

# Bomaz Farms - Permit Fact Sheet

## General Information

Permit Number	WI-0064505-04-0
Permittee Name and Address	Bomaz Farms 426 165 Street, Hammond, WI 54015
Permitted Facility Name and Address	Bomaz Farms 426 165 <sup>th</sup> , Street Hammond, WI 54015
Permit Term	July 01, 2026 to June 30, 2031
Discharge Location	Pleasant Valley Township
Receiving Water	Unnamed Tributary to Parker Creek
Discharge Type	Existing Source CAFO since 2010

Animal Units					
	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	2240	2288	2240	2288	02/03/2028
Heifers (400 lbs. to 800 lbs.)	210	350	30	50	02/03/2028
Heifers (800 lbs. to 1200 lbs.)	385	350	385	350	02/03/2028
Total	2905	2288	2655	2288	

## Facility Description

Bomaz Farms is an existing Concentrated Animal Feeding Operation (CAFO) dairy farm in St. Croix County, within the township of Pleasant Valley. The dairy has been a permitted CAFO since August 2010 and is owned/operated by Bob Zwald, Tom Zwald, and Annette Schalla of the Zwald Family. The dairy houses 1,600 milking/dry cows, 600 heifers, and 350 calves (~2,905 animal units). The dairy is not proposing to expand during the next five-year permit term.

Bomaz Farms consists of two sites: Main Dairy Site and Heifer Site. The Main Dairy Site consists of cow barns; rotary milking parlor; feed storage pad; three waste storage facilities; mortality composting pad; sand settling lane, and sand stacking bunker. The Heifer Site consists of multiple heifer sheds, two concrete heifer lots, calf hutch housing area, and Slurry Store.

## Substantial Compliance Determination

**Enforcement During Last Permit:** Bomaz Farms was issued a Notice of Noncompliance letter on October 18, 2024. This letter was issued due to manure leaving the field boundary during a fall manure application. This incident was self-reported and did not impact surface water.

After the review of all submitted reports, permit reissuance application materials, and a site inspection in 2025, Bomaz Farms has been found to be in substantial compliance with their current permit.

Compliance determination made by Jeff Jackson – DNR Agricultural Runoff Specialist on April 21, 2026.

## Sample Point Descriptions

Sample Point Designation For Animal Waste	
Sample Point Number	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
001	WSF-1: Sample Point 001 is for liquid manure from waste storage facility 1 (WSF-1), located at the Main Dairy Site. WSF-1 is a clay-lined storage structure located east of the sand settling lane. The facility has a capacity of approximately 3.2 million gallons and was constructed in 1996. This storage structure accepts manure and process wastewater produced at the Main Dairy.
002	WSF-2: Sample Point 002 is for liquid manure from waste storage facility 2 (WSF-2) located at the Main Dairy Site. WSF-2 is a clay-lined storage structure located north of the feed storage pad. The structure has a capacity of approximately 10.4 million gallons and was constructed in 2011. This storage accepts manure and process wastewater produced at the Main Dairy.
003	Slurry Store: Sample Point 003 is for liquid manure from the Slurry Store located at the Heifer Site. The Slurry Store is an above ground storage structure located east of the outdoor heifer lots. The structure has a capacity of approximately 726,000 gallons and was constructed in 1985. This storage accepts manure and feedlot runoff from the operation’s outdoor concrete heifer lots. In 2019 Bomaz Farms replaced transfer pipes associated with the structure.
004	Composting Pad: Sample Point 004 is for material from the composting pad that is directly land applied. This pad is located south of WSF-2. This structure is an unroofed concrete pad constructed in 2016. Runoff from the structure gravity flows to WSF-2.
005	Sand Lane and Stacking Apron: Sample point 005 is for visual monitoring and inspection of the sand land and stacking aprons. Proper operation and maintenance are required to ensure structures are kept in good working shape and ensure any discharges meet permit requirements. Weekly inspections are required and shall be recorded in accordance with the farm’s monitoring program.
006	WSF-4: Sample Point 006 is for liquid manure from waste storage facility 4 (WSF-4) located at the Main Dairy Site. WSF-4 is a concrete-lined storage structure located north of WSF-2. The structure was constructed in 2020 and has a volume capacity of approximately 22.5 million gallons. This storage will accept manure and process wastewater produced at the Main Dairy.
007	Miscellaneous Solids: Sample Point 007 is for all other solid sources produced by the operation and land applied. Materials include waste feed, calf manure, maternity pen pack, solid heifer manure, manure laden sand, settled solids removed from a waste storage facility, etc. Representative samples shall be taken for each manure source type.
008	Headland Stacking: Sample Point 008 is for solid manure stacked on approved headland stacking locations. Representative samples shall be taken of this material prior to land application. Note: Headland

