

Permit Fact Sheet

General Information

Permit Number:	WI-0063754-04-0
Permittee Name:	Arctic View Farms LLC
Address:	N17388 County Road T
City/State/Zip:	Galesville WI 54630
Discharge Location:	N17388 County Road T, Galesville, WI 54630 (NW ¼ of the SW ¼ & SW ¼ of the NE ¼ Sec. 29 T19N R08W)
Receiving Water:	Beaver Creek and Lake Marinuka within the Beaver Creek and Lake Marinuka Watersheds, and groundwaters of the state
Stream Classification:	303(d) Listed Impaired Water

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.)	80	0	0	0	-
Milking and Dry Cows	1820	1859	0	0	-
Heifers (400 lbs. to 800 lbs.)	330	550	0	0	-
Heifers (800 lbs. to 1200 lbs.)	440	400	0	0	-
TOTAL	2670	1859	0	0	-

Facility Description

Arctic View Farms LLC is an existing Concentrated Animal Feeding Operation (CAFO) owned and operated by Paul Halderson. Arctic View Farms currently has a total of approximately 2,670 animal units (1,300 milking and dry cows, 950 heifers, and 400 calves) and does not have plans to increase animal unit numbers during the upcoming five-year permit term. Based on the current herd size Arctic View Farms has approximately 295 days of liquid manure storage capacity with the two existing liquid manure storage facilities on site, both of which will be required to have engineering evaluations completed in accordance with the schedules section of the proposed permit. Arctic View Farms currently has approximately 3,201.3 acres included in their nutrient management plan (NMP) that are available for land application of manure and process wastewater, of which 3,144.8 are considered spreadable acres. Of the total acreage, approximately 410.9 acres are owned and approximately 2,790.4 are controlled through contracts, rental agreements, or are under manure agreements.

Substantial Compliance Determination

ARCTIC VIEW FARMS LLC IS IN SUBSTANTIAL COMPLIANCE WITH THE CURRENT PERMIT

Compliance determination entered by Clare Freix, Agricultural Runoff Management Specialist on June 13, 2023 (a summary of permit violations/noncompliance from the current permit term are outlined below)

1. Notice of Noncompliance: January 3, 2020

Permit Section 2.5 Feed Storage – Engineering Evaluation: *Complete an engineering evaluation of the existing feed storage area and associated runoff controls at Arctic View Farms by September 28, 2019.*

- The operation did not submit an engineering evaluation of the existing feed storage area and associated runoff control system by September 28, 2019.
- On April 6, 2020 the operation submitted plans and specifications for upgrades to the existing feed storage runoff control system which were approved by the Department on June 2, 2020. The operation later submitted an **engineering evaluation* of the existing feed storage area and associated runoff control system with the proposed upgrades on August 12, 2020.

Compliance Demonstrated –

Close Out Date: September 16, 2020

2. Notice of Noncompliance: July 28, 2021

Permit Section 2.5 Feed Storage – Engineering Evaluation: *Complete an engineering evaluation of the existing feed storage area and associated runoff controls at Arctic View Farms by September 28, 2019. Submit plans and specifications to permanently correct any adverse conditions identified as part of the engineering evaluation by April 1, 2020 and complete construction by April 1, 2021. Submit post construction within 60 days of completion of the project.*

- On September January 3, 2020 a notice of compliance was issued to the operation for not submitting an engineering evaluation of the existing feed storage area and associated runoff control system by September 28, 2019. Plans and specifications for upgrades to the existing feed storage runoff control system were submitted April 6, 2020 and approved by the Department on June 2, 2020. The operation later submitted an **engineering evaluation* of the existing feed storage area and associated runoff control system with the proposed upgrades on August 12, 2020. Therefore, the January 3, 2020 notice of noncompliance was closed out on September 16, 2020, with the condition that upgrades of the feed storage runoff control system be constructed as approved by the Department by the upcoming deadline under permit section 2.5. However, construction of the upgraded feed storage runoff control system was not completed by April 1, 2021.
- The Department later verified that construction of the upgraded feed storage runoff control system was completed in 2022 and post construction documentation was submitted to the Department on October 27, 2023.

Compliance Demonstrated –

Close Out Date: June 13, 2024

**On October 25, 2022 The Department completed its review of the engineering evaluation and determined that the feed storage area and associated runoff controls will meet the applicable requirements of ch. NR 243, Wis. Adm. Code following installation of the upgraded runoff control system as approved by the Department. Construction of the upgraded feed storage runoff control system was completed in 2022 and post construction documentation was submitted to the Department on October 27, 2023.*

3. Notice of Noncompliance: June 13, 2024

Permit Section 3.1.13 Submittal of Plans and Specifications: *In accordance with s. NR 243.15, the permittee shall submit plans and specifications for proposed new or upgraded reviewable facilities or systems to the Department for approval prior to construction.*

- On June 22, 2023 the Department completed a site inspection of the operation and discovered that the operation had begun construction of a new waste storage facility. However, plans and specifications for the new waste storage facility had not been submitted to the Department for approval prior to construction. The operation and their engineer informed the Department that it was their understanding that the new waste storage facility was included as part of the plans and specifications that were previously submitted and approved by the Department for the newly upgraded feed storage runoff control system. However, the plans and specifications for the upgraded feed storage runoff control system that were approved by the Department did not include the new waste storage facility and construction has since been completed without prior plan and specification approval by the Department.
- To demonstrate compliance with the above permit condition, the operation will need to complete an engineering evaluation of the new waste storage facility, as well as address any corrective actions determined as needed from the evaluation. Although an engineering evaluation has not been submitted to date, the Department has decided to move forward with permit reissuance and address the noncompliance as a requirement of the proposed WPDES permit instead. Therefore, the notice of noncompliance has been closed out and an engineering evaluation of the new waste storage facility will be required to be completed in accordance with the schedules section of the proposed permit.

Close Out Date: June 13, 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 (South) - Sample point 001 is for liquid waste storage facility 1 (WSF 1), located directly south of WSF 2 (sample point 002). WSF 1 is a clay lined waste storage with a HDPE cover and has an approximate maximum operating level capacity of 11,079,435 gallons. This storage accepts liquid manure, process wastewater, and contaminated bedding from the freestall barns and milking parlor. WSF 1 also receives contaminated feedlot runoff that is captured by the feedlot runoff control system (sample point 006) as well as leachate and feed storage area runoff that is captured by the feed storage runoff control system (sample point 005). Plans and specifications for WSF 1 were statutorily approved by the Department in 2008 and construction was completed the same year. An engineering evaluation of WSF 1 shall be completed in accordance with the schedules section of the permit (permit section 2.5).
002	WSF 2 (North) - Sample point 002 is for liquid waste storage facility 2 (WSF 2), located directly north of WSF 1 (sample point 001). WSF 2 is a HDPE covered and lined waste storage that has an approximate maximum operating level capacity of 6,494,652 gallons. Liquid manure and process wastewater from WSF 1 (sample point 001) is transferred to WSF 2 as needed. Construction of WSF 2 was completed in 2023, however, the plans and specifications for the waste storage were not approved by the Department prior to construction. Therefore, an engineering evaluation of WSF 2 shall be completed in accordance with the schedules section of the permit (permit section 2.6).
003	Solid Manure Stacking Area & Misc. Solids - Sample point 003 is for solid manure staged within the solid manure stacking area and other miscellaneous sources of solid manure that are directly land applied

