

Permit Fact Sheet

General Information

Permit Number	WI-0059391-06-0
Permittee Name and Address	Tauchen Harmony Valley Inc N3397 S Broadway Rd, Bonduel, WI 54107
Permitted Facility Name and Address	Tauchen Harmony Valley Inc N3399 Broadway Rd Bonduel
Permit Term	August 01, 2025 to July 31, 2030
Discharge Location	Main Farm: N3397 S Broadway Rd Bonduel, WI ; E ½ of the SE ¼ Section 23 T 26N R17E Klosterman Pit: N3745 N. Broadway Rd Bonduel, WI ; SE ¼ of the SE ¼ Section 14 T26N R17E
Discharge Type	Existing

Animal Units					
Animal Type	Current AU		Proposed AU (Note: If all zeroes, expansions are not expected during permit term)		
	Mixed	Individual	Mixed	Individual	Date of Proposed Expansion
Dairy Calves (under 400 lbs.)	70	0	0	0	
Milking and Dry Cows	1645	1680	0	0	
Heifers (400 lbs. to 800 lbs.)	60	100	0	0	
Heifers (800 lbs. to 1200 lbs.)	138	125	0	0	
Total	1913	1680	0	0	

Facility Description

Brief Facility Description Tauchen Harmony Valley is an existing Concentrated Animal Feeding Operation (CAFO). Tauchen Harmony Valley is owned and operated by the Tauchen family. It currently has 1,913 animal units and is not proposing any expansion over the permit term. This includes 1,175 milking & dry cows, 225 heifers, and 350 calves. Based on current herd size, Tauchen Harmony Valley has approximately 172 days of liquid waste storage and generates 15,513,946 gallons of manure and process wastewater annually and 1,777 tons of solid manure. Tauchen Harmony Valley has a total of 2,194 acres available for land application of manure and process wastewater. Of this acreage, 1,401 acres are owned, and 793 acres are controlled through contracts, rental agreements or leases, or under manure agreements. Of this acreage, 2,136 are considered spreadable acres. Tauchen Harmony Valley is adding an offsite waste storage facility to the upcoming permit to maintain 180 days of liquid waste storage volume. This offsite waste storage facility is known as the Klosterman Pit and labeled in the permit as WSF #4 & sample point 011.

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, NMP Updates, compliance schedule items, and a site visit on 6/19/2024, this facility has been found to be in substantial compliance with their current permit.

Compliance determination made by Brian Hanson, Wastewater Specialist on 6/2/2025.

Sample Point Designation For Animal Waste		
Sample Point Number	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)	
001	Sample point 001 is for liquid manure and process wastewater land applied from Waste Storage Facility #1 (WSF #1). WSF #1 is an earthen lined waste storage located at the Main Dairy north of freestall barns constructed in 2001. The facility has a total storage volume of 8.6 million gallons with maximum operating level capacity of 6.9 million gallons. This storage accepts manure and process wastewater from the north & south freestall barns and from the milking parlor. The facility has not been evaluated since 2001 at the time of construction.	
002	Sample point 002 is for any miscellaneous solid manure directly land applied and not stored in a waste storage facility. This includes calf hutch manure, maternity pen bedpack, heifer bedpack, and any solid waste produced on the farm. Representative samples shall be taken for each manure source type.	
003	Sample point 003 is for liquid manure and process wastewater land applied from Waste Storage Facility #2 (WSF #2). WSF #2 is a concrete storage tank located at the Main Dairy underneath the heifer barn that was constructed in 2015. The facility has a total storage volume of 460,000 gallons and a maximum operating level capacity of 440,000 gallons. This storage accepts manure and process wastewater from the heifer barn and occasionally from the feed runoff collection system. The facility was last evaluated in 2014 at the time of construction.	
005	Sample point 005 is for visual monitoring and inspection of the Feed Storage Area (FSA) and associated runoff control system at the main dairy south of the freestall barns. The FSA consists of a series of concrete pads & walls and is approximately 2.1 acres in size. Leachate and first flush runoff are collected in underground tanks. Remaining runoff is then treated with a biofilter & vegetated treatment area. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program.	
006	Sample point 006 is for manure solids land applied from all waste storage facilities. These facilities are described in sample points 001, 003, 011. Representative samples shall be taken from each waste storage facility when land application occurs.	
007	Sample point 007 is for solid manure land applied from a solid stacking pad. The solid stacking pad is 38' x 20' roofed structure located at the Main Dairy on the west end of the north cow barn. The solid stacking pad has a concrete working surface with concrete walls on 3 sides. The solid stacking pad was constructed in 2018 and last evaluated in 2022.	
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.	

