Permit Fact Sheet

General Information

Permit Number:	WI-0063568-04-0
Permittee Name:	Quonset Farms LLC
Address:	W3018 Wilson Lima Road
City/State/Zip:	Oostburg WI 53070
Discharge Location:	Unnamed tributaries within the Onion River Watershed, and groundwater of the state
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.)	2	0	0	0	
Milking and Dry Cows	1723	1760	0	0	
Heifers (400 lbs. to 800 lbs.)	57	95	0	0	
Heifers (800 lbs. to 1200 lbs.)	56	51	0	0	
Total	1838	1760	0	0	

Facility Description

Quonset Farms LLP is an existing Concentrated Animal Feed Operations (CAFO) for dairy cattle located in the Town of Lima in Sheboygan County, Wisconsin. Quonset Farms consists of one production site located at W3018 Wilson Lima Road, Oostburg, WI 53070 and is owned and operated by Scott Hesselink. The current herd size is 1,839 animal units (1,231 milking/dry cows, 10 calves, and 146 heifers). There is no expansion planned over the upcoming permit term. Approximately 15.6 million gallons of liquid manure and process wastewater, and 1,100 tons of solid manure is produced annually at the current herd size. Quonset Farms has approximately 209 days of storage capacity. Quonset Farms owns or rents 1,690 acres of cropland, of which approximately 1,839 acres are available for manure application.

Substantial Compliance Determination

After a desk top review of all compliance schedule items, and a site visit on October 31, 2024, this facility has been found to be in substantial compliance with their current permit.

Compliance determination entered by Danielle Block on 06/03/2024.

Sample Point Designation For Animal Waste		
Sample Point Number	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**	
001	WSF 1: Sample point 001 is for liquid waste storage facility 1 (WSF 1) located at the Main Site. WSF 1 is an earthen storage facility. The facility has a maximum operating level (MOL) of 3,545,595 gallons and was constructed in 1995. This storage accepts manure and process wastewater from freestall barns. WSF 1 was last evaluated in 2010.	
002	WSF 3 (Reception Tank T4): Sample point 002 is for liquid waste storage facility 3 (WSF 3) located at the Main Site. WSF 3 is a concrete reception tank storage located under the holding area. The facility has a maximum operating level (MOL) 503,935 gallons was constructed in 1990. This storage accepts manure and process wastewater from the holding area. WSF 3 was last evaluated in 2010.	
004	Solid Manure: Sample point 004 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 hutch manure, maternity pen bedpack, heifer bedpack, steer manure, etc. Representative samples shall be taken for each manure source type.	
005	Feed Storage Area & Runoff Control System: Sample point 005 is for visual monitoring and inspection of the feed storage area and associated runoff control system. Proper operation and maintenance is required to ensure to ensure discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program.	
006	Headland Stacking Sites: Sample point 006 is for solid manure stacked in approved headland stacking locations. Representative samples shall be taken of this manure prior to land application. Note: Headland stacking sites are subject to production site discharge limitations; weekly visual monitoring is required during use of stacking sites to ensure discharges meet permit requirements.	
007	WSF 2: Sample point 007 is for liquid waste storage facility 2 (WSF 2) located at the Main Site. WSF 2 is a concrete-soil composite liner storage with a ramp for the removal of solids. The facility has a maximum operating level (MOL) of 5,561,971 gallons and was constructed in 2016 and post construction documentation was received. This storage accepts manure and process wastewater from the freestall barns.	
008	WSF 4: Sample point 008 is for solid waste storage facility 4 (WSF 4) located at the Main Site. WSF 4 is a three-sided concrete storage bunker located to the north of the calf barn. The facility has a minimum storage volume of 800 tons and was constructed in 2012; post construction documentation was received in 2016. WSF 4 stores bedded pack solid waste from freestall barns.	
009	Settled Solid Manure: Sample point 009 is for any manure solids removed from bottom of liquid waste storage facilities. This includes manure-laden sand solids, manure fiber solids, etc. Representative samples shall be taken from each waste storage facility.	
010	Storm Water Runoff Control System: Sample point 010 is for visual monitoring and inspection of all production site storm water conveyance systems. This includes roof gutter and downspout structures, drainage tile systems, grassed waterways and other diversion systems that transport uncontaminated storm water. Proper operation and maintenance is required to keep uncontaminated runoff diverted away from manure and process wastewater handling systems. Weekly inspections are required and shall be recorded according to monitoring program.	

