Permit Fact Sheet

General Information

Permit Number	WI-0065528-02-0
Permittee Name	North Star Acres/Jeff Potter
Address	N9344 Hwy 40 Exeland, WI 54835
Permit Term	April 01, 2025 to March 31, 2030
Discharge Location	Same as facility address
Receiving Water	Big Weirgor Creek (WBIC 2370400) within the Brunet River-Chippewa River Watershed of the Upper Chippewa River Basin, and groundwaters of the state.
Stream Classification	Big Weirgor Creek is classified as an Exceptional Resource Water
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.)	80	0	0	0	
Milking and Dry Cows	2310	2360	0	0	
Heifers (400 lbs. to 800 lbs.)	361	602	0	0	
Heifers (800 lbs. to 1200 lbs.)	449	408	0	0	
Total	3200	2360	0	0	

Facility Description

North Star Acres is an existing Concentrated Animal Feeding Operation (CAFO) located in the Township of Murry, Rusk County. North Star Acres consists of three production sites: the Primary Site located at N9344 Hwy 40, Exeland WI 54835, the Storage Site, and the Heifer Site at N9275 Hwy 40, Exeland WI 54835. The operation is owned and operated by Jeff Potter. The current herd size is 3,200 animal units (1,650 milking/dry cows, 1,010 heifers, and 400 calves). There is no expansion planned over the upcoming permit term. Approximately 21 million gallons of liquid manure and process wastewater, and 7,000 tons of solid manure will be generated annually at the current herd size. Manure and process wastewater is stored in one liquid waste storage facility. A second storage structure is planned for construction during the permit term. The total usable storage capacity currently is approximately 8.1 million gallons or approximately 138 days of storage capacity for liquid manure and at least 59 days for solid manure. After the second storage structure is built, total useable storage capacity is projected at 12.2 million gallons or approximately 202 days of storage capacity for liquid

manure. North Star Acres owns or rents 4,313 acres of cropland, of which approximately 4,293 acres are available for manure application.

Substantial Compliance Determination

Enforcement During Last Permit:

1. Notice of Noncompliance (NON) issued for land application of liquid manure on March 16, 2022, to frozen soils. Return to Compliance letter issued on August 24, 2022.
2. Notice of Noncompliance issued on July 26, 2022 for land application to fields without prior approval and failure to submit nutrient management plan annual update for crop year 2021 by permit schedule date. Return to Compliance letter issued on August 24, 2022.

Compliance During Last Permit:

- The facility submitted all Annual Reports required in CAFO permit schedule (January 31 deadline).
- The facility submitted all Annual NMP Updates required in CAFO permit schedule (March 31 deadline).
- Two production site inspections (June 27, 2022, and March 6, 2024) did not find CAFO permit violations.
- One manure application inspection (October 18, 2023) did not find CAFO permit violations.
- Nutrient management plan compliance inspections (June 27, 2024, and July 3, 2024) did not find CAFO permit violations.

This facility is considered in substantial compliance with their permit. Schedule item 2.5 specifies when the farm has committed to constructing liquid manure storage for 180 days capacity as documented in the Days of Storage review letter.

Compliance determination made by Todd Prill on December 16, 2024.

Sample Point Designation For Animal Waste		
Sample Point Number	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**	
002	Pit #1 (liquids) - Sample point 002 is for liquids from the Pit #1 (WSF 2, New Pit). The facility is in the southern portion of the Storage Site. It was built in 2014 in a rectangular shape with top dimensions of 266 feet wide by 387 feet long by 15.5 feet deep and an estimated MOL capacity of 7,774,875 gallons (2019 calculation). The facility is an earthen berm, cast-in-place concrete lined in-ground storage. Plans and specifications were designed by NRCS engineers and approved by the DNR on October 17, 2013. This storage facility receives manure and waste wash water from the Freestall Barn Reception Pit; manure from the Wet Calves Barn Reception Pit; and solid manure from Heifer Barn 1, Heifer Barn 2, and the Wet Calves Barn. A boat agitator is used to mix solids and liquids prior to emptying in the spring, summer, and fall.	
003	Freestall Barn reception pit (liquids) - Sample point 003 is for liquids from the Freestall Barn reception pit. The facility is in the northern portion of the Primary Site. It was built in 2009 in a rectangular shape with	

