applicable NRCS Standards. Therefore, I recommend the plans and specifications be approved with specific conditions (justification provided). The following condition is recommended to be added to the approval letter:

- Using the existing industrial building for sand stacking is conditional upon the findings of the floor thickness and rebar size and spacing. When the floor is cut to install the wall for sand stacking, the floor thickness and rebar configuration (size and spacing) must be observed to confirm adherence to the criteria in NRCS 522 Table 1. Results must be provided to DNR prior to concrete placement in the sand separation building. Results must also be submitted in the post-construction documentation. If the concrete thickness and rebar configuration do not meet the design criteria in NRCS 522, Table 1, it will be necessary to modify the design or enact other agreed upon mitigating measures to allow for sand stacking.



Rob Davis, P.E.
Water Resources Engineer

DATE: March 5, 2024 FILE REF: Project# R-2024-0052

TO: Rob Davis, DNR CAFO Review Engineer

FROM: Ian Anderson, DNR Hydrogeologist

SUBJECT: Recommendation for a Well Setback Alternative Practice or Design at Creamery Creek Holsteins LLC – Robot Farm, at T16N, R5W, Section 3 in the Town of Bangor, and T17N, R5W, Section 34 in the Town of Burns, La Crosse County

This memo is to inform you that I have reviewed the above referenced well setback alternative practice or design, submitted by MSA Professional Services, Inc. on January 22, 2024. The well setback alternative practice or design request is part of a Plan & Specification submittal (R-2024-0012) for a proposed expansion and construction of a satellite facility, as the facility becomes a CAFO. This review was conducted in accordance with s. NR 243.15(1)(c) Wis. Adm. Code. The hydrogeologist report below provides the justifications.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES HYDROGEOLOGIST REPORT

GENERAL INFORMATION

<u>Farm Name:</u> Creamery Creek Holsteins LLC	<u>WPDES Permit#:</u> 0066907-01-0
<u>Location Address:</u> W1250 County Road U, Bangor	<u>DNR Project #:</u> R-2024-0052
<u>Submitted by:</u> MSA Professional Services, Inc.	<u>Initial Submittal:</u> January 22, 2024
	<u>Revised Submittal(s):</u> NA

Site Assessment: Geographical features of the site include soils that are Impact sand (551A), Mindoro sand (556A) and Gosil loamy sand (562B, 562C). No karst features are known to exist within 1,000 ft of the proposed facilities or systems. Groundwater supply wells are located within 250 feet of the proposed facilities or systems.

Wells within 250 ft. of the proposed facilities:

WUWN – ET545, to be abandoned according to NR 812.26

WUWN – LU850, located in NENE S3 T16N R5W, 43.8970°N, -90.9520°W

Justifications include:

- The request for an alternative design or practice well setback is part of a Plan & Specification review of the proposed construction several reviewable facilities for the new satellite facility referred to as the “robot farm.” The reviewable facilities located within 250 ft of Well LU850 include the manure transfer pipe, wet cell reception tank, auger channel, parlor transfer pipe, and parlor manhole. (see Appendix G of the Design Report for details).

- LU850 is located approximately 185ft northwest of the proposed waste transfer pipe that transfers manure to the sand separation building, which meets the 50ft NR 812 setback for a manure sewer >6” in diameter.
- LU850 is located approximately 153ft northwest of the proposed manure reception tank, which meets the 50ft NR 812 setback for a liquid-tight reception tank.
- LU850 is located approximately 162ft northwest of the proposed manure auger channel, which meets the 50ft NR 812 setback for a manure hopper or liquid-tight reception tank.
- LU850 is located approximately 50ft east of the proposed parlor transfer pipeline, which meets the 50ft NR 812 setback for a manure sewer >6” in diameter.
- LU850 is located approximately 122ft south of the proposed parlor manhole, which meets the 50ft NR 812 setback for a manure hopper or liquid-tight reception tank.
- The existing grade slopes to the south and the well is north of the majority of reviewable facilities, therefore any potential spills would flow away from the well.
- Well construction: existing well LU850 was constructed with grouted casing to a depth of 106ft, through 105ft of fine sand and silt, to the top of sandstone bedrock. The static water level was 18ft at the time of drilling.

DECISION RECOMMENDATION: Based on my review completed on March 5, 2024, the request for well setback alternative practice or design meets s. NR 243.15(1)(c), Wis. Adm. Code. Therefore, I recommend the request be approved.



