Permit Fact Sheet

General Information

Permit Number	WI-0067481-01-0
Permittee Name and Address	Matt Lavey Farms, Inc N10879 South Tower Road Chilton WI 53014
Permitted Facility Name and Address	Matt Lavey Farms, Inc N10879 SOUTH TOWER RD, CHILTON
Permit Term	March 01, 2025 to February 28, 2030
Discharge Location	Lake Winnebago – East Watershed, groundwaters of the state

Animal Units					
	Current AU		**Proposed AU** **(Note: If all zeroes, expansions are not expected during permit term)**		
Animal Type	**Mixed**	**Individual**	**Mixed**	**Individual**	**Date of Proposed Expansion**
Dairy Calves (under 400 lbs.)	47	0	65	0	04/01/2029
Milking and Dry Cows	1252	1278	1879	1919	04/01/2029
Heifers (400 lbs. to 800 lbs.)	137	228	195	325	04/01/2029
Heifers (800 lbs. to 1200 lbs.)	253	230	358	325	04/01/2029
Total	1689	1278	2497	1919	

Facility Description

Matt Lavey Farms is a Concentrated Animal Feeding Operation (CAFO) owned and operated by Matt, John, Joe, and Tom Lavey. It currently has 1,689 animal units (895 milking & dry cows, 558 heifers, and 237 calves) and based on current herd size, Matt Lavey Farms has approximately 261 days of liquid waste storage. Matt Lavey Farms generates 13,494,479 gallons of liquid manure and 1200 tons of solid manure annually and currently has 1,846.7 acres (742 owned and 1104.7 controlled through contracts, rental agreements or leases, or under manure agreements) of which 1,800.2 are spreadable acres.

Substantial Compliance Determination

Enforcement:

This is Matt Lavey Farms' first WPDES Permit. Matt Lavey Farms was issued a Notice of Noncompliance for operating above 1,000 animal units without a WPDES Permit. To return to compliance, Matt Lavey Farms submitted a WPDES Permit application. Due to this being the farm's first WPDES permit, a substantial compliance determination is not needed to issue the permit.

Sample Point Designation For Animal Waste		
Sample Point Number	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**	
001	Sample point 001 is for liquid manure and process wastewater that is directly land applied from Waste Storage Facility 1 (WSF 1), located on the main farm. WSF 1 is an earthen lined facility that was constructed in 1995. It has a maximum operating level capacity of 9,054,581 gallons. This storage accepts manure and process wastewater from the adjacent freestall barns and parlor. Plans and specifications for upgrades shall be submitted according to the permit schedules section.	
002	Sample point 002 is for liquid manure and process wastewater that is directly land applied from Waste Storage Facility 2 (WSF 2), located at the heifer site. WSF 2 is an earthen lined facility that was constructed in 1979. It has a maximum operating level capacity of 604,722 gallons. This storage accepts manure and process wastewater from the adjacent barn. An engineering evaluation shall be submitted according to the permit schedules section.	
003	Sample point 003 is for manure solids land applied from waste storage facilities 1 and 2. These facilities are described in sample points 001 and 002 respectively. Representative samples shall be taken from each waste storage facility when land application occurs.	
004	Sample point 004 is for solid manure land applied from the solid manure stacking pad, located on the east side of the calf barn. The stacking pad has concrete working surface with walls on three sides and a slopped floor to contain precipitation within the stacking area. Bedded pack manure and calf hutch manure is stored here. The pad is approximately 32 x 18 and was constructed in 2009. The pad was evaluated in 2024 and met permit requirements.	
005	Sample point 005 is for any miscellaneous solid manure directly land applied and not stored in a waste storage facility. This includes calf hutch manure, maternity pen bedpack, heifer bedpack, and any solids removed from the digester. Representative samples shall be taken for each manure source type.	
006	Sample point 006 is for visual monitoring and inspection of the feed storage area and associated runoff control system at the main dairy. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program. See the permit schedules section for additional requirements.	
007	Sample point 007 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.	

1 Livestock Operations - Proposed Operation and Management

Production Area Discharge Limitations

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

Runoff Control

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

Manure and Process Wastewater Storage

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

The permittee currently has approximately 261 days of storage for liquid manure. The permittee must maintain 180 days of storage, unless temporary reductions in required storage are approved by the Department.

Solid Manure Stacking

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

Ancillary Service and Storage Areas

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

Nutrient Management

With 1,689 animal units (895 milking & dry cows, 558 heifers, and 237 calves), it is estimated that approximately 13,494,479 gallons of manure and process wastewater will be produced per year. The permittee owns *approximately* 742 acres of cropland and rents about 1,104.7. Given the rotation commonly used by the permittee, 1,800.2 acres are available (or open) to receive manure and process wastewater on an annual basis. The permit requires all landspreading of manure and process wastewater be completed in accordance with an approved nutrient management plan. The permit will require sampling and analysis of manure and process wastewater that will be landspread. Landspreading rates must be adjusted based on sample analysis. The permit requires the permittee to maintain a daily log that documents landspreading activities. The permit also requires the submittal of an annual report that summarizes all landspreading activities. Plans must be updated annually to reflect cropping plans and other operational changes. Among the requirements, the plans must include detailed landspreading information including field by field nutrient budgets.

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

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

In addition, the permittee must comply with restrictions on land application of manure and process wastewater on frozen or snow-covered ground. Included in these restrictions is a prohibition on surface applications of solid manure (≥12% solids) on frozen or snow-covered ground during February and March. Beginning March 1, 2025, non-emergency surface applications of liquid manure (<12%) on frozen or snow-covered ground are prohibited.

Monitoring and Sampling Requirements

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

Sampling Points

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

1.1 Sample Point Number: 001- WSF 1 (liquids); 002- WSF 2 (liquids)

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 Matt Lavey Farms first permit.

1.1.2 Explanation of Operation and Management Requirements

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

1.2 Sample Point Number: 003- WSF (solids); 004- Solid Stacking; 005- Misc. Solids

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Total		lbs/ton	Quarterly	Grab	
Nitrogen, Available		lbs/ton	Quarterly	Calculated	
Phosphorus, Total		lbs/ton	Quarterly	Grab	
Phosphorus, Available		lbs/ton	Quarterly	Calculated	
Solids, Total		Percent	Quarterly	Grab	

1.2.1 Changes from Previous Permit

This is Matt Lavey Farms first permit.

1.2.2 Explanation of Operation and Management Requirements

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

1.3 Sample Point Number: 006- Feed Storage Area and 007- Stormwater

1.3.1 Changes from Previous Permit

This is Matt Lavey Farms first permit.

1.3.2 Explanation of Operation and Management Requirements

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

2 Schedules

2.1 Emergency Response Plan

Required Action	Due Date
Develop Emergency Response Plan: Develop a written Emergency Response Plan within 30 days of permit coverage, available to the Department upon request.	04/01/2025

Explanation of Schedules

Schedule 2.1 is included in the permit as a general permit requirement.

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 update and submit a proposed monitoring and inspection program within 30 days of the effective date of this permit.	04/01/2025

Explanation of Schedules

Schedule 2.2 is included in the permit as a general permit requirement.