Sample Point Designation For Animal Waste		
Sample Point Number	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)	
009	Sample point 009 is for process wastewater directly land applied from waste storage facility #3 (WSF #3). WSF #3 is located at the main dairy just southwest of the feed storage area. WSF #3 is a system of concrete manholes and reception tanks with a capacity of approximately 40,000 gallons. It stores leachate and feed storage area runoff. This waste may also be pumped to WSF #2 if required. WSF #3 was constructed in 2013 and has not been evaluated since the time of construction.	
010	Sample point 010 is for visual monitoring and inspection of the calf hutch area. Calf hutches are bedded in straw on an earthen base, and do not have engineered runoff controls. The calf hutch area is rotated to a new location at the Main Dairy 2-4 times per year. Proper operation and maintenance is required to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program.	
011	Sample point 011 is for liquid manure and process wastewater land applied from Waste Storage Facility #4 (WSF #4). WSF #4 is a concrete lined waste storage located west of the buildings at the Klosterman Pit site which was constructed in 2003. The facility has a total storage volume of approximately 1.0 million gallons with maximum operating level capacity of approximately 0.75 million gallons. This storage accepts manure and process wastewater transferred from the Main Dairy via tanker trucks or temporary hose line into this facility prior to land application. The facility has not yet been evaluated. See schedules section of permit for further details.	

1 Livestock Operations - Proposed Operation and Management

Production Area Discharge Limitations

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

Runoff Control

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

Manure and Process Wastewater Storage

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

to the storage facilities are necessary, formal engineering plans and specifications must be submitted to the Department for approval.

The permittee currently has approximately 172 days of storage for liquid manure. The permittee must maintain 180 days of storage, unless temporary reductions in required storage are approved by the Department.

Solid Manure Stacking

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

Ancillary Service and Storage Areas

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

Nutrient Management

With 1,913 animal units, it is estimated that approximately 15,513,946 gallons & 1,777 tons of manure and process wastewater will be produced per year. The permittee owns *approximately* 1,400 acres of cropland and 793 are controlled through contracts, rental agreements or leases, or under manure agreements. Given the rotation commonly used by the permittee, 2,136 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 of practices to address potential water quality impacts associated with the land application of manure and process wastewater. Among the permit conditions are restrictions on manure ponding, restrictions on runoff of manure and process wastewater from cropped fields, and setbacks from wells and direct conduits to groundwater (e.g., sinkholes, fractured bedrock at the surface). In addition, the permittee must implement a phosphorus based nutrient management plan that addresses phosphorus delivery to surface waters by basing manure and process wastewater applications on soil test phosphorus levels or the Wisconsin Phosphorus index. Additional phosphorus application restrictions apply to fields that are high in soil test phosphorus (>100 ppm).

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

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

Monitoring and Sampling Requirements

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

Sampling Points

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

1.1 Sample Point Number: 001- WSF #1; 003- WSF #2 Heifer Barn; 009- WSF #3 Leachate Tanks, and 011- WSF 4 (Klosterman 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	

1.1.1 Changes from Previous Permit

Sample point language was updated to more accurately describe existing facilities. Sample point 011 was added to the permit to account for waste directly land applied from WSF #4 Klosterman 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: 002- Misc. Solid Manure; 006- WSF Solids; 007- Solid Stacking Pad

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: 005- Feed Storage Area; 008- Stormwater Diversions, and 010- Calf Hutch Area

1.3.1 Changes from Previous Permit

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

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
Develop Emergency Response Plan: Update the written Emergency Response Plan within 30 days of permit coverage& submit to the Department.	09/01/2025

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.	10/01/2025

2.3 Annual Reports

Submit annual reports by January 31 of each year in accordance with the annual reports subsection in standard requirements

Required Action	Due Date
Submit Annual Report #1: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2026
Submit Annual Report #2: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E	01/31/2027
Submit Annual Report #3: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2028
Submit Annual Report #4: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2029
Submit Annual Report #5: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2030
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed.	

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 Waste Storage Facility #4 - Engineering Evaluation

Applicable to sample point 011 (Klosterman Pit)

Required Action	Due Date
Written Report: Submit a written report evaluating the existing manure storage facility's ability to meet the conditions in the Production Area Discharge Limitations and Manure and Process Wastewater Storage subsections and s. NR 243.15, Wis. Adm. Code. (See Standard Requirements for report details.)	06/30/2026
Plans and Specifications: Submit plans and specifications for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code, to permanently correct any adverse manure storage conditions.	12/31/2027
Corrections and Post Construction Documentation: Complete construction on the manure storage facility that permanently corrects any adverse conditions in concurrence with and approval by the Department, by the specified Date Due. Submit post construction documentation within 60 days of completion of the project.	12/31/2028

2.6 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	02/01/2030

2.7 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

Sample Point 011 is being added to the permit and has not previously been evaluated or approved by the department, therefore an engineering evaluation per NR 243.16 is required.