Ian Anderson
CAFO Hydrogeologist

DATE: September 5, 2024 WPDES Permit #0066907-01-0

TO: Sam Wettach – Agricultural Runoff Management Specialist, La Crosse
Eric Struck – Agricultural Runoff Management Specialist, Fitchburg

FROM: Ian Anderson – CAFO Hydrogeologist Program Coordinator

SUBJECT: Creamery Creek Holsteins LLC – Groundwater Monitoring Review

Background:

The Creamery Creek Holsteins LLC production area (Creamery Creek) is located in Section 3, T16N R05W, Town of Bangor, La Crosse County. This is the first issuance of a WPDES permit for Creamery Creek (Permit #0066907-01-0). The permitted facility will include the existing site (Main Farm) and two areas to the east where they have proposed expanding: one animal housing area with sand separation building designated Robot Farm and one proposed Waste Storage Facility (WSF2). The department has already issued engineering approvals for WSF2 and the sand separation system. Engineering Evaluations of the existing reviewable facilities have been submitted. This memo describes the site-specific information used to make the recommendation that production area groundwater monitoring should be required as part of the permit issuance, which includes: local well construction reports, soil pit logs, and published county-scale geologic maps.

Geology/Hydrogeology:

Bedrock in the Town of Bangor is primarily Cambrian-aged sandstone (Evans, T., 2003), which form the hills that are incised by streams to create the valleys of the Coulee region. Some ridgetops are capped by Ordovician-aged Prairie du Chien dolomite. Larger valleys, such as the La Crosse River valley are filled with alluvial sediment deposited during the Pleistocene and Holocene epochs.

A similar spatial pattern exists for depth to bedrock, which is shallow in the eastern portion of La Crosse County, except where the La Crosse River has incised it, and deep in the Mississippi River valley. Sediment in the La Crosse River valley, where Creamery Creek is located, is mapped as non-glacial stream sediment of Pleistocene and Holocene age.

Well construction reports (WCRs) onsite and nearby indicate sand or sand & gravel overlying sandstone bedrock at a depth of approximately 100ft. Soil test pits submitted with Plans & Specs for WSF2 showed primarily sand or loamy sand (SP) soils, with little to no fines. These site-specific data are consistent with the county-scale geologic map and indicate permeable soils.

Depth to groundwater ranges from 9-27ft, based on the 12 WCRs in the immediate vicinity of the Home Farm and the proposed facilities. This includes both bedrock wells as well as sand and gravel wells. The six sand & gravel wells had a mean depth to water of 24ft. Soil test pits were excavated to depths ranging from 11-23ft. While many of the of soil test pit encountered mottling, none encountered standing water, or seeps. However, many pits were described as “wet” at the bottom.

Potential production area contaminant sources:

Animal waste is known to contain nitrogen in various forms, and pathogens such as total coliform bacteria including *E. coli*. These contaminants can readily enter an aquifer system with shallow groundwater and shallow bedrock. Potential sources of the contamination in groundwater in this area include the Creamery Creek production area and manure landspreading sites. Several potential contaminant sources can be found at the Creamery Creek production area, including raw material storage

facilities, waste storage and transfer systems, and animal housing areas. Manure and process wastewater from dairy operations are known to contain significant levels of potential groundwater contaminants, including nitrate, ammonia and bacteria.

Conclusions and Recommendations:

S. NR 243.15(7) Wis. Adm. Code states that the department may require the installation of groundwater monitoring wells in the vicinity of manure storage facilities, runoff control systems, permanent spray irrigation systems and other treatment systems where the department determines monitoring is necessary to evaluate impacts to groundwater and geologic or construction conditions warrant monitoring. The site-specific geologic setting at Creamery Creek with sandy alluvial soils, and groundwater as shallow as 20ft makes this area of the town of Bangor susceptible to contaminants. Groundwater monitoring is necessary to ensure that Creamery creek is meeting groundwater quality standards contained in Ch. NR 140. As such, I recommend requiring groundwater monitoring at Creamery Creek production area. They should submit a Phase 1 Groundwater Monitoring Plan as part of a compliance schedule during the first permit term.

References:

Geology of La Crosse County, Wisconsin. Evans, T.J., 2003. Wisconsin Geological and Natural History Survey Bulletin 101, Plate 1.

