

## Permit Fact Sheet

### General Information

Permit Number:	WI-0064327-03-0
Permittee Name:	Dutch Dairy LLC
Address:	N13853 Gorman Ave
City/State/Zip:	Thorp WI 54771
Discharge Location:	Same as facility address
Receiving Water:	Unnamed stream (WBIC 5011420) within the South Fork of the Eau Claire River Watershed of the Lower Chippewa River Basin, and groundwaters of the state.
Stream Classification:	303(d) impaired water by "total phosphorus"
Discharge Type:	Existing

<b>Animal Units</b>					
<b>Animal Type</b>	<b>Current AU</b>		<b>Proposed AU</b>		
	<b>Mixed</b>	<b>Individual</b>	<b>(Note: If all zeroes, expansions are not expected during permit term)</b>		
	<b>Mixed</b>	<b>Individual</b>	<b>Mixed</b>	<b>Individual</b>	<b>Date of Proposed Expansion</b>
Dairy Calves (under 400 lbs.)	47	0	0	0	
Milking and Dry Cows	1252	1278	0	0	
Heifers (800 lbs. to 1200 lbs.)	44	40	0	0	
<b>Total</b>	<b>1343</b>	<b>1278</b>	<b>0</b>	<b>0</b>	

### Facility Description

Dutch Dairy LLC is an existing Concentrated Animal Feeding Operation (CAFO) located in the Township of Reseburg, Clark County. Dutch Dairy LLC consists of two production sites: the Main Facility Site located at N13853 Gorman Ave, Thorp WI 54771; and the East Pit Site located at N13894 Gorman Ave, Thorp WI 54771. The operation is owned and operated by Sander and Amy Penterman with a current herd size of 1,343 animal units (894 milking/dry cows, 40 heifers, and 234 dairy calves). No large expansion is planned during the permit term. This herd size is projected to produce approximately 12.2 million gallons of liquid manure/process wastewater and 1,542 tons of solid manure. Manure and process wastewater is stored in one (1) liquid waste storage facility at the Main Facility Site and one (1) at the East Pit Site. The total usable storage capacity is approximately 6.2 million gallons or 185 days of storage capacity for liquid manure and at least 59 days for solid manure. Currently, Dutch Dairy LLC owns or rents 1,488 acres of cropland, of which 1,422 acres are available for manure applications.

# Substantial Compliance Determination

## Enforcement During Last Permit:

1. None

## Compliance During Last Permit:

- The facility submitted all Annual Reports required in CAFO permit schedule (January 31 deadline).
- The facility submitted all Annual NMP Updates required in CAFO permit schedule (March 31 deadline).
- Two production site inspections (November 4, 2020 and December 9, 2022) did not find CAFO permit violations.
- One manure application inspection (October 19, 2022) did not find CAFO permit violations.
- One nutrient management plan compliance inspection (July 8, 2022) did not find CAFO permit violations.

**This facility is considered in substantial compliance with their current permit.**

**Compliance determination entered by Todd Prill on May 6, 2024.**

<b>Sample Point Designation For Animal Waste</b>	
<b>Sample Point Number</b>	<b>Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)</b>
001	Lagoon 1 (liquids) - Sample point 001 is for liquids from Lagoon 1 (WSF 1). The facility is in the southern portion of the Main Facility. It was modified in 2012 to be rectangular in shape with top dimensions of 204 feet wide by 355 feet long by 15 feet deep and an estimated maximum operating level (MOL) storage capacity of 5,047,492 gallons (2022 calculation). The facility is an earthen berm, concrete lined in-ground storage with a 3:1 side slope and 10-inch-thick vertical wall along the east side. The modification was designed by SEH, Inc. and built according to plans and specifications approved by the DNR on April 30, 2013. This storage facility receives manure and process wastewater from Freestall Barn 1, Freestall Barn 2, and milking center waste through a 16-inch PVC transfer pipe originating from a reception tank in the southeast corner of Freestall Barn 1. It also receives liquid manure from the Far Up Dry Cow Barn through a transfer pipe originating from a reception tank south of the barn. Feed pad runoff and leachate are added through an 18-inch HDPE waste transfer pipe from a collection manhole. An agitation boat mixes liquids and solids prior to removal for direct land application in the spring and fall.
002	Lagoon 2 (liquids) - Sample point 002 is for liquids from Lagoon 2 (WSF 2). The facility is in the northeast portion of the East Pit Site. It was built prior to 1990 in a rectangular shape with top dimensions of 140 feet wide by 190 feet long by 10 feet deep and an estimated MOL storage capacity of 1,058,560 gallons (2022 calculation). The facility is an earthen berm, earthen lined in-ground storage. The DNR has no records of plans and specifications approval for construction. An engineering evaluation as specified in NR243.16 was submitted by Auth Consulting & Associates on January 4, 2023, and concluded the facility meets soil type, separation requirements, and liner criteria in Table 1 of NRCS Standard 313 (June 2005). Lagoon 2 occasionally receives manure and process wastewater from Lagoon 1 through above ground