Other Comments

None

Attachments

- 1/24/2025 Conditional NMP Approval Letter
- 2/6/2025 Days of Storage Review Letter
- 7/24/2024 Reissuance Inspection Report
- Public Notice

Justification Of Any Waivers From Permit Application Requirements

N/A, No waivers requested or granted as part of this permit reissuance

Prepared By: Brian Hanson Wastewater Specialist

Date: 6/2/2025



January 24th, 2025

Shawano County
Approval

Greg Tauchen
Tauchen Harmony Valley Inc
N3397 S Broadway Rd
Bonduel, WI 54107

SUBJECT: Conditional Approval of Tauchen Harmony Valley Inc Nutrient Management Plan,
WPDES Permit No. 0059391-06-0

Dear Greg Tauchen:

After completing a review of Tauchen Harmony Valley 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 Tauchen Harmony Valley Inc review the NMP with those individuals involved with manure applications to ensure all remain familiar with the approved manure spreading protocol, spreading maps, field and map verification, record keeping requirements, and all the conditions of this approval. Specifically, some fields in Tauchen Harmony Valley Inc may have:

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

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

FINDINGS OF FACT

The Department confirms that:

1. A current dairy herd size of 1,913 animal units (1,175 milking & dry cows, 225 heifers, and 350 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 15,513,946 gallons of manure and process wastewater and 1,777 tons of solid manure in the first year of the permit term.
3. The use of application restriction options 1 and 5 within surface water quality management areas.

4. The use of phosphorus delivery method P Index.
5. That Tauchen Harmony Valley Inc currently has 2,193.6 acres (1,400.5 owned and 793.1 controlled through contracts, rental agreements or leases, or under manure agreements) of which 2,136.3 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 Tauchen Harmony Valley Inc Nutrient Management Plan subject to the following conditions and the applicable requirements of Ch. NR 243, Wis. Adm. Code:

FIELD AND MANURE MANAGEMENT

1. Fields not included in the NMP and new fields shall not receive manure or process wastewater applications until they have been properly soil sampled, entered into Snap Plus, evaluated for their nutrient needs, and approved by the Department.
2. If existing fields yield a soil test results equal to or greater than 200 ppm P, those fields would be prohibited from receiving manure or process wastewater applications, unless you obtain Department approval in accordance with NR 243.14(5)(b)2., Wis. Adm. Code.
3. All liquid manure samples collected may be analyzed, at a minimum, for percent dry matter, total nitrogen, percent $\text{NH}_4\text{-N}$, percent $\text{NO}_3\text{-N}$, phosphorus, potassium, and sulfur.
4. If manure sample results have a dry matter (DM) content less than 2.0% and the percent ammonium (NH_4^+) is greater than 75% of the total N, Tauchen Harmony Valley Inc may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

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

5. Tauchen Harmony Valley 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.
6. Tauchen Harmony Valley 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 'CAFO Annual Spreading Reports' generated by Snap Plus.

WINTER SPREADING

7. Liquid manure applications during winter conditions, as defined by NR 243.14(7), Wis. Adm. Code, are prohibited with the exception of emergency applications.
8. The following field(s) are approved for winter spreading solid manure, emergency applications of liquid manure and frozen liquid manure:

- Home 2-3-4-5-11
- Russ Z1
- Russ K1-7
- Franks 6-9
- Bill 4-7-9
- Rohloff
- Wnuk 4-8
- Rueckert H5
- Krull

9. 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.
10. Winter applications of liquid manure shall only occur under emergency situations, after notifying the Department and receiving verbal approval.
11. 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

12. No headland stacking sites are approved.

MANURE & PROCESS WASTEWATER IRRIGATION

13. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

14. 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 local permits, zoning and regulatory requirements.

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

Sincerely,



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

cc: Brian Hanson, WDNR Agricultural Runoff Specialist (Brian.Hanson@Wisconsin.gov)

Joe Baeten, WDNR Watershed Field Supervisor (Joseph.Baeten@Wisconsin.gov)
Christopher Clayton, WDNR Runoff Management Section Chief (Christopherr.Clayton@Wisconsin.gov)
Aaron O'Rourke, WDNR Nutrient Management Program Coordinator (Aaron.Orourke@Wisconsin.gov)
Falon French, WDNR Intake Specialist (Falon.French@Wisconsin.gov)
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Kyle Much, Much Crop Consulting Inc (Much.Kyle@gmail.com)
File



2/6/2025

FILE REF: R-2024-0295
WPDES Permit #: WI-0059391

Greg Tauchen
Tauchen Harmony Valley Inc
N3397 Broadway Road
Bonduel, WI 54107

Subject: Days of Storage Review for Tauchen Harmony Valley Inc, E½ of SE ¼ Section 23 Town 26N, Range 17E, in Hartland Township, Shawano County

Dear Mr. Tauchen:

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 Kyle Much (Much Crop Consulting) & Douglas Gatrell (GHD) on December 1, 2024, with revisions received on January 13, 2025 on behalf of Tauchen Harmony Valley 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 the following:

- Without the construction of a new waste storage facility or the ability to obtain additional offsite waste storage, Tauchen Harmony Valley Inc is not in compliance with its permit requirements to have and maintain 180 days of liquid manure storage as required by s. NR 243.14(9) Wis. Adm. Code.

Days of Available Liquid Waste Storage: The submitted information states that Tauchen Harmony Valley Inc has 172 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 1,913. The liquid waste volumes are based on manure hauling logs and a collection period of 365 days. Leachate and first flush of 0.1" is collected from the feed storage area, with the remainder transferred to a biofilter on site.

