

Permit Fact Sheet

General Information

Permit Number:	WI-0059374-05-0
Permittee Name:	Pagels Ponderosa Dairy, LLC
Address:	N4893 Hwy C
City/State/Zip:	Kewaunee WI 54216
Discharge Location:	N4893 County Road C, Kewaunee, WI 54216 N ½ NW ¼ S4 T23N R24E, Township of West Kewaunee N5318 County Road E, Kewaunee, WI 54216 SE ¼ SW ¼ S27 T24N R24E, Township of Casco E3470 County Rd F, Kewaunee, WI 54216 SE ¼ SW ¼ S16 T23N R24E, Township of West Kewaunee
Receiving Water:	Unnamed tributaries within the Kewaunee River Watershed, Lake Michigan Drainage Basin, and groundwaters of the State

Animal Units					
Animal Type	Current AU		Proposed AU (Note: If all zeroes, expansions are not expected during permit term)		
	Mixed	Individual	Mixed	Individual	Date of Proposed Expansion
Dairy Calves (under 400 lbs.)	376	0	380	0	05/31/2029
Milking and Dry Cows	9,627	9,834	9800	10010	05/31/2029
Heifers (400 lbs. to 800 lbs.)	1,114	1,856	756	1260	05/31/2029
Heifers (800 lbs. to 1200 lbs.)	277	242	1650	1500	05/31/2029
Steers or Cows (400 lbs. to market)	0	0	70	70	05/31/2029
Total	11,394	9,834	12,656	10010	

Facility Description

Pagel’s Ponderosa Dairy LLC is an existing Concentrated Animal Feeding Operation in Kewaunee County, WI. Pagel’s Ponderosa Dairy is owned and operated by the Pagel Family. As of January of 2024, it has 6,877 milking and dry cows, 252 large heifers, 1,856 small heifers, and 1,881 calves (11,394 animal units). Pagel’s Ponderosa Dairy will annually generate approximately 104,314,148 gallons of liquid manure and process wastewater and 5,364 tons of solid manure. As of March 2024, Pagel’s Ponderosa Dairy has greater than the required minimum of 180 days of storage. Pagel’s Ponderosa Dairy has 10,964 acres in its approved nutrient management plan, of which 7,923 acres are rented or in contract agreements and 3,041 acres are owned. Pagel’s Ponderosa Dairy has 10,548.5 acres available for land application.

Substantial Compliance Determination

Enforcement During Last Permit: During the previous permit term, Pagel’s Ponderosa Dairy LLC was issued several Notice of Violations pertaining to noncompliance associated with permit compliance schedules and multiple production area discharges to waters of the State. The facility has completed all previously required actions as part of the enforcement process and has returned to compliance.

After a desk top review of all compliance schedule items and associated reporting records, and a site visit on July 7, 2020, this facility has been found to be in substantial compliance with their current permit.

Compliance determination entered by James Salscheider, CAFO Compliance and Enforcement Coordinator on April 3, 2024.

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
017		Liquid industrial wastewater generated from an onsite cheese processing operation. Representative samples of the wastewater shall be obtained from the injection pit prior to discharge to the manure storage system. The wastewater is comprised primarily of washwater generated from cleaning cheese processing equipment.

Sample Point Designation For Animal Waste		
Sample Point Number	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)	
001	Sample point 001 is for liquid waste storage facility 1 (WSF 1) located at the Main Dairy. WSF 1 is a concrete storage and is the northernmost WSF at the Main Dairy. The facility has a capacity of 1,087,487 gallons and was modified in 2008. This storage accepts manure and process wastewater from the digester at the Main Dairy. WSF 1 was last evaluated in 2008 when it was modified and met permit requirements.	
002	Sample point 002 is for liquid waste storage facility 2 (WSF 2) located at the Main Dairy. WSF 2 is a clay-lined storage located south of WSF 1. The facility has a capacity of 5,917,996 gallons and was constructed in 1997. This storage accepts manure and process wastewater from WSF 1 and the feed storage runoff control system. WSF 2 was last evaluated in 2007 and met permit requirements.	
003	Sample point 003 is for liquid waste storage facility 3 (WSF 3) located at the Main Dairy. WSF 3 is a clay-lined storage located south of WSF 3. The facility has a capacity of 10,063,816 gallons and was constructed in 1999. This storage accepts manure and process wastewater from WSF 2 and is located south of WSF 2. WSF 3 will require an engineering evaluation due to age, see Schedules section for due dates.	
004	Sample point 004 is for liquid waste storage facility 4 (WSF 4) located at the Main Dairy. WSF 4 is a clay-lined storage located south of Ryan Radio Rd. The facility has a capacity of 23,320,788 and was constructed in 2009. This storage accepts manure and process wastewater from WSF 3. WSF 4 was last	