Sample Point Designation For Animal Waste		
Sample Point Number	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)	
	(feedlot and calf hutch area manure, manure laden bedding, waste feed, etc.). Representative samples shall be taken from all sources that are directly land applied.	
004	Headland Stacking Sites - Sample point 004 is for solid manure land applied from approved headland stacking sites. Representative samples shall be taken from each stacking site prior to land application. Stacking sites are defined as part of the production area and therefore are subject to the Production Area Discharge Limitations section of the permit. Weekly inspections of stacking sites are required and shall be recorded according to the Monitoring and Inspection Program. Information on the proposed headland stacking sites, or an alternative management plan, to be utilized for the storage of solid manure when conditions do not allow for land application shall be submitted to the Department for approval in accordance with the schedules section of the permit (permit section 2.4).	
005	Feed Storage Area & Runoff Controls - Sample point 005 is for visual monitoring and inspection of the feed storage area and associated runoff control system. Plans and specifications for the runoff control system were approved by the Department in 2020 and construction was completed in 2022. An engineering evaluation of the feed storage area was also completed in 2022, which determined that no further actions would be required following the installation of the associated runoff control system as approved by the Department. The associated runoff control system was designed for total containment of leachate and feed storage runoff for up to a 25 year 24 hour storm event (or greater) and directs leachate and feed storage runoff into a reception tank where it is then pumped to WSF 1 (sample point 001). Proper operation and maintenance are required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to the Monitoring and Inspection Program.	
006	Outdoor Lot & Runoff Controls - Sample point 006 is for visual monitoring and inspection of the outdoor concrete feedlot and associated runoff control system. Feedlot runoff is captured within a collection tank located at the east end of the lot where it is then pumped to WSF 1 (sample point 001). Proper operation and maintenance are required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to Monitoring and Inspection Program. An engineering evaluation of the outdoor lot and associated runoff control system shall be completed in accordance with the schedules section of the permit (permit section 2.7).	
007	Calf Hutch Area & Runoff Controls - Sample point 007 is for visual monitoring and inspection of the calf hutch area and associated runoff control system. Proper operation and maintenance are required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to the Monitoring & Inspection Program.	
008	CAFO Outdoor Vegetated Area - Sample point 008 is for visual monitoring and inspection of the CAFO outdoor vegetated areas located at the production area. Proper operation and maintenance are required to ensure sufficient vegetative cover is maintained throughout these areas. Quarterly inspections are required and shall be recorded according to the Monitoring and Inspection Program. Outdoor earthen lot areas that are not managed to maintain sufficient vegetation are not permitted and shall be properly abandoned.	
009	Storm Water Runoff Control System - Sample point 009 is for visual monitoring and inspection of all production site storm water conveyance systems. This includes roof gutters and downspout structures, drainage systems, storm water ponds, grassed waterways and any other diversion systems which transport uncontaminated storm water. Proper operation and maintenance are required to keep uncontaminated runoff diverted away from manure and process wastewater handling systems. Weekly inspections are required and shall be recorded according to the Monitoring and Inspection Program.	

1 Livestock Operations - Proposed Operation and Management

Production Area Discharge Limitations

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

Runoff Control

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

Manure and Process Wastewater Storage

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

The permittee currently has approximately 295 days of storage for liquid manure. The permittee must maintain 180 days of storage unless temporary reductions in required storage are approved by the Department.

Solid Manure Stacking

The operation has proposed to stack solid manure. All stacking of solid manure shall be done in accordance ch. NR 243, Wis. Adm. Code, which includes restrictions from NRCS Standard 313. Stacking of manure is considered to be part of the production area and is subject to the Production Area Discharge Limitations.

Ancillary Service and Storage Areas

The permittee shall take preventative maintenance actions and conduct visual inspections to minimize pollutant discharges from areas of the operation that are not part of the production area or land application areas. These areas are called ancillary service and storage areas and include access roads, shipping and receiving areas, maintenance areas, refuse piles and CAFO outdoor vegetated areas.

Nutrient Management

With 2,670 animal units (1,300 milking and dry cows, 950 heifers, and 400 calves), it is estimated that approximately 21,741,467 gallons of manure and process wastewater and 4,225 tons of manure will be produced per year. The permittee owns *approximately* 410.9 acres of cropland and rents about 2,790.4. Given the rotation commonly used by the permittee, approximately 2,100 to 2,300 acres are planned 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.

Monitoring and Sampling Requirements

The permittee must submit a monitoring and inspection program that outlines how the permittee will conduct self-inspections to determine compliance with permit conditions. These self-inspections include visual inspections of water lines, diversion devices, storage and containment structures and other parts of the production area. The permit requires periodic inspections and calibrations of landspreading equipment. The permittee must take corrective actions to problems identified inspections or otherwise notify the Department. Samples of manure, process wastewater and soils receiving land applied materials from the operation must also be collected and analyzed.

Sampling Points

The permit identifies the different sources of land applied materials (e.g., manure storage facilities, milking centers, egg-washing facilities) as “Sampling Points.” For these Sampling Points, the permittee is required to sample and analyze the different sources for nutrients and other parameters which serve as the basis for determining rates of application for these materials. Other areas are also identified as Sampling Points as a means of identifying them as areas requiring action by the permittee, such as an upgrade or evaluation of a certain system or structure (e.g., runoff control systems), even though sampling is not actually required.

1.1 Liquid Sample Points

Sample Point Number: 001- WSF 1; 002- WSF 2

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Total		lb/1000gal	2/Month	Grab	
Nitrogen, Available		lb/1000gal	2/Month	Calculated	
Phosphorus, Total		lb/1000gal	2/Month	Grab	
Phosphorus, Available		lb/1000gal	2/Month	Calculated	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	2/Month	Grab	

1.2 Solid Sample Points

Sample Point Number: 003- Stacking Area & Misc. Solids; 004- 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	

1.3 Runoff Control Sampling Points (No Sampling Required)

Sample Point Number: 005- Feed Storage & Runoff Controls; 006- Outdoor Lot & Runoff Controls; 007- Calf Hutch & Runoff Controls; 008- CAFO Outdoor Vegetated Area, and 009- Storm Water Runoff Controls

1.4 Changes from Previous Permit

Sample Point: 001

No Changes – Sample point is still applicable to the south waste storage facility (WSF 1).

Sample Point: 002

Previous Permit: Miscellaneous Sources of Solid Manure

Proposed Permit: Waste Storage Facility (North)

Explanation: Miscellaneous sources of solid manure is now covered under sample point 003 and sample point 002 is now applicable to the new north waste storage facility (WSF 2).

Sample Point: 003

Previous Permit: Headland Stacking Sites

Proposed Permit: Solid Manure Stacking Area & Miscellaneous Sources of Solid Manure

Explanation: Headland stacking sites are now covered under sample point 004 and sample point 003 is applicable to the solid manure stacking area and other miscellaneous sources of solid manure.

Sample Point: 004

Previous Permit: Feed Storage Area & Associated Runoff Controls

Proposed Permit: Headland Stacking Sites

Explanation: The feed storage area and associated runoff controls are now covered under sample point 005 and sample point 004 is applicable to headland stacking sites.

Sample Point: 005

Previous Permit: CAFO Outdoor Vegetated Areas

Proposed Permit: Feed Storage Area & Associated Runoff Controls

Explanation: CAFO Outdoor Vegetated Areas are now covered under sample point 008 and sample point 005 is now applicable to the feed storage area and associated runoff control system.

Sample Point: 006

No Changes – Sample point is still applicable to the outdoor feedlot and associated runoff control system.

Sample Point: 007

No Changes – Sample point is still applicable to the calf hutch area and associated runoff control system.

Sample Point: 008

Previous Permit: Storm Water Runoff Control System

Proposed Permit: CAFO Outdoor Vegetated Areas

Explanation: Storm water runoff controls are now covered under sample point 009 and sample point 008 is now applicable to CAFO Outdoor Vegetated Areas.

Sample Point: 009

Previous Permit: N/A

Proposed Permit: Storm Water Runoff Control System

Explanation: Sample point 009 has been added to the proposed permit and is now applicable to Storm water runoff controls.