2.3 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.	01/31/2026
Submit Annual Report #2: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2027
Submit Annual Report #3: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2028
Submit Annual Report #4: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2029
Submit Annual Report #5: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2030
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed.	

Explanation of Schedules

Schedule 2.3 is included in the permit as a general permit requirement.

2.4 Nutrient Management Plan

Submit annual nutrient management plan (NMP) updates by March 31 of each year. Note, in addition to annual NMP updates, submit NMP amendments and substantial revisions to the department for written approval prior to implementation of any changes to the NMP.

Required Action	Due Date
Management Plan Submittal: Submit any necessary updates to the Nutrient Management Plan to meet the conditions outlined in this permit (see conditions in the Livestock Operational and Sampling Requirements section).	
Submit NMP Update #1: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2025
Submit NMP Update #2: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2026
Submit NMP Update #3: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2027
Submit NMP Update #4: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2028
Submit NMP Update #5: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2029
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

Explanation of Schedules

Schedule 2.4 is included in the permit as a general permit requirement.

2.5 Manure Storage Facility - Engineering Evaluation

Applicable to WSF 1 and WSF 2.

Required Action	Due Date
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.	05/01/2025
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.	12/31/2026

Explanation of Schedules

Schedule 2.5 is included in the permit to evaluate WSFs 1 and 2.

2.6 Runoff Control System - Installation

Applicable to the feed storage area.

Required Action	Due Date
Plans and Specifications: Submit plans and specifications for a permanent feed storage area runoff control system 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.	05/01/2025
Complete Installation: Complete construction of runoff control system. System 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.	12/31/2025

Explanation of Schedules

Schedule 2.6 is included in the permit to install permanent runoff controls for the feed storage area.

2.7 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	09/01/2029

Explanation of Schedules

Schedule 2.7 is included in the permit as a general permit requirement.

Other Comments

N/A

Attachments

Plan Approval Letter(s)

- Preliminary Inspection Report – June 20, 2024
- Conditional Nutrient Management Plan Approval – December 5, 2024
- Days of Storage Review Letter – December 9, 2024

Justification Of Any Waivers From Permit Application Requirements

None

Prepared By: Holly Stegemann **Agricultural Runoff Management Specialist** **Date: 01/08/2025**

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
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Madison WI 53707-7921

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Adam N. Payne, Secretary
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June 20, 2024

John Lavey
Matt Lavey Farms, Inc.
N10878 S. Tower Road
Malone, WI 53049

Calumet County

Subject: **Notice of Noncompliance – Response Requested**

Dear Mr. John Lavey:

The Department of Natural Resources (Department) has reason to believe that Matt Lavey Farms, located at, N10878 S. Tower Road, Wisconsin, is in noncompliance with Statue NR 243 Wisconsin Administrative Code. Based on animal unit records received by the Department, the facility is not complying with the following requirements:

1. **S. NR 243.11(3), Wis. Admin. Code**:
   "…any person owning or operating a large CAFO that stores manure or process wastewater in a structure that is at or below grade or that land applies manure or process wastewater shall have a WPDES permit."

2. **S. NR 243.12(1)(a), Wis. Adm. Code:**
   "…a person who is proposing to own or operate a large CAFO that will store manure or process wastewater in a storage facility constructed at or below grade or that will land apply manure or process wastewater shall file a preliminary application for a WPDES permit at least 12 months prior to the intended date on which the operation will become a large CAFO." "The owner or operator shall then submit a completed final WPDES permit application under sub. (2) at least 180 days prior to the intended date on which the operation would become a large CAFO."

A large CAFO is defined as an animal feeding operation that has 1,000 animal units or more at any time. On May 9, 2024, Matt Lavey Farms reported a current herd size of 1,688.8 animal units in a preliminary application for a WPDES permit that was submitted to the Department.

In response to this letter, please submit a complete WPDES permit application to the Department via the ePermitting System: http://dnr.wi.gov/permits/water/ . Below is a detailed list of materials required as part of the complete WPDES permit application.

- Form 3400-025 (Livestock/Poultry Operation WPDES Permit Application)
- Form 3400-025A (Animal Units Calculation Worksheet)

- Form 3400-025B (Nutrient Management Plan Checklist)
- Form 3400-025C (Reviewable Facilities of Systems Checklist)
- A soil survey map of all production areas to be covered under the WPDES Permit
- A labeled aerial map showing the existing and proposed features and structures of the production areas to be covered under the WPDES Permit
- Calculations documenting days of liquid manure and process wastewater storage
- Supporting documentation for days of storage calculations
- A complete 5-year Nutrient Management Plan (NMP). If necessary, include a description of permanent spray irrigation systems and any other landspreading or treatment systems (proposed or active)
- Environmental Analysis Questionnaire
- Engineering evaluations for existing facilities that store or transfer manure or process wastewater, including:
    - Liquid waste storage facilities
    - Solid waste storage facilities
    - Feed storage areas and associated runoff control systems
    - Outdoor feedlots
    - Other permanent manure and process wastewater transfer systems
- Engineering plans and specifications for any proposed facilities or systems

It should be noted that Matt Lavey Farms is in noncompliance, and will remain in noncompliance, until a complete permit application is received by the Department. Failure to respond in a timely manner may escalated enforcement actions.

On June 7, 2024, Department staff conducted a pre-permit site inspection at Matt Lavey Farms and met with you to discuss WPDES CAFO permit application requirements. Department observations from the site inspection are included in the enclosed report.

If you have any questions regarding this letter or your WPDES permit requirements, please contact me at (920) 360-0794 or at holly.stegemann@wisconsin.gov.

Sincerely,

Holly Stegemann

Holly Stegemann
Agricultural Runoff Management Specialist

Enclosure: Matt Lavey Farms Issuance Inspection Report

Electronic CC:
Anthony Reali - Calumet County LWC
Brittany Newman - Country Visions Cooperative
Joe Baeten, Falon French, James Salscheider – DNR
Emily Micolichek – Miller Engineers & Scientists
Rachel Ecker – Complete Management Consulting

CAFO Compliance Report (06/20/2024)

Inspection Date: 06/07/2024

Inspection Type: Issuance

Operation Name: Matt Lavey Farms

Operation Address: Main Site: N10878 S. Tower Road, Malone WI
Heifer Site: N10879 S. Tower Road, Malone WI

On-Site Representative(s): John Lavey, Owner Operator

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

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On June 7, 2024, Stegemann and Joe Baeten (NER Watershed Management Team Supervisor) met with Lavey and Rachel Ecker (Complete Management Consulting) to conduct a preliminary inspection of Matt Lavey Farms. A preliminary WPDES Permit application was received by the department on May 9, 2024. All facilities to be covered under the permit were inspected. Weather during the inspection was windy and sunny. No substantial precipitation had fallen prior to the inspection.