Sample Point Designation For Animal Waste	
Sample Point Number	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
	evaluated in 2009 when it was constructed and met permit requirements.
005	Sample point 005 is for digested and separated manure solids. These are typically reused as bedding and stored in the storage bays located in the solid separator building. Digested and separated solids may also be distributed to another party according to Department approval and Distribution of Manure and Process Wastewater section of permit.
006	Sample point 006 is for liquid waste storage facility 5 (WSF 5) located at the Heifer Site. WSF 5 is a concrete/earthen storage and is the first stage of a two-stage system, located north of WSF 6. The facility has a capacity of 1,500,000 gallons and was constructed in 2005. This storage accepts manure and process wastewater from the animal housing buildings and the manure stacking pad. WSF 5 was last evaluated in 2005 at the time of construction and met permit requirements.
007	Sample point 007 is for liquid waste storage facility 6 (WSF 6) located at the Heifer Site. WSF 6 is an in-place earthen storage and is the second stage of a two-stage system, located south of WSF 5. The facility has a capacity of 7,000,000 gallons and was constructed in 2005. This storage accepts manure and process wastewater from the animal housing buildings, manure stacking pad, and the calf hutch washing area. WSF 6 was last evaluated in 2005 at the time of construction and met permit requirements.
010	Sample point 010 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.
011	Sample point 011 is for solid manure land applied from approved headland stacking sites. Stacks are defined as part of the production area and therefore subject to the production area discharge limitations section of this permit. Quarterly inspections while stacks are present are required and shall be recorded according to monitoring program.
012	Sample point 012 is for visual monitoring and inspection of the feed storage area and associated runoff control system located at Main Dairy. Proper operation and maintenance is required to ensure discharges of process wastewater to waters of the state do not occur. Weekly inspections are required and shall be recorded according to monitoring program. An engineering evaluation of the feed storage area and runoff control system shall be submitted according to the Schedules section of the permit.
013	Sample point 013 is for visual monitoring and inspection of the anaerobic digester and associated digested solids storage. Proper operation and maintenance is required to ensure discharges of process wastewater to waters of the state do not occur. Weekly inspections are required and shall be recorded according to monitoring program.
016	Sample point 016 is for visual monitoring and inspection of outdoor vegetated areas located at Heifer Site. Proper operation and maintenance is required to ensure vegetative cover is sustained across lot areas. Quarterly inspections are required and shall be recorded according to monitoring program. For proposed areas, a pasture management plan shall be submitted according to Schedules section of permit. Outdoor lot areas not managed to sustain vegetation are not permitted and shall be properly abandoned.
018	Sample point 018 is for liquid waste storage facility 7 (WSF 7) located at the Hilltop Ponderosa site. WSF 7 is an in-place earthen storage located on the northeast corner of the production site. The facility has a capacity of 5,398,347 gallons and was constructed in 1977. This storage accepts manure and process wastewater from the freestall barns and milking parlor at Hilltop Ponderosa. WSF 7 was last evaluated in

Sample Point Designation For Animal Waste	
Sample Point Number	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
	2018 and met permit requirements.
019	Sample point 019 is for visual monitoring and inspection of the feed storage area and associated runoff control system located at Hilltop Ponderosa. Proper operation and maintenance is required to ensure discharges of process wastewater to waters of the state do not occur. Weekly inspections are required and shall be recorded according to monitoring program. An engineering evaluation of the feed storage area and runoff control system shall be submitted according to the Schedules section of the permit.
020	Sample point 020 is for solid waste storage facility 8 (WSF 8) located at the Heifer Site. WSF 8 is a liquid-tight concrete storage pad located east of WSF 5 and WSF 6. The facility has a capacity of 3,500 tons and was constructed in 2014. This storage accepts manure and process wastewater from barns at the Heifer Site. WSF 8 was last evaluated in 2014 when it was constructed and met 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 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 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.

