Permit Fact Sheet

General Information

Permit Number	WI-0065196-03-0
Permittee Name and Address	Kane Family Farm 4367 Lark Road, Denmark, WI 54208
Permitted Facility Name and Address	Kane Family Farm 4367 Lark Road Denmark
Permit Term	November 01, 2025 to October 31, 2030
Discharge Location	Unnamed tributaries within the West Twin River and Branch River Watersheds and 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.)	39	0	24	0	11/03/2025
Milking and Dry Cows	1225	1251	1820	1859	11/03/2025
Heifers (400 lbs. to 800 lbs.)	104	174	210	350	11/03/2025
Heifers (800 lbs. to 1200 lbs.)	307	279	605	550	11/03/2025
Steers or Cows (400 lbs. to market)	13	13	0	0	11/03/2025
Total	1688	1251	2659	1859	

Facility Description

Kane Family Farm is a Concentrated Animal Feeding Operation (CAFO) owned and operated by the Kane Family. It currently has 1,688 animal units (875 milking & dry cows, 453 heifers, 194 calves, and 13 steers) and based on current size, Kane Family Farm has approximately 196 days of liquid waste storage. Kane Family Farm generates 15,192,894 gallons of liquid manure and process wastewater and 985 tons of solid manure annually. Kane Family Farm has a total of 3,015.2 acres available for land application of manure and process wastewater. Of this acreage, 2,936.9 acres are spreadable, 845.5 acres are owned, and 2,169.7 acres are rented or controlled through contracts.

Substantial Compliance Determination

Enforcement During Last Permit:

Two notices of noncompliance were issued to Kane Family Farms for missing schedule due dates related to the submittal of engineering evaluations. Evaluations and appropriate upgrades/abandonment actions have since been completed by Kane Family Farm and the notices of noncompliance closed out.

After a desk top review of all compliance schedule items and a site visit on April 23, 2025, this facility has been found to be in substantial compliance with their current permit.

Compliance determination made by Holly Stegemann, Agricultural Runoff Management Specialist on 09/02/2025.

Sample Point Descriptions

Sample Point Designation For Animal Waste		
Sample Point Number	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**	
001	WSF 1 (Liquids): Sample point 001 is for liquid waste storage facility 1 (WSF 1) located south of the feed pad on the east side of Fairview Road. WSF 1 is a liquid-tight concrete storage that has a maximum operating level of 3,672,779 gallons and was originally constructed in 2001 and upgraded in 2015. Upgrades included removal of a partial berm and a concrete liner. This storage accepts manure and process wastewater from the adjacent barns.	
003	WSF 2 (Liquids): Sample point 003 is for liquid waste storage facility 2 (WSF 2) located south of the feed pad and east of WSF 1. WSF 2 is a liquid-tight concrete storage with a maximum operating level of 12,252,802 gallons that was originally built in 2009 and upgraded in 2025. Upgrades included expansion of the storage and a concrete liner. WSF 2 accepts manure and process wastewater from WSF 1 and the RCF.	
005	Miscellaneous Solids: Sample Point 005 is for any miscellaneous solid manure sources that are directly land applied and not stored in a waste storage facility. This includes solid sources such as calf hutch manure, maternity pen bedpack, heifer bedpack, steer manure, etc. Representative samples shall be taken for each manure source type.	
006	Feed Storage Area: Sample point 006 is for visual monitoring and inspection of the feed storage area and associated runoff control system located on the east side of Fairview Road, north of the waste storage facilities. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program. Plans and specifications for feed storage area expansion and associated runoff controls were approved by the department (R-2025-0109).	
009	Calf Hutch Area: Sample Point 009 is for visual monitoring and inspection of the calf hutch area located on the west side of Fairview Road, southeast of the calf barns. Proper operation and maintenance is required to ensure to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program.	
010	Stormwater: Sample point 010 is for visual monitoring and inspection of all production site storm water conveyance systems. This includes roof gutter and downspout structures, drainage tile systems, grassed waterways and other diversion systems that transport uncontaminated storm water. Proper operation and maintenance is required to keep uncontaminated runoff diverted away from manure and process wastewater handling systems. Weekly inspections are required and shall be recorded according to monitoring program.	
011	WSF (Solids): Sample point 011 is for any manure solids removed from bottom of liquid waste storage facilities. This includes manure-laden sand solids, manure fiber solids, etc. Representative samples shall be taken from each waste storage facility.	