<https://wgnhs.wisc.edu/catalog/publication/000125/resource/b101plate01>

Attachments:

Figure 1 – Aerial Photo of Creamery Creek Production Area

Figure 2 – Topographic Map of Creamery Creek Production Area

Figure 3a – Excerpt from Geology of La Crosse County, WI

Figure 3b – Map Legend from Geology of La Crosse County, WI



Figure 1 – Aerial Photo of Creamery Creek Holsteins LLC. Home Farm production area, proposed “Robot Farm” expansion and proposed WSF2 outlined in red.

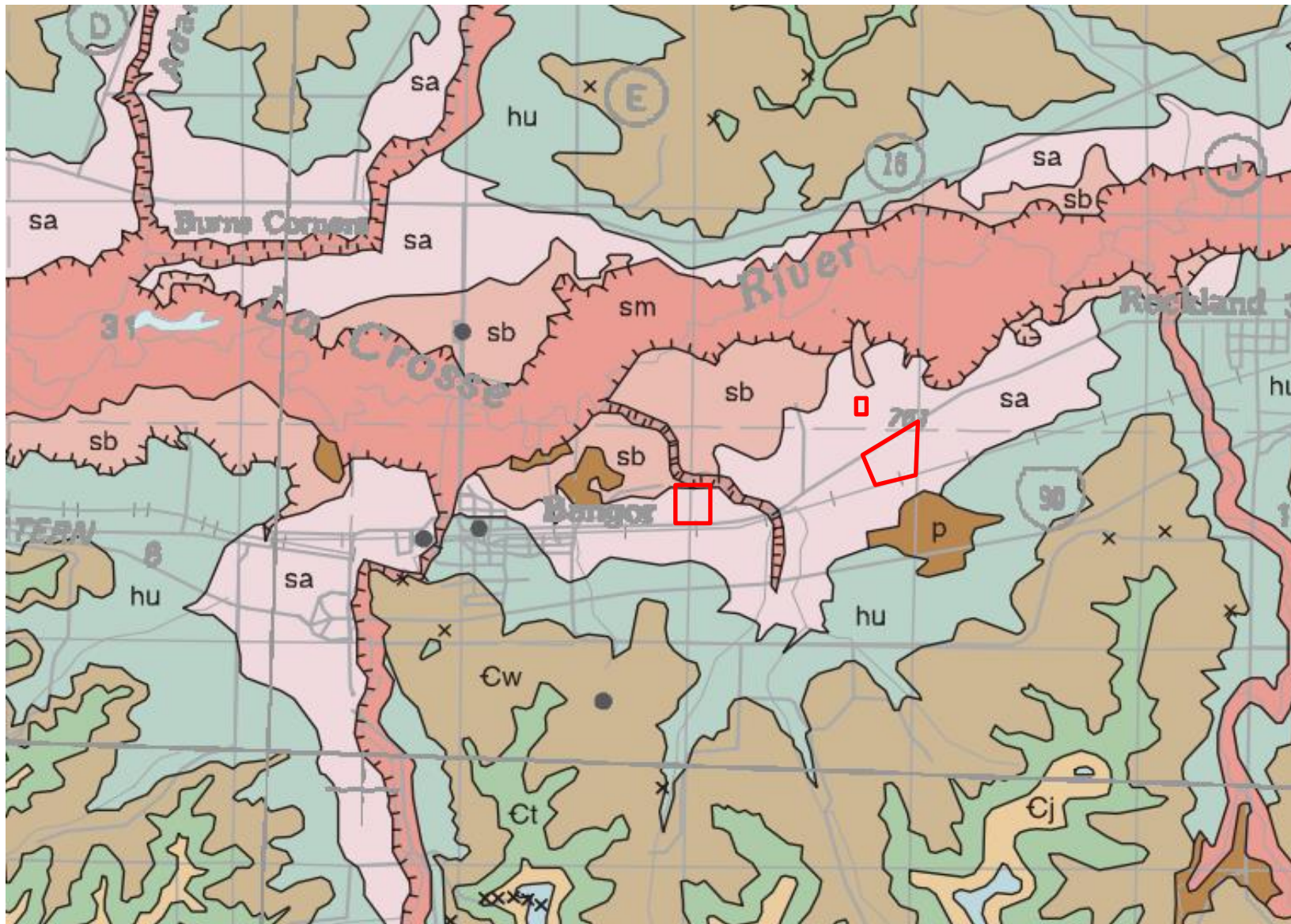
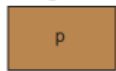


Figure 3a – Excerpt from Geology of La Crosse County, Wisconsin. Evans, T.J., 2003. Wisconsin Geological and Natural History Survey Bulletin 101, Plate 1. Home Farm production area, proposed “Robot Farm” expansion and proposed WSF2 outlined in red.