2 Schedules

2.1 Emergency Response Plan

Required Action	Due Date
Develop Emergency Response Plan: Develop a written Emergency Response Plan within 30 days of permit coverage, available to the Department upon request.	12/31/2024

2.2 Monitoring & Inspection Program

Use of the department’s monitoring and inspection program template is encouraged, but optional.

Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the Monitoring and Sampling Requirements subsection, the permittee shall submit a proposed monitoring and inspection program within 60 days of the effective date of this permit.	01/30/2025

2.3 Headland Stacking Site Proposal

Shall at least include information for the minimum number of headland stacking sites needed to provide the operation with sufficient temporary solid manure storage throughout the manure prohibition period (February 1st - March 31st).

Required Action	Due Date
<p>Proposed Headland Stacking Sites: Submit an in-field headland stacking site proposal for Department review and approval. For each of the proposed stacking sites, identify the associated landspreading field, the delineated stacking site area, and include the information necessary to demonstrate compliance with the Solid Manure Stacking section of the permit.</p> <p>Otherwise, submit an alternative management plan demonstrating that solid manure will be managed/stored in a manner which will maintain compliance with permit requirements throughout the manure prohibition period and other times when conditions do not allow for land application.</p>	01/01/2025

2.4 Waste Storage Facility - Engineering Evaluation

Applicable to the south waste storage facility (WSF 1 - sample point 001)

Required Action	Due Date
<p>Engineering Evaluation: 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.)</p>	08/31/2025
<p>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.</p>	08/31/2026
<p>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.</p>	08/31/2027

2.5 Waste Storage Facility - Engineering Evaluation

Applicable to the north waste storage facility (WSF 2 - sample point 002)

Required Action	Due Date
<p>Engineering Evaluation: 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.)</p>	08/31/2025
<p>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.</p>	08/31/2026
<p>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.</p>	08/31/2027

2.6 Outdoor Lot & Runoff Control System - Engineering Evaluation

Applicable to the outdoor feedlot and associated runoff control system (sample point 006)

Required Action	Due Date
Engineering Evaluation: Submit a written report evaluating the outdoor feedlot and associated runoff control system and their 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.)	08/31/2025
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.	08/31/2026
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.	08/31/2027

2.7 Annual Reports

Submit Annual Reports by January 31st of each year in accordance with the Annual Reports subsection in Standard Requirements.

Required Action	Due Date
Submit Annual Report #1: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2025
Submit Annual Report #2: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2026
Submit Annual Report #3: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2027
Submit Annual Report #4: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2028
Submit Annual Report #5: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2029
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed.	

2.8 Nutrient Management Plan

Required Action	Due Date
Submit NMP Annual 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 Annual 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 Annual 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 Annual 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 Annual 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 NMP Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

2.9 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	06/01/2029

2.10 Explanation of Schedules

Permit Section 2.3

The proposed headland stacking sites included as part of the permit application were denied by the Department, and the operation will not have any approved headland stacking sites available upon permit reissuance. Therefore, a schedule has been included in the proposed permit to submit a proposed headland stacking site proposal for Department review and approval, or an alternative solid manure management/storage plan, to ensure that the operation will have sufficient storage capacity during the manure prohibition period (February 1st – March 31st) or other times when conditions do not allow for land application.

Permit Section 2.4

An engineering evaluation of the south waste storage facility (sample point 001) has been included in the schedules section of the proposed permit due to the age of the waste storage facility, in addition to the fact that the waste storage had been constructed according to plans that were statutorily approved by the Department. An engineering evaluation of the adjacent north waste storage facility (sample point 002) is also required to be completed in accordance with the schedules section of the proposed permit and therefore provides a timely opportunity for the evaluations of both waste storage facilities to be completed simultaneously.

Permit Section 2.5

An engineering evaluation of the north waste storage facility (sample point 002) has been included in the schedules section of the proposed permit since plans and specifications for the waste storage facility were not approved by the Department prior to construction.

Permit Section 2.6

Based on observations during the Department’s June 22, 2023 site inspection of the operation, the Department documented potential discharge concerns related to contaminated runoff exiting the west end of the outdoor concrete feedlot (sample point 006). The Department requested that a permanent long term fix/solution be implemented (and documentation submitted to the Department) by April 1, 2024 to ensure all contaminated feedlot runoff is contained within the boundary of the lot and directed to the associated runoff collection tank. The Department also informed the

operation that if a permanent long term fix has not been installed by the deadline provided, or if the Department does not agree that the operation's solution will sufficiently address the outdoor lot discharge concerns, then an engineering evaluation of the outdoor lot and associated runoff control system will be included in the schedules section of the reissued permit. The Department has not received any documentation that the operation has implemented a permanent long term fix/solution to address the Department's feedlot runoff discharge concerns to date. Therefore, an engineering evaluation of the outdoor lot and the associated runoff control system has been included the schedules section of the proposed permit.

Attachments:

Sample Point Map
Reissuance Inspection Report
Five-Year NMP Conditional Approval Letter
180 Day Liquid Manure Storage Review Letter
Public Notice

PERMIT APPLICATION

WPDES Permit Application: <https://permits.dnr.wi.gov/water/SitePages/DocSetView.aspx?DocSet=AG-APP-WC-2023-62-X10-03T10-32-03>

Five-Year Nutrient Management Plan: <https://permits.dnr.wi.gov/water/SitePages/DocSetViewDet.aspx?DocSet=AG-NMP-WC-2023-62-X10-03T10-32-03>

180 Day Liquid manure Storage Calculations:
<https://permits.dnr.wi.gov/water/SitePages/DocSetViewDet.aspx?DocSet=AG-PNS-WC-2023-62-X10-03T10-32-03>

Expiration Date:

November 30, 2029

Prepared By: Clare Freix, Agricultural Runoff Management Specialist

Date: June 13, 2024

Arctic View Farms LLC- Sample Points: 2022 Aerial Imagery Obtained From Google Earth

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004

(Headland Stacking Sites – Various Locations)

002
(WSF 2)

001
(WSF 1)

007

(Calf Hutch Area & Runoff Controls)

008

(CAFO Outdoor Vegetated Area)

006

(Outdoor Lot & Runoff Controls)

003

(Solid Manure Stacking Area & Misc. Solids)

009

(Storm Water Controls – Various Locations)


T

005

(Feed Storage Area & Runoff Controls)

N 4th St

Hang Ln

- Liquid Sample Point
 - Solid Sample Point
 - Runoff Control Sample Point
- 



February 20, 2024

FILE REF: R-2023-0215
 WPDES Permit #: WI-0063754

Paul Halderson
 Arctic View Farms
 N17388 Cty Rd T
 Galesville, WI 54630

Subject: Days of Storage Review for Arctic View Farms T19N, R08W, Section 29 in Galesville Township, Trempealeau County – NO ADDITIONAL ACTION REQUIRED

Dear Mr. Halderson:

This letter is to inform you that the Wisconsin Department of Natural Resources (Department) has completed its review of the calculation of days of storage submitted under certification by Dave McDaniel, Auth Consulting & Associates on October 3, 2023 on behalf of Arctic View Farms.

The Department reviewed the submitted calculations in accordance with ss. NR 243.14(9) and NR 243.15(3)(i) to (k), Wis. Adm. Code. Under s. NR 243.17(3)(c), Wis. Adm. Code, the permittee shall demonstrate compliance with the 180-day design storage capacity requirement at specified times. For the following liquid manure storage calculations, the Department has determined **no additional actions** on your part are required.

