Permit Fact Sheet

General Information

Permit Number	WI-0066583-02-0
Permittee Name and Address	Olson Dairy Farms, Inc. N9124 Butternut Rd, Birnamwood, WI 54414
Permitted Facility Name and Address	Olson Dairy Farms, Inc. N9124 Butternut Rd Birnamwood
Permit Term	July 01, 2025 to June 30, 2030
Discharge Location	N9124 Butternut Road Birnamwood, WI 54414 ; NW ¼ Section 12, T28N, R11E
Discharge Type	Existing

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.)	34	0	0	0	
Milking and Dry Cows	1050	1073	0	0	
Heifers (400 lbs. to 800 lbs.)	102	170	0	0	
Heifers (800 lbs. to 1200 lbs.)	187	170	0	0	
Total	1373	1073	0	0	

Facility Description

Brief Facility Description Olson Dairy Farm Inc is an existing Concentrated Animal Feeding Operation (CAFO). Olson Dairy Farm Inc is owned and operated by members of the Olson family. It currently has 1,373 animal units and is not proposing an expansion during the permit term. Based on current herd size, Olson Dairy Farm Inc has approximately 222 days of available liquid waste storage and generates approximately 14,555,482 gallons of manure and process wastewater annually. Olson Dairy Farm Inc has a total of 1,574 acres available for land application of manure and process wastewater. Of this acreage, 911 acres are owned and 663 acres are controlled through contracts, rental agreements, leases, or manure agreements. Of this acreage, 1,567 are considered spreadable acres.

Substantial Compliance Determination

Enforcement During Last Permit: No enforcement actions were taken during the previous permit term.

After a desk top review of all annual reports, land app reports, compliance schedule items, and a site visit on **5/1/2024** this facility has been found to be in substantial compliance with their current permit.

Compliance determination made by Brian Hanson on 4/29/2025.

Sample Point Designation For Animal Waste		
Sample Point Number	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**	
002	Sample point 002 is for existing liquid waste storage tank #1 (WSF #1). WSF #1 is a concrete-lined structure located to the east of the existing freestall barn. This facility has a total volume of 1.5 million gallons and a maximum operating level capacity of 1.0 million gallons. This storage accepts leachate & runoff from the feed storage area. This facility was constructed in 2005 and met permit requirements when it was last evaluated in 2019.	
003	Sample point 003 is for existing liquid waste storage tank #2 (WSF #2). WSF #2 is a concrete-lined structure located to the east of WSF #1. This facility has a total volume of 7.4 million gallons and a maximum operating level capacity of 6.5 million gallons. The storage accepts manure and process wastewater from the existing freestall barns after it has flowed through WSF #3, the Sand Pit. The facility was constructed in 2019 and has not been evaluated since it was constructed.	
004	Sample point 004 is for 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.	
005	Sample point 005 is for solid manure sources that are directly land applied and not stored in a waste storage facility. This includes solid sources such as calf barn manure, maternity pen bedpack, heifer bedpack, etc. Representative samples shall be taken for each manure source type.	
006	Sample point 006 is for visual monitoring and inspection of the feed storage area(FSA) and associated runoff control system located south of WSF #2. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections will be required and shall be recorded according to monitoring program. The FSA was constructed in 2020 and has not been evaluated since that time.	
008	Sample point 008 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.	
009	Sample point 009 is for existing liquid waste storage facility #3 (WSF #3). WSF #3 is a concrete-lined impoundment located to the east of the heifer barns. This facility has a total volume of 0.8 million gallons and a maximum operating level capacity of 0.6 million gallons. The storage accepts manure and process wastewater from the existing freestall barns and is primarily used as a sand settling basin. The facility was constructed in 2022 and has not been evaluated since it was constructed.	

1 Livestock Operations - Proposed Operation and Management

Production Area Discharge Limitations

Beginning on the effective date of the permit, the permittee may not discharge pollutants from the operation's production area (e.g., manure storage areas, outdoor animal lots, composting and leachate containment systems, milking center

wastewater treatment/containment systems, raw material storage areas) to navigable waters, except in the event a 25-year, 24-hour rainfall event (or greater) causes the discharge from a structure which is properly designed and maintained to contain a 25-year, 24-hour rainfall event for this location as determined under s. NR 243.04. If an allowable discharge occurs from the production area, state water quality standards may not be exceeded.

Runoff Control

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

Manure and Process Wastewater Storage

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

The permittee currently has approximately 222 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.