<b>Sample Point Designation For Animal Waste</b>	
<b>Sample Point Number</b>	<b>Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)</b>
	dragline hoses. No agitation is needed prior to emptying due to the short storage time between filling and removal.
003	Feed Storage Area - Sample point 003 is for visual monitoring and inspection of Feed Storage Area and associated runoff control system. The facility is in the northwestern portion of the Main Facility. This structure stores haylage and corn silage in piles with an overall estimated size of 112,852 square feet. The construction date of the older (eastern) portion of the Feed Storage Area is unknown and consists of an asphalt floor that slopes to the south and west. Dimensions of this portion are approximately 240 feet by 290 feet with a surface area of 74,052 square feet (2016 calculation). The DNR has no documentation this portion was built according to Plans and Specifications and has not requested an engineering evaluation. The newer (western) portion consists of a 4-inch asphalt floor over 19 inches of base coarse. The floor slopes to the east and south and has dimensions of 194 feet wide by 200 feet long with a surface area of 38,800 square feet (2016 calculation). This facility was designed by SEH, Inc. and built according to plans and specifications approved by the DNR on July 19, 2016. The current Feed Storage Area runoff collection system was designed by SEH, Inc. and built according to plans and specifications approved by the DNR on July 19, 2016. A concrete trench with grates is located along the southern portion of the older feed pad to collect feed pad runoff. The trench drains to a collection manhole northwest of Freestall Barn 1. The newer feed pad floor slopes to the south with 6-inch curbs located along the north and western perimeter. An 8-inch curb and apron along the south side collects peak surface flow from a 25-year, 24-hour storm (4.74 inches) and directs it to a transfer channel that drains into the same collection manhole used by the trench drain. Perforated tile lines are located under the apron and transfer channel with an outlet to the manhole. Any liquids entering the manhole flow through an 18-inch HDPE waste transfer pipe to Lagoon 1.
004	Stacking Pad (solids) - Sample point 004 is for solids from the Stacking Pad. The facility is in the northwestern portion of the Main Facility. It was built in 2012 in a rectangular shape with dimensions of 24 feet wide by 60 feet long with 6 feet high walls on three sides. The facility is an above-ground cast in place 10-inch-thick concrete floor and vertical wall stacking pad. The structure was designed by Auth Consulting and built according to plans and specifications approved by the DNR on September 28, 2011. The Stacking Pad receives solid manure from several buildings with bedding packs. Any runoff flows to a collection manhole shared with the feed pad. Liquids entering the collection manhole gravity flow through an 18-inch diameter waste transfer pipe to Lagoon 1.
005	Heifer Barn Pit (liquids) - Sample point 005 is for liquids from the Heifer Barn Pit (WSF 3). The facility is in the southern portion of the East Pit Site. It was built in 2018 in a rectangular shape with dimensions of 36 feet wide by 180 feet long by 6 feet deep and an estimated MOL of approximately 111,855 gallons (2022 calculation). The facility is an in-ground, cast in place concrete floor and vertical wall pit. The facility was designed by Auth Consulting and built according to plans and specifications approved by the DNR on August 3, 2018. The DNR received post construction documentation on March 11, 2019. It accepts liquid and solid manure from the slatted floor in the barn located above the structure. An access grate on the east side of the building allows a drop in pump to agitate liquids and solids prior to removal for direct land application in the spring and fall.
006	Misc. Solid Manure (solids) – Sample point 006 is for miscellaneous waste solids directly land applied from the production area of the Main Facility or East Pit Site. This includes the Heifer Barn, Calf Barn, and Cover Barn. Representative samples shall be taken for each nutrient source type when land application occurs.