Days of Available Liquid Waste Storage: The submitted information states that Arctic View Farms has 295 days of liquid waste storage based on the volumes listed in the table below with respect to s. NR 243.15(3)(i) to (k), Wis. Adm. Code. The submitted calculations includes waste storage pond 2 (WSF2) for Arctic View Farms that was constructed without approval and will require an evaluation. Calculations below show that without usage of WSF2, the days of storage is currently **186 days** in accordance with s. NR 243.15(3). The calculations are subject to change once the evaluation for WSF2 is submitted and found to require no further actions. The current number of animal units provided for the calculation is 2,670. The liquid waste volumes are based on the NRCS spreadsheet and other estimated or calculated values for a collection period of 365 days. All runoff, up to the 25yr – 24hr storm, from the feed storage area is captured and stored in permanent storage

Waste Storage	Total Vol. from Settled Top to Bottom	Solids Storage	25-yr, 24-hr Precip. on Storage	25-yr, 24-hr Collected Runoff	Freeboard Vol.	Max. Operating Level (MOL) Vol.
WSF1	13,393,269	530,781	444,877	364,089	974,087	11,079,435
Total MOL Vol:						11,079,435
Days of Storage:						186

Liquids Collected/Stored	Annual Gallons
Manure and Bedding	14,932,634
Parlor Wastewater	2,769,620
Feed Storage Leachate	149,600
Feed Storage Runoff Collected	2,185,508
Net Precipitation on Storage Surfaces	1,704,105
TOTAL:	21,741,467

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

NOTICE OF APPEAL RIGHTS

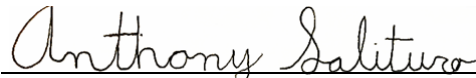
If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to WIS. STAT. §§ 227.52 and 227.53, you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to WIS. STAT. § 227.42, you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with WIS. ADMIN. CODE § NR 2.05(5), and served on the Secretary in accordance with WIS. ADMIN. CODE § NR 2.03. The filing of a request for a contested case hearing does not extend the 30-day period for filing a petition for judicial review.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES



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



Tony Salituro, EIT
CAFO Review Engineer
Watershed Management Program

Email: Paul Halderson; Arctic View Farms
(608) 582-2264; barn@trivest.net

David McDaniel; Auth Consulting Associates
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Ashley Scheel; DNR, Central Office
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Anthony Salituro; DNR-Central Office
(608) 444-2869; anthony.salituro@wisconsin.gov



February 26th, 2024

Trempealeau County
Approval

Paul Halderson
Artic View Farms, LLC
N17388 County Road T
Galesville, WI 54630

SUBJECT: Conditional Approval of Artic View Farms, LLC Nutrient Management Plan, WPDES Permit No. 0063754-04-0

Dear Mr. Halderson:

After completing a review of Artic View Farms, LLC 2024-2028 Nutrient Management Plan (NMP) the Wisconsin Department of Natural Resources (Department) is providing conditional approval that it is consistent with s. NR 243.14, 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 Artic View Farms, LLC review the NMP with those individuals involved with manure applications to ensure all remain familiar with the approved manure spreading protocol, spreading maps, field and map verification, record keeping requirements, and all the conditions of this approval. Specifically, some fields in Artic View Farms, LLC may have:

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

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

FINDINGS OF FACT

The Department confirms that:

1. A current dairy herd size of 2,656 animal units (1,290 milking & dry cows, 950 heifers, and 400 calves). Currently there are no planned expansions in the next permit term.
2. Manure generation and spreading records indicate your herd will annually generate approximately 21,741,467 gallons of manure and process wastewater and 4,225 tons of solid manure in the first year of the permit term.
3. The use of application restriction options 1 and 5 within surface water quality management areas.
4. The use of phosphorus delivery method P Index.
5. That Artic View Farms, LLC currently has 3,201.3 acres (410.9 owned and 2,790.4 controlled through contracts, rental agreements or leases, or under manure agreements) of which 3,144.8 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 Marinuka Lake and Beaver Creek (listed 303(d) impaired water by 'total phosphorus').

7. That no fields are directly adjacent to or have high potential to deliver nutrients and sediment to outstanding/exceptional waters.
8. That no fields are tiled.
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 Artic View Farms, LLC Nutrient Management Plan subject to the following conditions and the applicable requirements of Ch. NR 243, Wis. Adm. Code:

FIELD AND MANURE MANAGEMENT

1. Fields not included in the NMP and new fields shall not receive manure or process wastewater applications until they have been properly soil sampled, entered into Snap Plus, evaluated for their nutrient needs, and approved by the Department.
2. The following fields have also been approved to receive industrial, municipal, or septage waste:

Field Name:	Other Permittee Name:	Site ID-Field Name:	DNR #:
Ziegler Home	FEYEN'S ARCADE PUMPING SERVICE, LLC	KZHESS-3	40064
Schultz Praire	FEYEN'S ARCADE PUMPING SERVICE, LLC	WS-1	121003
Ziegler Home	FEYEN'S ARCADE PUMPING SERVICE, LLC	KZHESS-1	113732
Ziegler Home	FEYEN'S ARCADE PUMPING SERVICE, LLC	KZHESS-2	113731
Bender 1	FEYEN'S ARCADE PUMPING SERVICE, LLC	KZ-2	101034
Bender 1	FEYEN'S ARCADE PUMPING SERVICE, LLC	KZ-3	101035
BENDER 2	FEYEN'S ARCADE PUMPING SERVICE, LLC	KZ-1	101033

Prior to any manure applications on these fields Artic View Farms, LLC shall contact the entities listed above to obtain recent spreading records and make the necessary adjustments to the planned manure application rates. At the end of each year Artic View Farms, LLC shall contact each entity listed above to obtain spreading records from the previous year so that they can be properly tracked in the NMP. Please Note: Artic View Farms, 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:

- 1142-1 (default soil test)	- 1142-11 (default soil test)	- 1142-12 (default soil test)
- 1142-13 (default soil test)	- 1142-14 (default soil test)	- 1142-2 (default soil test)
- 1142-3 (default soil test)	- 1142-4 (default soil test)	- 1142-5 (default soil test)
- 1142-6 (default soil test)	- 1142-7 (default soil test)	- 1142-8 (default soil test)
- 1142-9 (default soil test)	- 1281-11 (default soil test)	- 1281-14 (default soil test)
- 1281-16 (default soil test)	- 1680-3 (default soil test)	- 1680-4 (default soil test)
- 1689-1 (default soil test)	- 1689-10 (default soil test)	- 1689-11 (default soil test)
- 1689-2 (default soil test)	- 1689-3 (default soil test)	- 1689-4 (default soil test)
- 1689-5 (default soil test)	- 1689-6 (default soil test)	- 1689-7 (default soil test)
- 1689-8 (default soil test)	- 1689-9 (default soil test)	- 1694 3-4 (default soil test)

- | | | |
|---|---|------------------------------------|
| - 1694-1 (default soil test) | - 1694-10 (default soil test) | - 1694-5 (default soil test) |
| - 1694-7 (default soil test) | - 2648-1 (default soil test) | - 2648-11 (default soil test) |
| - 2648-12 (default soil test) | - 2648-13 (default soil test) | - 2648-5 (default soil test) |
| - 2648-8 (default soil test) | - 3973 3-4 (default soil test) | - 3973-1 (default soil test) |
| - 3973-10 (default soil test) | - 3973-11 (default soil test) | - 3973-12 (default soil test) |
| - 3973-2 (default soil test) | - 3973-6 (default soil test) | - 3973-7 (default soil test) |
| - 3973-8 (default soil test) | - 3973-9 (default soil test) | - 4260-1 (default soil test) |
| - 4260-2 (default soil test) | - 4260-3 (default soil test) | - 4260-7 (default soil test) |
| - 9087-1 (default soil test) | - 9468-7 (default soil test) | - Home Pasture (default soil test) |
| - Lavander Pasture (default soil test) | - Schultz Prairie (default soil test) | - T4432-1 (default soil test) |
| - T5856-2 (default soil test) | - T5856-3 (default soil test) | - 2285-1 (>200 ppm P) |
| - 11195-3 (portion within 1,000' of municipal well) | - Fernholt Z2 (portion within 1,000' of municipal well) | |