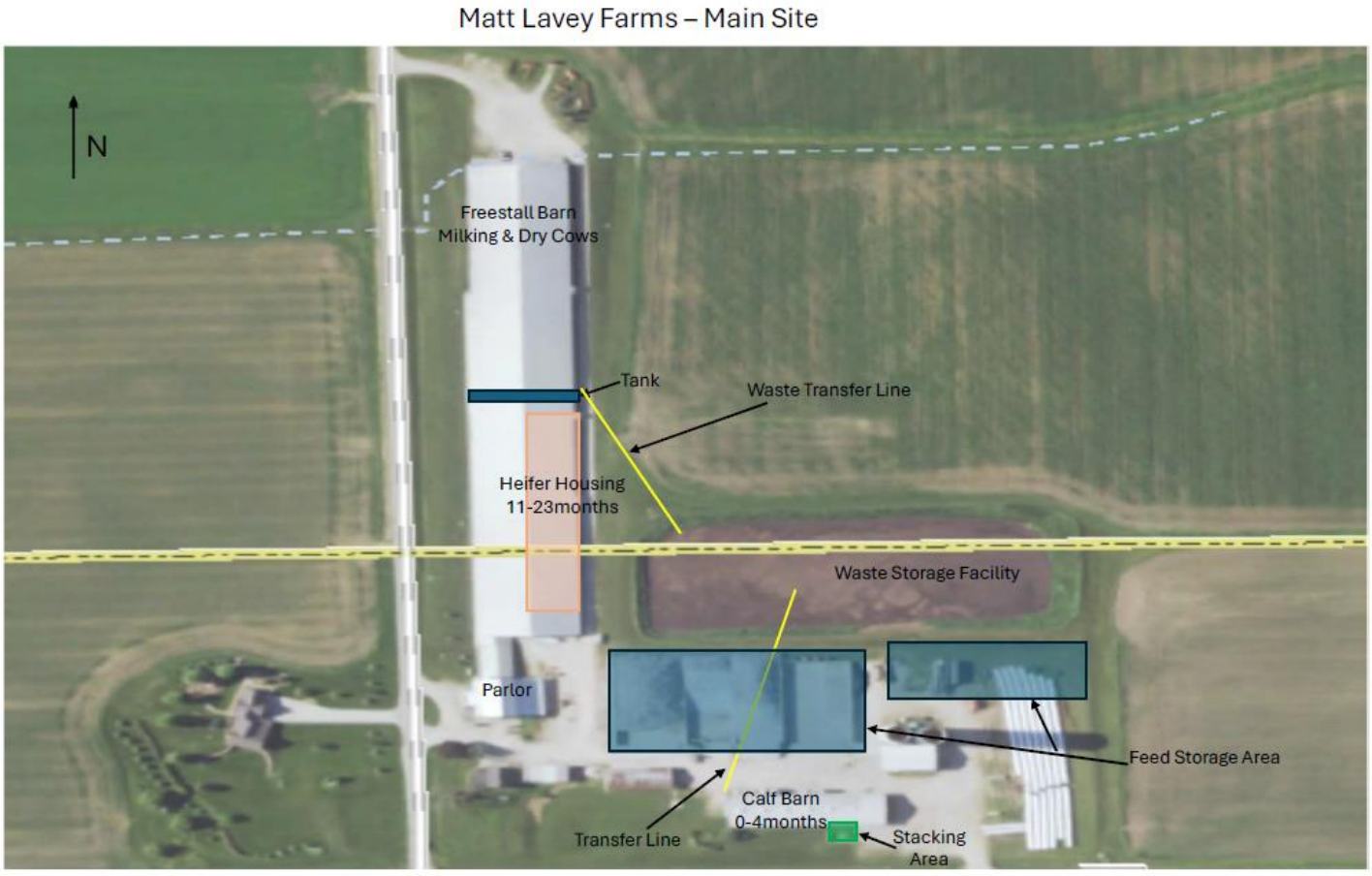

Figure 1. Aerial overview of Lavey Farms main site, outlining waste storage facility with associated transfer lines, feed storage area, and solid stacking area.

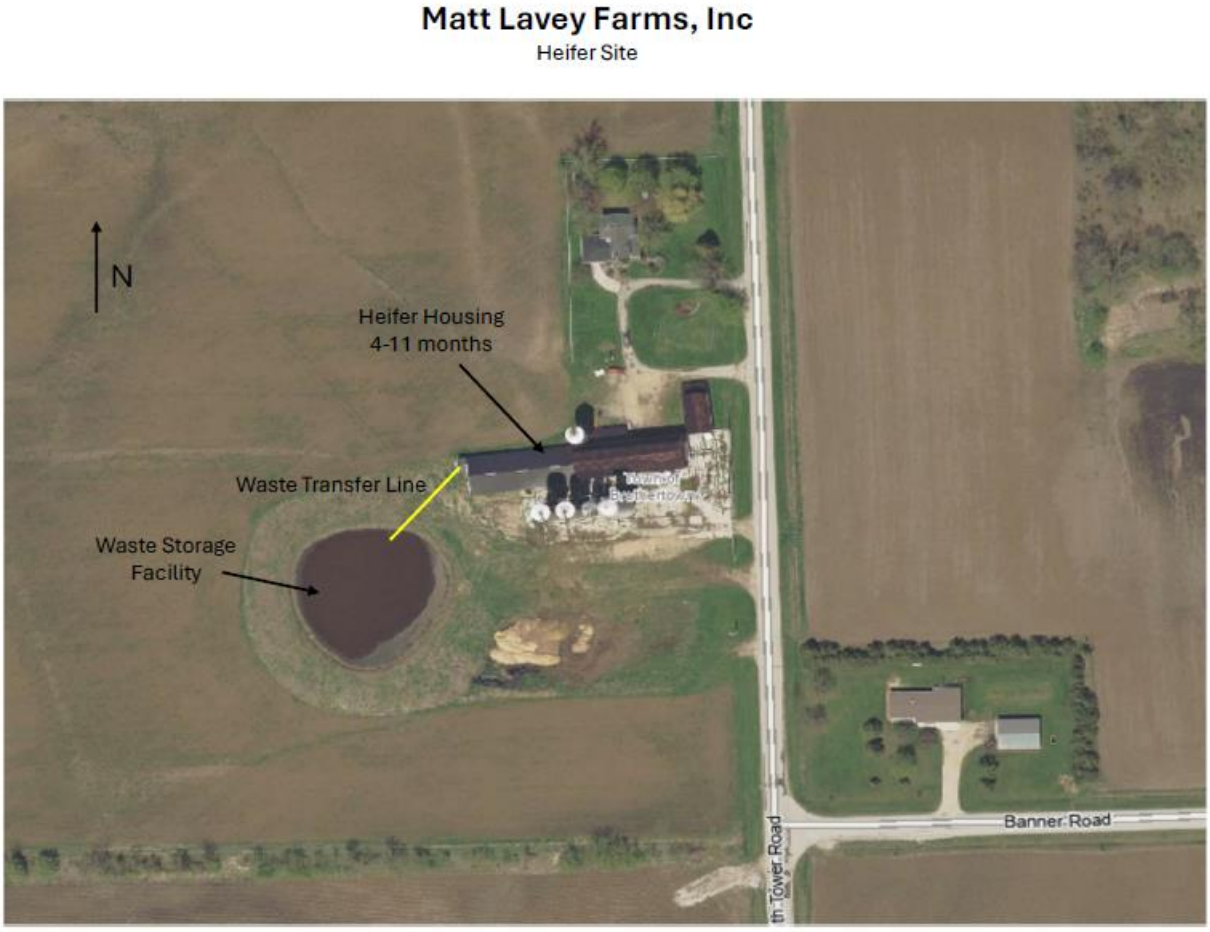

Figure 2. Aerial overview of Lavey Farms heifer site, located to the north of the main site outlining waste storage facility and associated transfer line.