# **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. 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 185 days of storage for liquid manure based on 1,343 animal units. The permittee must maintain 180 days of storage unless temporary reductions in required storage are approved by the Department.

## **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 1,343 animal units from dairy animals (894 milking/dry cows, 40 heifers, and 234 dairy calves), it is estimated that approximately 12,237,367 gallons of manure and process wastewater will be produced per year. The permittee currently has 1,488 acres (427 owned and 1,061 controlled through contracts, rental agreements, or leases, or under manure agreements) in the NMP, of which 1,422 acres are available for spreading after various restricted areas have been accounted for. The permit requires all landspreading of manure and process wastewater be completed in accordance with

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

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

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

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

### **Monitoring and Sampling Requirements**

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

### **Sampling Points**

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

**Sample Point Number: 001- Lagoon 1; 002- Lagoon 2; 005- Heifer Barn Pit**

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	

**Sample Point Number: 004- Stacking Pad and 006- Misc. Solid Manure**

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

**1.1.1 Changes from Previous Permit**

- Sample point language was updated to describe existing facilities more accurately (Sample Points 001, 002, 003, and 005)
- Sample Point 004 was changed from a combination of bedding pack manure and stacking pad to only the Stacking Pad.
- Sample point 006 was changed from headland stacking sites to Misc. Solid Manure from the production area.

## 2 Schedules

### 2.1 Emergency Response Plan

Required Action	Due Date
Develop Emergency Response Plan: Develop a written Emergency Response Plan within 60 days of permit coverage, available to the Department upon request.	08/31/2024

### 2.2 Monitoring & Inspection Program

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

Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the Monitoring and Sampling Requirements subsection, the permittee shall update and submit a proposed monitoring and inspection program within 60 days of the effective date of this permit.	08/31/2024

### 2.3 Annual Reports

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

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

### 2.4 Nutrient Management Plan

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

Required Action	Due Date
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Management Plan Annual Update #1: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2025
Management Plan Annual Update #2: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2026
Management Plan Annual Update #3: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2027
Management Plan Annual Update #4: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2028
Management Plan Annual Update #5: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2029
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

## 2.5 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	12/31/2028

## 2.6 Explanation of Schedules

The schedules contained in 2.1, 2.2, 2.3, 2.4, and 2.5 are standard permit schedules.

### Attachments:

Days of Storage Approval Letter (February 29,2024)

Nutrient Management Plan Approval Letter (April 26, 2024)

Sample Point Map (May 2024)

Public Notice (May 2024)

### Expiration Date:

**June 30, 2029**



**Prepared By: Todd Prill      Agricultural Runoff Management Specialist**  
**Date: May 7, 2024**

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

PUBLIC NOTICE OF AVAILABILITY OF A NUTRIENT MANAGEMENT PLAN AND INTENT TO REISSUE A WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM (WPDES) PERMIT No. WI-0064327-03-0

Permittee: Dutch Dairy LLC, N13853 Gorman Ave, Thorp, WI, 54771

Receiving Water And Location: Surface water and groundwater within the South Fork of the Eau Claire River Watershed of the Lower Chippewa River Basin.

Brief Facility Description : Dutch Dairy LLC is an existing Concentrated Animal Feeding Operation (CAFO) located in the Township of Reseburg, Clark County. Dutch Dairy LLC consists of two production sites: the Main Facility Site located at N13851 Gorman Ave, Thorp WI 54771; and the East Pit Site located at N13894 Gorman Ave, Thorp WI 54771. The operation is owned and operated by Sander and Amy Penterman with a current herd size of 1,343 animal units (894 milking/dry cows, 40 heifers, and 234 dairy calves). No large expansion is planned during the permit term. This herd size is projected to produce approximately 12.2 million gallons of liquid manure/process wastewater and 1,542 tons of solid manure. Manure and process wastewater is stored in one (1) liquid waste storage facility at the Main Facility Site and one (1) at the East Pit Site. The total usable storage capacity is approximately 6.2 million gallons or 185 days of storage capacity for liquid manure and at least 59 days for solid manure. Currently, Dutch Dairy LLC owns or rents 1,488 acres of cropland, of which 1,422 acres are available for manure applications.