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 1,373 animal units, it is estimated that approximately 14,555,482 gallons & 10,600 tons of manure and process wastewater will be produced per year. The permittee owns *approximately 911* acres of cropland and rents about 663. Given the rotation commonly used by the permittee, 1,567 acres are available (or open) to receive manure and process wastewater on an annual basis. The permit requires all landspreading of manure and process wastewater be completed in accordance with an approved nutrient management plan. The permit will require sampling and analysis of manure and process wastewater that will be landspread. Landspreading rates must be adjusted based on sample analysis. The permit requires the permittee to maintain a daily log that documents landspreading activities. The permit also requires the submittal of an annual report that summarizes all landspreading activities. Plans must be updated annually to reflect cropping plans and other operational changes. Among the requirements, the plans must include detailed landspreading information including field by field nutrient budgets.

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

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

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

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: 002- WSF #1-Leachate; 003- WSF #2 -Lagoon, and 009- WSF #3 Sand

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 existing facilities. Sample point 009 was added to the permit to account for waste directly land applied from WSF #3 Sand Pit.

1.1.2 Explanation of Operation and Management Requirements

Liquid manure & process wastewater must be properly stored and land applied according to the permit and nutrient management plan.

1.2 Sample Point Number: 004- WSF Solids Removal; 005- Miscellaneous 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	

1.2.1 Changes from Previous Permit

Sample point language was updated to more accurately describe existing facilities.

1.2.2 Explanation of Operation and Management Requirements

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

1.3 Sample Point Number: 006- Feed Storage Area and 008- Storm Water Runoff

1.3.1 Changes from Previous Permit

Sample point language was updated to more accurately describe existing facilities. Sample point 007 for the Outdoor Lots was removed from the permit as the farm abandoned these facilities during the previous permit term.

1.3.2 Explanation of Operation and Management Requirements

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

2 Schedules

2.1 Emergency Response Plan

Required Action	Due Date
Update Emergency Response Plan: Update the written Emergency Response Plan within 30 days of	08/01/2025

permit coverage, and submit to the Department.	

2.2 Monitoring & Inspection Program

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

Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the Monitoring and Sampling Requirements subsection, the permittee shall submit a proposed monitoring and inspection program within 60 days of the effective date of this permit.	09/01/2025

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.	

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.	

2.5 Submit Permit Reissuance Application

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

2.6 Explanation of Schedules

Emergency Response Plan, Monitoring and Inspection Program – Schedules consistent with permit requirements

Annual Reports, Nutrient Management Plan, Submit Permit Reissuance Application - Schedules consistent with permit requirements

Other Comments

None

Attachments

- 2/6/2025 Conditional NMP Approval Letter
- 3/28/2025 Days of Storage Review Letter
- 5/23/2024 Reissuance Inspection Report
- Public Notice

Justification Of Any Waivers From Permit Application Requirements

N/A

Prepared By: Brian Hanson Wastewater Specialist Date: 4/29/2025

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
1300 W. Clairemont Ave.
Eau Claire WI 54701

Tony Evers, Governor
Telephone 608-266-2621
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February 6, 2025

Shawano County
Approval

Kurt Olson
Olson Dairy Farms, Inc
N9124 Butternut Rd
Birnamwood, WI 54414

SUBJECT: Conditional Approval of Olson Dairy Farms, Inc Nutrient Management Plan, WPDES Permit No. 0066583-02-0

Dear Mr. Olson:

After completing a review of Olson Dairy Farms, Inc 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 Olson Dairy Farms, Inc review the NMP with those individuals involved with manure applications to ensure all remain familiar with the approved manure spreading protocol, spreading maps, field and map verification, record keeping requirements, and all the conditions of this approval.

FINDINGS OF FACT

The Department confirms that:

1. A current dairy herd size of 1,373 animal units (750 milking & dry cows, 340 heifers, and 170 calves). Currently there are no planned expansions in the next permit term.

2. Manure generation and spreading records indicate your herd will annually generate approximately 14,555,482 gallons of manure and process wastewater and 10,600 tons of solid manure in the first year of the permit term.

3. The use of application restriction options 1, 2 and 5 within surface water quality management areas.

4. The use of phosphorus delivery method P Index.

5. That Olson Dairy Farms, Inc currently has 1,574 acres (911 owned and 663 controlled through contracts, rental agreements or leases, or under manure agreements) of which 1,567 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 Olson Dairy Farms, Inc Nutrient Management Plan subject to the following conditions and the applicable requirements of Ch. NR 243, Wis. Adm. Code:

FIELD AND MANURE MANAGEMENT

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

2. The following fields are prohibited from receiving applications of manure or process wastewater:
   - Home 4 (>200ppm P)
   - Tripp 5 (Default soil test)

   If Olson Dairy Farms, Inc 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.

3. 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.

4. 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.

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

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

6. Olson Dairy Farms, Inc shall record daily manure applications by using form 3200-123A. These forms shall be retained at the farm and provided to the department upon request.