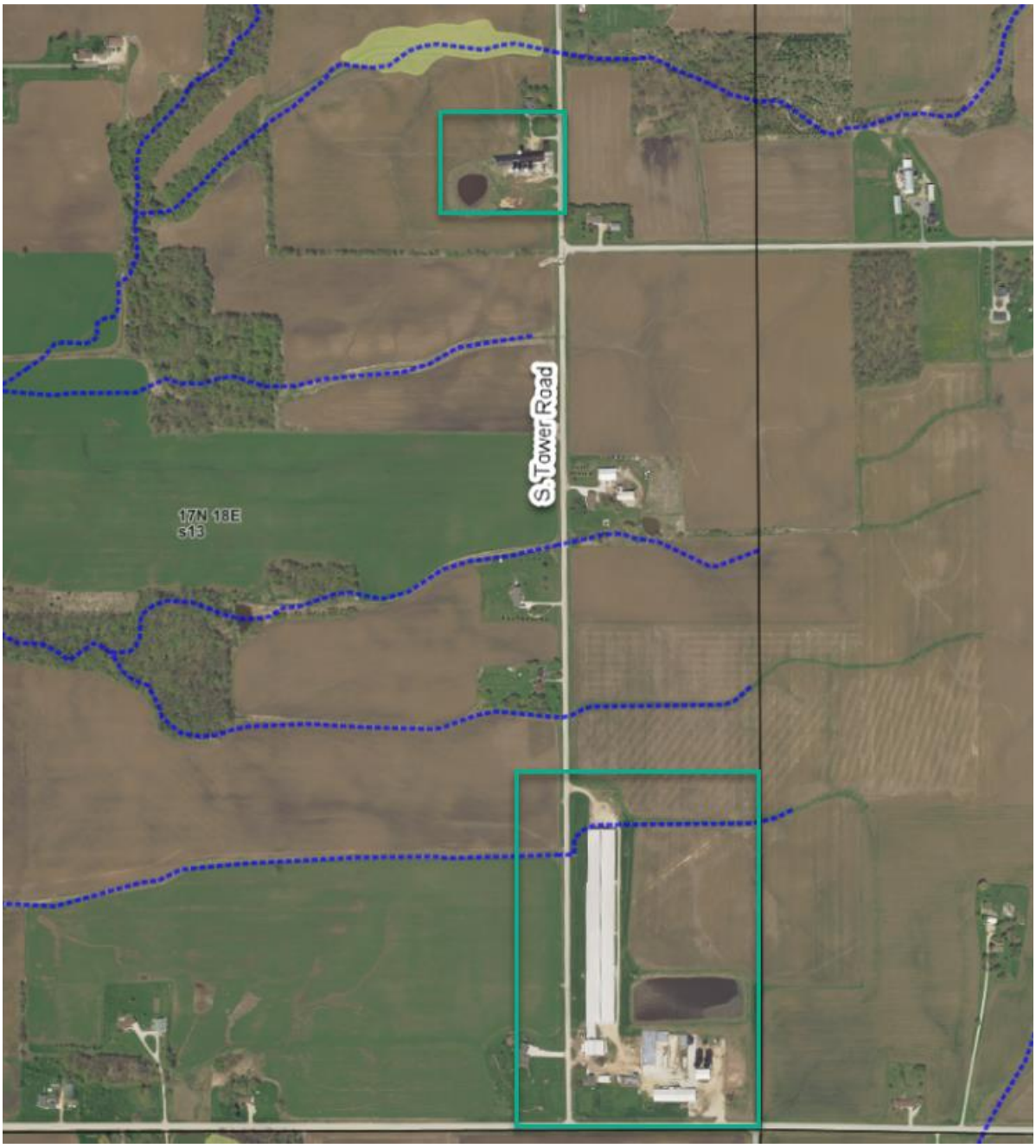

Figure 3. Aerial overview of Lavey Farms main and heifer sites in relation to surface water features. Areas shaded green represent designated wetlands.

SITE OBSERVATIONS

Feedlot Runoff
Lavey Farms does not utilize any outdoor feedlots.

Calf Hutch Areas
Lavey Farms does not utilize any calf hutch areas. Calves are housed under roof on the south side of the production site.

Waste Storage Facilities
Lavey Farms utilizes one waste storage facility on the main site and one on the heifer site. Wood shavings are utilized as animal bedding in the freestall barn and stored in WSF 1. Solids from the calf barn are stacked on the east side of the calf barn before they are land applied.

WSF 1 is an earthen lined facility that was constructed in the 1990s. It accepts manure and process wastewater from the adjacent barn as well as the calf barn. At the time of inspection, no safety fencing or permanent markers were present.

WSF 2, located at the heifer site, is an earthen lined pit that was constructed in the 1970s. It accepts manure and process wastewater from the adjacent heifer barn. At the time of inspection, no safety fencing or permanent markers were present. The addition of concrete agitations pads, fencing, and markers were discussed for both waste storages.

During the walkthrough of the heifer site, a stack of manure solids was noted on the south side of the facility. Different options for stacking solids in compliance with permit requirements were discussed.

Process Wastewater (other than feed storage area leachate/runoff)
Process wastewater is collected and transferred to WSF 1. Process wastewater sources (milking center, wash water, etc.) are managed to not have current or past indicators of discharges.

Feed Storage Area Runoff
Lavey Farms utilizes one feed storage area on the southeast side of the production site which consists of multiple concrete feed bunkers, located to the south of WSF 1. An additional bunker was added north of the silos in 2022 with room to add another in the future. The concrete is pitched to convey runoff slightly south and then west. At the time of inspection, no permanent runoff controls were installed. A stormwater inlet is located between the bunkers and the calf barn which runs northwest with the outlet in the ditch to the west of the freestall barn, along S. Tower Road.

Plans and specifications for the installation of permanent runoff controls are already in the works with the idea of installing an inlet that would lead to a collection tank near the east side of the parlor that would then pump leachate to WSF 1. Thoughts about potential timelines, funding, as well as the installation of interim runoff controls, were discussed.

At the heifer site, Lavey Farms utilizes the four silos to store feed. No noticeable discharge or leaking was observed.

Animal Mortality Disposal
Mortalities are placed on the north side of the calf barn until picked up by OJ Krull. Animal mortalities are managed to not have current or past indicators of discharges.