Sample Point Designation For Animal Waste		
Sample Point Number	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**	
015	RCF (Liquids): Sample point 015 the Runoff Collection Facility (RCF) located on the east side of Fairview Road, northeast of the feed storage area. The RCF is a liquid-tight concrete storage that has a maximum operating level of 114,979 gallons and was constructed in 2024. This storage accepts process wastewater from the adjacent feed storage area with collected runoff either land applied or transferred to WSF 2.	

Permit Requirements

1 Livestock Operations - Proposed Operation and Management

Production Area Discharge Limitations

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

Runoff Control

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

Manure and Process Wastewater Storage

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

The permittee currently has approximately 233 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 1,688 animal units (875 milking & dry cows, 453 heifers, 194 calves, and 13 steers), it is estimated that approximately 15,192,894 gallons of liquid manure and process wastewater and 950 tons of solid manure will be produced per year. The permittee owns *approximately* 845.5 acres of cropland and rents about 2,169.7. Given the rotation commonly used by the permittee, 2,936.9 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 permittee must also implement conservation practices when applying manure near navigable waters and their conduits, referred to as the Surface Water Quality Management Area (SWQMA). These practices include a 100-foot setback from navigable waters and their conduits, a 35-foot vegetated buffer adjacent to the navigable water or conduit, or a practice that provides equivalent pollutant reductions equivalent to or better than the 100-foot setback.

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

Monitoring and Sampling Requirements

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

Sampling Points

The permit identifies the different sources of land applied materials (e.g., manure storage facilities, milking centers, egg-washing facilities) as "Sampling Points." For these Sampling Points, the permittee is required to sample and analyze the

different sources for nutrients and other parameters which serve as the basis for determining rates of application for these materials. Other areas are also identified as Sampling Points as a means of identifying them as areas requiring action by the permittee, such as an upgrade or evaluation of a certain system or structure (e.g., runoff control systems), even though sampling is not actually required.

1.1 Sample Point Number: 001- WSF 1 (Liquids); 003- WSF 2 (Liquids), and 015- RCF (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

Sample point language was updated to more accurately describe the current production site and sample point 004 and 014 were removed as the liquid manure storages have been abandoned.

1.1.2 Explanation of Operation and Management Requirements

Manure must be properly stored and land applied according to the permit and nutrient management plan.

1.2 Sample Point Number: 005- Misc. Solids and 011- WSF (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

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

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; 009- Calf Hutch Area, and 010- Stormwater

1.3.1 Changes from Previous Permit

Sample point language was updated to more accurately describe the current production site and sample points 007 and 008 were removed as the concrete outdoor lots have been abandoned.

1.3.2 Explanation of Operation and Management Requirements

Proper operation and maintenance is required to ensure unlawful discharges to waters of the state to 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
Update Emergency Response Plan: Update the written Emergency Response Plan within 30 days of permit coverage and submit to the department.	12/01/2025

Explanation of Schedules

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

2.2 Monitoring & Inspection Program

Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the Monitoring and Sampling Requirements subsection, the permittee shall submit a proposed monitoring and inspection program within 60 days of the effective date of this permit.	01/01/2026

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 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.	01/31/2026
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.	03/31/2026
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.	03/31/2027
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.	03/31/2028
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.	03/31/2029
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.	03/31/2030
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 Runoff Control System - Engineering Evaluation

Applicable to sample point 009, Calf Hutch Area

Required Action	Due Date
Written Description of Existing System: Submit a written description of the existing runoff control system and its adequacy to permanently meet the conditions in the Production Area Discharge Limitations and Runoff Control subsections and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	07/01/2026
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.	12/31/2026
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.	12/31/2027

Explanation of Schedules

Schedule 2.5 is an engineering evaluation that includes a written description of the existing calf hutch area and its adequacy to meet the conditions found in the Production Site Discharge Limitations subsection of NR 243.15, Wis. Adm. Code.