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

Permit Drafter's Name, Address, Phone and Email: Todd Prill, DNR, 1300 W Clairemont Ave, Eau Claire, WI, 54701, (715) 214-8576, [Todd.Prill@wisconsin.gov](mailto:Todd.Prill@wisconsin.gov)

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

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

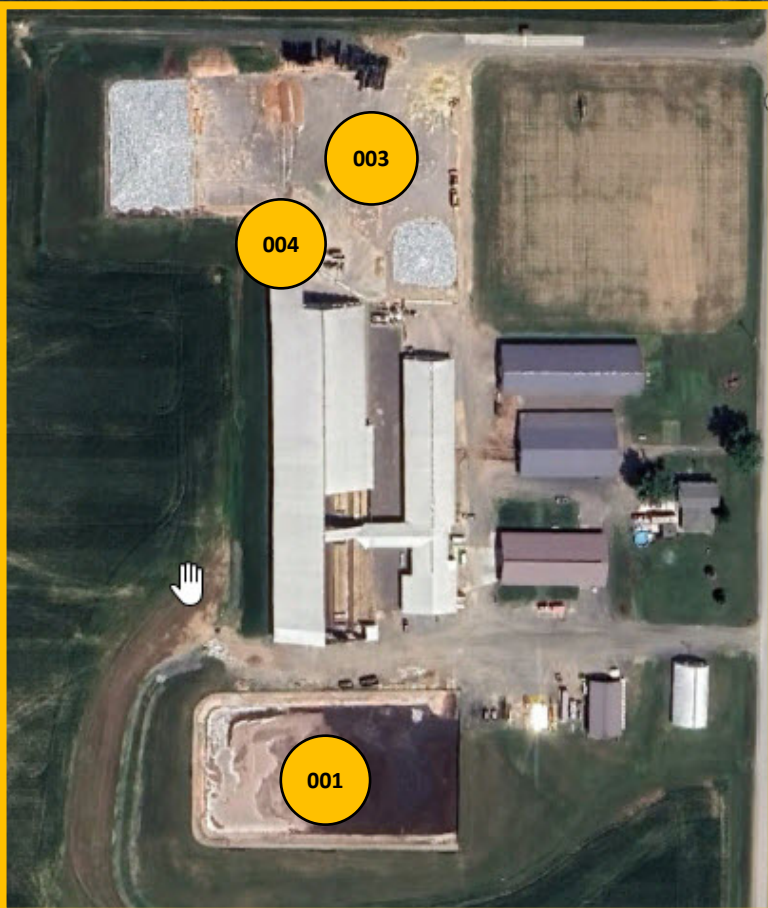
Information on file for this permit action, including the draft permit and fact sheet (if required), the operation's nutrient management plan and application may be inspected and copied at the permit drafter's office, Monday through Friday (except holidays), between 9:00 a.m. and 3:30 p.m. Please call the permit drafter for directions to their office location, if necessary. Information on this permit action may also be obtained by calling the permit drafter at (715) 214-8576 or by writing to the Department. Reasonable costs (15 cents per page for copies and 7 cents per page for scanning) will be charged for information in the file other than the public notice and fact sheet. Permit information is also available on the internet at: <http://dnr.wi.gov/topic/wastewater/PublicNotices.html>. Pursuant to the Americans with Disabilities Act, reasonable accommodation, including the provision of informational material in an alternative format, will be made to qualified individuals upon request.

NAME OF PUBLISHING NEWSPAPER: **Enter Name of Publishing Newspaper**

ADDRESS OF PUBLISHING NEWSPAPER: **Enter Address of Publishing Newspaper**

Date Notice Issued: **Enter Date Notice Issued**

# Dutch Dairy LLC Sample Points



**Main Facility**



**East Pit Site**

## Sample Points – Main Facility and East Pit Sites

- 001 Lagoon 1
- 002 Lagoon 2
- 003 Feed Storage Area
- 005 Heifer Barn Pit
- 004 Stacking Pad

## Sample Points – Facility Wide

- 006 Misc. Solid Manure



February 29, 2024

FILE REF: R-2023-0003a  
WPDES Permit #: WI-0064327

Sander Penterman  
Dutch Dairy LLC  
N13853 Gorman Ave  
Thorp, WI 54771-1770

Subject: Evaluation Review for Waste Storage Facility 2 (WSF2) at Dutch Dairy LLC in Clark County  
- FURTHER ACTIONS ARE REQUIRED

Dear Mr. Penterman:

This letter is to inform you that the Wisconsin Department of Natural Resources (Department) received on January 4, 2023 an evaluation certified by David McDaniel, P.E., Auth Consulting & Associates (Engineer) submitted on behalf of Dutch Dairy LLC in accordance with s. NR 243.16(1), Wis. Adm. Code.