<b>Sample Point Designation For Animal Waste</b>	
<b>Sample Point Number</b>	<b>Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)</b>
	stacking sites are subject to production site discharge limitations; weekly visual monitoring is required during use of stacking sites to ensure discharges to waters of the state do not occur.
010	Feed Storage Pad: Sample Point 010 is for visual monitoring and inspection of the feed storage pad and associated runoff control system located at the Main Dairy Site. Proper operation and maintenance are required to ensure any pollutant discharges meet permit requirements. Weekly inspections are required and shall be recorded according to monitoring program.
011	Stormwater Controls: Sample Point 011 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 are 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.
012	Outdoor Animal Lots & Runoff Control System: Sample Point 012 is for visual monitoring and inspection of the outdoor heifer lots, along with the associated runoff control systems located at the Bomaz Heifer Site. Outdoor animal lot runoff is pumped into waste storage facility 003 – “Slurry Store”. Proper operation and maintenance are required to ensure discharges to waters of the state do not occur. Weekly inspections are required and shall be recorded according to monitoring program.
013	Stacking Bunker at Heifer Site: Sample point 013 is for solid manure stored in the stacking bunker at the Heifer Site. This structure has concrete walls and floor with roughly a 35-foot by 65-foot stacking area. Representative samples shall be taken of this material prior to land application.
014	Sand Stacking Bunker & Runoff Control System - Sample point 014 is for visual monitoring and inspection of the sand stacking bunker, along with the associated runoff control system located at the Main Dairy Site. Weekly inspections are required and shall be recorded according to monitoring program.
015	Calf Hutch Housing Area: Sample point 015 is for visual monitoring and inspection of the calf hutch housing area. Proper operation and maintenance are required to prevent unlawful pollutant discharges. Weekly inspections are required and shall be recorded according to the farm's monitoring program.

## **Permit Requirements**

### **1 Livestock Operations - Proposed Operation and Management**

#### **Production Area Discharge Limitations**

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

#### **Runoff Control**

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

### **Manure and Process Wastewater Storage**

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

The permittee currently has approximately 467 days of storage for liquid manure. The permittee must maintain 180 days of storage, unless temporary reductions in required storage are approved by the Department.

### **Solid Manure Stacking**

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

### **Ancillary Service and Storage Areas**

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

### **Nutrient Management**

Based on current herd size, it is estimated that approximately 27.6 million gallons of manure and process wastewater will be produced per year. The permittee has 3,364.4 acres of cropland in the nutrient management plan. Of these acres, roughly 3,243.7 acres are available (or open) to receive manure and process wastewater. The permit requires all landspreading of manure and process wastewater to 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. Non-emergency surface applications of liquid manure ( $< 12\%$ ) on frozen or snow-covered ground are prohibited.

**Monitoring and Sampling Requirements**

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

**Sampling Points**

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

**1.1 Sample Point Number: 001- WSF-1; 002- WSF-2; 003- Slurry Store; 006- WSF-4**

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 from the previous permit

**1.1.2 Explanation of Operation and Management Requirements**

Permit sampling requirements for these structures have not changed from the previous permit. Liquid manure and process wastewater must be properly stored, sampled, and land applied in accordance with the farm’s nutrient management plan.

**1.2 Sample Point Number: 004- Compost pad; 007- Miscellaneous Solids; 008- Headland Stacking Sites; 013- Stacking Bunker (Heifer Site)**

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 013 has been added and will represent solid manure from the stacking bunker at the Heifer Site.

### 1.2.2 Explanation of Operation and Management Requirements

Solid manure must be properly stored, sampled and land applied in accordance with the Bomaz Farms nutrient management plan.

## 1.3 Sample Point Number: 005- Sand Lane & Stacking Apron; 010- Feed Storage Pad & Runoff; 011- Stormwater Controls; 012- Outdoor Animal Lots; 014- Sand Stacking Bunker, and 015- Calf Hutch Housing Area

### 1.3.1 Changes from Previous Permit

Sample Point 014 has been added to reflect the sand stacking bunker that was built in 2020.

### 1.3.2 Explanation of Operation and Management Requirements

There is no required nutrient sampling for the runoff control sample points. Rather, weekly or quarterly inspections are required and shall be recorded according to the monitoring plan and submitted with the Annual Reports.