2.6 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	05/01/2030

Explanation of Schedules

Schedule 2.6 is included in the permit as a general permit requirement.

Other Comments

None

Attachments

Plan Approval Letter(s)

- Reissuance Inspection Report – 04/23/2025
- Conditional Nutrient Management Plan Approval – 06/06/2025
- Days of Storage Review Letter – 06/05/2025 (current) & 08/07/2025 (proposed)

Justification Of Any Waivers From Permit Application Requirements

None

Prepared By: Holly Stegemann Agricultural Runoff Management Specialist Date: 09/02/2025

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

Tony Evers, Governor
Adam N. Payne, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

May 7, 2025

Tim Kane
Kane Fmaily Farms
4367 Lark Road
Denmark, WI 54208

WPDES Permit No. WI-0065196-02-0
Brown County

Subject: WPDES Permit Reissuance Walkover Inspection Report

Dear Mr. Kane:

On April 23, 2025, the Department of Natural Resources (department) conducted a permit reissuance walkover inspection of Kane Family Farms. Results and photos are included in the enclosed report. Follow up items are listed on page 4.

Kane Family Farm's current WPDES permit will expire October 31, 2025. A permit reissuance application was received on May 1, 2025 and is under review.

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

Sincerely,

Holly Stegemann
Agricultural Runoff Management Specialist

Enclosure: Kane Family Farms Mid-Permit Inspection Report

Electronic CC:
Nick Peltier - Brown LCD
Kevin Beckard - AgSource
Joe Baeten - DNR

CAFO Compliance Report (05/07/2025)

Inspection Date: 04/23/2025

Inspection Type: Reissuance

Operation Name: Kane Family Farms

WPDES Permit No. WI-0065196-02-0

Operation Address: Main Site: 4367 Lark Road, Denmark, WI 54208
Aert's Farm: 4283 Cooperstown Road, Denmark, WI 54208

On-Site Representative(s): Pat Kane, Owner/Operator

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

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On April 23, 2025, Stegemann met with Kane and Kevin Beckard (AgSource) to conduct a WPDES permit reissuance inspection of Kane Family Farms. All facilities currently covered under Kane Family Farms WPDES permit were inspected. No liquid precipitation had fallen prior to the inspection. Follow up items are requested on page 4.