**Evaluated Facilities:** The evaluation included the following reviewable facility: An in-place earth liquid waste storage (WSF2).

The Engineer evaluated the above referenced reviewable facility based on applicable NRCS Standards and ch. NR 243 Wis. Adm. Code. The engineering report below summarizes the evaluation's findings, lists standards that apply, and provides a compliance analysis.

The Department reviewed the evaluation above and disagree with the Engineer's conclusion that the reviewable facility meets ch. NR 243, Wis. Adm. Code requirements.

**Required Actions:** The following actions are required in accordance with s. NR 243.16(3), Wis. Adm. Code based on the Department's review of the submitted evaluation:

- Vegetation present along the liner embankment is reducing liner structural integrity and provides potential leakage conduits through the liner. Remove the vegetation, and provide documentation of the removal and a plan to control vegetation growth to the DNR CAFO Specialist.
- Survey the MOL marker elevation and verify if it is consistent with the required elevation. The MOL marker elevation or new marker installation should be documented and provided to the DNR CAFO Specialist.
- The WSF is located within 250 ft of a well and requires a ch. NR 812 and NR 243, Wis. Adm. Code well setback variance request. Please submit Form 3300-210 to the Ian Anderson (contact information at the end of this letter).

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. Questions concerning the review may be directed to the review engineer Tony Salituro (contact information is at the end of this letter).

**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



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

Enclosures:

1. Wisconsin DNR Engineering Report

Email: Sander Penterman; Dutch Dairy LLC  
(715) 760-1146; dutchdairyllc@gmail.com

David McDaniel; ACA  
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Matt Woodrow; DATCP  
(920) 427-8505; matthew.woodrow@wisconsin.gov

Jim Arch; Clark County  
(715) 743-5285; James.Arch@co.clark.wi.us

Todd Prill; DNR-West Central Region  
(715) 214-8576; Todd.Prill@wisconsin.gov

Bradley A Johnson; DNR, West Central Region  
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Anthony Salituro; DNR-Central Office  
(608) 444-2869; anthony.salituro@wisconsin.gov

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

## WISCONSIN DEPARTMENT OF NATURAL RESOURCES ENGINEERING REPORT

### GENERAL INFORMATION

**Farm Name:** Dutch Dairy LLC

**WPDES Permit#:** WI-0064327

**Location Address:** N13853 Gorman Ave

**DNR Project #:** R-2023-0246a

**Engineering Certification by:** David McDaniel, P.E.

### In-Place Earth Waste Storage Design Acceptability

The Department has a policy of not accepting the NRCS 313 (2005) In-place earth design criteria alone as demonstrating compliance with the requirements of NR 243.13 and 15, Wisconsin Administrative Code. The NRCS 313 standard for in-place earth and clay liner was significantly updated in 2012 with requiring compaction according to NRCS Spec 300 for in-place earth storages and removing the option for a permeability of  $1 \times 10^{-6}$  cm/sec for clay liners. It appears that previous standard versions assumed a level of manure sealing which was then discounted in later standard versions. The NRCS Agricultural Waste Management Field Handbook, Part 651, Appendix 10D (August 2009) states that “manure sealing is not effective for soils with a low clay content. Its effectiveness is not accepted by all designers and cannot be used in the designs of storage ponds by some State and local regulations.” Rather than accepting NRCS 313 (2005) in-place earth design criteria in engineering evaluations, the Department has been accepting liner permeability measurements as evidence for compliance with NR 243.13, with the acceptable threshold being  $1 \times 10^{-7}$  cm/sec as required for industrial wastewater lagoons by NR 213. NR 243.13 requires permit conditions that are necessary to achieve compliance with groundwater quality standards and NR 243.15(1)(d) provides Department authority for requiring “Additional Requirements” based on soil limitations such as permeability and are needed to prevent exceedances of groundwater quality standards.

In lieu of measuring liner permeability, the Department has started accepting an alternate method of evaluating in-place earth WSFs based on comparing past permeability tests with known P200 and PI for those test soils. Analysis suggests that waste storages with soils where the P200 (decimal fraction) multiplied by the PI is eight(8) or more would yield an areally averaged permeability of  $1 \times 10^{-7}$  cm/sec.