7. Olson Dairy Farms, Inc shall annually submit a spreading report that summarizes the land application activities listed under NR 243.19(3)(c)5., Wis. Adm. Code by using form 3200-123.

WINTER SPREADING

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

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

- Beran 1
- Beran 2
- Beran 4
- Fandrey 1
- Fandrey 4
- Gast 1
- Gast 3
- Gast 4
- Home 1
- Home 6
- Hohn 3
- Randy 1
- Randy 5

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

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

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

HEADLAND STACKING

13. No headland stacking sites are approved.

MANURE & PROCESS WASTEWATER IRRIGATION

14. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

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

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 715-214-5503 or Aaron.Orourke@Wisconsin.gov.

Sincerely,

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

cc: Brian Hanson, WDNR Agricultural Runoff Specialist (Brian.Hanson@Wisconsin.gov)
Joe Baeten, WDNR Watershed Field Supervisor (Joseph.Baeten@Wisconsin.gov)
Chris Clayton, WDNR Ag Runoff Section Chief (Christopherr.Clayton@Wisconsin.gov)
Ashley Scheel, WDNR CAFO NMP Reviewer (Ashley.Scheel@Wisconsin.gov)
Falon French, WDNR Intake Specialist (Falon.French@Wisconsin.gov)
Scott Frank, Shawano County (Scott.Frank@shawanocountywi.gov)
Katelin Bradley, AgSource Laboratories (olsondairyfarmsinc@gmail.com)
File

State of Wisconsin
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Shawano, WI 54166

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Karen Hyun, Ph.D., Secretary
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3/28/2025

FILE REF: R-2024-0293
WPDES Permit #: WI-0066583

Kurt Olson Jr.
Olson Dairy Farms Inc
N9124 Butternut Road
Birnamwood, WI 54414

Subject: Days of Storage Review for Olson Dairy Farms Inc, NW ¼ Section 12 Town 28N, Range 11E, in Birnamwood Township, Shawano County

Dear Mr. Olson:

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 Nick Coady (GHD) on November 27, 2024, with additional information received on March 25, 2025, on behalf of Olson Dairy Farms Inc.

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 Olson Dairy Farms Inc has 222 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 1,373 and there is no planned expansion. The liquid waste volumes are based on NRCS spreadsheet and other calculated values and a collection period of 365 days. Feed Leachate & Feed Storage Runoff Volumes were calculated separately as they have a separate waste storage system.

Waste Storage	Total Vol. from Settled Top to Bottom	Solids Storage	25-yr, 24hr Precip. On Storage	25-yr, 24-hr Collected Runoff	Freeboard Volume	Max. Operating Level (MOL) Vol.
#1	7,392,175	0	218,522	0	624,348	6,549,306
#2	805,711	0	53,996	0	145,357	606,358
					Total MOL Vol:	7,155,664
					Days of Storage:	**222**

Liquids Collected/Stored	**Annual Gallons**
Manure & Wastewater	9,917,050
Discarded Bedding	547,500
Net Precipitation on Storage Surfaces:	1,319,765
Total:	**11,784,315**

Days of Available Process Wastewater Storage: The submitted information states that Olson Dairy Farms Inc. is proposed to have 134 days of process wastewater storage based on the volumes listed in the table below. The total proposed feed storage area collected is 120,000 sq ft. and leachate from 30,000 tons of silage is collected. Runoff up to and including the 25-yr, 24-hr storm is collected. The liquid waste volumes are based on the NRCS spreadsheet and other estimated or calculated values and based upon a collection period of 365 days.

Waste Storage	Total Vol. from Settled Top to Bottom	Solids Storage	25-yr, 24hr Precip. On Storage	25-yr, 24-hr Collected Runoff	Freeboard Volume	Max. Operating Level (MOL) Vol.
LMT	1,502,721	0	43,829	314,160	125,227	1,019,505
				Total MOL Vol:		1,019,505
				Days of Storage:		**134**

Liquids Collected/Stored	**Annual Gallons**
Total Feed Storage Leachate	112,200
Total Feed Storage Runoff Collected	2,446,708
Net Precipitation on Storage Surfaces:	212,259
Total:	**2,771,167**

Should you have any questions, please contact Brian Hanson, DNR Shawano 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

Brian Hanson

Brian Hanson
Ag Runoff Management Specialist
Watershed Management Program

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WISCONSIN
DEPT. OF NATURAL RESOURCES

6/20/2022

Kurt Olson Jr.
Olson Dairy Farm, Inc.
N9124 Butternut Road
Birnamwood, WI 54414

WPDES Permit No. WI-0066583-01-0
Shawano County

Subject: 5/1/2024 Permit Compliance Inspection

Dear Mr. Olson:

On May 1, 2024, the Department of Natural Resources met with the representatives of Olson Dairy Farm, Inc. to conduct a full compliance inspection of your facility for the purpose of permit reissuance. Department observations, including photographs, and a record of our conversations are included in the enclosed report.