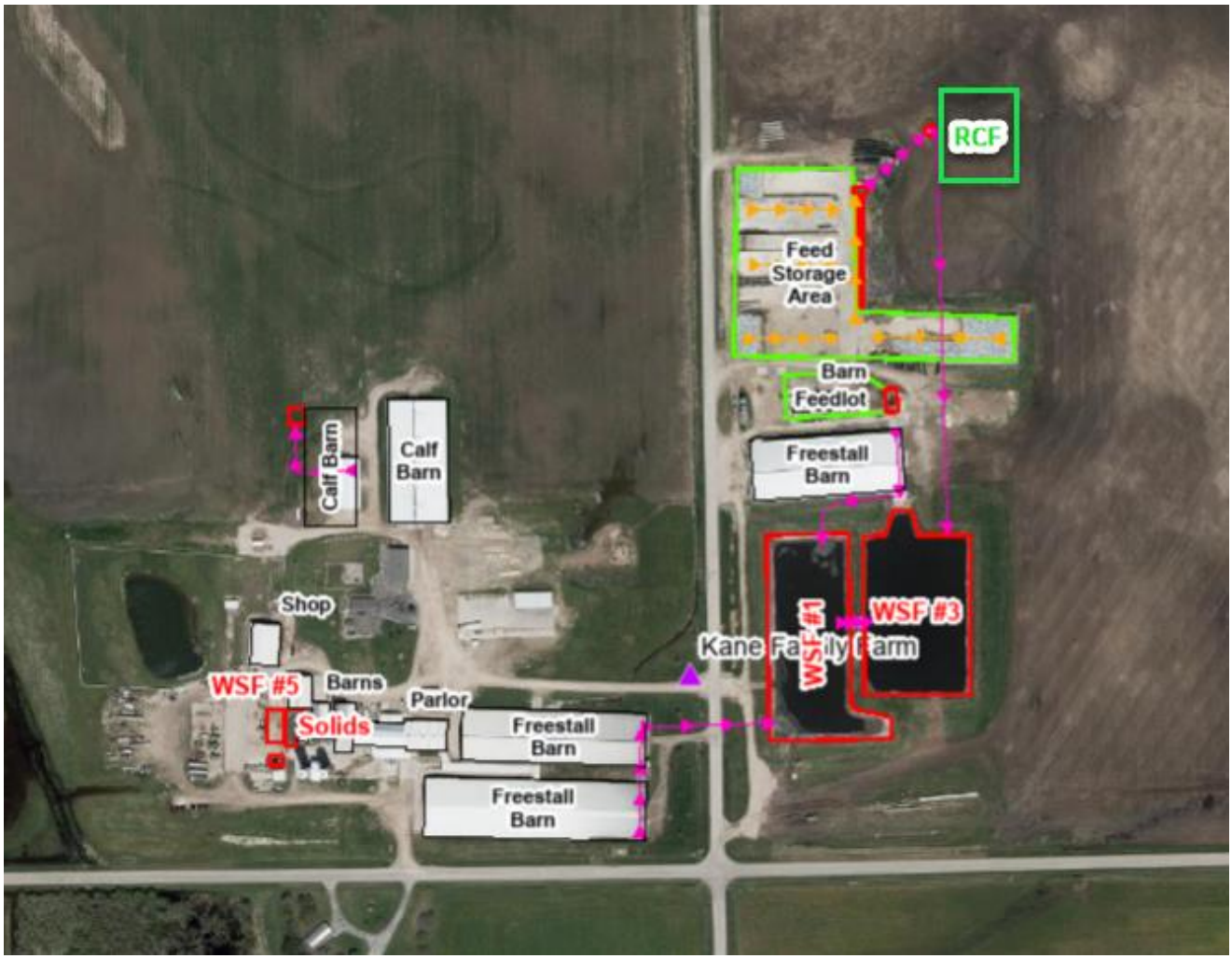

Figure 1. Aerial overview of Kane Family Farms. Orange arrows indicate contaminated runoff flow paths. Pink arrows indicate manure and process wastewater transfer lines.

Figure 2. Aerial overview of Aert's farm located north of the main site on Cooperstown Road. Note: storage is in the process of being abandoned.

SITE OBSERVATIONS

Feedlot Runoff
Kane Family Farms does not utilize any outdoor feedlot areas.

Calf Hutch Areas
Kane Family Farms utilizes one calf hutch area located to the southeast of the calf barns. At the time of inspection, three rows of hutches were present, which is an increase from previous site visits. Kane discussed options of building a roof over the hutches or other clean water diversion/runoff control options. Options of expanding the current calf barns and removing the hutches were also discussed.

Waste Storage Facilities
Kane Family Farms utilizes three liquid waste storage facilities on the main site and one offsite is in the process of being abandoned. Manure solids are stacked on the north side of WSF 1.

Waste storage facility 1 (WSF 1) is a concrete lined storage, located on the east side of Fairview Road. It is the first stage in a two celled system, constructed in 2001 and upgraded in 2005 which included the removal of a berm, combining WSF 1 and WSF 2. WSF 1 accepts manure and process wastewater from the barns on the

west side of Fairview Road as well as the freestall barn to the north. WSF 1 has a maximum operating level of 3,274,101 gallons. At the time of inspection, safety fencing and permanent markers were present.

Waste storage facility 3 (WSF 3) is a clay lined storage, located to the east of WSF 1. WSF 3 is the second stage in a two celled system, constructed in 2009. WSF 3 accepts process wastewater from the feed storage area located to the north. A temporary pump was placed on the north side of the storage, used to bring flush water to the freestall barn to the north. This storage has a maximum operating level of 3,970,447 gallons. At the time of inspection, safety fencing was present. A rubber mat was placed on the east end of the concrete overflow to help slow the erosion of the berm. At the time of inspection, safety fencing was present.