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

With 6,877 milking and dry cows, 252 large heifers, 1,856 small heifers, and 1,881 calves, it is estimated that approximately 104,314,148 gallons and 5,364 tons of manure and process wastewater will be produced per year. The permittee owns *approximately* 3,041 acres of cropland and rents about 7,923 acres. Given the rotation commonly used by the permittee, 10,548.5 acres are available (or open) to receive manure and process wastewater on an annual basis. The permit requires all landspreading of manure and process wastewater be completed in accordance with an approved nutrient management plan. The permit will require sampling and analysis of manure and process wastewater that will be landspread. Landspreading rates must be adjusted based on sample analysis. The permit requires the permittee to maintain a daily log that documents landspreading activities. The permit also requires the submittal of an annual report that summarizes all landspreading activities. Plans must be updated annually to reflect cropping plans and other operational changes. Among the requirements, the plans must include detailed landspreading information including field by field nutrient budgets.

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

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

In addition, the permittee must comply with restrictions on land application of manure and process wastewater on frozen or snow-covered ground. Included in these restrictions is a prohibition on surface applications of solid manure ($\geq 12\%$ solids) on frozen or snow-covered ground during February and March. Beginning June 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 2; 003- WSF 3; 004- WSF 4; 006- WSF 5; 007- WSF 6; 018- WSF 7

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 018 was added to the permit to cover the liquid waste storage facility at the Hilltop Ponderosa site.

1.1.2 Explanation of Operation and Management Requirements

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

Sample Point Number: 005- Separated Solids; 010- Solid Manure; 011- Headland Stacking Sites, and 020- WSF 8

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Total		lbs/ton	2/Month	Grab	
Nitrogen, Available		lbs/ton	2/Month	Calculated	
Phosphorus, Total		lbs/ton	2/Month	Grab	
Phosphorus, Available		lbs/ton	2/Month	Calculated	
Solids, Total		Percent	2/Month	Grab	

1.1.3 Changes from Previous Permit

Sample Point 020 was added to the permit to cover the solid manure stacking area at the Clyde Hill site.

1.1.4 Explanation of Operation and Management Requirements

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

Sample Point Number: 012- Feed Storage Area ; 013- Digester and Digested Solids; 016- CAFO Outdoor Vegetated Area , and 019- Hilltop FSA

1.1.5 Changes from Previous Permit

Sample Point 019 was added to the permit to cover the feed storage area at the Hilltop Ponderosa site.

1.1.6 Explanation of Operation and Management Requirements

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

2 Land Application - Sludge/By-Product Solids (industrial only)

Sample Point Number: 017- Cheese Processing Wastewater

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gpd	Daily	Total Daily	
Solids, Total		Percent	Annual	Grab	
Chloride		mg/L	Monthly	Grab	
Nitrogen, Total Kjeldahl		mg/L	Monthly	Grab	
Phosphorus, Total		mg/L	Quarterly	Grab	

Changes from Previous Permit:

No changes from the previous permit.

Explanation of Limits and Monitoring Requirements

Required monitoring and reporting requirements are consistent with the industrial wastewater program requirements and the current issuance of the WPDES general permit for Land Application of Liquid Industrial Wastes (0055867-06). Requirements for land application of liquid industrial wastes are determined in accordance with ch. NR 214, Wis. Adm. Code.

3 Schedules

3.1 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.	07/01/2024

3.2 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.	08/01/2024

3.3 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.	01/31/2025
Submit Annual Report #2: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2026
Submit Annual Report #3: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2027
Submit Annual Report #4: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2028
Submit Annual Report #5: To include monitoring and inspection results from the previous 12 months, consistent with the requirements of department form 3400-025E.	01/31/2029
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed.	

3.4 Nutrient Management Plan

Required Action	Due Date
Management Plan Submittal: 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.	
Management Plan Annual Update #1: To include actual cropping, tillage, and nutrient application	03/31/2025

data from the previous calendar or crop year, consistent with the requirements of department for 3400-025D.	
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.	03/31/2026
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.	03/31/2027
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.	03/31/2028
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.	03/31/2029
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

3.5 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	11/30/2028

3.6 Manure Storage Facility - Engineering Evaluation

Engineering Evaluation for Waste Storage Facility 3 at the Main Site.

Required Action	Due Date
Retain Expert: Retain a qualified expert to complete an engineering evaluation for WSF 3 at the Main Site and report the name of the expert to the Department.	08/01/2024
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.)	04/01/2025
Plans and Specifications: Submit plans and specifications for Department review and approval in accordance with Chapter 281.41, Wis. Stats., and Chapter NR 243, Wis. Adm. Code, to permanently correct any adverse manure storage conditions.	12/31/2025
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.	12/31/2026

3.7 Explanation of Schedules

Schedules 3.1 through 3.5 are general compliance schedule items required by the permit. Schedule 3.6 is included to evaluate WSF 3 at the Main Site due to age.