The final pages of the report include a summary section identifying areas of concern & action items the farm should continue to monitor.

If you have any questions regarding this letter or your WPDES permit requirements, please contact me at 920-366-3302 or brian.hanson@wisconsin.gov.

Sincerely,

Brian Hanson

Brian Hanson
Agricultural Runoff Management Specialist

Enc: 12/4/2020 Inspection Report & Photo Log
10/13/2020 Completeness letter (R-2020-0189)

ec: Katelin Bradley -AgSource
Scott Frank - Shawano County LCD
Joe Baeten, Falon French - DNR

CAFO Compliance Inspection Report

Inspection Date: 5/1/2024

Report Final Date: 5/23/2024

Operation Name: Olson Dairy Farms, Inc.

WPDES Permit #: WI-0066583-01-0

Farm Address: 9124 Butternut Road, Birnamwood, WI

On-Site Representative(s): Kurt Olson Jr. (Owner)

Report Author: Brian Hanson: DNR Agricultural Runoff Specialist

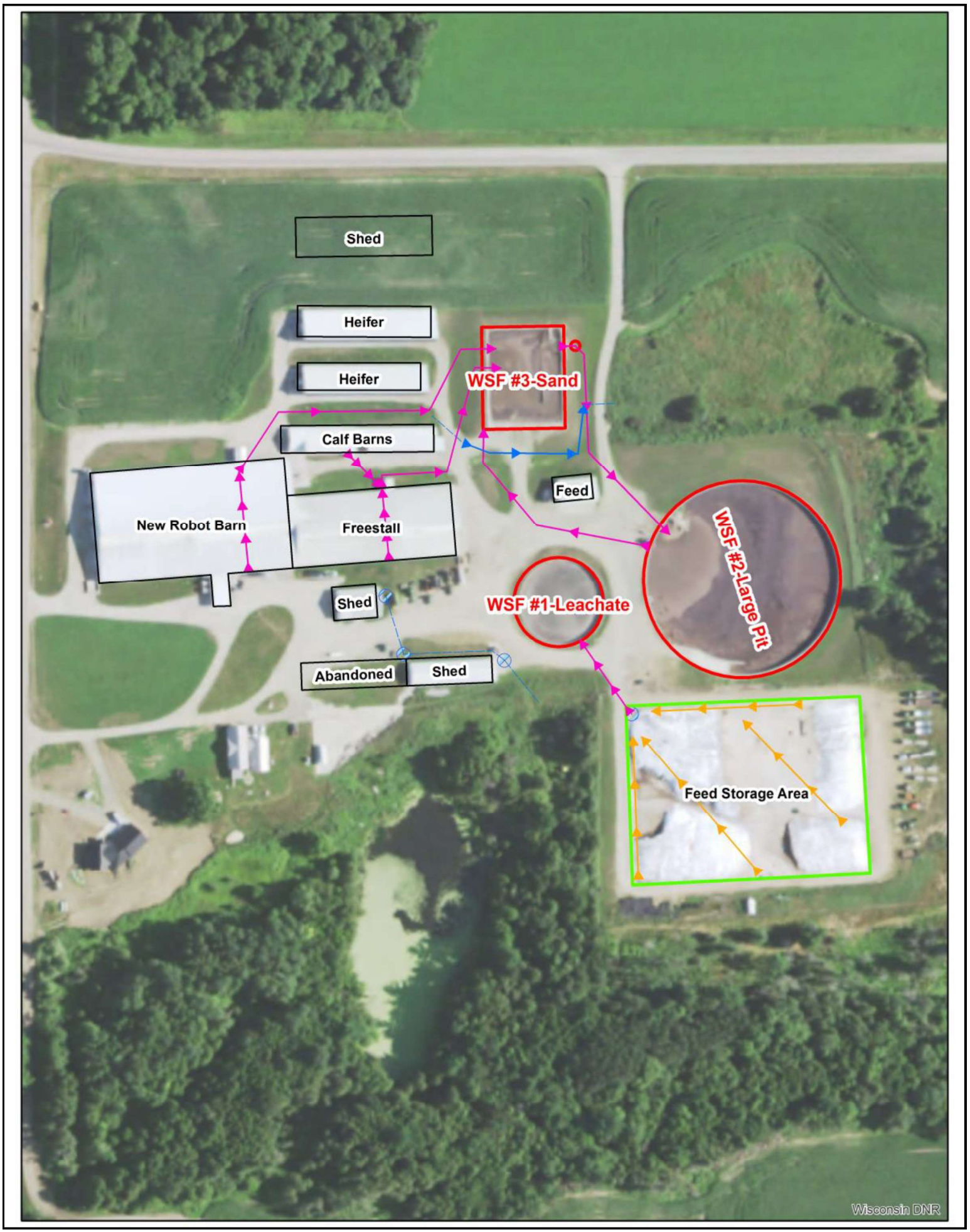
Other Participating Agencies: None

Introduction

On Wednesday May 1, 2024 Hanson met with Olson at 9:00 at Olson Dairy Farms site to conduct a permit reissuance compliance inspection. Only the 1 production site was inspected. Some liquid precipitation had fallen the previous days but day of inspection was sunny & in the 60's. No permit violations were observed, and no water samples were collected. Hanson departed at approximately 10:00.

Figure 1: Site Overview Diagram (Olson Dairy Farms, Inc)

Site Overview Diagram (Main Dairy: orange lines =potential contaminated runoff, blue lines = stormwater flow, pink lines = waste transfer system)



SITE OBSERVATIONS :

Feedlot Runoff

There are no longer any outdoor feedlots on the farm. The 2 existing outdoor lots when the permit was issued have both been abandoned. They were located to the south of the old milking parlor (barn) which has also been abandoned; and south of WSF #1. Both of these lots were abandoned in 2020 according to department records.

Calf Hutch Areas

There are no outdoor calf hutches located on the farm at this time. All calves and heifers are housed under roof in a series of barns in the northwest corner of the production site. Wastewater from the calf barn is collected and transferred to the freestall barn to be pumped to long term storage. The calf barn contains a series indoor calf hutches and a bedded pack area which utilizes an automatic feeding system. Manure and bedding from this area is handled as a solid and either land applied, stored under roof in the former commodity building, or stored in one of the waste storage facilities.

Waste Storage Facilities (Photos on pages 5-12)

There are 3 liquid waste storage facilities located on the farm. They are as follows: WSF #1-Leachate, WSF #2-Large Pit, and WSF #3-Sand.

WSF #1 is a vertical wall concrete Pipping structure located to the east of the freestall barn that was built in 2005 and slightly modified in 2020 to accept runoff from the feed storage area instead of manure from the freestall barns. Leachate and runoff from the feed storage area are collected and flow through a gravity pipe to WSF #1. Wastewater from this storage is occasionally pumped through temporarily hoses to WSF #2 to aid agitation and to the freestall barns to flush out transfer lines. At the time of inspection, WSF #1 appeared to be in good working condition and was operating well below the maximum operating level.