Sample Point Designation For Animal Waste		
Sample Point Number	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**	
	dimensions of 13 feet wide by 32 feet long by 10 feet deep and an estimated capacity of 31,117 gallons (2019 calculation). The facility is an in-ground, precast concrete vertical wall reception pit. This storage facility was built according to approved plans and specifications approved through the Rusk County Land Conservation Department Animal Waste Ordinance. On March 29, 2019; the DNR approved an engineering evaluation from Naomi Bernstein (Insight FS) which determined this structure was in compliance with NRCS 634 and NR 243.15(4). This storage facility receives manure from all three freestall barns through a sloped precast concrete channel located under the floor at the south end of the buildings. It also receives parlor wash water and manure from a transfer system located in the Milking Center. Wash water from an attached pump wash building is collected as well. Materials in the reception pit are transferred daily to Pit #1 through an 8-inch pipe using a pressurized air system. Sampling for nutrient content is only required if removed material is directly land applied.	
005	Wet Calf Barn reception pit (liquids) - Sample point 005 is for liquids from the Wet Calf Barn reception pit (WSF 5). The facility is in the middle portion of the Heifer Site. It was built in 2015 in a rectangular shape with dimensions of 8 feet wide by 8 feet long by 8 feet deep and an estimated capacity of 3,830 gallons (2019 calculation). The facility is a pre-cast concrete in-ground vertical wall reception tank. This storage facility was built according to approved plans and specifications approved through the Rusk County Land Conservation Department Animal Waste Ordinance. On March 29, 2019; the DNR approved an engineering evaluation from Naomi Bernstein (Insight FS) which determined this structure was in compliance with NRCS 634 and NR 243.15(4). This storage facility receives liquids from the Wet Calf Barn. Liquids in the reception pit are transferred daily to Pit #1 through a pipe. Sampling for nutrient content is only required if removed material is directly land applied.	
006	Misc. Solid Manure (solids) – Sample point 006 is for miscellaneous waste solids directly land applied from the production area of the Primary, Storage, or Heifer Sites. This includes maternity pen bed pack and any solids removed from Heifer Barn 1, Heifer Barn 2, the Wet Calf Barn, and associated staging areas. Representative samples shall be taken for each nutrient source when land application occurs.	
008	Solids Separation Building (solids) – Sample point 008 is for solids from the Solids Separation Building. The facility is in the northcentral portion of the Storage Site. The structure has 56 feet by 64 feet footprint and is an above-ground, cast-in-place concrete floor and walls building used to separate and store manure laden solids. Plans and specifications were designed by Auth Consulting and approved by the DNR on September 19, 2022. This facility receives manure from the attached New Heifer Barn and is temporarily stored in 12 feet by 22 feet by 8 feet deep cast-in-place concrete reception tank. After solids are separated, they are dried and stored within the building until being reused as bedding. Manipulated liquids are transferred to Pit #1 using a piston pump and 10-inch HDPE pipe underground transfer pipe.	
009	Sample point 009 is for visual monitoring and inspection of Feed Storage Area 2 and associated runoff control system. The facility is in the western portion of the Storage Site. A portion of this structure was built in 2023 and stores haylage and corn silage in piles. This area is rectangular in shape with dimensions of 450 feet by 290 feet (130,500 square feet). Floors consist of 6-inch poured concrete with reinforcement rod, waterstop liner, and slope south toward the runoff collection system. A second portion was built in 2024 and stores corn silage in a pile. This area is rectangular in shape with dimensions of 200 feet by 250 feet (50,000 square feet). Floors consist of 6-inch poured concrete with reinforcement rod, waterstop liner, and slope south toward the runoff collection system. Plans and Specifications for the runoff control system were designed by Auth Consulting and approved by the DNR on October 5, 2023. All leachate/runoff flows south toward a 12-inch wall that directs runoff through a 4-inch PVC pipe into Pit #2.	