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	8,573,015	776,193	242,335	0	681,565	6,872,922
#2	461,664	0	0	0	21,471	440,193
Total MOL Vol:						7,313,115
Days of Storage:						172

Year	Gallons Applied	Avg. Yearly AUs	Gallons/AU
2020	15,603,342	1,905	8,191
2021	15,686,600	1,910	8,213
2022	15,423,369	1,910	8,075
2023	15,332,950	1,913	8,015
2024	15,409,080	1,913	8,055
Average Volume/AU			8,110
Average Annual Volume for Current AUs			15,513,946

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, P.E.
CAFO Engineer Supervisor
Watershed Management Program



Brian Hanson
Ag Runoff Management Specialist
Watershed Management Program

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Matt Woodrow; DATCP
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Scott Frank; Shawano County
(715) 526-4820; scott.frank@co.shawano.wi.us



7/24/2024

Greg Tauchen
Tauchen Harmony Valley Inc
N3397 S Broadway Road
Bonduel, WI 54107

WPDES Permit No. WI-0059391-05-0
Shawano County

Subject: 6/19/2024 Permit Compliance Inspection

Dear Mr. Tauchen:

On June 19, 2024, the Department of Natural Resources met with the representatives of Tauchen Harmony Valley Inc. to conduct a full compliance inspection of your facility. 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
Agricultural Runoff Management Specialist

Enc: 6/19/2024 Compliance Inspection Report

ec: Scott Frank - Shawano County LCD
Kyle Much – Much Crop Consulting
Joe Baeten - DNR

CAFO Compliance Inspection Report



Inspection Date: 6/19/2024

Report Final Date: 7/24/2024

Operation Name: Tauchen Harmony Valley Inc

WPDES Permit #: WI-0059391-05-0

Farm Address: **Main Dairy** - N3397 S Broadway Road, Bonduel, WI 54107

On-Site Representative(s): Greg Tauchen & Steve Tauchen

Report Author: Brian Hanson: DNR Agricultural Runoff Specialist

Other Participating Agencies: Kyle Much—Much Crop Consulting, Blake Schuebel —Shawano County

Introduction

On Wednesday June 19, 2024 Hanson met with Tauchen, Tauchen, Much, & Schuebel at 13:00 at Tauchen Harmony Valley Inc site to conduct a permit reissuance walkover inspection. Only the 1 production site was inspected. No liquid precipitation had fallen prior to the inspection, but moderate rainfall did occur during the inspection and the temperature was in the 80's and rainy. No permit violations were observed, and no water samples were collected. Hanson departed at approximately 14:00.

Site Overview Diagram (Main Dairy)



Site Overview Diagram (Tauchen Harmony Valley: orange lines = potential contaminated runoff, blue lines = stormwater flow, pink lines = waste transfer system, yellow circles = well locations)



SITE OBSERVATIONS :

Feedlot Runoff

There are no outdoor feedlots located on the farm at this time. The area previous used as an outdoor lot was abandoned during the previous permit term and is now used for storage.

Calf Hutch Areas (See photos on pages 5-6)

There is 1 calf hutch area located on the farm at this time. The calf hutch area consists of about 85 hutches and the location is rotated 1-2 times per year. After the hutches are removed the area is returned to crop production. The current calf hutch area is located to the west of the heifer barn. The calf hutches are placed directly on the ground and are bedded with sand & straw. The calf hutch area does not have engineered runoff controls. Runoff from this area generally flows to the south into the adjacent crop field. While there was some spilled straw in between the hutches at the time of the inspection, no evidence of current or past discharges were observed leaving the site.

Waste Storage Facilities (See photos on pages 6-10)

There are 3 liquid waste storage facilities located on the farm and 1 permanent solid stacking area.

WSF #1 is the main manure storage for the farm that was last expanded in 2001 and it is located directly north of the freestall barns. WSF #1 is an earthen lined impoundment used to store all of the manure from the freestall barns and parlor wastewater. All manure & wastewater gravity flows to the storage through a series of transfer pipes. There is 1 concrete agitation ramp located on the east side and the rest of the pit is an earthen liner. There was minor erosion present along the edge of the agitation ramp and there was also minor sluffing of the earthen liner on the north side of the pit. In 2020, the farm installed a section breaker rock on top of the earthen liner along the central portion of the north embankment. The purpose of this was to protect the earthen liner by preventing further erosion in this area. At the time of the inspection, the facility looked to be in good working order, but vegetation has begun to grow down the interior embankment. The vegetation on the interior of the pit should be eliminated to reduce the risk of impacting the earthen liner. This can be done by mechanical or chemical methods.

WSF #2 is a concrete tank that was built in 2014 and is located directly beneath the litter alley in the heifer barn. Liquid manure from the heifer barn litter alleys fall through the slatted floor directly into WSF #2. The remainder of the barn is a bedded pack and that manure is hauled out as needed. The tank extends outside the east end of the barn and 2 sections of concrete lid are removed to allow access for the manure pump when emptying the tank.