If Artic View Farms, 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 ≥ 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 $\text{NH}_4\text{-N}$, percent $\text{NO}_3\text{-N}$, phosphorus, potassium, and sulfur.
6. If manure sample results have a dry matter (DM) content less than 2.0% and the percent ammonium (NH_4^+) is greater than 75% of the total N, Artic View Farms, LLC may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

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

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

WINTER SPREADING

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:

- 1263-1	- 1263-2	- 1142-14	- 728-1
- 728-2	- 728-3	- 728-4	- T3231-1
- T3231-2			

11. Winter spreading of solid and liquid manure may not occur during the “high risk runoff period” pursuant to s. NR 243.14(6)(c) and NR 243.14(7)(c), respectively.
12. Winter applications of liquid manure shall only occur under emergency situations, after notifying the Department and receiving verbal approval.
13. Liquid applications shall be limited to 3,500 gallons per acre or 30 lbs. P per acre, whichever is less, on slopes 2-6% and 7,000 gallons per acre or 60 lbs. P per acre, whichever is less, on slopes 0-2%. Winter applications of solid manure shall be limited to 60 lbs. P per acre.

HEADLAND STACKING

14. The following headland stacking sites are **denied** due to being located on hydrologic soil group A:
 - Stacking Site 1
 - Stacking Site 2
 - Stacking Site 3
 - Stacking Site 4
 - Stacking Site 5
 - Stacking Site 6
 - Stacking Site 7

MANURE & PROCESS WASTEWATER IRRIGATION

15. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

16. A copy of this conditional approval shall be included in all future annual Nutrient Management Plan Updates in addition to the NR 243 and NRCS 590 checklists.
17. The farm is required to take a minimum amount of manures samples to meet permit requirements as follows:
 - Solid Manure: One solid sample per source on a quarterly basis when hauling occurs.
 - Liquid Manure: Two liquid samples per source on a monthly basis when hauling occurs.
18. A revised copy of the restriction maps which have potential areas that may be considered concentrated flow are due back to the department no later than **March 8th, 2024**.
19. A minimum of one solid manure sample and two liquid manure samples from spring hauling are due by no later than **June 28th, 2024** to the department.

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

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

If you have any questions regarding this approval I can be reached at 608-212-8460 or Ashley.Scheel@Wisconsin.gov.

Sincerely,



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

cc: Clare Freix, WDNR Agricultural Runoff Management Specialist (Clare.Freix@Wisconsin.gov)
Brad Johnson, WDNR Watershed Field Supervisor (Bradley.Johnson@Wisconsin.gov)
Christopher Clayton, WDNR Runoff Management Section Chief (Christopherr.Clayton@Wisconsin.gov)
Tyler Dix, CAFO Program Coordinator (Tyler.Dix@Wisconsin.gov)
Joe Baetan, WDNR Watershed Field Supervisor (Joeseeph.Baetan@Wisconsin.gov)
Aaron O'Rourke, WDNR Nutrient Management Program Coordinator (Aaron.Orourke@Wisconsin.gov)
Tony Salituro, WDNR CAFO Engineer (Anthony.Salituro@Wisconsin.gov)
Falon French, WDNR CAFO Intake Specialist (Falon.French@Wisconsin.gov)
Kyle Govin, Nutrient Advisors (kgovin@nutrientadvisors.com)
Haily Sand, Agsource (Haily.Sand@Agsource.com)
Morgan Becker, Trempealeau County (Morgan.Becker@Co.Trempealeau.Wi.Us)
File



June 27, 2023

WPDES Permit No. WI-0063754-03-0

Paul Halderson
Arctic View Farms
N17388 County Road T
Galesville, WI 54630

Subject: June 22, 2023 Reissuance Inspection Report – Response Requested

Dear Mr. Halderson:

On June 22, 2023 the Department met with you at your operation, Arctic View Farms, located at N17388 County Road T, Galesville, Wisconsin to conduct a full site inspection for permit reissuance. Department observations and a record of our conversation is included in the enclosed report.

A complete permit reissuance application must be submitted through the Department's ePermitting System (<https://dnr.wisconsin.gov/permits/water>) no later than October 2, 2023. A list of materials required for a complete permit application have been provided within the summary section of the enclosed report. The summary section also includes areas of concern and additional actions to be completed by the farm. Please refer to the enclosed report for a complete list of required action items and associated deadlines.

Please do not hesitate to contact me if you have any questions or concerns.

Sincerely,

Clare Freix
Agricultural Runoff Specialist
Phone: (715) 492-4465
Email: Clare.Freix@Wisconsin.gov

Enc: June 22, 2023 Reissuance Inspection Report

Cc: Falon French – WDNR
Kyle Govin – Nutrient Advisors
Dave McDaniel – Auth Consulting & Associates
Rick Reisinger – Trempealeau County Land Conservation

CAFO Compliance Report (June 27, 2023)

Inspection Date: June 22, 2023

Inspection Type: Permit Reissuance

Operation Name: Arctic View Farms

WPDES Permit No: WI-0063754-03-0

Operation Address: N17388 County Road T, Galesville, WI 54630 (NW ¼ of the SE ¼ & SW ¼ of the NE ¼ Sec. 29 T19N R08W)

On Site Representatives: Paul & Ted Halderson (Arctic View Farms) & Kyle Govin (Nutrient Advisors)