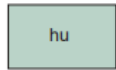
Organic material



p

Organic material (peat and muck) in varying degrees of decomposition; approximately 1 to several feet thick; dark brown to black where saturated; medium to dark brown where unsaturated due to tiling; found generally within areas of modern stream sediment in nonglacial stream valleys and on lowermost slopes of hillslope sediment; deposited during the Holocene.

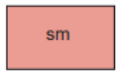
Hillslope sediment



hu

Silty to gravelly material, depending on nature of material moved downslope due to mass wasting processes; a few feet to several feet thick; yellow to reddish yellow; poorly sorted; found along toeslopes of bedrock ridges; deposited primarily during the Late Pleistocene, but minor deposition continues.

Holocene stream sediment



sm

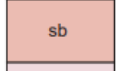
Fine- to medium-grained sand; slightly gravelly in places; includes extensive areas of marshlands along the Black and Mississippi Rivers; includes small areas of peat and muck; deposited primarily during the late Holocene.

Pleistocene and Holocene nonglacial stream sediment



sf

Very fine- to fine-grained sand; includes two distinctive terrace surfaces distinguished by their relative elevation and the presence of cutbanks; deposited mainly during Late Pleistocene and early Holocene. Unit **sf**: Alluvial fan deposits; fine- to medium-grained sand; poorly to moderately sorted; forms a conical or fan-shaped land surface at mouth of Halfway Creek; fills lowland between the high terrace near Holmen and the low terrace surface to the southwest. Unit **sb**: Unnamed low terrace surface. Unit **sa**: Unnamed high terrace surface.

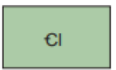


sb



sa

Lone Rock Formation



Cl

Very fine- to fine-grained, glauconitic, thin- to medium-bedded, horizontally bedded, light brown to green-brown sandstone; from 100 to 200 ft thick; forms broad, gently sloping land surface extensively covered by vegetation; lower contact with Wonewoc Formation is gradational and not well exposed; upper contact with St. Lawrence dolomitic siltstone is gradational and covered; Late Cambrian (Franconian).

ELK MOUND GROUP

Wonewoc Formation



Cw

Fine- to medium-grained, brownish-yellow to yellow, moderately sorted quartz sandstone displaying medium- to large-scale cross-stratification; from 140 to 280 ft thick; forms steep, near-vertical slopes, with less steep rolling topography at contact with unit **hu** along toeslopes of outcrops; lower contact with Eau Claire Formation not exposed in county; upper contact is a gradational change to glauconitic, fine-grained sandstone of the Lone Rock Formation; Late Cambrian (Dresbachian). Ironton Member, medium- to coarse-grained, buff to reddish-brown, poorly sorted, well cemented sandstone. Galesville Member, medium-grained, white to buff colored, well sorted, weakly cemented sandstone.

Figure 3b – Explanation of Map Units and Symbolology, excerpted from Geology of La Crosse County, WI. 2003.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

PUBLIC NOTICE OF AVAILABILITY OF A NUTRIENT MANAGEMENT PLAN AND INTENT TO ISSUE A WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM (WPDES) PERMIT No.WI-0066907-01-0

Permittee: Creamery Creek Holsteins LLC, W1250 County Road U, Bangor, WI, 54614

Facility Where Discharge Occurs: Creamery Creek Holsteins LLC,

Main Farm: W1250 County Road U, Bangor WI 54614, Lacrosse County, Town of Bangor, SW ¼ of NW ¼ Sec. 03 T16N R05W

Robot Farm: W1017 County Road U, Bangor WI 54614, Lacrosse County, Town of Bangor, NE ¼ of NE ¼ Sec. 03 T16N R05W

WSF 2: W990 County Road U, Bangor WI 54614, Lacrosse County, Town of Bangor, SE ¼ of SE ¼ Sec. 34 T17N R05W

Receiving Water And Location: Surface water and groundwater within the **Middle La Crosse** Watersheds