### Evaluated Facilities:

**Waste Storage Facility 2 (WSF2):** This in-place earth waste storage facility was constructed prior to 1997 and is used for low solid wastewater taken from the top of WSF1. The rectangular storage is approximately 190 ft x 140 ft x 9.7 ft deep and has an estimated total capacity of 1,420,729 gallons and an MOL volume of 1,058,560 gallons. The pond bottom elevation was surveyed and found to be around an elevation of 1,212 ft. Ten test pits conducted throughout 2008, 2017, and 2021 were provided. Four of the test pits show separation from bedrock and saturation to an elevation of 1,206 ft, showing sufficient separation for NRCS 313 (12/05). The WSF “liner” was surveyed and determined to be 5 ft thick soils. No scour protection is present, but the storage never requires agitation due to the low solids content of the waste. MOL markers were documented during the site inspection, but no elevation of the MOL marker was provided in the evaluation.

- Assessment References: NRCS Standard 313, Table 1 (12/05) and ss. NR 243.13 and NR 243.15(3), Wis. Adm. Code.
- Two permeability results from 2008 were provided showing the liner to have a permeability of  $2.4 \times 10^{-8}$  and  $4.0 \times 10^{-8}$  cm/sec. These results are consistent the permeability threshold used to demonstrate compliance with ss. NR 243.13 and 15(3), Wis. Adm. Code as described above.
- Ten soil sample results were taken of soils in 2017 and 2021 around the liner and found P200 results in the range of 54 – 97% and PI in the range of 9 – 36. The soil samples for this site provide P200 x PI multiplication factors of 7, 7.8, 8.8, 10.4, 10.6, 12.6, 13.7, 16.2, 22.1, and 34.2. Eight of the ten results exceed the threshold of eight. These results are consistent the P200 x PI threshold used to demonstrate compliance with ss. NR 243.13 and 15(3), Wis. Adm. Code as described above.
- Photo documentation shows vegetation growing along the interior side slopes. Vegetation roots provide a flow conduit through the liner, allowing liquids to penetrate and seep through the liner. Vegetation must be removed from the interior embankment and repaired. A plan for routine maintenance of the liner before planned usage should be developed and submitted to the regional CAFO specialist.
- It is not documented that the elevation was surveyed and verified. Submit documentation that permanent markers have been installed in accordance with s. NR 243.15(3)(e), Wis. Adm. Code as well as identifying elevation.
- The WSF is located 180 ft east of an on-site well and does not meet the minimum separation distance requirements in ch. NR 812, Table A for a Manure Storage Structure – earthen, excavated or non-liquid tight structure. In addition, the WSF does not meet the minimum well separation distance in Ch. NR 243.15. A variance request for the well setback in accordance with NR 812.43(1), and NR 243.15 (1) Wis. Adm. Code is required to be submitted to the Department for review.

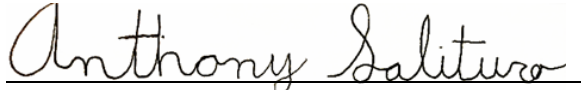
**Days of Available Storage:** The submitted information states that Dutch Dairy LLC has 185 days of liquid waste storage based on the volumes listed in the table below with respect to s. NR 243.15(3)(i) to (k), Wis. Adm. Code. The current number of animal units provided for the calculation is 1,368 (850 Milking and Dry Cows, 144 Heifers, 48 Steers, and 100 Calves). 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, for the feed storage area is captured and stored in WSF1. For the following liquid manure storage calculations, the Department has determined **no additional actions** on your part are required.

Waste Storage	Total Vol. from Settled Top to Bottom	Solids Storage	25-yr, 24-hr Precip. on Storage	25-yr, 24-hr Collected Runoff	Freeboard Vol.	Max. Operating Level (MOL) Vol.
WSF1	5,679,007	0	211,868	35,455	384,192	5,047,492
WSF2	1,420,729	111,654	72,181	0	178,334	1,058,560
Heifer Tank	239,121	53,138	20,989	0	53,138	111,856
<b>Total MOL Vol:</b>						<b>6,217,908</b>
<b>Days of Storage:</b>						<b>185</b>

Liquids Collected/Stored	Annual Gallons
Manure and Bedding	6,816,473
Parlor Wastewater	1,839,600
Feed Storage Leachate	112,200
Feed Storage Runoff Collected	2,250,199

Net Precipitation on Storage Surfaces	1,218,895
<b>TOTAL:</b>	<b>12,237,367</b>

**DECISION RECOMMENDATION:** Based on my review completed on February 29, 2024, the reviewable facilities identified above require further actions.