WSF #3 is a series of 2 concrete tanks that were built in 2013 and are located off the southwest corner of the feed storage area. Leachate & first flush runoff is pumped to these tanks for long term storage. Each tank has about 20,000 gallon capacity. The tanks were designed & constructed with a load out pipe, however that has not been used to directly load spreaders in several years. The farm currently pumps this wastewater via temporary hose to WSF #2 to aid in manure agitation.

The permanent solid storage area is a concrete slab and walls that that was built in 2018 & is located on the west end of the north freestall barn. Bedding from the maternity pens & waste feed from the freestall barns are temporarily stored in this facility. A roof over the structure was added in 2020. This facility was last evaluated in 2022 and required no further action.

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

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

Milking parlor washwater at the dairy is collected and mixed with the manure from the dairy barns. Any liquid from this system is eventually stored in WSF #1.

Feed Storage Area (FSA) Runoff (See photos on pages 11-16)

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 at the southwest corner of the FSA. At this location there is a series of grated surface inlets used to collect all runoff from the pad. This runoff gravity flows to a concrete basin directly southwest of the FSA. Leachate & first flush runoff drop into a small manhole where it is pumped to the adjacent reception tanks (WSF #3) for long term storage. The remainder of the runoff overflows into a designed biofilter which contains a layer of woodchips above a sand filtering layer. Below the sand filtering layer a tile drainage system then transports excess water to the top end of the vegetated treatment area. The VTA contains a gravel spreader bar and flows south towards a wetland area.

At the time of the inspection the runoff controls on the FSA were functioning as intended. The concrete basin was clear of debris and water was flowing into the manhole. The biofilter looked to have recently had the woodchip layer replaced with new material and appeared to be in good working order. The vegetated treatment area was well vegetated and the gravel spreader did not show any signs of concentrated flow channels. Vegetation in the VTA was quite tall and should be cut and harvested as soon as the soil conditions allow.

Except as noted above, the feed storage areas and runoff control systems are well-maintained, in good repair and in compliance with permit requirements.

Animal Mortality Disposal

Mortalities are moved to a designated location and picked up daily as needed by OJ Krull.

Ancillary Service Areas (See photo on page 16)

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 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

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

The permittee provided complete production site inspection records that are required to be retained. Daily Hauling logs, 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 farm currently uses the previous 5 years hauling records to show compliance. The farm is very close to the 180 day requirement and a conversation was had regarding finding or building additional storage in case future manure hauling logs shows an increase in manure production which could drop the farm below 180 days of storage.

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:	6/19/2024 13:45
Photo By:	Brian Hanson
Photo Location:	Calf Hutch Area
Photo Description: Standing in the center of the calf hutch area looking northwest: View of center section of calf hutch area. Notice some bedding located outside of the hutches.	



Photo #:	2
Date/Time of Photo:	6/19/2024 13:45
Photo By:	Brian Hanson
Photo Location:	Calf Hutch Area
Photo Description: Standing on the east side of the calf hutch area looking west: View of center section of calf hutch area.	



Photo #:	3
Date/Time of Photo:	6/19/2024 13:44
Photo By:	Brian Hanson
Photo Location:	Calf Hutch Area
Photo Description: Standing on the south side of the calf hutch area looking west: View of the south edge of calf hutch area. Notice runoff flow path is into existing corn field. No sign of past or current discharges.	



Photo #:	4
Date/Time of Photo:	6/19/2024 13:47
Photo By:	Brian Hanson
Photo Location:	WSF #1
Photo Description: Standing on the west side of WSF #1 looking east: View of southwest corner of WSF #1.	



Photo #:	5
Date/Time of Photo:	6/19/2024 13:48
Photo By:	Brian Hanson
Photo Location:	WSF #1
Photo Description: Standing on the west side of WSF #1 looking east: View of northwest corner of WSF #1.	



Photo #:	6
Date/Time of Photo:	6/19/2024 13:48
Photo By:	Brian Hanson
Photo Location:	WSF #1
Photo Description: Standing on the north side of WSF #1 looking south: View of west end of WSF #1.	



Photo #:	7
Date/Time of Photo:	6/19/2024 13:48
Photo By:	Brian Hanson
Photo Location:	WSF #1

Photo Description:

Standing on the north side of WSF #1 looking southwest: View of center section of WSF #1.



Photo #:	8
Date/Time of Photo:	6/19/2024 13:49
Photo By:	Brian Hanson
Photo Location:	WSF #1

Photo Description:

Standing on the east side of WSF #1 looking west: View of northeast corner of WSF #1.



Photo #:	9
Date/Time of Photo:	6/19/2024 13:49
Photo By:	Brian Hanson
Photo Location:	WSF #1
Photo Description: Standing on the east side of WSF #1 looking west: View of southeast corner of WSF #1.	



Photo #:	10
Date/Time of Photo:	6/19/2024 13:43
Photo By:	Brian Hanson
Photo Location:	WSF #2
Photo Description: Standing on the east side of heifer barn looking west: View of slatted floor in litter alley that acts as a cover for WSF #2.	