Special Reporting Requirements

N/A

Other Comments:

N/A

Attachments:

July 7, 2020 Permit Reissuance Inspection Report

March 20, 2024 Days of Storage Review Letter

March 29, 2024 Condition NMP Approval Letter

Site Maps

Expiration Date:

May 31, 2029

Justification Of Any Waivers From Permit Application Requirements

N/A

Prepared By: James Salscheider

Agricultural Runoff Management Specialist

Date: 4/15/2024

Notice of reissuance was published in the Green Bay Press Gazette and WDNR website on **DATE**

CAFO Compliance Report (8/21/2020)



Inspection Date: July 7, 2020

Inspection Type: Permit Reissuance

Operation Name: Pagels Ponderosa Dairy

WPDES Permit No. WI-0059374-04-0

Operation Address: N4893 Cty Rd C and N5316 Cty Rd E, Kewaunee WI, 54216

On-Site Representative(s): John J Pagel, Bryan Pagel, and Susan LaCrosse

DNR Staff / Report Writer: James Salscheider and Brian Hanson, CAFO Specialists

On Tuesday, July 7, 2020, James Salscheider and Brian Hanson, Agricultural Runoff Management Specialists WDNR (Department) met with John J Pagel, Bryan Pagel, and Susan LaCrosse to conduct a WPDES permit reissuance inspection at Pagel's Ponderosa Dairy, LLC (PPD). The Main Site is located at the NW ¼ Sec 4 T23N R24E in the Town of West Kewaunee. The Clyde Hill Farm Site is located at SE ¼ SW ¼ Sec 27 T24N R24E in the Town of Casco. The weather conditions during the inspection were sunny and dry. The farm did receive approximately 0.33" of rain the day before. Follow up items are requested on Page 7. All photos taken during the inspection are included in Attachment A. Overall, the permittee is **not in** substantial compliance. Aerial maps are included on pages 2 and 3.