WSF #2 is a vertical wall concrete Pipping structure located north of the feed storage area that was built in 2019. Manure is pumped to this facility from WSF #3 for long term storage. There is also a floating pump & recirculation line back to WSF #3 to aide in settling out sand in WSF #3. WSF #2 has an access ramp on the south side to allow entry into the structure to remove sand bedding and other manure solids. Solid manure from the heifer barns is also dumped over the side during times when field applications are not feasible. At the time of the inspection, WSF #2 appeared to be in good working condition and was almost empty.

WSF #3 is a concrete lined impoundment located east of the heifer barns that was constructed in 2020. All manure and process wastewater from the freestall barns and calf barn is directed to WSF #3. WSF #3 is mainly used as a sand settling basin and not for long term storage. This manure enters this basin on the west side. A connected manhole in the northeast corner was installed in 2022 which pumps liquids from the top portion of WSF #3 to WSF #2 for long term storage.. The entire south side of WSF #3 is used an access ramp to remove sand bedding from the facility. At the time of inspection there was some sand spilled on the top of the berm on the north side of WSF #3. Olson explained they used an excavator to load spreaders from this side of the pit and spilled a little sand outside the concrete liner while loading.

The farm does not currently have any long term solid manure storages, but there is a small load out area on the east end of calf & heifer barns that are used for short term storage and load out. These areas are under roof and showed no signs of current or past discharge. The farm is also planning to use the previous commodity shed south of WSF #3 as a solid stacking area. This structure has concrete a concrete floor & walls and is under roof. This area is proposed to be used during Feb-March to store bedded pack manure from the calf barn & heifer barns.

Solid and liquid waste storage structures are well-maintained, in good repair, and appear to be in compliance with permit requirements. Liquid waste storage facilities have permanent markers installed. See photo log for details.

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

The farm does not have a central milking parlor, but instead utilizes a series of 10 robotic milking units in the freestall barn. Each robot unit collects wastewater and transfers it to the main manure transfer systems. The calf barn contains a small milk wash room and an automatic feeding system. All wastewater from these areas is collected and transferred to the main manure transfer system. All liquid from these systems is eventually stored in WSF #2.