Sample Point Designation For Animal Waste		
Sample Point Number	**Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**	
010	Sample point 010 is for liquids from the Pit #2 (WSF 3). The facility is in the southern portion of the Storage Site. It will be built in 2025 in a square shape with top dimensions of 250 feet wide by 250 feet long by 20 feet deep and an estimated MOL capacity of 4,513,121 gallons (2023 calculation). The facility is an earthen berm, concrete lined in-ground storage. Plans and specifications were designed by Auth Consulting and approved by the DNR on October 5, 2023. This storage facility receives runoff/feed leachate from Feed Storage Area 2. A boat agitator is used to mix solids and liquids prior to emptying in the spring, summer, and fall.	

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 submit to the Department for approval.

Manure and Process Wastewater Storage

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

The permittee currently has approximately 138 days of storage for liquid manure based on 3,200 animal units. The permittee will be required to design and construct 180 days of liquid manure storage by November 30, 2025. Once the permittee has 180 days of liquid manure storage, it 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 3,200 animal units from dairy animals (1,650 milking/dry cows, 1,010 heifers, and 400 calves), it is estimated that approximately 21,422,466 gallons of manure and process wastewater will be produced per year. The permittee currently has 4,314 acres (3,111 owned and 1,202 controlled through contracts, rental agreements, or leases, or under manure agreements) in the NMP, of which 4,293 acres are available for spreading after various restricted areas have been accounted for. The permit requires all landspreading of manure and process wastewater be completed in accordance with an approved nutrient management plan. The permit will require sampling and analysis of manure and process wastewater that will be landspread. Landspreading rates must be adjusted based on sample analysis. The permit requires the permittee to maintain a daily log that documents landspreading activities. The permit also requires the submittal of an annual report that summarizes all landspreading activities. Plans must be updated annually to reflect cropping plans and other operational changes. Among the requirements, the plans must include detailed landspreading information including field by field nutrient budgets.

The permittee is required to implement a number 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 ($\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: 002- Pit #1 (liquids); 003- Freestall Barn reception pit; 005- Wet Calf Barn reception pit, and 010- Pit #2 (liquids)

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 001 is no longer included in the permit as it was abandoned in 2024.
- Sample point language was updated to describe existing facilities more accurately (Sample Points 002, 003, and 005).
- Sample point 010 was added for the construction of a new liquid storage facility.

1.2 Sample Point Number: 006- Misc. Solid Manure (solids); 008- Solids Separation Bui (solids)

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 004 is no longer included in the permit as it was abandoned in 2024.
- Sample Point 008 was changed from “Manure Stacking Sites” to “Solids Separation Building”.

1.3 Sample Point Number: 009- Feed Storage Area 2

1.3.1 Changes from Previous Permit

- Sample point language was updated to describe existing facilities more accurately (Sample Point 009).

2 Schedules

2.1 Emergency Response Plan

Required Action	Due Date
Develop Emergency Response Plan: Develop a written Emergency Response Plan within 60 days of permit coverage, available to the Department upon request.	05/31/2025

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.	05/31/2025

2.3 Annual Reports

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

Required Action	Due Date
Submit Annual Report #1: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2026
Submit Annual Report #2: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2027
Submit Annual Report #3: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2028

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

2.4 Nutrient Management Plan

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

Required Action	Due Date
Management Plan Annual Update #1: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2026
Management Plan Annual Update #2: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2027
Management Plan Annual Update #3: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2028
Management Plan Annual Update #4: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2029
Management Plan Annual Update #5: To include actual cropping, tillage, and nutrient application data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	03/31/2030
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 - Installation of 180 Day Liquid Manure Storage

For Pit #2

Required Action	Due Date
Submit Plans and Specifications: Submit Plans and specifications for a 180-day liquid manure storage facility for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code. See Standard Requirements for plan content information.	04/30/2025

Complete Installation: Complete construction of the manure storage facility. The facility shall be functional and in operation by the specified Date Due. Post construction documentation shall be submitted within 6 months of completion of the project.	11/30/2025

2.6 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	09/30/2029

2.7 Explanation of Schedules

The schedules contained in 2.1, 2.2, 2.3, 2.4, and 2.6 are standard permit schedules.