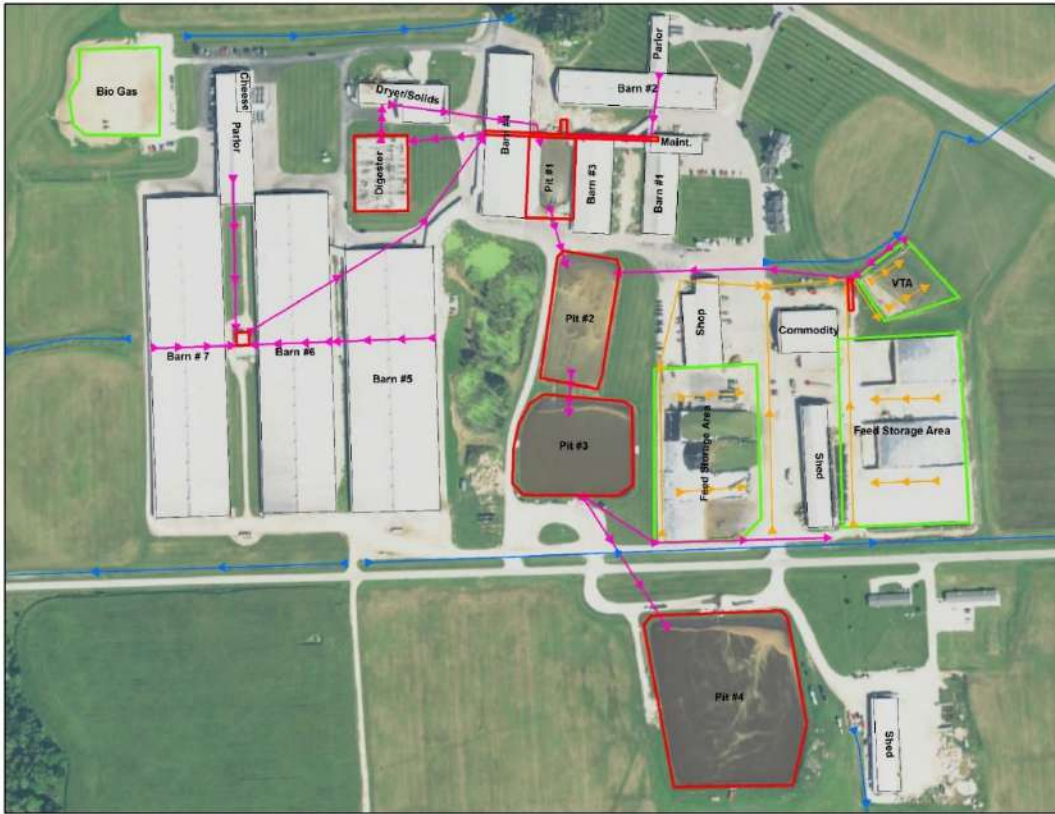


Figure 1. An aerial photograph and map depicting the buildings, storages, and waste transfers/flow paths at the Main Site. The Main Site consists of seven animal housing units, four waste storage facilities, two milking parlors, two feed storage areas, a runoff collection system (VTA included), several sheds and commodity storage buildings, a solid separator, a digester with biogas production, and a cheese factory which stores process wastewater in the on-site WSFs. The pink lines represent manure transfer lines. The yellow lines represent the flow paths of runoff from the feed storage area. The blue lines represent flow paths of surface water around the production site.



Figure 2. An aerial photograph depicting surface water and wetlands near the production site at the Main Site. There is one mapped intermittent stream and several mapped wetlands near the production site. This photo was obtained from WDNR Surface Water Data Viewer.



Figure 3. An aerial photograph depicting the buildings, storages, and waste transfer lines/flow paths at the Heifer Site. The Heifer Site consists of 14 animal housing buildings, three manure storage structures, several machine/commodity sheds, and a CAFO Outdoor Vegetated Area. The pink lines represent manure transfer lines. The yellow lines represent the flow paths of runoff from the feed storage area. The blue lines represent flow paths of surface water around the production site.



Figure 4. An aerial photograph depicting surface water and wetlands near the production site at the Heifer Site. There is one mapped intermittent stream and several mapped wetlands near the production site. This photo was obtained from WDNR Surface Water Data Viewer.

SITE OBSERVATIONS

Feedlot Runoff

PPD does not use any outdoor feedlots.

Calf Hutch Areas (see Photos on pages 9-11)

The majority of PPD's calves are kept under roof. A small percentage of calves are kept in hutches outside. The calf hutch area is located just north of the solid manure stacking area at the Clyde Hill Farm Site. The runoff controls for the calf hutch area is tied in with the runoff controls for the solid manure stacking area. The runoff flows east to west towards waste storage facility 1 (WSF 1). There is not a designed runoff control system, but contaminated runoff flows on the surface directly towards WSF 1. The contaminated runoff was concentrated to flow just north of the WSF, where it ponded and then drained to the WSF out of channel. Gully erosion was present adjacent to the ramp to the WSF, in the north berm. The bedding for the calves is comprised of a mixture of digested solids and straw. The bed pack is cleaned regularly and stacked on-site. When the wet calf barns are cleaned, they are scrapped, washed, and sanitized. The wash water is collected by drains and transferred to the solid separator located in free stall barn #2 which then transfers the waste to WSF 1.

Calf hutch areas are managed to not have current or past indicators of discharges. Runoff control systems are not well-maintained, in good repair and in compliance with permit requirements.

Waste Storage Facilities (see Photos on pages 12-32)

At the Main Dairy, there are four liquid waste storage facilities (WSF). WSF 1 at the Main Dairy was constructed in 1985 but has since been modified to have concrete side slopes (2008) and a concrete floor (2000). WSF 1 has an MOL volume of approximately 750,000 gallons. There is just one permanent marker present in WSF 1. It is unknown if it is the MOL or MOS marker. WSF 2 is an earthen pond that was constructed in 1997. It is the first part in a two-cell system. It has an MOL volume of 5,500,000 gallons. It was last evaluated in 2007. WSF 3 is an earthen pond that was constructed in 1999 and has not been evaluated or modified since. WSF 3 is the second part in the two-cell system and is connected to WSF 2 by a concrete weir. It has an MOL volume of 9,350,000 gallons. There is one permanent marker present in WSF 3 and additional markers at one-foot increments below the top marker. It is unknown if the top marker is the MOL and MOS marker. WSF 4 is an earthen pond that was constructed in 2009 and has not been evaluated or modified since. It has an MOL volume of 23,500,000 gallons. There is one permanent marker present in WSF 4 and additional markers at one-foot increments below the top marker. It is unknown if the top marker is the MOL and MOS marker.