Brief Facility Description : Creamery Creek Holsteins LLC is a proposed Concentrated Animal Feeding Operation (CAFO). Creamery Creek Holsteins LLC is operated by Justin Peterson. The farm is currently under 1000 animal units. The farm has a planned expansion to 2,639 animal units. (1,780 milking & dry cows, 70 heifers up to 1200 lbs, and 350 dairy/beef calves). Creamery Creek Holsteins LLC has a total of 3,111 acres available for land application of manure and process wastewater. Of this acreage, 0 acres are owned, and 3,254 acres are rented or controlled through manure agreements. Creamery Creek Holsteins LLC has a planned expansion during the proposed permit term. Approximately 22,482,537 gallons of manure and process wastewater and 830 tons of solid manure in the first year of the permit term. The farm has a proposed 270 days of liquid manure storage and at least 59 days of solid manure storage. The planned expansion is planned be completed in 2025. The expansion will include the construction of the Robot Barn, WSF 2, Sand Separation Facility, expanded feed storage and calf hutch area with a runoff collection waste storage facility. See schedule sections for dates.

Three facilities will be covered under Creamery Creek Holsteins LLC WPDES Permit. The main dairy site is located at W1250 County Road U, Bangor WI 54614 and is composed of 3 dairy freestall barns, milking parlor, heifer barn, calf hutch area, feed storage area, 2 solid stacking areas, and waste storage facility. The expansion will include the construction of the Robot Farm located at W1017 County Road U, Bangor WI 54614 and will be composed of one dairy freestall barn and robot milking facilities. The third site, WSF2, is located at W990 County Road U, Bangor WI 54614 will be composed of one waste storage facility.

Creamery Creek Holsteins LLC has submitted an application for issuance of a Wisconsin Pollutant Discharge Elimination System (WPDES) permit. The application is complete. This will be the first permit issuance for this facility. Creamery Creek Holsteins LLC has an approved Nutrient Management Plan (NMP) that is written according to WPDES permit and Chapter NR 243 Wis. Adm. Code requirements. Creamery Creek Holsteins LLC was also found to have at least 180 days of liquid manure storage.

The Department has tentatively decided that the above specified WPDES permit should be issued.

Permit Drafter's Name, Address, Phone and Email: Eric Struck, WDNR, 141 NW Barstow Street, Suite 180, Waukesha, WI, 53188-3789, (608) 422-1512, Eric.Struck@wisconsin.gov

Persons wishing to comment on or object to the proposed permit action, the terms of the nutrient management plan, or the application, or to request a public informational hearing may write to the Department of Natural Resources at the permit drafter's address. All comments or suggestions received no later than 30 days after the publication date of this public notice will be considered along with other information on file in making a final decision regarding the permit. Anyone providing comments in response to this public notice will receive a notification of the Department's final decision when the permit is issued. Where designated as a reviewable surface water discharge permit, the U.S. Environmental Protection Agency is allowed up to 90 days to submit comments or objections regarding this permit determination. If no comments are received on the proposed permit from anyone, including U.S. EPA, the permit will be issued as proposed.

The Department may schedule a public informational hearing if within 30 days of the public date of this notice, a request for a hearing is filed by any person. The Department shall schedule a public informational hearing if a petition requesting a hearing is received from USEPA or from 5 or more persons or if the Department determines there is significant public interest. Requests for a public informational hearing shall state the following: the name and address of the person(s) requesting the hearing; the interest in the proposed permit of the person(s) requesting the hearing; the reasons for the request; and the issues proposed to be considered at the hearing.

Information on file for this permit action, including the draft permit and fact sheet (if required), the operation's nutrient management plan and application may be inspected and copied at the permit drafter's office, Monday through Friday (except holidays), between 9:00 a.m. and 3:30 p.m. Please call the permit drafter for directions to their office location, if necessary. Information on this permit action may also be obtained by calling the permit drafter at (608) 422-1512 or by writing to the Department. Reasonable costs (15 cents per page for copies and 7

cents per page for scanning) will be charged for information in the file other than the public notice and fact sheet. Permit information is also available on the internet at: <http://dnr.wi.gov/topic/wastewater/PublicNotices.html>. Pursuant to the Americans with Disabilities Act, reasonable accommodation, including the provision of informational material in an alternative format, will be made to qualified individuals upon request.

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