Photo #:	11
Date/Time of Photo:	6/19/2024 13:43
Photo By:	Brian Hanson
Photo Location:	WSF #2
Photo Description:	
Standing on the east side of WSF #2 looking north: View of east end of WSF #2. Chain used to measure depth highlighted.	

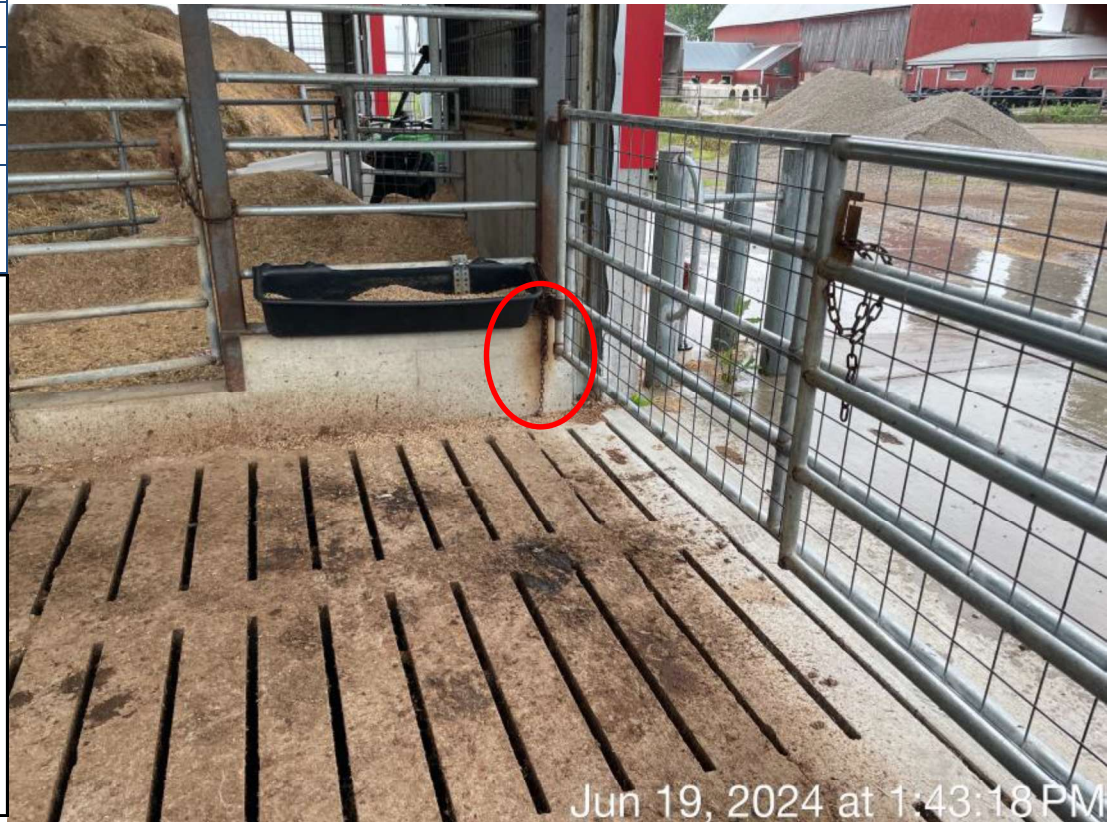


Photo #:	12
Date/Time of Photo:	6/19/2024 13:47
Photo By:	Brian Hanson
Photo Location:	Solids Stacking Area
Photo Description:	
Standing on the west side of the north freestall barn looking north: View of roofed solids stacking area used to temporarily store solid manure & bedded pack from the maternity area.	



Photo #:	13
Date/Time of Photo:	6/19/2024 13:38
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area
Photo Description: Standing on the west side of the FSA looking north: View of the west edge of FSA.	



Photo #:	14
Date/Time of Photo:	6/19/2024 13:39
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area
Photo Description: Standing in the center of the FSA looking north: View of center section of FSA. Floor is free of major cracks and appears to be in good working order.	



Photo #:	15
Date/Time of Photo:	6/19/2024 13:40
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. Arrows indicate direction of runoff flow.	



Photo #:	16
Date/Time of Photo:	6/19/2024 13:40
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area
Photo Description: Standing on the east side of FSA looking south: View of southeast corner of FSA. Arrows indicate direction of runoff flow.	



Photo #:	17
Date/Time of Photo:	6/19/2024 13:39
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area
Photo Description: Standing on south side of FSA looking west: View of south edge of FSA. Arrows indicate direction of runoff flow.	



Photo #:	18
Date/Time of Photo:	6/19/2024 13:38
Photo By:	Brian Hanson
Photo Location:	Feed Storage Area
Photo Description: Standing in the southwest corner of FSA looking southwest: View of southwest corner of FSA where runoff enter one of 2 surface inlets highlighted by red arrows.	



Photo #:	19
Date/Time of Photo:	6/19/2024 13:41
Photo By:	Brian Hanson
Photo Location:	FSA Runoff Controls

Photo Description:

Standing at the northeast corner of the reception tanks & biofilter looking west: View of outlet basin for FSA runoff controls. Notice biofilter in background.