Waste storage facility 4 (WSF 4) is a clay lined storage located at the Aert's site, north of the main farm. WSF 4 was constructed in the 1980's and has a maximum operating level of 556,159 gallons. An abandonment plan was submitted to the department for review and the approval letter was issued on 4/27/2023 (R-2023-0077). This storage is currently being excavated with the clay being brought over for farm expansion projects.

Waste storage facility 5 (WSF 5) is a 250,000-gallon concrete, vertical wall structure located to the west of the pump room on the east side of Fairview Road. An abandonment plan was submitted to the department for review and an approval letter was issued 11/07/2021 (R-2021-0204). At the time of inspection, the concrete walls of the structure were being removed.

Waste storage facility 6, also called the Runoff Collection Facility (RCF) is a concrete lined structure that was constructed in 2024 (R-2022-0083). The RCF will accept leachate and process wastewater from the feed storage area and has a total volume of 473,600 gallons and is designed to be emptied into WSF 2 daily. At the time of inspection, safety fencing and permanent markers were present.

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

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

Feed Storage Area Runoff
Kane Family Farms utilizes one feed storage area, located on the east side of Fairview Road, north of the waste storage facilities. The concrete bunkers are pitched to convey runoff to the east where it is temporarily being collected by the plugged concrete spreader bar while the expansion is in progress. A temporary transfer line pumps collected runoff to the RCF as needed. The area that was previously the vegetated treatment area has been leveled and prepped for the feed storage area expansion and is planned to be completed in 2025.

An existing drain tile run along the east end of the east bunker where runoff is temporarily being collected by portable tank that is emptied as needed. This tile line will tie in to the runoff collection system as the expansion project continues.

Plans and specifications have been submitted and approved by the department for a new leachate collection system that includes abandonment of the vegetated treatment area, new leachate basin, and bunker expansion (R-2022-0083).

Animal Mortality Disposal
Animal mortalities are managed to not have current or past indicators of discharges.

Ancillary Service Areas
Preventative maintenance actions and visual inspections are occurring to minimize pollutant discharges from ancillary service and storage areas (i.e. storm water conveyance systems, driveways, etc.).

RECORDS REVIEW

The permittee has current WPDES Permit and Nutrient Management Plan onsite.
The permittee provided complete production site inspection records that are required to be retained.
The permittee provided adequate documentation that the facility has a minimum of 180 days of liquid manure storage capacity.
The permittee provided land application records to demonstrate compliance with nutrient management plan requirements.
The permittee has copies of their emergency response and monitoring and inspection plans onsite.
The permittee is up to date on required reporting and actions as specified in the Schedules section of permit.

SUMMARY

Substantial Compliance
The permittee is in substantial compliance with the permit.

Areas of Concern

- The calf hutch area has potential for unpermitted discharges from the production area

Permit Violations
None

Action Items

- Submit to the department the post abandonment documentation as required in the Further Actions Letter (R-2024-0169) dated March 17, 2024.

Items for Next Permit Term

- An engineering evaluation may be required for the calf hutch area due to lack of runoff controls

Photo #:	923
Date/Time of Photo:	04/23/2025 10:23
Photo By:	Stegemann
Photo Location:	Calf Barns

Photo Description:

View of calf barns, looking north.

Photo #:	925
Date/Time of Photo:	04/23/2025 10:25
Photo By:	Stegemann
Photo Location:	Calf Barn Septic Tanks

Photo Description:

View of calf barn septic tanks, looking south.

Photo #:	966
Date/Time of Photo:	04/23/2025 11:03
Photo By:	Stegemann
Photo Location:	Calf Hutches

Photo Description:

View of calf hutch area, looking west.

Photo #:	937
Date/Time of Photo:	04/23/2025 10:37
Photo By:	Stegemann
Photo Location:	WSF 1

Photo Description:

View of WSF 1, looking northeast.

Photo #:	938
Date/Time of Photo:	04/23/2025 10:38
Photo By:	Stegemann
Photo Location:	WSF 1

Photo Description:

View of permanent markers in WSF 1.