## 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.	07/30/2026

### 2.2 Explanation of Schedules

An emergency response plan is required to be developed per s. NR 243.13(6)(a) Wis. Admin. Code.

## 2.3 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 30 days of the effective date of this permit.	07/30/2026

## 2.4 Explanation of Schedules

A monitoring and inspection program is required to be submitted per s. NR 243.19(1) Wis. Admin. Code.

## 2.5 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.	01/31/2027
Submit Annual Report #2: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2028
Submit Annual Report #3: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2029
Submit Annual Report #4: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2030
Submit Annual Report #5: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2031
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed.	

## 2.6 Explanation of Schedules

Annual reports are required to be submitted per s. NR 243.19(3) Wis. Admin. Code.

## 2.7 Nutrient Management Plan - Updates

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
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.	03/31/2027

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.	03/31/2028
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.	03/31/2029
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.	03/31/2030
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.	03/31/2031
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

## 2.8 Explanation of Schedules

Nutrient management plan updates are required to be submitted per s. NR 243.19(3) Wis. Admin. Code.

## 2.9 Manure Storage Facility - Engineering Evaluation

This permit section pertains to the engineering evaluation of WSF-1.

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.)	12/31/2027
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.	08/31/2028
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.	11/30/2029

## 2.10 Explanation of Schedules

Engineering evaluation of WSF-1 has been included per s. NR243.16(2) Wis. Admin. Code. This structure was built in 1996.

## 2.11 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	01/01/2031

## 2.12 Explanation of Schedules

A permit reissuance application is required per s. NR243.12(1)(d) Wis. Admin. Code.

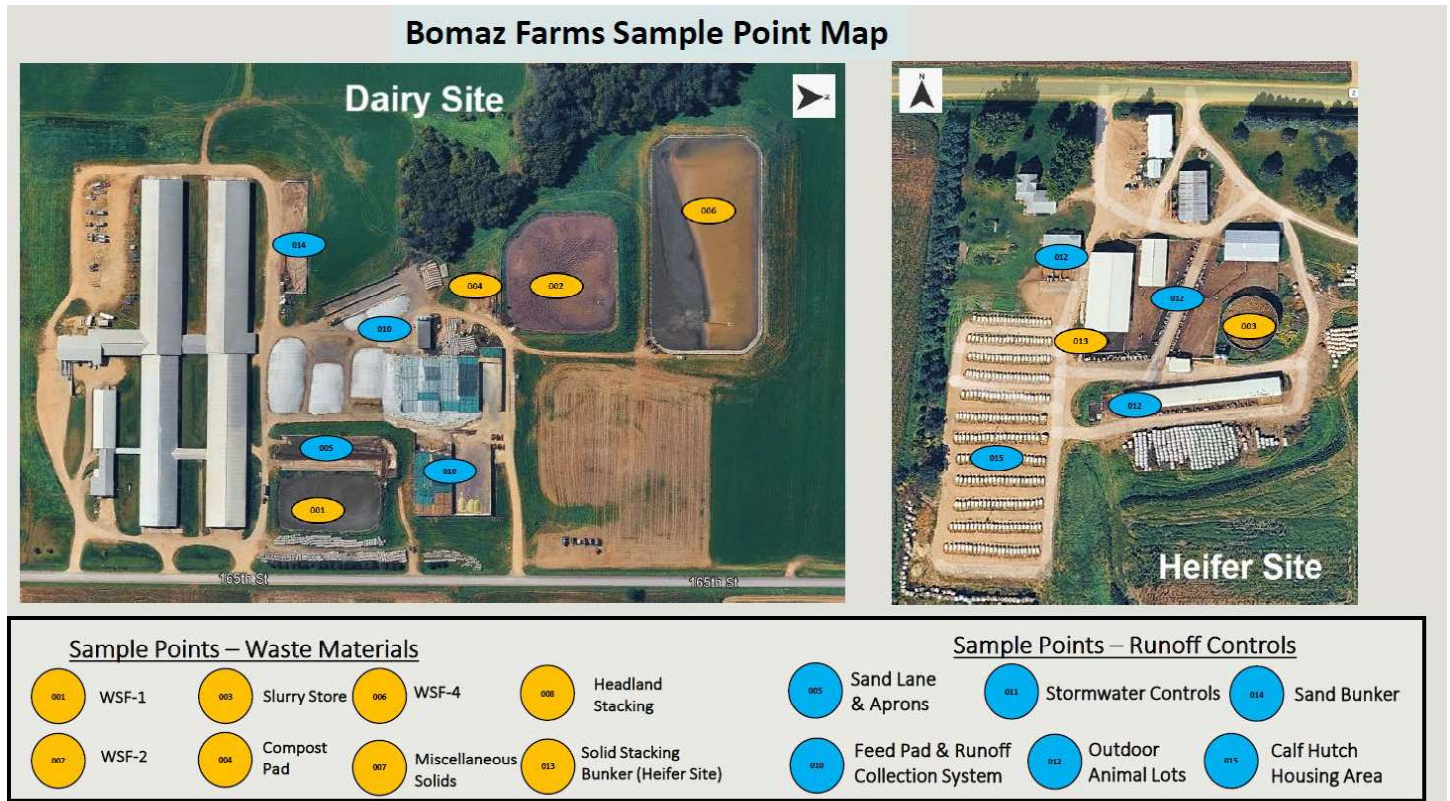
Attachments:

- Bomaz Farms Sample Point Map
- Conditional Nutrient Management Plan Approval Letter
- Days of Storage Review Letter

Prepared By: Jeff Jackson

Agricultural Runoff Specialist

Date: April 21, 2026





April 8, 2026

St. Croix County  
Approval

Tom Zwald  
Bomaz Farms  
426 165 St.  
Hammond, WI 54015

SUBJECT: Conditional Approval of Bomaz Farms Nutrient Management Plan, WPDES Permit No. 0064505-04-0

Dear Mr. Zwald:

After completing a review of Bomaz Farms 2026-2030 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 Bomaz Farms 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 2,905 animal units (1,600 milking & dry cows, 600 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 27,599,563 gallons of manure and process wastewater and 2,000 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 Bomaz Farms currently has 3,364.4 acres (911.4 owned and 2,453 controlled through contracts, rental agreements or leases, or under manure agreements) of which 3,243.7 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 2026-2030 Bomaz Farms 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:
  - Home16 (default soil test)

If Bomaz Farms 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<sub>4</sub>-N, percent NO<sub>3</sub>-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<sub>4</sub><sup>+</sup>) is greater than 75% of the total N, Bomaz Farms may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

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

6. Bomaz Farms 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. Bomaz Farms 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:

- |                 |            |                 |
|-----------------|------------|-----------------|
| - Home 2        | - Home 3   | - Home 5        |
| - Home 6        | - Home 7   | - Austrum north |
| - Austrum South | - Roeker 3 | - Roeker East   |
| - Roeker West   | - Hages    |                 |

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

- |                              |   |                              |
|------------------------------|---|------------------------------|
| - Home 1 (lack of acreage)   | - Home 4 (lack of acreage)                          | - Roeker 1 (lack of acreage) |
| - Roeker 2 (lack of acreage) | - Ammeter (location of acreage and lack of acreage) |                              |

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

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

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

#### HEADLAND STACKING

14. The following sites are approved for winter and non-winter headland stacking of >32% only during February, March, July, August, and September:

- |                |   |  |
|----------------|---|--|
| - Roekers West | - Austrums South                                | - Ham 1  |
| - Ham 3        | - Roekers 3                                     | - Home 102                                     |
| - Home 2       | - Home 3  | - Home 5                                       |
| - Home 6       | - Home 7  | - Home 13                                      |
| - J4           | - S30   | - S32  |
| - S9           | - S10   | - S20 ( <b>Except for the month of March</b> ) |
| - Soldberg 2   | - Soldberg 1                                    | - W5 ( <b>Except for the month of March</b> )  |
| - W8           | - Webb ( <b>Except for the month of March</b> ) | - W2 ( <b>Except for the month of March</b> )  |

15. The following sites are denied for headland stacking of solid manure:

- |  |   |                            |
|--|---|----------------------------|
| - Arnie 2 (shallow to GW restrictions) | - Home 22 (does not meet required setbacks) | - SP2 (slope restrictions) |
| - 04 (No map provided)                 |   |                            |

#### MANURE & PROCESS WASTEWATER IRRIGATION

16. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

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

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

Please keep in mind that approval by the Department of Natural Resources – Runoff Management Program does not relieve you of obligations to meet all other applicable federal, state or local 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](mailto:Aaron.Orourke@Wisconsin.gov).