Feed Storage Area Runoff (Photos on pages 12-16)

All feed storage areas and runoff controls are located at the Main Dairy. Surface drainage of leachate and runoff is directed to a centralized collection point in the northwest corner of the pad. In general the feedpad is sloped to the northwest and the contains a 16' raised apron along the west & north sides. This raised apron is meant to act as a runoff collection channel and ensure all leachate and runoff from the feedpad is directed to the collection point which is a grated surface inlet. Runoff then gravity flows through an underground pipe to WSF #1 for long term storage. At the time of inspection a few of the feed piles had extended onto this raised apron (especially on the north side) and had partially blocked the collection channel. This caused some minor ponding of runoff on the feedpad and decreased the capacity of the runoff channels. The farm should manage the placement of the feed piles and runoff collection system to avoid a future discharge.

Except for those items mentioned above, the feed storage areas and runoff control systems are well-maintained, in good repair and appeared to be in compliance with permit requirements.

Animal Mortality Disposal

Mortalities are moved to the east end of the freestall barn and picked up daily as needed by OJ Krull.

Ancillary Service Areas (Photos on page 17)

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.). At the time of the inspection, all stormwater channels (except for the newly constructed machine shed) were well vegetated and other areas were free of manure & feed solids. Farm should continue to manage these areas to minimize the chance of runoff from the production area.

The farm does not have any CAFO outdoor vegetated areas as part of their operation.

RECORDS REVIEW (Photos on page18)

The permittee has current WPDES Permit and Nutrient Management Plan onsite, located in the office.

The permittee provided complete production site inspection records that are required to be retained. Daily Hauling logs and CAFO Calendar for required inspections and manure pit volume logs were all available for inspection.

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.

Photo #:	1
Date/Time of Photo:	5/1/2024 09:40
Photo By:	Brian Hanson
Photo Location:	WSF #1

Photo Description:

Standing on the north side of WSF #1 looking southeast: View of east 1/2 of WSF #1.

Photo #:	2
Date/Time of Photo:	5/1/2024 09:40
Photo By:	Brian Hanson
Photo Location:	WSF #1

Photo Description:

Standing on the north side of WSF #1 looking southwest: View of west 1/2 of WSF #1.

Photo #:	3
Date/Time of Photo:	5/1/2024 09:42
Photo By:	Brian Hanson
Photo Location:	WSF #1

Photo Description:

Standing on the southeast corner of WSF #1 looking north: View of east edge of WSF #1. Permanent markers highlighted.

Photo #:	4
Date/Time of Photo:	5/1/2024 09:47
Photo By:	Brian Hanson
Photo Location:	WSF #2

Photo Description:

Standing on the north side of FSA looking northeast: View of east 1/2 of WSF #2.

Photo #:	5
Date/Time of Photo:	5/1/2024 0783
Photo By:	Brian Hanson
Photo Location:	WSF #2

Photo Description:

Standing on the north side of FSA looking northwest: View of west 1/2 of WSF #2.

Photo #:	6
Date/Time of Photo:	5/1/2024 09:49
Photo By:	Brian Hanson
Photo Location:	WSF #2

Photo Description:

Standing on the west side of WSF #2 looking north: View of west edge of WSF #2. Notice load out pump on tractor & floating recirculation pump to WSF #3.

Photo #:	7
Date/Time of Photo:	5/1/2024 09:50
Photo By:	Brian Hanson
Photo Location:	WSF #2

Photo Description:

Standing on the southwest side of WSF #2 looking east: View of access ramp located on the southwest side of WSF #2.

Photo #:	8
Date/Time of Photo:	5/1/2024 09:49
Photo By:	Brian Hanson
Photo Location:	WSF #2

Photo Description:

Standing on the west side of WSF #2 looking north: View of west edge of WSF #2. Permanent markers highlighted.

Photo #:	9
Date/Time of Photo:	5/1/2024 09:34
Photo By:	Brian Hanson
Photo Location:	WSF #3

Photo Description:

Standing on the south side of WSF #3 looking northeast: View of concrete access ramp used to remove accumulated sand solids.

Photo #:	10
Date/Time of Photo:	5/1/2024 09:34
Photo By:	Brian Hanson
Photo Location:	WSF #3

Photo Description:

Standing on the south side of WSF #3 looking north: View of east edge of WSF #3.

Photo #:	11
Date/Time of Photo:	5/1/2024 09:34
Photo By:	Brian Hanson
Photo Location:	WSF #3

Photo Description:

Standing on the east side of WSF #3 looking west: Alternate view of south edge of WSF #3 used as access ramp to remove accumulated sand solids.