Photo #:	939
Date/Time of Photo:	04/23/2025 10:40
Photo By:	Stegemann
Photo Location:	WSF 1

Photo Description:

View of WSF 1, looking north.

Photo #:	942
Date/Time of Photo:	04/23/2025 10:43
Photo By:	Stegemann
Photo Location:	WSF 3

Photo Description:

View of WSF 3, looking northwest.

Photo #:	944
Date/Time of Photo:	04/23/2025 10:44
Photo By:	Stegemann
Photo Location:	WSF 3

Photo Description:

View of WSF 3, looking west.

Photo #:	948
Date/Time of Photo:	04/23/2025 10:46
Photo By:	Stegemann
Photo Location:	Outdoor Lots Abandoned

Photo Description:

View of new shed in place of abandoned outdoor lots, looking west.

Photo #:	950
Date/Time of Photo:	04/23/2025 10:48
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of feed storage area, looking west.

Photo #:	949
Date/Time of Photo:	04/23/2025 10:48
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of feed storage area, looking northwest.

Photo #:	951
Date/Time of Photo:	04/23/2025 10:48
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of concrete spreader bar collection, looking north.

Photo #:	954
Date/Time of Photo:	04/23/2025 10:49
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of concrete spreader bar collection, looking south. Arrows indicate approximate runoff flow path.

Photo #:	955
Date/Time of Photo:	04/23/2025 10:53
Photo By:	Stegemann
Photo Location:	FSA Collection

Photo Description:

View of collection tank on north end of concrete spreader bar, looking northeast towards new leachate pit.

Photo #:	959
Date/Time of Photo:	04/23/2025 10:55
Photo By:	Stegemann
Photo Location:	WSF 6, RCF

Photo Description:

View of Runoff Collection Facility, looking southeast.

Photo #:	960
Date/Time of Photo:	04/23/2025 10:55
Photo By:	Stegemann
Photo Location:	WSF 6, RCF

Photo Description:

View of Runoff Collection Facility, looking northeast.

Photo #:	962
Date/Time of Photo:	04/23/2025 10:56
Photo By:	Stegemann
Photo Location:	WSF 6, RCF

Photo Description:

View of Runoff Collection Facility permanent marker on east berm.

Photo #:	963
Date/Time of Photo:	04/23/2025 10:56
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of feed storage area runoff collection pumps.

Photo #:	964
Date/Time of Photo:	04/23/2025 10:56
Photo By:	Stegemann
Photo Location:	FSA

Photo Description:

View of temporary collection tank for tiles along east bunker, looking southeast.

Photo #:	928
Date/Time of Photo:	04/23/2025 10:27
Photo By:	Stegemann
Photo Location:	WSF 5

Photo Description:

View of WSF 5 abandonment in progress, looking southeast.

Photo #:	929
Date/Time of Photo:	04/23/2025 10:27
Photo By:	Stegemann
Photo Location:	WSF 5

Photo Description:

View of abandonment of WSF 5, solids bunkers, and collection tank in progress, looking south.

Photo #:	930
Date/Time of Photo:	04/23/2025 10:29
Photo By:	Stegemann
Photo Location:	WSF 5

Photo Description:

View of abandonment of WSF 5, solids bunkers, and collection tank in progress, looking west.

Photo #:	931
Date/Time of Photo:	04/23/2025 10:30
Photo By:	Stegemann
Photo Location:	WSF 5

Photo Description:

View of area where silos were removed for future barn expansion, looing northeast.