Attachments

Sample Point Map (March 2024)

Days of Storage Approval Letter (December 3, 2024)

Nutrient Management Plan Approval Letter (December 3, 2024)

Public Notice (December 2024)

Prepared By: Todd Prill **Agricultural Runoff Management Specialist**

Date: December 16, 2024

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

PUBLIC NOTICE OF AVAILABILITY OF A NUTRIENT MANAGEMENT PLAN AND INTENT TO REISSUE A WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM (WPDES) PERMIT No.WI-0065528-02-0

Permittee: North Star Acres/Jeff Potter, N9344 Hwy 40, Exeland, WI, 54835

Receiving Water And Location: Big Weirgor Creek (WBIC 2370400) within the Brunet River-Chippewa River Watershed of the Upper Chippewa River Basin, and groundwaters of the state.

Brief Facility Description : North Star Acres is an existing Concentrated Animal Feeding Operation (CAFO) located in the Township of Murry, Rusk County. North Star Acres consists of three production sites: the Primary Site located at N9344 Hwy 40, Exeland WI 54835, the Storage Site, and the Heifer Site at N9275 Hwy 40, Exeland WI 54835. The operation is owned and operated by Jeff Potter. The current herd size is 3,200 animal units (1,650 milking/dry cows, 1,010 heifers, and 400 calves). There is no expansion planned over the upcoming permit term. Approximately 21 million gallons of liquid manure and process wastewater, and 7,000 tons of solid manure will be generated annually at the current herd size. Manure and process wastewater is stored in one liquid waste storage facility. A second storage structure is planned for construction during the permit term. The total usable storage capacity currently is approximately 8.1 million gallons or approximately 138 days of storage capacity for liquid manure and at least 59 days for solid manure. After the second storage structure is built, total useable storage capacity is projected at 12.2 million gallons or approximately 202 days of storage capacity for liquid manure. North Star Acres owns or rents 4,313 acres of cropland, of which approximately 4,293 acres are available for manure application.