Photo #:	12
Date/Time of Photo:	5/1/2024 09:35
Photo By:	Brian Hanson
Photo Location:	WSF #3

Photo Description:

Standing on east side of WSF #3 looking north: View of manhole and transfer pump used to transfer liquids from WSF #3 to WSF #2 for long term storage.

Photo #:	13
Date/Time of Photo:	5/1/2024 09:36
Photo By:	Brian Hanson
Photo Location:	WSF #3

Photo Description:

Standing on the north side of WSF #3 looking west: View of north edge of WSF #3. Notice sand solids present outside the top of the berm. Olson stated they spilled some sand when using excavator to remove sand from north end of pit.

Photo #:	14
Date/Time of Photo:	5/1/2024 09:36
Photo By:	Brian Hanson
Photo Location:	WSF #3

Photo Description:

Standing on west side of WSF #3 looking south: View of west edge of WSF #3. Notice recirculation line from WSF #2 along west edge of pit.

Photo #:	15
Date/Time of Photo:	5/1/2024 09:33
Photo By:	Brian Hanson
Photo Location:	Solid Manure Storage

Photo Description:

Standing on the north side of WSF #1 looking northeast: View of old commodity shed that will be used to store solid manure during February/March timeframe.

Photo #:	16
Date/Time of Photo:	5/1/2024 09:42
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing at the northwest corner of the FSA looking south: View of the west edge of the FSA. Arrows indicate direction of runoff flow.

Photo #:	17
Date/Time of Photo:	5/1/2024 09:42
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing at northwest corner of FSA looking south: Close up view of surface inlet used to collect runoff.

Photo #:	18
Date/Time of Photo:	5/1/2024 09:44
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing at the southwest corner of FSA looking north: View of west edge of FSA. Arrow indicates direction of runoff flow.

Photo #:	19
Date/Time of Photo:	5/1/2024 09:44
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing at the southwest corner of FSA looking east: View of south edge of FSA. Arrows indicate direction of runoff flow.

Photo #:	20
Date/Time of Photo:	5/1/2024 09:45
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing on the south edge of FSA looking north: View of central portion of FSA. A few minor cracks in floor, but no major ones observed.

Photo #:	21
Date/Time of Photo:	5/1/2024 09:46
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing on the east side of FSA looking north: View of east edge of FSA. No signs of leachate leaving the pad even though plastic tarp is right to edge of concrete.

Photo #:	22
Date/Time of Photo:	5/1/2024 09:46
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing on the north side of FSA looking west: View of north edge of FSA. Arrows indicate direction of runoff flow.

Photo #:	23
Date/Time of Photo:	5/1/2024 09:47
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing on the north side of FSA looking west: View of north edge of FSA that acts as runoff collection channel. Arrows indicate flow path at the lowest point of the runoff collection channel.

Photo #:	24
Date/Time of Photo:	5/1/2024 09:47
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area

Photo Description:

Standing on the north side of FSA looking west: View of feed stored on top of runoff collection channel causing a partial dam of the channel. Arrows indicate direction of runoff flow. Red dashed line indicates approximate toe of runoff collection channel.

Photo #:	25
Date/Time of Photo:	5/1/2024 09:36
Photo By:	Brian Hanson
Photo Location:	Stormwater

Photo Description:

Standing on the north side of WSF #3 looking northwest: View of new machine shed recently constructed. Final grading & seeding has not yet been completed.

Photo #:	26
Date/Time of Photo:	5/1/2024 09:37
Photo By:	Brian Hanson
Photo Location:	Stormwater

Photo Description:

Standing on the west side of WSF #3 looking west: View of stormwater channel in between heifer barns. Areas are well vegetated.

Photo #:	27
Date/Time of Photo:	5/1/2024 09:17
Photo By:	Brian Hanson
Photo Location:	Records

Photo Description:

View of current CAFO calendar used to track daily & weekly inspections.