Sincerely,



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

cc: Jeffrey Jackson, WDNR Agricultural Runoff Specialist ([Jeffrey.Jackson@Wisconsin.gov](mailto:Jeffrey.Jackson@Wisconsin.gov))  
Brad Johnson, WDNR Watershed Field Supervisor ([BradleyA.Johnson@Wisconsin.gov](mailto:BradleyA.Johnson@Wisconsin.gov))  
Joe Baeten, WDNR Ag Runoff Section Chief ([Joseph.Baeten@Wisconsin.gov](mailto:Joseph.Baeten@Wisconsin.gov))  
Ashley Scheel, WDNR CAFO NMP Reviewer ([Ashley.Scheel@Wisconsin.gov](mailto:Ashley.Scheel@Wisconsin.gov))  
Falon French, WDNR Intake Specialist ([Falon.French@Wisconsin.gov](mailto:Falon.French@Wisconsin.gov))  
Josh O'Neil, St. Croix County ([Josh.Oneil@sccwi.gov](mailto:Josh.Oneil@sccwi.gov))  
Greg Alire, Ag Strategies ([greg@agstratllc.com](mailto:greg@agstratllc.com))  
File



March 16, 2026

FILE REF: R-2025-0307  
 WPDES Permit #: WI-0064505

Tom Zwald  
 Bomaz Farms  
 426 165th St  
 Hammond, WI 54015

Subject: Days of Storage Review for Bomaz Farms SE¼ of T28N, R17W, Section 08 in Pleasant Valley Township, St. Croix County – NO ADDITIONAL ACTION REQUIRED

Dear Tom Zwald:

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 Erik Lietz, Oakridge Engineering on December 1, 2025 on behalf of Bomaz Farms with revisions on March 3, 2026.

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 Bomaz Farms has 467 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 2,905 with 2,795 on the Main Farm site and 110 animals on the Heifer site. The liquid waste volumes for the Main Farm are based on the NRCS spreadsheet and other estimated or calculated values for a collection period of 365 days. The Heifer site waste volume was calculated using hauling logs. The farm collects all leachate and 0.05” of first flush from the feed storage area in permanent storage. The remainder of the runoff is directed to the farm’s VTA. All runoff from the sand lane and compost pad, up to the 25-year, 24-hr storm, is collected in permanent waste storage.

Total Liquid Waste Storage Capacity (gallons)						
Waste Storage	Total Vol. from Settled Top to Bottom	-Solids Storage	-25-yr, 24-hr Precip. on Storage	25-yr, 24-hr Collected Runoff	Freeboard Vol.	Max. Operating Level (MOL) Vol.
#1	3,591,806	154,918	159,772	150,452	369,677	2,756,987
#2	11,180,221	333,728	334,736	5,110	701,250	9,805,397
#3	25,110,672	545,902	613,257	661,830	1,395,689	21,893,994
#4	726,600	19,273	16,703	59,921	38,546	592,157
Total MOL Vol:						35,048,535
Days of Storage:						<b>467</b>

Total Annual Liquid Waste Volume (NRCS Table Values)	
Liquids Collected/Stored	Annual Gallons
Manure and Bedding	16,490,736
Parlor Wastewater	889,499
Feed Storage Leachate	104,252
Feed Storage Runoff Collected	4,255,018
Net Precipitation on Storage Surface(s)	4,333,064
Stacking Pad Runoff Collected	378,758
Compost Pad	23,695
Sand Lane Runoff	424,541
Heifer Site Hauling Volumes	479,763
<b>TOTAL:</b>	<b>27,379,326</b>

Heifer Site Annual Manure and Process Wastewater Application Volumes			
Year	Gallons Applied	Avg. Yearly AUs	Gallons/AU
2021	371,718	110	3,379
2022	371,718	110	3,379
2023	560,650	110	5,097
2024	559,284	110	5,084
2025	535,446	110	4,868
Average Volume/AU			4,361
<b>Average Annual Volume for Current AUs</b>			<b>479,756</b>

Should you have any questions, please contact Tabby Feller, DNR Madison office or your regional CAFO Specialist.

**NOTICE OF APPEAL RIGHTS**

If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to WIS. STAT. §§ 227.52 and 227.53, you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review must name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to WIS. STAT. § 227.42, you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. All requests for contested case hearings must be made in accordance with WIS. ADMIN. CODE § NR 2.05(5), and served on the Secretary in accordance with WIS. ADMIN. CODE § NR 2.03. The filing of a request for a contested case hearing does not extend the 30-day period for filing a petition for judicial review.

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES



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