Tony Salituro, E.I.T.

Water Resources Engineer

Watershed Management Program





April 26, 2024

Sander Penterman  
Dutch Dairy LLC  
N13853 Gorman Avenue  
Thorp, WI 54771-1770

Clark County  
Approval

SUBJECT: Conditional Approval of Dutch Dairy LLC Nutrient Management Plan, WPDES Permit No. 0064327-02-0

Dear Mr. Penterman:

After completing a review of the Dutch Dairy LLC 2024-2028 Nutrient Management Plan (NMP), **the Wisconsin Department of Natural Resources (Department) is providing conditional approval that it is consistent with Nutrient Management Requirements in s. NR 243, Wis. Adm. Code.** This part of your WPDES permit application is now ready for the public notice and comment process as required by Ch. 283 Stats.

Before applying manure onto approved fields each season, the Department recommends Dutch Dairy LLC review the NMP with individuals involved with manure applications to ensure all are familiar with the approved manure spreading practices, spreading map restrictions, required field verifications, record keeping requirements, and conditions of this approval. Specifically, some fields in the Dutch Dairy LLC NMP may have:

- Soils with bedrock or seasonal perched water conditions within 24 inches of surface,
- Setback requirements due to streams, conduits to streams (such as man-made channels or road ditches), grassed waterways, wetlands, or wells,
- Evidence of soil erosion/flow channels.

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

**DUTCH DAIRY LLC CAFO PERMIT NMP REMARKS SUMMARY**

- Outstanding plan overall. Easy to understand and a thorough job of providing documentation.
- Excellent job keeping liquid manure rates below 15,000 gallons/acre to reduce manure runoff potential. For annual NMP updates during the proposed permit term, be sure to include commercial nitrogen applications in addition to manure applications.
- The plan appears to be doing a great job of supplying phosphorus below rotational crop needs for fields testing above 50 ppm soil test phosphorus. Continue using minimum till/no-till and cover crops to lessen soil erosion and particulate phosphorus loss.
- Good start on manure sampling frequency to establish a nutrient “baseline” for different manure sources. As you take more manure samples, be sure to update changes in SnapPlus manure values.

## FINDINGS OF FACT

The Department confirms that:

1. The farm has a current dairy herd size of 1343 animal units (894 milking & dry cows, 40 heifers, and 234 calves). No expansion in animal units is planned during the permit term.
2. Engineering firm Auth Consulting estimates total annual liquid waste volume from Days of Storage calculations of approximately 12,237,367 gallons of manure/process wastewater. This is slightly higher than the liquid volumes reported in the 2023 and 2024 Annual Reports. The reissuance NMP planned for annual applications of 12,427,100 gallons or more during the permit term. The NMP narrative estimates the farm will annually produce 1,542 tons of solid manure. This volume is like what was reported in the 2024 Annual Report.
3. Surface water quality management areas (SWQMA) will be managed by the farm using application restriction option 1 (no manure within 25 feet of SWQMA or conduit, incorporate within remaining SWQMA area) and 5 (no application within 100 feet of navigable water or conduit when surface applied).
4. The phosphorus management method to minimize field losses is the P Index.
5. Dutch Dairy LLC currently has 1,488 acres (427 owned and 1,061 controlled through contracts, rental agreements, or leases, or under manure agreements) in the NMP, of which 1,422 acres are available for spreading after various restricted areas have been accounted for.
6. Some fields included in the NMP are directly adjacent to or have high potential to deliver nutrients and sediment to a 303(d) impaired water (Unnamed Creek 27-8 – WBIC 2145000 – total phosphorus – 2018, South Fork Eau Claire River – WBIC 2137000 – total phosphorus – 2016).
7. No fields included in the NMP are directly adjacent to or have high potential to deliver nutrients and sediment to streams classified as an outstanding/exceptional water resource.
8. No fields included in the NMP are located within a well head protection area.
9. No fields included in the NMP are identified as containing drain tile.
10. All fields will be checked for the following features prior to/during manure or process wastewater applications:
  - soil areas with possible perched water conditions within 24 inches of surface (“W” soils) at the time of manure application.
  - required setbacks associated with wells, navigable waters, conduits to navigable waters, grassed waterways, and wetlands.
  - soil erosion/flow channels.
11. Surface applications of manure will not be completed when precipitation capable of producing runoff is forecasted within 24 hours of the time of planned application.