DNR Staff/Report Writer: Clare Freix, Agricultural Runoff Specialist



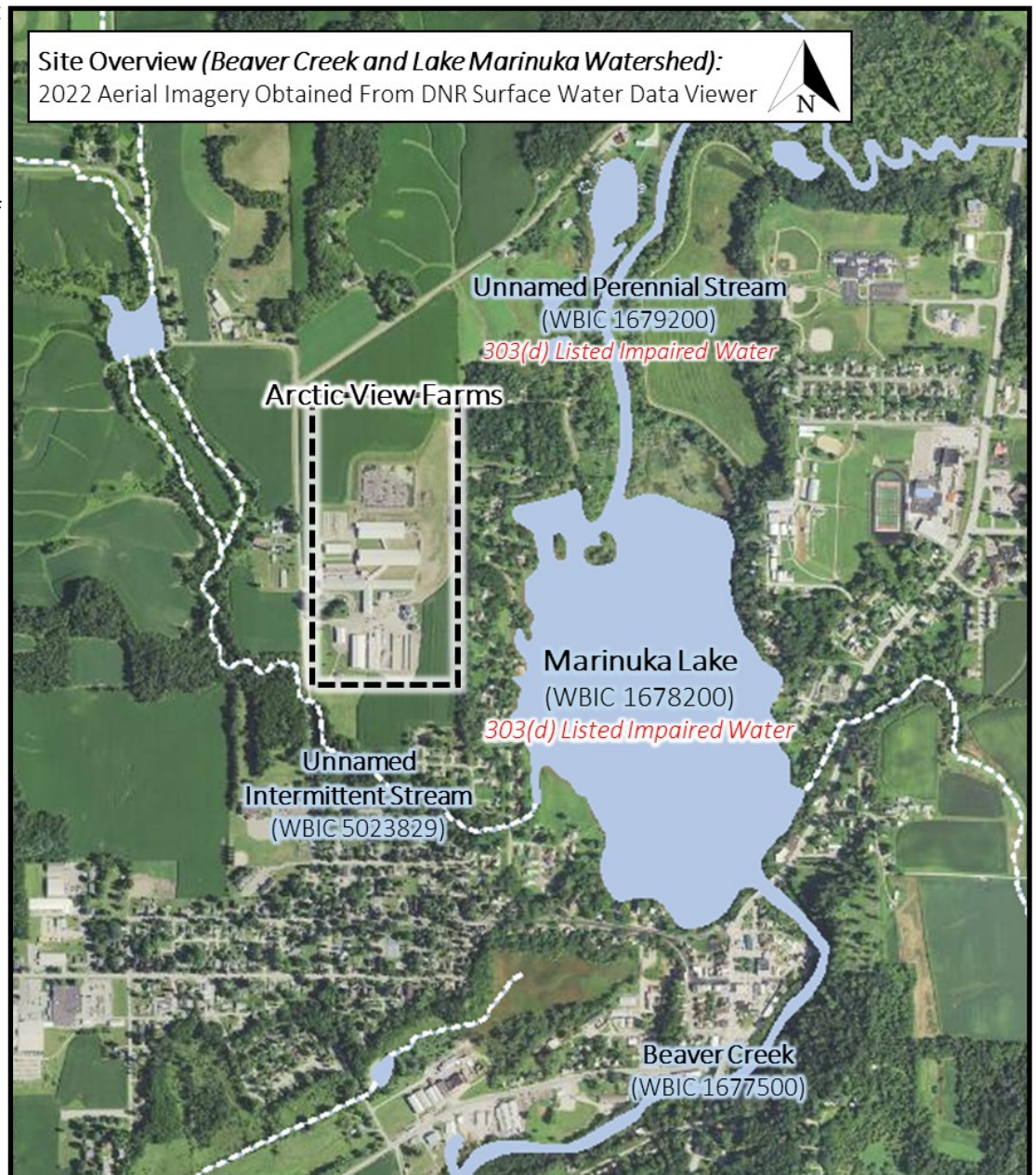
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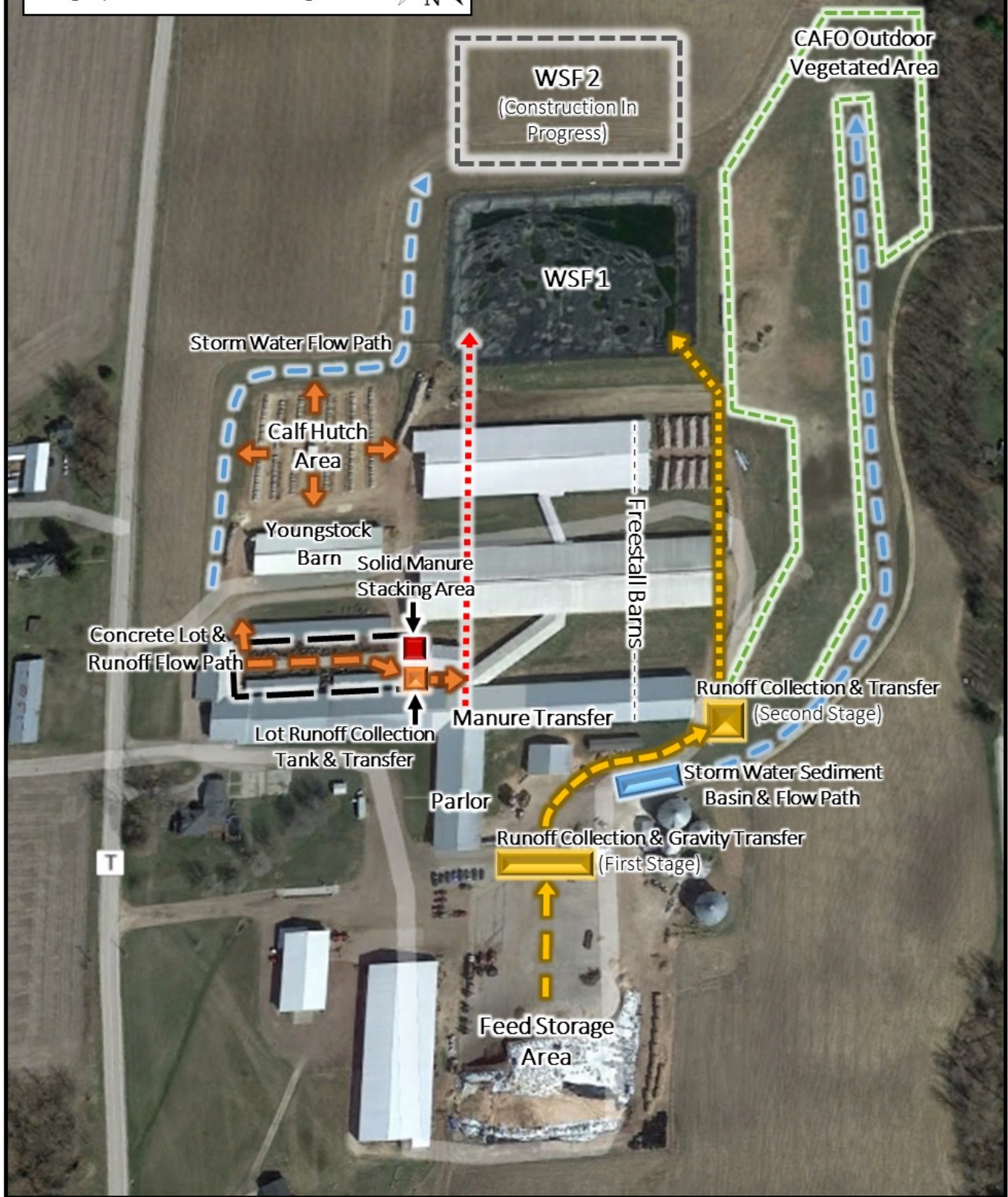
Arctic View Farms first obtained WPDES permit coverage on August 1, 2008 under an individual permit, which was reissued on July 1, 2013. The operation's third and current permit was reissued again on May 1, 2019 and is set to expire on April 30, 2024.

On June 22, 2022 at approximately 10:00 AM Clare Freix met with Paul and Ted Halderson, Kyle Govin, and Rick Reisinger (Trempealeau County Land Conservation) on site at the operation. The purpose of the site visit was to conduct a full compliance inspection for permit reissuance. Weather conditions were sunny with temperatures in the low 80s. Drought like conditions have persisted over the last several weeks prior to the inspection, with the exception of approximately 2.3 inches of rain that had occurred about 72 days prior to the inspection.

SITE OVERVIEW

(see right)





SITE OBSERVATIONS

Feedlot Runoff

The operation utilizes a concrete feedlot located near the center of the site. The feedlot was first constructed sometime during the early 2000s prior to the operation obtaining WPDES permit coverage. There is no record that either the feedlot or the associated runoff control system were evaluated nor is there record of Department approved plans and specifications.

Majority of feedlot runoff flows east across the lot and proceeds into a collection tank located at the east end of the lot. The contents of the collection tank are then pumped to the liquid waste storage facility at the north end of the site. The western end of the feedlot slopes slightly to the west, allowing for some feedlot runoff to exit the west end of the lot. Runoff that exits the west end of the lot proceeds north west through a culvert where it enters a grassed waterway intended for storm water. The grassed waterway flows north east and eventually discharges at the north east end of the site. During a separate inspection that took place approximately one year prior (June 15, 2022), Freix observed manure and manure laden runoff accumulating at both the inlet and the outlet of the culvert located off the western end of the feedlot which flows into the grassed waterway. Freix then recommended that the operation consider installing some type of berm/curb at the western end of the lot to ensure contaminated runoff at that end is contained with the lot and directed toward the collection tank.