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 6.9 months 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 1839 AU (1,231 milking & dry cows, 146 heifers, and 10 calves), it is estimated that approximately 15,651,807 gallons and 1,100 tons of manure and process wastewater will be produced per year. The permittee owns *approximately 1,144* acres of cropland and rents about 546 acres. Given the rotation commonly used by the permittee, 1,839 acres are available (or open) to receive manure and process wastewater on an annual basis. The permit requires all landspreading of manure and process wastewater be completed in accordance with an approved nutrient management plan. The permit will require sampling and analysis of manure and process wastewater that will be landspread. Landspreading rates must be adjusted based on sample analysis. The permit requires the permittee to maintain a daily log that documents landspreading activities. The permit also requires the submittal of an annual report that summarizes all landspreading activities. Plans must be updated annually to reflect cropping plans and other operational changes. Among the requirements, the plans must include detailed landspreading information including field by field nutrient budgets.
The permittee is required to implement a number or practices to address potential water quality impacts associated with the land application of manure and process wastewater. Among the permit conditions are restrictions on manure ponding, restrictions on runoff of manure and process wastewater from cropped fields, and setbacks from wells and direct conduits

to groundwater (e.g., sinkholes, fractured bedrock at the surface). In addition, the permittee must implement a phosphorus based nutrient management plan that addresses phosphorus delivery to surface waters by basing manure and process wastewater applications on soil test phosphorus levels or the Wisconsin Phosphorus index. Additional phosphorus application restrictions apply to fields that are high in soil test phosphorus (>100 ppm).

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

In addition, the permittee must comply with restrictions on land application of manure and process wastewater on frozen or snow-covered ground. Included in these restrictions is a prohibition on surface applications of solid manure (≥12% solids) on frozen or snow-covered ground during February and March. Beginning September 1, 2024, non-emergency surface applications of liquid manure (<12%) on frozen or snow-covered ground are prohibited.

Monitoring and Sampling Requirements

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

Sampling Points

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

Sample Point Number: 001- WSF 1; 002- WSF 3 (Reception Tank T4); 007- WSF 2

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

No changes

1.1.2 Explanation of Operation and Management Requirements

Wastes shall be stored and land applied according to permit and nutrient management requirements.

Sample Point Number: 004- Solid Manure; 006- Headland Stacking Sites; 008- WSF 4; 009- Settled Solid Manure

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

1.1.3 Changes from Previous Permit

No changes

1.1.4 Explanation of Operation and Management Requirements

Wastes shall be stored and land applied according to permit and nutrient management requirements.

Sample Point Number: 005- Feed Storage & Runoff Controls and 010- Storm Water Runoff Controls

1.1.5 Changes from Previous Permit

No changes

1.1.6 Explanation of Operation and Management Requirements

There is no required sampling for the runoff controls. Rather, there is required inspection and routine maintenance that should be recorded on a monitoring and inspection sheet or calendar. A copy of the record of inspection shall be submitted with the Annual Report.

2 Schedules

2.1 Emergency Response Plan

Required Action	Due Date
Develop Emergency Response Plan: Develop a written Emergency Response Plan within 30 days of permit coverage, available to the Department upon request.	10/01/2024

2.2 Monitoring & Inspection Program

Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the Monitoring and Sampling Requirements subsection, the permittee shall submit a proposed monitoring and inspection program within 90 days of the effective date of this permit.	12/01/2024

2.3 Annual Reports

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

Required Action	Due Date
Submit Annual Report #1:	01/31/2025
Submit Annual Report #2:	01/31/2026
Submit Annual Report #3:	01/31/2027
Submit Annual Report #4:	01/31/2028
Submit Annual Report #5:	01/31/2029
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed.	

2.4 Nutrient Management Plan

Required Action	Due Date
Management Plan Annual Update #1: Submit an Annual Update to the Nutrient Management Plan by March 31st of each year. Note: In addition to Annual Updates, submit Management Plan Amendments to the Department for written approval prior to implementation of any changes to nutrient management practices, in accordance with the Nutrient Management requirements in the Livestock Operational and Sampling Requirements section.	03/31/2025
Management Plan Annual Update #2: Submit an Annual Update to the Nutrient Management Plan.	03/31/2026
Management Plan Annual Update #3: Submit an Annual Update to the Nutrient Management Plan.	03/31/2027
Management Plan Annual Update #4: Submit an Annual Update to the Nutrient Management Plan.	03/31/2028
Management Plan Annual Update #5: Submit an Annual Update to the Nutrient Management Plan.	03/31/2029

Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

2.5 Manure Storage Facility - Engineering Evaluation

For WSF 1 (S001) and Reception Tank T4 (S002)

Required Action	Due Date
Retain Expert: Retain a qualified expert to complete an engineering evaluation for the WSF1 and Reception Tank manure storage facility and report the name of the expert to the Department.	12/01/2024
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.)	02/01/2026
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.	09/01/2026
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.	02/28/2029

2.7 Explanation of Schedules

Schedules are included in the permit to monitor and fulfill requirements of permit discharge limitations, and to ensure compliance with s. NR 243, Wis. Admin. Code, requirements.

Special Reporting Requirements

NA

Attachments:

Expiration Date:

August 31, 2029

Justification Of Any Waivers From Permit Application Requirements

NA

Prepared By: Danielle Block Agricultural Runoff Management Specialist **Date:06/03/2024**

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