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster St., PO Box 7921
Madison, WI 53707

Tony Evers, Governor
Telephone 608-266-2621
Toll Free 1-888-936-7463
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June 6th, 2025

Brown County
Approval

Pat Kane
Kane Family Farm
4367 Lark Road
Denmark, WI

SUBJECT: Conditional Approval of Kane Family Farm Nutrient Management Plan, WPDES Permit No. 0065196-03-0

Dear Pat Kane:

After completing a review of Kane Family Farm 2025-2029 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 Kane Family Farm 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 Kane Family Farm 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 Kane Family Farm 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 1,688 animal units (875 milking & dry cows, 453 heifers, 194 calves, and 13 steers). A planned herd size of 2,659 animal units (1,300 milking & dry cows, 900 heifers, and 120 calves) by 2026.
2. Manure generation and spreading records indicate your herd will annually generate approximately 15,192,894 gallons of manure and process wastewater and 950 tons of solid manure in the first year of the permit term. It is anticipated that the herd will annually generate 23,017,973 gallons of manure and process wastewater and 985 tons of solid manure once full expansion is reached in 2026.
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 Kane Family Farm currently has 3,015.2 acres (845.5 owned and 2,169.7 controlled through contracts, rental agreements or leases, or under manure agreements) of which 2,936.9 are spreadable acres.
6. That all fields will be checked for the following features prior to/during manure or process wastewater applications: soil areas with possible shallow groundwater (i.e., within 24 inches of surface) at the time of manure application; required setbacks associated with wells, navigable waters, conduits to navigable waters, grassed waterways, wetlands, possible soil erosion/flow channels.
7. That surface applications of manure will not be completed when precipitation capable of producing runoff is forecasted within 24 hours of the time of planned application.

CONDITIONAL NUTRIENT MANAGEMENT PLAN APPROVAL

The Department hereby approves the 2025-2029 Kane Family Farm Nutrient Management Plan subject to the following conditions and the applicable requirements of Ch. NR 243, Wis. Adm. Code:

FIELD AND MANURE MANAGEMENT

1. Fields not included in the NMP and new fields shall not receive manure or process wastewater applications until they have been properly soil sampled, entered into Snap Plus, evaluated for their nutrient needs, and approved by the Department.

2. The following fields have also been approved to receive industrial, municipal, or septage waste:

Field ID:	Other Permittee Name:	Site ID:	Field ID:	DNR #:
K13	NLC ENERGY DENMARK LLC	PLV	2	108188
K72	NLC ENERGY DENMARK LLC	DUFECK	1	110830
K72	NLC ENERGY DENMARK LLC	DUFECK	3	110836
K72	NLC ENERGY DENMARK LLC	DUFECK	5	110840
K72	NLC ENERGY DENMARK LLC	DUFECK	6	110841
K75	NLC ENERGY DENMARK LLC	RK	2	50631
K76	NLC ENERGY DENMARK LLC	KA32	1	116663
K76	NLC ENERGY DENMARK LLC	RLK	1	54105
K77	JBS GREEN BAY INC LIME KILN	TOM	1	107802
K77	JBS GREEN BAY INC LIME KILN	TOM	2	107789
K77	JBS GREEN BAY INC LIME KILN	TOM	3	107790
K77	JBS GREEN BAY INC LIME KILN	TOM	5	107792
K77	JBS GREEN BAY INC LIME KILN	TOM	6	107795
K77	JBS GREEN BAY INC LIME KILN	TOM	7	107797
K77	JBS GREEN BAY INC LIME KILN	TOM	8	107799
K77	JBS GREEN BAY INC LIME KILN	TOM	9	107800
K77	NLC ENERGY DENMARK LLC	TK	3	107791
K78	JBS GREEN BAY INC LIME KILN	MASS	1	115953
K78	JBS GREEN BAY INC LIME KILN	MASS	2	107816
K78	JBS GREEN BAY INC LIME KILN	MASS	3	107815
K79	NLC ENERGY DENMARK LLC	PLV	1	108187

Prior to any manure applications on these fields Kane Family Farm 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 Kane Family Farm 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: Kane Family Farm 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:
   - K12 (default soil test)
   - K15 (default soil test)
   - K44 (>200 ppm P)
   - K65 (default)
   - K68 (default soil test)

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

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

5. All liquid manure samples collected may be analyzed, at a minimum, for percent dry matter, total nitrogen, percent NH_4-N, percent NO_3-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, Kane Family Farm may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

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

7. Kane Family Farm shall record daily manure applications by using the 'Daily Log' as generated by Snap Plus. These forms shall be retained at the farm and provided to the department upon request.