The operation has since installed a gravel berm off the west end of the lot near the front of culvert inlet. The location of the gravel berm prevents contaminated runoff which exits the west end of the lot from entering the culvert inlet, however, it does not fully prevent contaminated runoff from exiting the lot altogether. Furthermore, the gravel material used to construct the berm is easily erodible, and also permeable in nature, and therefore does not effectively serve as a long term permanent fix to prevent discharges from the west end of the lot. For that reason, Freix recommended that the operation install a more permanent fix to stop contaminated runoff from exiting the west end of the lot altogether, such as installing a concrete curb/berm on the west end of the lot itself. If the operation does not install a permanent fix to stop contaminated runoff from exiting the feedlot, then an engineering evaluation of the outdoor lot and the associated runoff controls (which include the collection tank at the east end of the lot) will be included in the schedules section of the reissued permit.



Photo 1 (Left): Looking west across the center of the outdoor concrete feedlot from the east end of the lot. Majority of contaminated lot runoff flows east across the lot where it then enters the collection tank pictured in photo 2.

Photo 1 (Left): Looking west across the center of the outdoor concrete feedlot from the east end of the lot. Majority of contaminated lot runoff flows east across the lot where it then enters the collection tank pictured in photo 2.



Photo 2 (Right): Looking at the inlet to the runoff collection tank located at the east end of the outdoor concrete feedlot pictured in photo 1. The contents of the collection tank flow into the manure transfer system within the freestall barns where it is then pumped to WSF 1.



Photo 3 (Left): Looking at the gravel berm that was installed in front of the culvert inlet located off the west end of the outdoor concrete lot.

The operation also utilizes a gravel calf hutch area located near the north west end of the site which was put in place sometime around 2015. There is no record that the calf hutch area runoff control system has been evaluated nor is there record of Department approved plans and specifications.

The calf hutch area does not have a designed runoff control system in place. Runoff that does discharge from the calf hutch area exits at various points where it would then enter the grassed waterway intended for storm water. The grassed waterway flows north east and eventually discharges at the north east end of the site. There were no signs of channelization where runoff regularly discharges from the calf hutch area and sufficient vegetation has been established in the surrounding areas outside the entire perimeter of the calf hutch area. The areas between each row of calf hutches were also well vegetated and were clear of contaminated bedding and waste feed.



Photo 4 (Right): Looking west across the northern edge of the calf hutch area. Vegetative cover was only absent within a small portion of the outer perimeter of the calf hutch area as a result of some recent construction activities (pictured front left). Otherwise, sufficient vegetation is maintained throughout an extended area around majority of the outer perimeter of the calf hutch area.



Photo 5 (Left): Looking south between a row of calf hutches within the calf hutch area. The areas between each row of calf hutches were well vegetated and clear of contaminated bedding and waste feed.

Waste Storage Facilities

The operation utilizes a HDPE covered, clay lined waste storage facility located at the north end of the site (WSF 1). WSF 1 was constructed in 2008 with an approximate maximum operating level capacity of 11,079,435 gallons. Plans and specifications for WSF 1 were statutorily approved by the Department on March 17, 2008 and there is no record of post construction documentation being submitted. The operation once utilized a solid manure separation system located east of the concrete feedlot where manure solids were separated to be reused for animal bedding and the remaining liquids were transferred to the covered storage facility. The operation has discontinued use of the solid manure separation system and now primarily uses sawdust for animal bedding. The waste storage facility now accepts liquid manure, parlor water, and contaminated bedding generated within the three freestall barns and contaminated runoff collected from the concrete feedlot. The operation also completed construction of a new feed storage runoff control system in 2022 which collects and transfers all leachate and feed storage runoff to WSF 1.

Photo 6 (Right): Looking north across WSF 1. A safety fence was observed around the entire perimeter of the waste storage. A permanent maximum operating level marker and margin of safety marker are also present within the sump well at the south west corner of the storage.





Photo 7 (Left): Looking south along the eastern wall of WSF 1. Considerable tree growth was present along the outer bank of this wall.

With the new feed storage runoff control system in place, the operation has determined a need for an additional liquid waste storage facility. The earth work for a new liquid waste storage facility was recently completed directly north of WSF 1 just prior to the inspection. Plans and specifications for the proposed waste storage facility have not yet been submitted to the Department for approval. Paul Halderson stated that he believed the plans and specifications for the proposed storage were included as part of the approved plans for the feed storage runoff control system. However, the approved plans for the feed storage runoff control system only included the concrete collection tank and transfer line to WSF 1, and did not include anything related to the proposed waste storage facility. On June 23, 2022, Freix contacted Dave McDaniel (the operation's engineer) to inquire about the status of the plans for the proposed storage. McDaniel explained that he also believed the plans for the waste storage were included with the plans for the approved feed storage runoff control system, but he now sees that was not the case. McDaniel also stated that he will submit the plans for the proposed waste storage facility to the Department as soon as possible. The operation should not commence further construction activities until the plans and specifications for the proposed waste storage facility have been approved.

The new waste storage facility is proposed to be a HDPE covered and lined waste storage facility and will accept the contents from WSF 1 via manual transfer as needed.

Photo 8 (Right): Looking north west across the proposed waste storage facility to be located directly north of WSF 1. The earth work for the new waste storage facility had just been completed prior to the inspection and the rest of construction is also expected to begin during the summer of 2023.



The operation also utilizes a small concrete area located at the east end of the concrete feedlot as a solid manure stacking/storage area. The stacking area is located directly north of the collection tank for the feedlot and manure runoff from the

stacking area flows south into the collection tank. Headland stacking sites are also utilized for solid manure that cannot be directly land applied or stored in the solid manure stacking area.



Photo 9 (Left): Looking at the solid manure stacking area located directly north of the runoff collection tank (pictured in photo 2) at the east end of the outdoor concrete lot. Contaminated runoff from the stacking area flows south into the adjacent collection tank.

Feed Storage Area Runoff

The operation utilizes a concrete feed storage area located at the south end of the site. The feed storage area was initially constructed prior to the

operation receiving WPDES permit coverage. The feed storage was later expanded on a couple separate occasions without Department approval, after permit coverage was obtained, and a small feed storage runoff collection tank and transfer system was also installed. An engineering evaluation of the feed storage area and associated runoff control system was required per permit section 2.5 of the current permit. Plans and specifications for a new feed storage area runoff control system were approved by the Department on June 6, 2020. An engineering evaluation of the feed storage area itself, including the proposed runoff control system, was later submitted on August 12, 2022 and the Department determined that no further actions are required (provided construction of the approved runoff control system is completed). Construction of the new feed storage runoff control system was completed in 2022, and post construction documentation has not been submitted to date.

The feed pad has been regraded so that it slopes north to direct leachate and feed storage runoff to the north end of the pad. The feed pad was also newly resurfaced with concrete and drain tiles were installed below the surface. Concrete walls were also installed along the south, east, and western boundary of the pad. Leachate and feed storage runoff now flows to the north end of the pad where it is captured within an initial collection tank which gravity flows to a larger concrete collection tank located near the north east corner of the feed pad. The contents of the concrete collection tank are then pumped to WSF 1.



Photo 10 (Right): Looking west along the southern end of the feed storage area where concrete calls were recently installed in 2022. Concrete walls were also installed along the east and western end of the feed pad.



Photo 11 (Left): Looking at the first stage feed storage runoff collection tank located at the north end of the feed storage area. Leachate and feed storage runoff flows north across the pad and first enters this collection tank where it then gravity flows to the second collection tank pictured in photo 12.



Photo 12 (Right): Looking at the second stage feed storage runoff collection tank. Leachate and feed storage runoff within this collection tank is pumped to WSF 1.

Ancillary Service & Storage Areas

The operation occasionally utilizes a CAFO outdoor vegetated area located along the east end of the site. Use of the outdoor vegetated area is minimal and sufficient vegetated cover is maintained throughout the entire area.