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

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

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

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

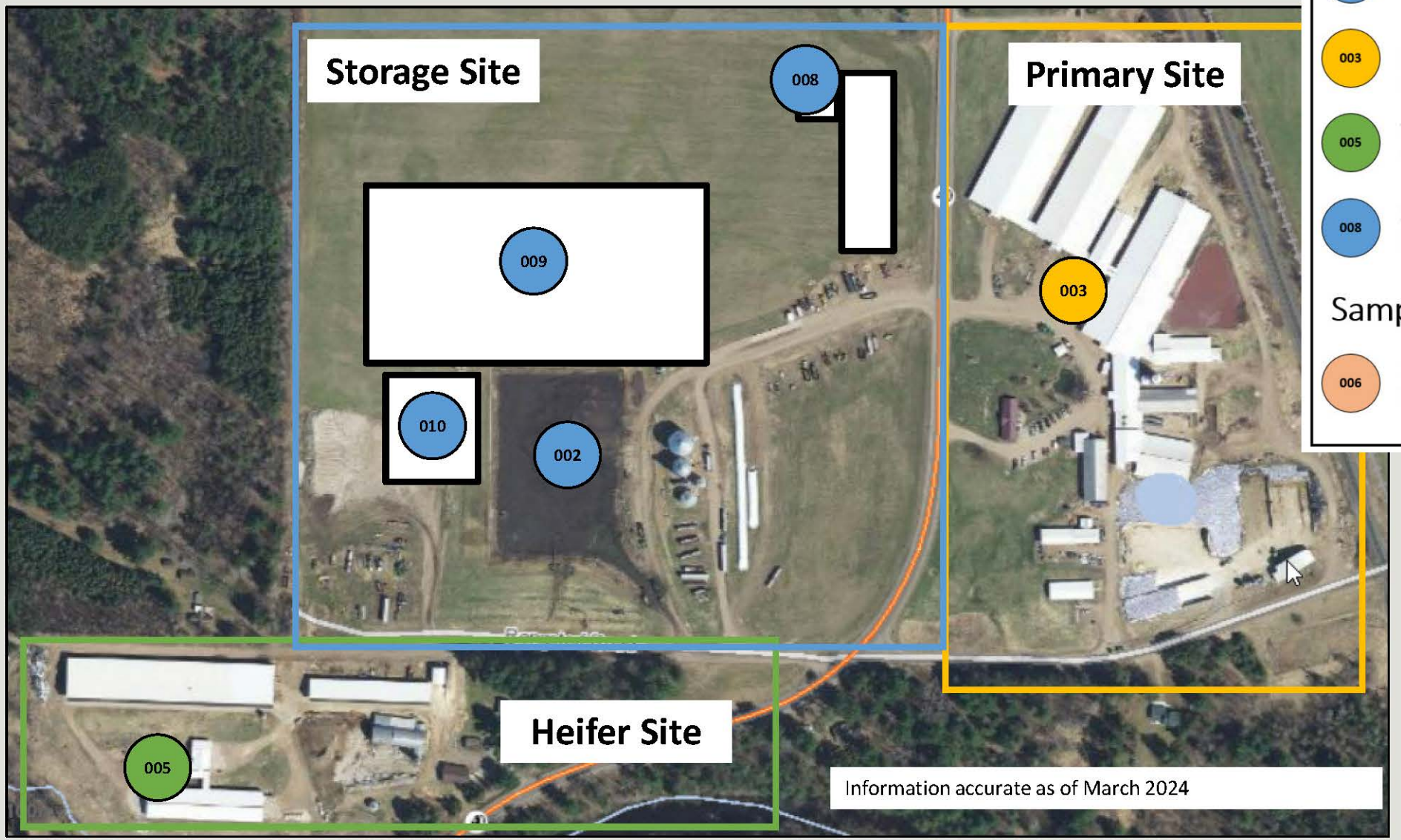
Information on file for this permit action, including the draft permit and fact sheet (if required), the operation's nutrient management plan and application may be inspected and copied at the permit drafter's office, Monday through Friday (except holidays), between 9:00 a.m. and 3:30 p.m. Please call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

NAME OF PUBLISHING NEWSPAPER: Ladysmith News

ADDRESS OF PUBLISHING NEWSPAPER: 120 W. 3rd St. S, PO Box 189, Ladysmith WI 54848-0189

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

North Star Acres Sample Points



Sample Points – Primary Site

Heifer Site

Storage Site

- 002 Pit #1
- 003 Freestall Barn reception pit
- 005 Wet Calf Barn reception pit
- 009 Feed Storage Area 2
- 008 Solids Separation Building
- 010 Pit #2

Sample Points – Facility Wide

- 006 Misc. Solid Manure

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster St., PO Box 7921
Madison, WI 53707

Tony Evers, Governor
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

December 3rd, 2024

Rusk County
Approval

Jeff Potter
North Star Acres
N9344 Hwy 40
Exeland, WI 54835

SUBJECT: Conditional Approval of North Star Acres Nutrient Management Plan, WPDES Permit No. 0065528-02-0

Dear Jeff Potter:

After completing a review of North Star Acres 2025-2028 Nutrient Management Plan (NMP) the Wisconsin Department of Natural Resources (Department) is providing conditional approval that it is consistent with Nutrient Management Requirements in s. NR 243, Wis. Adm. Code. This part of your WPDES permit application is now ready for the public notice and comment process as required by Ch. 283 Stats.