8. Kane Family Farm shall annually submit a spreading report that summarizes the land application activities listed under NR 243.19(3)(c)5., Wis. Adm. Code by using 'CAFO Annual Spreading Report' generated by Snap Plus.

<u>WINTER SPREADING</u>

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 <u>approved</u> for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure:
    - K1*
    - K2*
    - K3*
    - K6*
    - K10*
    - K15*
    - K19
    - K20
    - K75
    - K76
    - K78
    - K88
    - Collins East*
    - Collins West*

    ***Indicates W or Silurian Bedrock soils which require verification or pre-tillage and could not be used for any winter applications.**

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 approved for use with >32% solids with the following conditions:
    - Sites can be used for 1 year out of every 2.
    - Maximum stacking period is 8 months and cannot exceed 40,000 cubic feet in size.
    - Can be used for stacking only during February and March, or any other period when ground is not frozen, or snow covered.
        - K1 Site #1
        - K1 Site #2
        - K10 Site #1

    *If any of these sites are wished to be used for less than 32% solids, slope verification would be required.

NR243.143/151.075 SILURIAN BEDROCK PERFORMANCE STANDARDS

15. Manure generated by Kane Family Farm 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.
    - K10
    - K13
    - K17
    - K29
    - K36
    - K40
    - K44
    - K5
    - K6
    - K64
    - K65
    - K7
    - K72
    - K79
    - K8
    - K85

MANURE & PROCESS WASTEWATER IRRIGATION

16. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

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

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

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

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

Sincerely,

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

cc: Holly Stegemann, WDNR Agricultural Runoff Specialist (holly.stegmann@wisconsin.gov)
Joe Baeten, WDNR Watershed Field Supervisor (joseph.baeten@wisconsin.gov)
Ben Uvaas, Acting WDNR Runoff Management Section Chief (benjamin.uvaas@Wisconsin.gov)
Victoria Ziegler, WDNR CAFO Program Coordinator (victoria.ziegler@wisconsin.gov)
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File

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June 5, 2025

FILE REF: R-2025-0098
WPDES Permit #: WI-0065196

Tim Kane
Kane Dairy LLC
4367 Lark Road
Denmark, WI 54208

Subject: Days of Storage Review for Kane Dairy LLC T21N, R21E, Section 01 and 02 in Morrison Township, Brown County – NO ADDITIONAL ACTION REQUIRED

Dear Mr. Kane:

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 Ryan Nehls, Outland Design on May 1, 2025 on behalf of Kane Dairy LLC.

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

Days of Available Liquid Waste Storage: The submitted information states that Kane Dairy LLC currently has 196 days of liquid waste storage based on the volumes listed in the table below with respect to s. NR 243.15(3)(i) to (k), Wis. Adm. Code. The current number of animal units provided for the calculation is 1,688. An expansion to 2,659 animal units is proposed and will be reviewed as part of the expansion plan submitted May 19, 2025 (R-2025-0109). 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, is captured from the existing feed storage area on site and transferred to manure storage. All WSFs have a ramp for access to fully empty the storages as needed.

Waste Storage	Total Vol. from Settled Top to Bottom	Remaining Waste	25-yr, 24-hr Precip. on Storage	25-yr, 24-hr Collected Runoff	Freeboard Vol.	Max. Operating Level (MOL) Vol.
WSF1	4,333,577	0	175,484	0	485,314	3,672,779
WSF2	5,033,898	0	172,067	0	489,289	4,372,542
RCF	506,066	0	34,304	260,792	95,991	114,979
					Total MOL Vol:	8,160,300
					Days of Storage:	**196**

Liquids Collected/Stored	**Annual Gallons**
Manure, Bedding, and Wastewater	11,157,481
Feed Storage Leachate	112,199
Feed Storage Runoff Collected	2,019,250
Net Precipitation on Storage Surfaces	1,840,502
Stacking Pad Runoff Collected	63,462
TOTAL:	**15,192,894**

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

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

Anthony Salituro

Tony Salituro
CAFO Review Engineer
Watershed Management Program

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