Prior to construction of the new feed storage runoff control system, majority of the contaminated feed storage runoff would exit the north east corner of the feed pad where it would proceed north through the grassed waterway, which eventually discharges at the north east end of the site. The operation has since cleaned out the debris that was accumulating within the waterway from regular discharges of contaminated runoff as well as regraded areas where significant channelization had occurred. The operation is currently in the process of revegetating areas of the waterway as best they can despite the dry conditions.

Furthermore, the operation installed a concrete storm water sediment collection basin near the north east corner of the feed

pad at the beginning of the waterway. Contaminated feed storage runoff no longer discharges into this waterway since construction of the new runoff control system, however, there is still a significant amount of storm water that enters the waterway during rain events. Therefore, the operation installed the sediment basin to capture sediment that is carried by storm water from the adjacent driveways and ancillary service and storage areas. The sediment basin is also intended to slow down the flow of storm water runoff entering the beginning of the waterway to prevent channelization.

No discharge concerns were observed from ancillary service and storage areas.



Photo 13 (Left): Looking west at the concrete storm water sediment basin located off the north east corner of the feed pad. Storm water from the rooftops and concrete areas just north of the first feed storage runoff collection tank (pictured in photo 11) flows into the sediment basin. Sediment is then trapped within the basin and remaining storm water is slowly filtered out through the screens where it proceeds through the grassed waterway pictured in photo 14.

Photo 14 (Right): Looking east at the beginning of the grassed waterway near the outlet of the storm water sediment basin pictured in photo 13. Debris that was accumulating from regular discharges of feed storage runoff has been removed from the waterway and the areas where significant channelization had occurred have been regraded and are also in the process of being revegetated. Since construction of the feed storage runoff control system, the primary material that now flows through the waterway is filtered storm water from the sediment basin.



Animal Mortality Disposal

The operation once utilized an incinerator to cremate all mortalities on site. However, the operation has discontinued use of the incinerator and mortalities are now picked up by Organic Waste Connections on a weekly basis.

RECORDS REVIEW

Current WPDES Permit – Provided On Site

Production Area Inspection Records – Provided On Site

Emergency Response Plan – Provided On Site

Monitoring & Inspection Plan – Provided On Site

Nutrient Management Plan – Provided On Site

Land Application Records – Provided On Site

180 Day Liquid Manure Storage Documentation – Provided On Site

PERMIT SCHEDULE

Permit Section 2.1: Emergency Response Plan

Emergency Response Plan: Due 05/01/2019 – Complete

Permit Section 2.2: Monitoring & Inspection Program

Monitoring & Inspection Plan: Due 05/31/2019 – Complete

Permit Section 2.3: Permanent Markers – Installation

Installation of permanent markers for the clay lined waste storage facility.

Complete Installation: Due 06/01/2019 – Complete 06/12/2019

Permit Section 2.4: Waste Storage Facility Fence – Installation

Installation of fence to keep animals within the CAFO outdoor vegetated area off the walls of the clay lined liquid waste storage facility

Complete Installation: Due 06/01/2019 – Complete 06/12/2019

Permit Section 2.5: Feed Storage – Engineering Evaluation

Existing feed storage area and associated runoff control system

Engineering Evaluation: Due 09/28/2019 – Submitted 08/12/2020, No Further Actions 10/25/2022 (Provided Construction Of Approved Plans & Specs Is Completed)

Plans & Specifications: Due 04/01/2020 – Submitted 04/06/2020, Approved 06/02/2020

Complete Installation: Due 04/01/2021 – Complete 2022

Post Construction: Due Within 60 Days Of Completion – Outstanding

Permit Section 2.6: Annual Reports

Annual Report #1: Due 01/31/2020 – Complete 01/28/2020

Annual Report #2: Due 01/31/2021 – Complete 01/27/2021

Annual Report #3: Due 01/31/2022 – Complete 01/31/2022

Annual Report #4: Due 01/31/2023 – Complete 01/31/2023

Annual Report #5: Due 01/31/2024 – Upcoming

Permit Section 2.7: Nutrient Management Plan

NMP Update #1: Due 03/31/2020 – Complete 03/31/2020

NMP Update #2: Due 03/31/2021 – Complete 03/15/2021

NMP Update #3: Due 03/31/2022 – Complete 03/31/2022

NMP Update #4: Due 03/31/2023 – Complete 03/31/2022

NMP Update #5: Due 03/31/2024 – Upcoming

Permit Section 2.8: Submit Permit Reissuance Application

Reissuance Application: Due 10/02/2024 – Upcoming

SUMMARY

Areas of Concern

1. The operation is ready to begin construction of a new liquid waste storage facility this summer, but has not submitted

plans and specifications of the proposed waste storage for Department review and approval.

2. The gravel berm installed off the west end of the outdoor lot does not effectively serve as a long term permanent fix to prevent discharges of contaminated runoff from the west end of the outdoor lot. A permanent long term solution to stop contaminated runoff from exiting the west end of the lot altogether and ensure all contaminated runoff is directed to the collection tank at the east end of the lot is recommended. Otherwise, an engineering evaluation of the outdoor lot and associated runoff controls will be included in the schedules section of the reissue permit.
3. The operation has completed construction of the approved feed storage runoff control system, however, post construction documentation has not been submitted to date.

Action Items

June 30, 2023 – Submit plans and specifications through the Department’s ePermitting System for the proposed liquid waste storage facility that will be constructed directly north of the existing waste storage facility (WSF 1)

August 1, 2023 – Submit post construction documentation through the Department’s ePermitting System for the feed storage runoff control system (DNR Project # R-2020-0065)

October 2, 2023 – Submit a complete permit reissuance application that contains the following components through the Department’s ePermitting System:

1. 3400-025 Livestock/Poultry Operation WPDES Permit Application
2. 3400-025A Animal Unit Calculation Worksheet
3. 3400-025B Nutrient Management Plan Checklist
4. 3400-025G CAFO Reviewable Facilities and Systems for Livestock/Poultry Operation WPDES Permit
5. [Environmental Analysis Questionnaire](#) (EAQ)

Note: *At a minimum, please complete and submit the first two pages of the EAQ form, which include general contact information and screening questions. Answering the screening questions will determine whether the EAQ is required for the operation, in which case the entire EAQ form must be completed and submitted as part of the permit application.*

6. Aerial map labelling all the existing and proposed facilities and systems at the production area
7. Soil Survey map of the production area
8. Five year nutrient management plan
9. 180 day liquid manure storage calculations & supporting documentation

April 1, 2024 – Submit documentation of the permanent long term fix that was installed to stop contaminated runoff from exiting the west end of the outdoor feedlot and to ensure that all contaminated runoff is contained within the boundary of the feedlot and is collected by the collection tank at the east end of the lot.

Note: *If the operation has not installed a permanent long term fix by the deadline above, or if the Department does not agree that the permanent fix installed by the operation will sufficiently contain contaminated runoff within the boundary of the lot to ensure all contaminated runoff is directed into the collection tank, then an engineering evaluation of the outdoor lot and associated runoff controls will be included in the schedules section of the reissued permit.*

Items For Reissued Permit

1. A new sample point will be added for the proposed liquid waste storage facility to be constructed directly north of the existing waste storage facility.
2. An engineering evaluation of the outdoor feedlot and associated runoff control system (if a permanent long term fix has not been installed to ensure that all contaminated runoff is contained within the boundary of the feedlot and is collected by the collection tank).

Substantial Compliance

The operation is not currently in substantial compliance with the permit. A notice of noncompliance was issued July 28, 2021 for failure to construct the proposed feed storage runoff control system in accordance with permit section 2.5. Construction of the runoff control system was completed in 2022, however, post construction documentation has not been submitted to date. Once post construction documentation has been submitted to the Department, the notice of noncompliance will be closed out.