Photo #:	20
Date/Time of Photo:	6/19/2024 13:41
Photo By:	Brian Hanson
Photo Location:	FSA Runoff Controls

Photo Description:

Standing at the northeast corner of the reception tanks & biofilter looking west: View of outlet basin for FSA runoff controls. Notice 2 green outlet pipe that convey runoff from the feedpad to this basin. Inlet at red arrows directs first flush into reception tanks to be stored. Remaining runoff overflows to biofilter.



Photo #:	21
Date/Time of Photo:	6/19/2024 13:41
Photo By:	Brian Hanson
Photo Location:	FSA Runoff Controls
Photo Description: Standing on the west side of the biofilter looking east: View of concrete basin used as a biofilter for FSA runoff. Notice wood biofilter had recently been changed.	



Photo #:	22
Date/Time of Photo:	6/19/2024 13:42
Photo By:	Brian Hanson
Photo Location:	FSA Runoff Controls
Photo Description: Standing on the south side of biofilter looking south: View of vegetated treatment area (VTA) on south side of biofilter. After runoff passes through the biofilter, it is directed to this VTA via gravity outlet pipes.	



Photo #:	23
Date/Time of Photo:	6/19/2024 13:40
Photo By:	Brian Hanson
Photo Location:	Hay Storage Shed
Photo Description:	
Standing on the north side of FSA looking northwest: View of storage shed on north side of Feed Storage used to store dry hay and equipment.	



Photo #:	24
Date/Time of Photo:	6/19/2024 13:49
Photo By:	Brian Hanson
Photo Location:	Stormwater
Photo Description:	
Standing at the southeast corner of WSF #1 looking west: View of stormwater channel between the freestall barn & WSF #1. Area is well vegetated & shows no sign of erosion or discharges.	



Photo #:

25

Date/Time of Photo:

6/19/2024 13:15

Photo By:

Brian Hanson

Photo Location:

Office Records

Photo Description:

View of current year Nutrient Management Plan stored in the office.

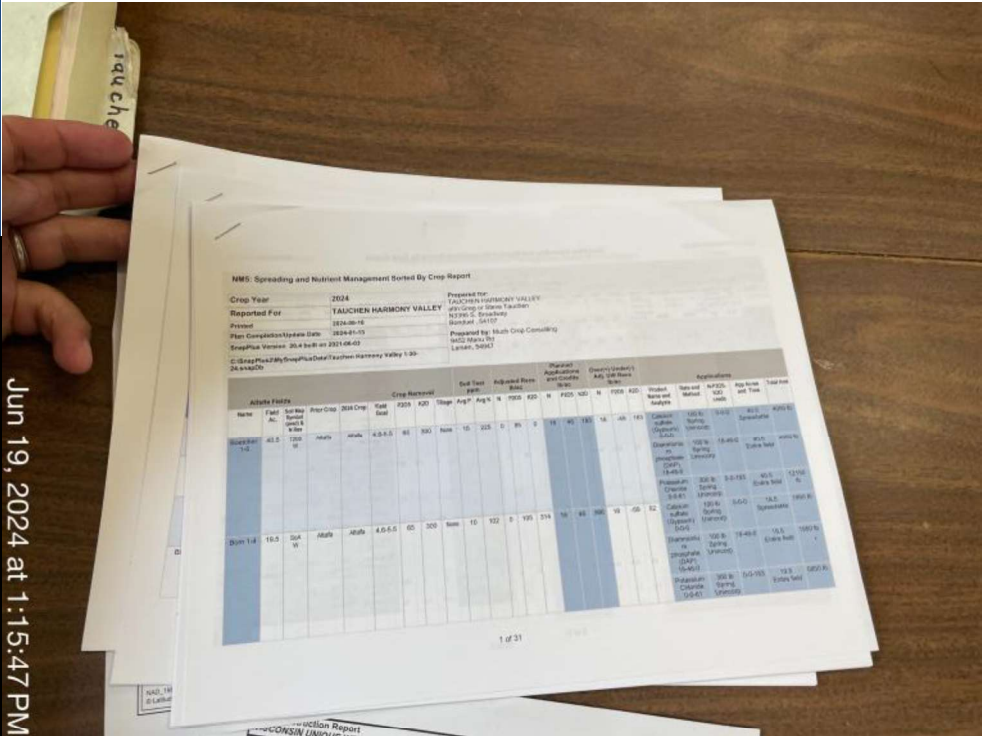


Photo #:

26

Date/Time of Photo:

6/19/2024 13:54

Photo By:

Brian Hanson

Photo Location:

Photo Description:

View of CAFO Calendar used to record daily weekly & quarterly observations per the monitoring & inspection program.