Before applying manure onto approved fields each season, the Department recommends North Star Acres 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 North Star Acres 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 North Star Acres 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 3,200 animal units (1,650 milking & dry cows, 1,010 heifers, and 400 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 21,422,466 gallons of manure and process wastewater and 7,020 tons of solid manure in the first year of the permit term. Once facilities are updated to storage structures, the farm will generate approximately 22,175,700 gallons of manure and process wastewater and 7,020 tons of solids manure by 2026.
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 North Star Acres currently has 4,314 acres (3,111 owned and 1,202 controlled through contracts, rental agreements or leases, or under manure agreements) of which 4,293 are spreadable acres.

6. That no fields are directly adjacent to or have high potential to deliver nutrients and sediment to a 303(d) impaired water.
7. That some fields included in the NMP are directly adjacent to or have high potential to deliver nutrients and sediment to outstanding/exceptional waters including Clear Creek, Big Weirgor Creek, Little Weirgor Creek, Flunkers Creek, Becky Creek, Alder Creek, Swan Creek.
8. That 2 fields are tiled.
    - 308
    - 309

9. 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.
10. 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 2025-2028 North Star Acres 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 have also been approved to receive industrial, municipal, or septage waste:

Field Name	Other Permittee Name	Site Name	DNR #
067A	Dunn Paper, Ladysmith LLC	35060702	117930
68	Dunn Paper, Ladysmith LLC	35060701	117929
68	Dunn Paper, Ladysmith LLC	35060702	117930

Prior to any manure applications on these fields North Star Acres shall contact the entities listed above to obtain recent spreading records and make the necessary adjustments to the planned manure application rates. At the end of each year North Star Acres shall contact each entity listed above to obtain spreading records from the previous year so that they can be properly tracked in the NMP. Please Note: North Star Acres is responsible for obtaining nutrient content values for all other wastes spread on any field in their NMP.

3. The following fields are prohibited from receiving applications of manure or process wastewater:
    - 016 (expired/default)

If North Star Acres 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.

4. 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.

5. All liquid manure samples collected may be analyzed, at a minimum, for percent dry matter, total nitrogen, percent NH_4-N, percent NO_3-N, phosphorus, potassium, and sulfur.

6. 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, North Star Acres may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

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

7. North Star Acres shall record daily manure applications by using the 'Daily Log' generated by Snap Plus. These forms shall be retained at the farm and provided to the department upon request.

8. North Star Acres 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

WINTER SPREADING

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

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

- 001	- 002	- 006	- 009
- 010	- 017	- 027	- 028
- 029	- 030	- 031	- 034
- 039	- 040	- 046	- 050
- 051	- 068	- 084	- 085
- 203	- 204		

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. Currently no headland stacking sites are approved until current solid manure samples are obtained and submitted to the department for review. To give a determination on stacking sites, the % solids content must be able to be utilized as part of that review. North Star Acres is able to request for stacking site approval at a future time once solid manure samples have been obtained.

MANURE & PROCESS WASTEWATER IRRIGATION

15. Irrigation of manure or process wastewater is prohibited.

SUBMITAL AND RECORDKEEPING REQUIREMENTS

16. 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.
17. Two solid manure samples are necessary to be submitted by no later than **January 24th, 2025**.
18. To follow manure sampling requirements, the farm is required to sample at the following intervals:
    - One solid sample per source on a quarterly basis when hauling occurs.
    - Two liquid samples per source monthly when hauling occurs.