Ancillary Service Areas
Drainage tiles are installed around the barns with the outlet in the east ditch of S. Tower Road. A stormwater drain inlet is on the east side of the freestall barn, runs west under the barn, with the outlet in the east ditch of S. Tower Road. Preventative maintenance actions are occurring to minimize pollutant discharges from ancillary service and storage areas (i.e. storm water conveyance systems, driveways, etc.).

Lavey Farms does not utilize any CAFO outdoor vegetative areas.

SUMMARY

Areas of Concern
- Feed storage area does not have a permanent runoff control system and may lead to unpermitted discharges from the production area
- Waste storage facilities 1 and 2 do not have permanent markers installed or safety fencing in place

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

• 3400-025 form (Livestock/Poultry Operation WPDES Permit Application)
• 3400-025A form (Animal Units Calculation Worksheet)
• 3400-025G form (Evaluated Facilities of Systems Checklist)
• 3400-025C form (Reviewable Facilities of Systems Checklist)
• A soil survey map of the dairy's production area 12
• A labeled aerial map showing the existing and proposed features and structures of the dairy's production area
• Calculations documenting days liquid manure and process wastewater storage
• Supporting documentation for days storage calculations
• A complete 5-year Nutrient Management Plan (NMP). If necessary, include a description of permanent spray irrigation systems and any other landspreading or treatment systems (proposed or active)
• Plans and specifications for any proposed facilities

Photo #:	2349
Date/Time of Photo:	06/07/2024 10:11
Photo By:	Stegemann
Photo Location:	Calf Barn

Photo Description:

View of calf barn, looking southeast.

Photo #:	2354
Date/Time of Photo:	06/07/2024 10:14
Photo By:	Stegemann
Photo Location:	WSF 1

Photo Description:

View of WSF 1, looking northwest.

Photo #:	2355
Date/Time of Photo:	06/07/2024 10:15
Photo By:	Stegemann
Photo Location:	WSF 1

Photo Description:

View of WSF 1, looking north.

Photo #:	2358
Date/Time of Photo:	06/07/2024 10:17
Photo By:	Stegemann
Photo Location:	WSF 1

Photo Description:

View of WSF 1, looking west.

Photo #:	2371
Date/Time of Photo:	06/07/2024 10:41
Photo By:	Stegemann
Photo Location:	WSF 2

Photo Description:

View of WSF 2, looking southwest.

Photo #:	2373
Date/Time of Photo:	06/07/2024 10:42
Photo By:	Stegemann
Photo Location:	WSF 2

Photo Description:

View of WSF 2, looking southeast.

Photo #:	2376
Date/Time of Photo:	06/07/2024 10:43
Photo By:	Stegemann
Photo Location:	Heifer Solids

Photo Description:

View of manure solids at the heifer site, looking south.

Photo #:	2344
Date/Time of Photo:	06/07/2024 10:10
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of the feed storage area, looking northwest.

Photo #:	2348
Date/Time of Photo:	06/07/2024 10:11
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of the feed storage area, looking west. Arrows indicate approximate contaminated runoff flow paths.

Photo #:	2352
Date/Time of Photo:	06/07/2024 10:12
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of feed storage area, looking west. Arrows indicate approximate contaminated runoff flow paths. Blue circle indicates stormwater drain inlet that outlets on S. Tower Road.

Photo #:	2357
Date/Time of Photo:	06/07/2024 10:17
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of bunker walls that were constructed in 2022, looking south.

Photo #:	2378
Date/Time of Photo:	06/07/2024 10:46
Photo By:	Stegemann
Photo Location:	Heifer FSA

Photo Description:

View of in use silos on the heifer site, looking north.

Photo #:	2365
Date/Time of Photo:	06/07/2024 10:26
Photo By:	Stegemann
Photo Location:	Stormwater

Photo Description:

View of tile inlet on east side of freestall barn, collecting water from fields to the east.

Photo #:	2369
Date/Time of Photo:	06/07/2024 10:28
Photo By:	Stegemann
Photo Location:	Stormwater

Photo Description:

View of tile three tile outlets in the east ditch of S. Tower Road, looking east.

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WISCONSIN DEPT. OF NATURAL RESOURCES

December 5, 2024

Matthew Lavey
Matt Lavey Farms, Inc
N10878 S. Tower Road
Chilton, WI 53014

SUBJECT: Conditional Approval of MATT LAVEY FARMS, INC Nutrient Management Plan, WPDES Permit No. 0067481-01-0

Dear Farm Contact:

After completing a review of MATT LAVEY FARMS, INC 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 MATT LAVEY FARMS, INC 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 Matt Lavey Farms, Inc 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 Matt Lavey Farms, Inc 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 1689 animal units (895 milking & dry cows, 558 heifers, and 237 calves). A planned herd size of 2372 animal units (1275 milking & dry cows, 618 heifers, and 308 calves) by 2029.
2. Manure generation and spreading records indicate your herd will annually generate approximately 13,494,479 gallons of manure and process wastewater and 1200 tons of solid manure in the first year of the permit term. Approximately 21,488,640 gallons of manure and process wastewater and 1530 tons of solid manure will be generated by 2029.
3. Matt Lavey Farms, Inc. has an expansion planned within the permit term. The farm has adequate acres for the first year of the permit term; however, they do not have adequate acres to expand to the AU number of 2372. Prior to the planned expansion, Matt Lavey Farms, Inc must add additional acres to accommodate for the

expansion. These additional acres should be submitted as a substantial revision to the nutrient management plan, and be reflected in the NMP update to show adequate land base prior to expansion.

4. The use of application restriction options 1 and 5 within surface water quality management areas.
5. The use of phosphorus delivery method P Index.
6. That Matt Lavey Farms, Inc currently has 1846.7 acres (742 owned and 1104.7 controlled through contracts, rental agreements or leases, or under manure agreements) of which 1800.2 are spreadable acres.
7. That some fields included in the NMP are directly adjacent to or have high potential to deliver nutrients and sediment to Brothertown Creek, Pipe Creek, Unnamed Stream 8110723 (Total Phosphorus); Lake Winnebago (PCBs, Total Phosphorus, Sediment/Total Suspended Solids, Mercury).
8. That 39 fields are tiled:
   - 2AB
   - 4B
   - A5B
   - B1
   - B5
   - BB
   - BCDF
   - BH
   - BS
   - C1
   - C3
   - CB3
   - Clink Mid
   - D
   - Daves House
   - Ecker Lower
   - Ecker Upper
   - F
   - G
   - GL
   - GP
   - GU
   - HEL
   - IR E
   - IR W
   - JL
   - JM
   - JU
   - KU
   - L
   - L1
   - L3
   - M
   - MN
   - MS
   - S
   - S1
   - S3
   - S-4
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 2025-2029 Matt Lavey Farms, Inc 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. 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.

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

4. 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, Matt Lavey Farms, Inc may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

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

5. Matt Lavey Farms, Inc shall record daily manure applications by using form "Lavey Farms Hauling Log." These forms shall be retained at the farm and provided to the department upon request.

6. Matt Lavey Farms, Inc 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. If an alternative method of record retention is requested, please provide a template to the Department for approval. If an alternative method of record retention is requested, please provide a template to the Department for approval.