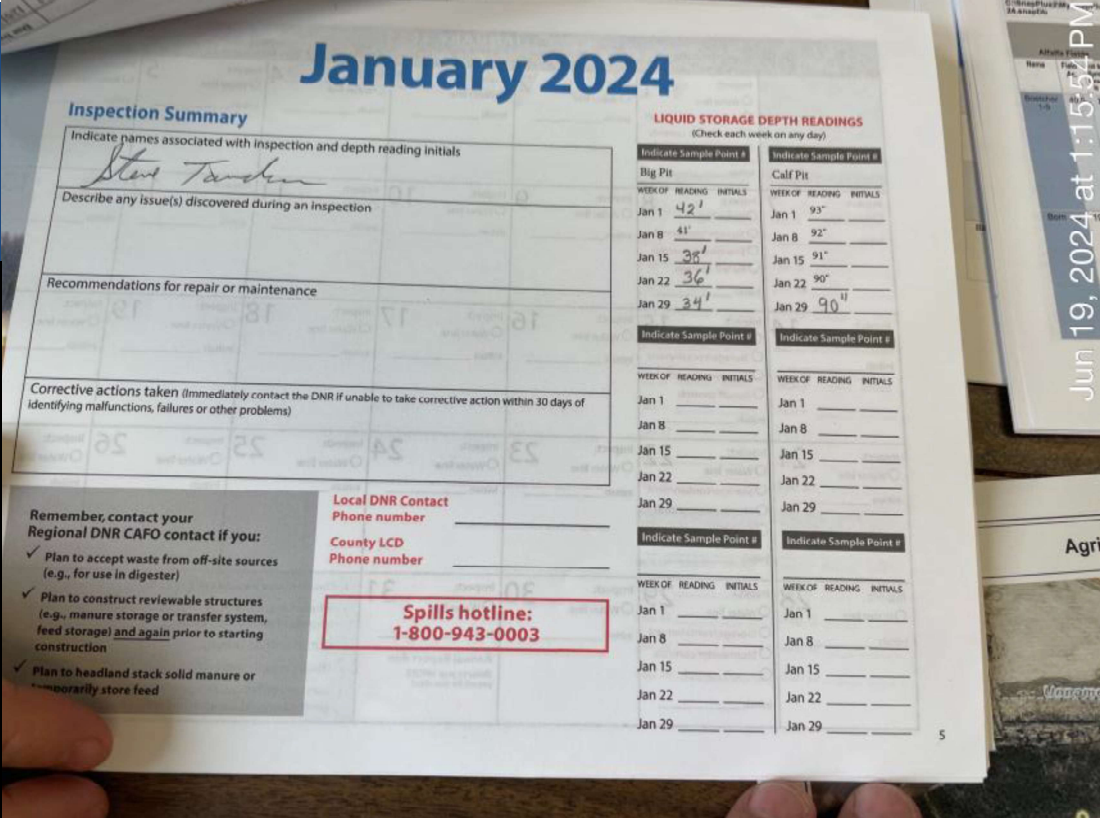


Photo #:	27
Date/Time of Photo:	6/19/2024 13:35
Photo By:	Brian Hanson
Photo Location:	Well Locations
Photo Description: Standing on the west side of the parlor looking east: View of well KV188 located next to the bulk tanks of the parlor.	



Photo #:	28
Date/Time of Photo:	6/19/2024 13:35
Photo By:	Brian Hanson
Photo Location:	Well Locations
Photo Description: Standing on the west side of the parlor looking west: View of well QO850 located in the grassy area west of the parlor.	



Photo #:	29
Date/Time of Photo:	6/19/2024 13:37
Photo By:	Brian Hanson
Photo Location:	Well Locations

Photo Description:

Standing on the east side of the house looking west: View of well 8EC692 off the northeast corner of house. This may also be the same well as an inventoried well GW453 that has the same depth, 85'.



SUMMARY:

Substantial Compliance

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

Areas of Concern

- The calf hutch area does not have engineered runoff controls and has the potential to have an unpermitted discharge. The farm should continue to monitor this area for any signs of a discharge and implement any actions needed if one does occur.
- WSF #1 was last constructed in 2001. Evidence of minor erosion of the earthen liner was visible & the farm should continue to monitor the liner integrity to prevent any discharge or liner failure. Vegetation had also started to establish itself along the interior berm of the facility. Excessive root growth from grasses or woody vegetation can negatively impact the integrity of earthen liners. This vegetation should be removed via mechanical or chemical methods.
- The farm currently uses the previous 5 years hauling records to show compliance with the 180 days of storage requirement. The farm is currently very close to the 180 day requirement and a conversation was had regarding the scenario where future manure hauling logs may show an increase in manure production which could subsequently drop the farm below 180 days of storage. The department recommends the farm monitor yearly manure hauling logs & develop a contingency plan if this were to happen.

Permit Violations

- No violations were observed during the inspection.

Action Items

- The vegetation on the interior of the pit should be eliminated to reduce the risk of impacting the earthen liner. This can be done by mechanical or chemical methods.
- Submit permit reissuance application in accordance with permit schedule deadline. Current due date is 12/1/2024.

Required in Next Permit Term

- Possible engineering evaluation of WSF #1.

Expansion Plans:

- The farm has no expansion plans at this time.

SUMMARY:

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)