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

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

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

Sincerely,

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

cc: Todd Prill, WDNR Agricultural Runoff Specialist (Todd.Prill@Wisconsin.gov)
Brad Johnson, WDNR Watershed Field Supervisor (Bradleya.Johnson@Wisconsin.gov)
Christopher Clayton, WDNR Runoff Management Section Chief (Christopherr.Clayton@Wisconsin.gov)
James Salscheider, CAFO Enforement Coordinator (James.Salscheider@Wisconsin.gov)
Aaron O'Rourke, WDNR Nutrient Management Program Coordinator (Aaron.Orourke@Wisconsin.gov)
Falon French, WDNR Intake Specialist (Falon.French@Wisconsin.gov)
Tabby Davis, WDNR CAFO Engineer (Tabatha.Davis@Wisconsin.gov)
Nick Stadnyk, Rusk County (Nstadynk@Ruskcountywi.us)
Tim Seidl, Sawyer County (Tim.Seidl@Sawyercountygov.org)
Matt Luther, Rock River Laboratories, Inc (matt_luther@rockriverlab.com)
File

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Tony Evers, Governor

Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

WISCONSIN DEPT. OF NATURAL RESOURCES

December 3, 2024

FILE REF: R-2024-0258
WPDES Permit #: WI-0065528

Jeff Potter
North Star Acres
N9344 Hwy 40
Exeland, WI 54835

Subject: Days of Storage Review for North Star AcresSW¼ of T36N, R07W, Section 02 in Murry Township, Rusk County

Dear Jeff Potter:

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 Dave McDaniel, ACA on October 9, 2024 on behalf of North Star Acres.

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 and use of waste storage facility 3, North Star Acres 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 North Star Acres has 138 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 3,200 with 2,758 animal units contributing to liquid waste. The liquid waste volumes are based on the NRCS spreadsheet and other estimated or calculated values for a collection period of 365 days. Leachate and 0.25 inches of first flush runoff from Feed Storage Area 1 is collected in permanent waste storages. All runoff from Feed Storage Area 2 up to the 25-year 24-hour storm is collected in permanent storages.

Existing Condition

Existing 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.
#2	9,607,256	375,055	334,281	0	778,750	8,119,170
					Total MOL Vol:	8,119,170
					Days of Storage:	**138**

Total Annual Liquid Waste Volume (NRCS Table Values)	
Liquids Collected/Stored	Annual Gallons
Manure and Bedding	12,889,734
Parlor Wastewater	3,643,430
Feed Storage Leachate	149,600
Feed Storage Runoff Collected	3,357,735
Net Precipitation on Storage Surface(s)	1,381,967
TOTAL:	**21,422,466**

The operation is proposing to add a liquid waste storage facility in the upcoming permit term. North Star Acres will have 202 days of liquid waste storage following the construction of proposed waste storage facility 3. There will be no change in animal units under proposed conditions. Waste storage facility 3 was approved by the department on October 4, 2023, project R-2023-0141, and has not yet been constructed.

Proposed Condition

Proposed 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.
#2	9,607,256	375,055	334,281	0	778,750	8,119,170
#3	5,425,983	126,412	182,198	518,289	422,055	4,177,029
					Total MOL Vol:	12,296,199
					Days of Storage:	**202**

Total Annual Liquid Waste Volume (NRCS Table Values)	
Liquids Collected/Stored	Annual Gallons
Manure and Bedding	12,889,734
Parlor Wastewater	3,643,430
Feed Storage Leachate	149,600
Feed Storage Runoff Collected	3,357,735
Net Precipitation on Storage Surface(s)	2,135,201
TOTAL:	**22,175,700**

Should you have any questions, please contact Tabby Davis, 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

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

Tabby Davis
CAFO Review Engineer
Watershed Management Program

Email:

Jeff Potter; North Star Acres/Jeff Potter
(715) 943-2204; northstaracres@ymail.com

David McDaniel; ACA
(715) 225-4718; dmcdaniel@authconsulting.com

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

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

Nick Stadnyk; Rusk County Land Conservation Department
(715) 532-2162; nstadnyk@ruskcountywi.us

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

Bradley A Johnson; DNR-West Central Region
(715) 340-5281; BradleyA.Johnson@wisconsin.gov

Ashley Scheel; DNR, Central Office
(608) 261-6419; ashley.scheel@wisconsin.gov

Tabatha A Davis; DNR-Central Office
(608) 712-2324; tabatha.davis@wisconsin.gov