WINTER SPREADING

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

8. The following field(s) are approved for winter spreading of solid manure:
   - 2AB
   - Q
   - S3
   - S6-8
   - S9
   - S12

9. The following field(s) are approved for emergency applications of liquid manure and frozen liquid manure:
   - 2AB
   - Q
   - S3
   - S6-8
   - S9
   - S12

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

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

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

NR243.143/151.075 SILURIAN BEDROCK PERFORMANCE STANDARDS

13. Manure generated by Matt Lavey Farms, Inc that is mechanically applied to the following approved fields meet planning requirements under NR243.143/151.075, Silurian bedrock performance standards. The following fields are required to meet all requirements under NR243.143/151.075, Silurian bedrock performance standards immediately following this approval.
   - J1
   - J2
   - J3

MANURE & PROCESS WASTEWATER IRRIGATION

14. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

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

ITEMS FOR FOLLOW-UP

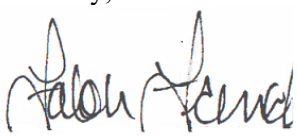
16. Please clarify with the Department what form(s) or report(s) are used to maintain annual spreading records for the annual nutrient management plan update by December 20, 2024.

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

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

If you have any questions regarding this approval I can be reached at (608) 228-5265 or Falon.French@Wisconsin.gov.

Sincerely,



Falon French
WDNR CAFO Intake/Nutrient Management Specialist
Wisconsin Department of Natural Resources

cc: Holly Stegemann, WDNR Agricultural Runoff Specialist (Holly.Stegemann@wisconsin.gov)
Joe B Baeten, WDNR Watershed Field Supervisor (Joseph.Baeten@wisconsin.gov)
Christopher Clayton, WDNR Runoff Management Section Chief (Christopherr.Clayton@Wisconsin.gov)
Aaron O'Rourke, WDNR Nutrient Management Program Coordinator (Aaron.Orourke@Wisconsin.gov)
Ashley Scheel, WDNR CAFO Nutrient Management Plan Reviewer (Ashley.Scheel@Wisconsin.gov)
Rob Davis, WDNR CAFO Review Engineer (Robert.Davis@Wisconsin.gov)
Tony Reali, Calumet County (reali.anthony@co.calumet.wi.us)
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Rachel Ecker, Complete Management Consulting, LLC (rachelecker.cmc@gmail.com)
Jeremy Edwards, County Visions Cooperative (jedwards@cvcoop.com)
File

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WISCONSIN DEPT. OF NATURAL RESOURCES

December 9, 2024

FILE REF: R-2024-0255
WPDES Permit #: WI-0067481

Matt Lavey
Matt Lavey Farms
N10878 South Tower Road
Chilton, WI 53014

Subject: Evaluation Review and Days of Storage Review for Matt Lavey Farms in T17N, R18E, Section 13, Brothertown Township, Calumet County – FURTHER ACTIONS ARE REQUIRED

Dear Mr. Lavey:

This letter is to inform you that the Department received on September 20, 2024, the evaluation for the Feed Storage Area, Feed Storage Area Runoff Controls, Manure Stacking Area, Waste Transfer System, Waste Storage Facility 1, and Waste Storage Facility 2, and Days of Storage submitted under certification by Emily Micolichek, P.E., Miller Engineers & Scientists on behalf of Matt Lavey Farms. Emily Micolichek evaluated the facilities listed below based on applicable NRCS Standards and ch. NR 243 Wis. Adm. Code.

In accordance with s. 243.16(1), Wis. Adm. Code, when submitting an evaluation for an existing facility the evaluation shall include, at a minimum, the following information:

(a) A narrative providing general background and operational information on existing facilities and systems.
(b) Available post-construction documentation including the date and materials of construction.
(c) For facilities or systems that are part of the production area, an assessment of the ability of the facility or system to meet the production area requirements in s. NR 243.13, the adequate storage requirement under s. NR 243.14 (9), and accepted management practices.
(d) An assessment of the ability of the facility or system to meet the applicable design requirements identified in s. NR 243.15.
(e) Any proposed actions to address issues identified as part of the evaluation.

The Department has reviewed the evaluation for the reviewable facilities listed below and finds that they meet the requirements for submission listed above. Emily Micolichek assessed each reviewable facility in accordance with s. NR 243.16(1) and has concluded that some of the reviewable facilities listed below meet the ch. NR 243 requirements and some of the reviewable facilities will require further actions to be compliant with ch. NR 243.

Required Actions for Waste Storage Facilities and Feed Storage Area Runoff Controls

- Submit plans and specifications for Department approval which would bring waste storage facilities 1 and 2 as well as runoff controls for the feed storage area into compliance with the requirements of ch. NR 243.13 and 15, Wis. Adm. Code.
- Construct the Department approved waste storage facility and runoff control plans and submit post-construction documentation.

In accordance with s. NR 243.16(3) and s. NR 243.17(3), Wis. Adm. Code, the Department requires additional practices or actions based on the Department's review of the submitted evaluation for the previously constructed structures or systems. This may include (1) additional technical analysis, modeling or monitoring to demonstrate compliance or (2) installation, replacement or upgrade of systems or structures in order to ensure compliance with requirements in ss. NR 243.13, and 243.15, and 243.17(3), prevent exceedances of groundwater or surface water quality standards or to prevent impairments to wetland functional values.

Submit plans and specifications through the Department's ePermitting system at http://dnr.wi.gov/permits/water/. Submittal due dates are contained in your WPDES permit Schedules section(s). The DNR CAFO Specialist will contact you to discuss next steps. Questions concerning permit requirements should be directed to the DNR CAFO Specialist (contact information at the end of this letter). Questions concerning the review may be directed to Rob Davis.

NOTICE OF APPEAL RIGHTS

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

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

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

Bernie Michaud

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

Enclosures: Wisconsin DNR Engineering Report

Email:
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Emily Micolichek, P.E.; Miller Engineers & Scientists
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Matt Woodrow, P.E.; DATCP
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(920) 849-1493; reali.anthony@co.calumet.wi.us

Holly Stegemann; DNR Northeast Region
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Falon French; DNR, Central Office
(608) 228-5265; Falon.French@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: Matt Lavey Farms **WPDES Permit#:** WI-0067481
Location Address: N10878 South Tower Road, Chilton **DNR Project #:** R-2024-0255
Engineering Certification by: Emily Micolichek, P.E.

Evaluated Facilities:

Waste Storage Facility - WSF 1 (Further Actions Required): WSF 1 is approximately 459 ft x 124 ft x 20 ft deep and is an in-place earth facility. It was originally constructed in 1995 and post-construction records were provided by Calumet County. It was expanded north around 2007 and there are no designs or records for the expansion. 19 borings were performed around the production area on January 22, 2024 with eight of the borings located in the vicinity of WSF 1. Soil borings consistently showed lean clay across the site. The soil borings did not encounter either bedrock or saturation. The 30 ft deep borings adequately demonstrated separation from bedrock and saturation by extending approximately 10 ft below the existing bottom of WSF 1. Shelby tube samples were obtained from the liner of WSF 1 when the lagoon was emptied for the evaluation. P200 ranged from 77.3 to 87.1%, PI ranged from 26 to 28, and the permeabilities ranged from 4.19E-08 to 6.90E-08.