**CONDITIONAL NUTRIENT MANAGEMENT PLAN APPROVAL**

The Department hereby approves the 2024-2028 Dutch Dairy LLC Nutrient Management Plan subject to the following conditions and the applicable requirements of Ch. NR 243, Wis. Adm. Code:

FIELD AND MANURE MANAGEMENT

1. Fields not included in the NMP, and new fields shall not receive manure or process wastewater applications until they have been properly soil sampled, entered in Snap Plus (or comparable software), evaluated for nutrient needs, and approved by the Department (a.k.a. Substantial NMP Revisions).
2. No fields have been approved to also receive industrial, municipal, or septage waste.
3. The following fields are prohibited from receiving **mechanical** applications of manure or process wastewater, unless the condition listed is corrected prior to proposed applications:
  - **Soil test phosphorus levels equal to or above 200 ppm (as of December 6, 2023)**

8-3	8-4	Paul F				
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If Dutch Dairy LLC wishes to use these fields for mechanical 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. During the permit term, if field soil test phosphorus levels should become equal to or above 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. At a minimum, all liquid manure samples collected should be analyzed for percent dry matter, total nitrogen, percent NH<sub>4</sub>-N, percent NO<sub>3</sub>-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<sub>4</sub><sup>+</sup>) is greater than 75% of the total N, Dutch Dairy LLC may use the following equation to adjust the first-year available nitrogen when applications are injected or incorporated within 1 hour:
 
$$\text{First-Year Available N} = \text{NH}_4\text{-N} + [0.25 \times (\text{Total N} - \text{NH}_4\text{-N})]$$
7. Dutch Dairy LLC shall record daily manure applications by using form 3200-123A or other documentation with equivalent information. This information shall be retained at the farm and provided to the department upon request.
8. Dutch Dairy LLC shall annually submit a spreading report that summarizes the land application activities listed under NR 243.19(3)(c)5., Wis. Adm. Code and contained in form 3200-123.

WINTER SPREADING

- 9. **Liquid** manure applications during winter conditions, as defined by NR 243.14(7), Wis. Adm. Code, are prohibited except for emergency applications.
- 10. The following fields have areas determined to have a low risk of runoff and are approved for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure:

W29-1	W29-2	16-1	9-3			
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- 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.
- 13. No **liquid or solid** manure applications may occur during the “high risk runoff period” of February 1 to March 31 pursuant to information in s. NR 243.14(6)(c) and NR 243.14(7)(c), respectively.

HEADLAND STACKING

- 14. No headland stacking sites are approved for non-winter and winter headland stacking.

MANURE & PROCESS WASTEWATER IRRIGATION

- 15. No fields were requested for approval to receive manure or process wastewater from irrigation. This conditional approval does not limit the Department’s regulatory authority to require NMP revisions based upon new information or request additional information to confirm or ensure your farm operation remains in compliance with NR 243 and your WPDES permit conditions. If additional information, project changes or other circumstances indicate a possible need to modify this approval, the Department may ask you to provide further information relating to this activity.

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

If you have any questions regarding this approval, I can be reached at 715-214-8576 or [Todd.Prill@Wisconsin.gov](mailto:Todd.Prill@Wisconsin.gov)

Sincerely,

A handwritten signature in cursive script that reads "Todd m. Prill".

Todd Prill  
Certified Crop Advisor (CCA)  
WDNR Agricultural Runoff Specialist

cc: Charles Bolte, crop consultant ([chuck.bolte@agsource.com](mailto:chuck.bolte@agsource.com))  
Jim Arch, Clark County LCD ([james.arch@co.clark.wi.us](mailto:james.arch@co.clark.wi.us))  
Aaron O'Rourke, WDNR Nutrient Management Program Coordinator ([Aaron.Orourke@Wisconsin.gov](mailto:Aaron.Orourke@Wisconsin.gov))  
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