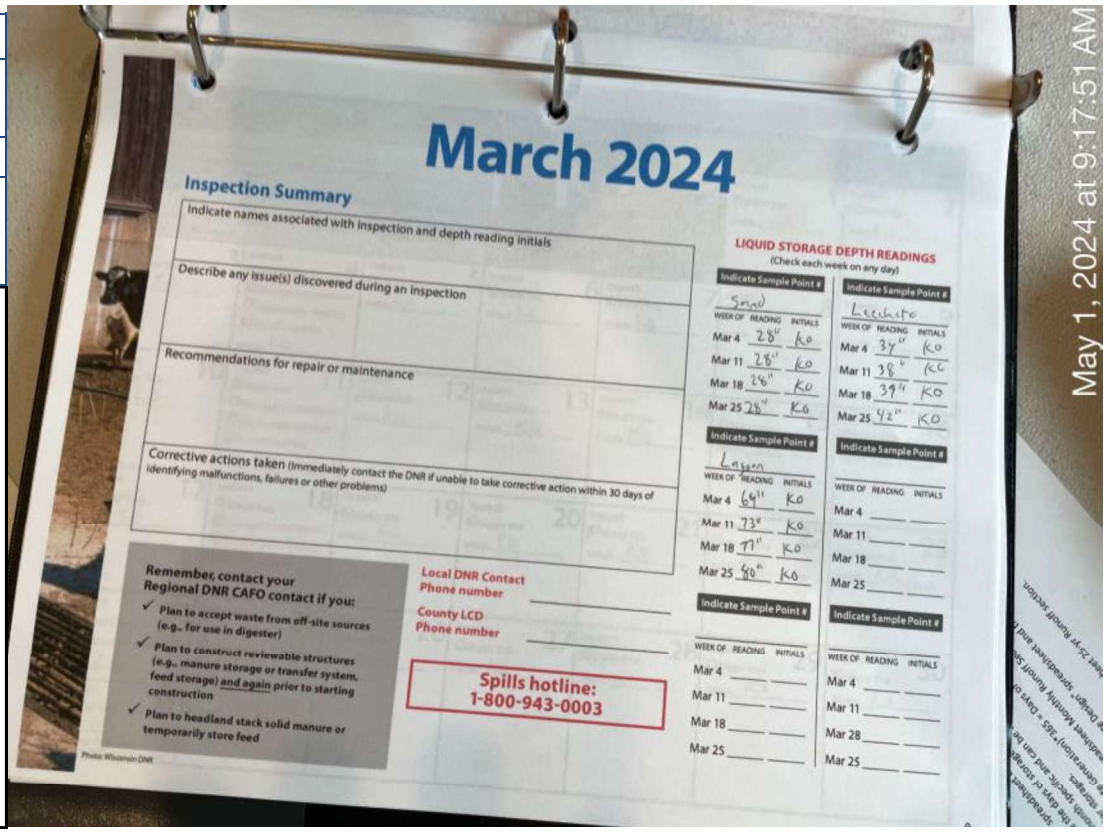


Photo #:	28
Date/Time of Photo:	5/1/2024 09:31
Photo By:	Brian Hanson
Photo Location:	Well Locations

Photo Description:

Standing on the northwest side of the old house looking east: View of water supply well used by the residences, not the farm buildings.

Photo #:	29
Date/Time of Photo:	5/1/2024 09:32
Photo By:	Brian Hanson
Photo Location:	Well Locations

Photo Description:

Standing northeast of the old house looking northwest: View of water supply well on south side of robot barn.

Well ID: MS691

Photo #:	30
Date/Time of Photo:	5/1/2024 09:38
Photo By:	Brian Hanson
Photo Location:	Well Locations

Photo Description:

Standing between the calf barn & the south heifer barn looking west: View of water supply well location for farm. Well highlighted.

Well ID: WR800

SUMMARY:

Substantial Compliance

- The permittee is currently in substantial compliance with the permit.

Areas of Concern

- Feed piles are located too close to the exterior edge of the concrete pad and therefore are blocking a portion of the runoff collection channel. Move these edges of the feed piles back far enough to ensure runoff collection channels will operate as designed.

Permit Violations

- No violations were observed during the inspection.

Action Items

- Clear feed from runoff collection channels of feed storage area as described in “areas of concern” above
- Clean up any spilled sand material around the berm of WSF #3.
- Submit permit reissuance application to DNR e-permitting system by 12/2/2024

Expansion Plans:

- The farm does not have any expansion plans at this time. There is a possibility of constructing a satellite manure storage facility at some point in the future, but no solid plans at this time.

Materials Required as part of the Permit Application

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

• 3400-025 form (Livestock/Poultry Operation WPDES Permit Application)

• 3400-025A form (Animal Units Calculation Worksheet)

• 3400-025G form (Evaluated Facilities of Systems Checklist)

• 3400-025C form (Reviewable Facilities of Systems Checklist)

• A soil survey map of the dairy’s production area

• A labeled aerial map showing the existing and proposed features and structures of the dairy’s production area

• Calculations documenting days liquid manure and process wastewater storage

• Supporting documentation for days storage calculations

• A complete 5-year Nutrient Management Plan (NMP). If necessary, include a description of permanent spray irrigation systems and any other landspreading or treatment systems (proposed or active)

- Plans and specifications for any proposed facilities
- ENVIRONMENTAL ANALYSIS QUESTIONNAIRE for Concentrated Animal Feeding Operations

(Screening questions will determine if entire questionnaire needs to be completed)