- The evaluation states, "WSF1 does not meet NR 243.15 design requirements and at a minimum the NRCS 313 Code (12/05), due to lack of design records, eroded slopes, missing safety fence and operating level markers." It goes on to say, "The farm intends on expanding WSF1 so Miller will prepare plans and specifications for the expansion and to upgrade the WSF1 to current design codes." Finally, the evaluation states, "Plans and specifications to bring the WSF into compliance should be submitted by December 31, 2024."
    - The Department agrees that plans and specifications should be submitted to reconstruct WSF 1 based on the need for increased storage due to the proposed increase in animals, to provide storage for runoff controls from the feed storage area, and to address the eroded slopes, missing safety fence, and missing operating level markers.
- Submit plans and specifications to reconstruct WSF 1 in accordance with s. NR 243.15(1) and (3), Wis. Adm. Code. Plans should address the need for increased storage, the eroded slopes, the missing safety fence, and the missing operating level markers.
- Construct the Department approved waste storage facility plans and submit post-construction documentation.

Waste Storage Facility - WSF 2 (Further Actions Required): WSF 2 is approximately 100 ft in diameter and is an in-place earth facility. A full survey was not completed at the time of the evaluation due to the liquid waste remaining in the lagoon. It was originally constructed in 1979 and post-construction records were provided by Calumet County. It appears to have been expanded at some point based on aerial images because the shape has changed from the circular shape to a somewhat irregular shape. 19 borings were performed around the production area on January 22, 2024 with two of the borings located in the vicinity of WSF 2. WSF 2 is on a satellite facility that is approximately 2/3 of a mile north of the main farm. Soil borings consistently showed lean clay across both sites. The soil borings did not encounter either bedrock or saturation. The 25 ft deep borings adequately demonstrated separation from bedrock and saturation by extending approximately 10 ft below the existing bottom of WSF 2. Shelby tube samples were obtained from the liner of WSF 2 when the lagoon was partially emptied for the evaluation. P200 ranged from 73.4 to 78.9%, PI ranged from 21 to 31, and the permeabilities ranged from 2.79E-08 to 3.77E-08.

- The evaluation states, "WSF2 does not meet NR 243.15 design requirements and at a minimum the NRCS 313 Code (12/05), because of its' age and the lack of safety fence and operating level markers." It goes on to say, "The farm intends to bring the facility into compliance. Miller will prepare plans and specifications to upgrade WSF2 to current design codes." Finally, the evaluation

states, “Plans and specifications to bring the WSF into compliance should be submitted by December 31, 2024.”
    - The Department agrees that plans and specifications should be submitted to reconstruct WSF 2 based on the need for increased storage due to the proposed increase in animals, to address the eroded slopes, to address the missing safety fence, and missing operating level markers.
- Submit plans and specifications to reconstruct WSF 2 in accordance with s. NR 243.15(1) and (3), Wis. Adm. Code. Plans should address the need for increased storage, the eroded slopes, the missing safety fence, and the missing operating level markers.
- Construct the Department approved waste storage facility plans and submit post-construction documentation.

Transfer System (No Further Actions Required): There are three waste transfer systems at the farm. The parlor and freestall barn transfer consists of a concrete reception tank located at the end of the holding area (T1). The reception tank is approximately 8 ft deep and transfers waste from the holding area to a concrete reception tank in the freestall barn via a 6” transfer pipe (T2). The T2 tank is approximately 8 ft deep x 10 ft wide x 120 ft long (approximately 75,000 gallons) and was constructed in 1996. A pump room was added to the east end of the freestall barn reception tank in 2004. A Patz Tundra pump transfers waste from the freestall barn to WSF 1 via a 12” waste transfer pipe. Liquid waste from the calf barn is collected by a pumping manhole located south of the calf barn and transferred to WSF 1 via a 2” pipe (T3). Four soil borings were immediately adjacent to the waste transfer system (B1, B2, B8, and B16). Soils were consistently found to be lean clays throughout the site and there was adequate separation from saturation and bedrock. Miller visually observed the condition of the concrete reception tanks and found them to be in good condition with little to no cracks.

- The evaluation states that the waste transfer system meets the requirements of NRCS 634 (12/05) and NR 243.15.
- The Department agrees with the findings of the evaluation and that no further actions are required for the waste transfer system.

Feed Storage Area (No Further Actions Required): The existing feed storage area consists of 5 bunkers totaling approximately 75,135 square feet. The farm plans on expanding its feed storage area by approximately 38,850 square feet with plans expected to be submitted in the near future which will also address the lack of runoff controls. The bunkers are located on the southeast side of the production area. The bunkers were constructed between 2006 and 2024. Nineteen borings were performed as part of a facility site assessment. Two borings (B13 and B14) were drilled to a depth of 10 feet in the area of the feed storage area. Neither bedrock nor saturation were encountered in any of the borings. The borings revealed that a 1 to 2 ft thick layer of concrete and basecourse overlies lean clay that extends to at least 10 ft deep. Soil tests performed on samples from the native clay indicate that soils on this site are consistently lean clay with P200 of 77.3 to 87.1% and PI ranging from 26-28.

- During the evaluation, Miller observed the existing concrete surface to be in very good condition indicating that proper materials and construction methods were used in construction. Subsurface conditions below the pad as revealed in the recent borings and lab testing meet the soil quality and separation requirements in Table 2 of NRCS Code 561 (11/22). The feed storage area is located ≥ 250 ft from water supply wells as required by NR 243 for CAFO reviewable facilities.
- The evaluation states that the feed storage area meets the requirements of NRCS 561 (11/22) and NR 243.15, with the exception that the feed storage area lacks runoff controls. Feed storage area runoff controls area addressed in the next section of this Engineering Report.
- The Department agrees with the findings of the evaluation and that no further actions are required for the feed storage area. To be clear, this is referring to only the feed storage area itself, not the feed storage area runoff controls. The runoff controls are addressed separately in the next section of this Engineering Report.

Feed Storage Area Runoff Controls (Further Actions Required): The feed storage area currently lacks runoff controls. Leachate and contaminated runoff are discharged to a roadside ditch and therefore does not meet NR 243.15(9).

- The evaluation states, "The farm intends to construct a runoff collection system and tank to collect and transfer contaminated runoff and leachate to the waste storage facility. Plans and specifications are forthcoming." In an email with Miller, it was noted that there is currently no drain tile in the leachate drainage layer of the feed storage area, but it is proposed to be added with the plans that will be forthcoming for the runoff controls.
  - Submit plans and specifications to construct feed storage area runoff controls in accordance with ss. NR 243.15(1), (2) and (9), Wis. Adm. Code.
  - Construct the Department approved feed storage area runoff controls and submit post-construction documentation.

Manure Stacking Facility (No Further Actions Required): The manure stacking area is approximately 32 ft x 18 ft and was constructed in 2009. It has three vertical concrete walls with a sloped floor to contain precipitation within the stacking area. Grades around the stacking area keep runoff from entering. Of the soil borings on the site, one boring (B17) was adjacent to the stacking area. The soil was consistent with the other soils onsite, lean clay, with P200 ranging from 77.3-87.1% and PI ranging from 26-28.

- The evaluation states that the manure stacking area meets the requirements of NR 243.15 and NRCS 313 (10/17).
- The Department agrees with the findings of the evaluation and that no further actions are required for the manure stacking area.

Days of Available Liquid Waste Storage: The submitted information states that Matt Lavey Farms, Inc. currently has 261 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. However, because both of the waste storage facilities currently require additional actions to be completed, the number of days of storage is less in accordance with s. NR 243.15(3). The number of days of storage will change once the evaluations for the waste storages require no further actions. The current number of animal units provided for the calculation is 1,689 with 1,642 contributing to the liquid waste volume (237 calves handled as solids). Currently there are no runoff controls in place for the feed storage area and leachate and contaminated runoff are discharged to a roadside ditch. The number of animal units is proposed to increase to 2,372 with 2,311 contributing to the liquid waste volume (308 calves handled as solids) by the end of the permit term. The farm is planning to reconstruct both waste storage facilities in the near future. The farm is also planning to expand the feed storage area and concurrently provide leachate and contaminated runoff collection for up to the 25-yr, 24-hr storm event in the proposed reconstructed WSF 1. Based on the increase in animals, the proposed reconstruction of the waste storage facilities, and the addition of runoff controls the proposed condition will have 256 days of liquid waste storage available. This is based on preliminary design information for the feed storage expansion as well as the waste storage facilities. Plans for the proposed projects have not yet been received by DNR for review and approval, so at the time of this review, 256 days of storage is a preliminary number. The proposed condition takes into account reconstruction of both WSF 1 and WSF 2 in order to have enough liquid waste storage to provide 180 days of storage after the proposed animal expansion and feed storage area expansion and associated runoff collection. Without the reconstruction of WSF 1 and WSF 2, the days of liquid waste storage will fall below 180 days if the waste storages are not reconstructed prior to the proposed expansion. The liquid waste volumes are based on the NRCS spreadsheet and other estimated or calculated values. The liquid waste volumes are based upon a collection period of 365 days.

Existing Conditions (1,689 AU) – 261 Days of Storage

Total Annual Liquid Waste Volume (NRCS Table Values)	
Liquids Collected/Stored	**Annual Gallons**
Manure and Bedding:	9,308,526
Parlor Wastewater:	2,599,708
Total Feed Storage Leachate:	0
Total Feed Storage Runoff Collected:	0

Net Precipitation on Storage Surfaces:	1,586,245
Total Liquid Waste Stored Below the MOL:	**13,494,479**

Total Liquid Waste Storage Capacity (Gallons)						
Waste Storage	Total Volume from Top to Bottom	-Remaining Waste	-25-yr, 24-hr Precipitation on Storage	-25-yr, 24-hr Collected Runoff	-Freeboard Volume	Max. Operating Level (MOL) Volume
WSF 1	11,068,781	886,651	305,021	0	822,528	9,054,581
WSF 2	880,082	117,504	42,703	0	115,154	604,722
					Total MOL Volume:	9,659,303

Proposed Conditions (2,372 AU) – 256 Days of Storage

Total Annual Liquid Waste Volume (NRCS Table Values)	
Liquids Collected/Stored	**Annual Gallons**
Manure and Bedding:	13,110,866
Parlor Wastewater:	3,703,494
Total Feed Storage Leachate:	44,880
Total Feed Storage Runoff Collected:	2,192,135
Net Precipitation on Storage Surfaces:	2,437,265
Total Liquid Waste Stored Below the MOL:	**21,488,640**

Total Liquid Waste Storage Capacity (Gallons)						
Waste Storage	Total Volume from Top to Bottom	-Remaining Waste	-25-yr, 24-hr Precipitation on Storage	-25-yr, 24-hr Collected Runoff	-Freeboard Volume	Max. Operating Level (MOL) Volume
WSF 1	17,700,380	1,565,673	464,372	299,427	1,252,239	14,118,669
WSF 2	1,446,133	224,057	69,905	0	188,509	963,662
					Total MOL Volume:	15,082,331

Evaluation Stated Proposed Actions:

- The evaluation states, “WSF1 does not meet NR 243.15 design requirements and at a minimum the NRCS 313 Code (12/05), due to lack of design records, eroded slopes, missing safety fence and operating level markers.” It goes on to say, “The farm intends on expanding WSF1 so Miller will prepare plans and specifications for the expansion and to upgrade the WSF1 to current design codes.” Finally, the evaluation states, “Plans and specifications to bring the WSF into compliance should be submitted by December 31, 2024.”
- The evaluation states, “WSF2 does not meet NR 243.15 design requirements and at a minimum the NRCS 313 Code (12/05), because of its’ age and the lack of safety fence and operating level markers.” It goes on to say, “The farm intends to bring the facility into compliance. Miller will prepare plans and specifications to upgrade WSF2 to current design codes.” Finally, the evaluation states, “Plans and specifications to bring the WSF into compliance should be submitted by December 31, 2024.”

- The evaluation states, "The farm intends to construct a runoff collection system and tank to collect and transfer contaminated runoff and leachate to the waste storage facility. Plans and specifications are forthcoming." In an email with Miller, it was noted that there is currently no drain tile in the leachate drainage layer of the feed storage area, but it is proposed to be added with the plans that will be forthcoming for the runoff controls.

Department Comments to Proposed Actions:

- The Department agrees that plans and specifications should be submitted to reconstruct WSF 1 based on the need for increased storage due to the proposed increase in animals, to provide storage for runoff controls from the feed storage area, and to address the eroded slopes, missing safety fence, and missing operating level markers.
- The Department agrees that plans and specifications should be submitted to reconstruct WSF 2 based on the need for increased storage due to the proposed increase in animals, to address the eroded slopes, to address the missing safety fence, and missing operating level markers.
- The Department agrees that plans and specifications should be submitted to address the lack of runoff controls from the feed storage area.
- Submit plans and specifications to reconstruct WSF 1 in accordance with s. NR 243.15(1) and (3), Wis. Adm. Code. Plans should address the need for increased storage, the eroded slopes, vegetation removal, the missing safety fence, and the missing operating level markers.
- Submit plans and specifications to reconstruct WSF 2 in accordance with s. NR 243.15(1) and (3), Wis. Adm. Code. Plans should address the need for increased storage, the eroded slopes, vegetation removal, the missing safety fence, and the missing operating level markers.
- Submit plans and specifications to construct feed storage area runoff controls in accordance with ss. NR 243.15(1), (2) and (9), Wis. Adm. Code.
- Construct the Department approved waste storage facility plans and feed storage area runoff control plans and submit post-construction documentation.

DECISION RECOMMENDATION: Based on my review completed on December 5, 2024, some of the reviewable facilities identified above require no further actions and some of the reviewable facilities identified above require further actions. Requirements of each reviewable facility are noted in the specific section of the Engineering Report.

Rob Davis, P.E.
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Watershed Management Program