At the Heifer Site, there are two liquid waste storage facilities and one solid manure stacking facility. WSF 1 at the Heifer site is an earthen/concrete lined WSF that was built in 2005 and has not been evaluated since. It is the first part of a two-cell system. It has an MOL volume of 1,500,000 gallons. WSF 2 at the Heifer Site is an earthen liquid WSF that was built in 2005 and has not been evaluated since. It is the second part of a two-cell system. WSF 2 has an MOL volume of 7,000,000 gallons. There is one permanent marker present in WSF 2 and additional markers at one-foot increments below the top marker. It is unknown if the top marker is the MOL and MOS marker. WSF 3 at the Heifer Site is the solid manure stacking area. All solid manure generated at either the Main Dairy or the Heifer Site that is stored is stacked at the Heifer Site. All leachate from the stacking area surfaces flows to WSF 1 at the Heifer Site. The contaminated runoff was concentrated to flow just north of the WSF, where it ponded and then drained to the WSF out of channel. Gully erosion was present adjacent to the ramp to the WSF, in the north berm. This is going to be something that needs to be addressed by improving the runoff controls and evaluating WSF 1 at the Heifer Site. There are four pushout areas located at the end of barns 3,4,5, and 6. When the barns are scrapped, the solid manure is pushed into the pushout areas and is then transferred to the manure stacking area the same day. There is no roof present on any pushout area, allowing rain events to wash residual manure out of the pushout area and across the gravel driveway, where residual manure was observed during the inspection. Installing a roof or good housekeeping can prevent future discharges from the pushout areas.

PPD has an anaerobic plug flow digester on-site. All manure and process wastewater located at the Main Dairy (other than feed leachate/runoff) get digested. After the liquid manure is digested, the separated solids go through the drying process located in the building north of the digester. Once the separated solids are dried, they are stored in bays located within the dryer building. On June 6, 2020, the dryer building caught fire, resulting in significant damage to the building. The dryer was operational and running during the inspection. For the liquid manure, half of the digested liquid gets transferred to WSF 1 while the other half gets transferred back into the manure transfer system. This helps the flow of manure through the system. Both the digester and separated solids buildings are managed to not have current or past indicators of discharge.

Solid and liquid waste storage facilities are managed to not have current or past indicators of discharges (includes headland stacking sites).

Solid and liquid waste storage structures are well-maintained, in good repair, and in compliance with permit requirements.

Liquid waste storage facilities do have permanent markers installed but they are not clearly designated.

Process Wastewater (other than feed storage area leachate/runoff) (see Photos on page 93)

At the Main Dairy, there are two milking parlors present. Both parlors are connected to the manure transfer systems located at the main dairy. PPD also has a cheese plant on-site at the Main Dairy, located near the large milking parlor. All process industrial wastewater from the cheese plant is stored in the existing WSFs on-site, per Section 2 of their WPDES Permit. All process wastewater is collected, digested, and transferred to the WSFs located on-site. There were no observed discharges of milk house waste or process wastewater during the inspection.

At the Heifer Site, there are drains located within every wet calf barn. One drain is located at the end of the barn and drains are located underneath the bedding on both sides of the barn. All wash water generated when cleaning and disinfecting the barns drains into reception basins located between the barns and is then transferred to heifer barn #2. There is also a calf hutch washing center located at the south end of the production site. There, they wash and disinfect the calf hutches. The wash water flows into a drain and is transferred directly to WSF 2 at the Heifer Site. These transfer systems have not been previously approved or evaluated by the department and will require an evaluation per NR 243.16 (See Page 7 for items for the next permit term).

Feed Storage Area Runoff (see Photos on pages 33-47)

The feed storage areas at PPD are designed to gravity flow towards each other and then north, where the runoff enters a man-hole or the concrete runoff controls located at the north end of the east feed storage area. Leachate & first flush runoff is collected & pumped directly to WSF #2. PPD currently utilizes a vegetated treatment area (VTA) to handle additional runoff from the feed storage area. The VTA has a concrete spreader bar which distributes leachate runoff across the VTA but due to dense vegetation, the leachate is not evenly distributed. This results in a concentrated flow path through the densely vegetated part of the VTA.

Approximately 185 feet downslope of the spreader bar, there is a berm present to collect any runoff that would flow through the end of the VTA. This creates a large ponded area of leachate, approximately 0.5 acres in size. PPD installed a hickenbottom drain & pump station at the northwest corner of the VTA to capture any liquid that is ponded within the VTA. This transfers the liquid to a reception basin located west of the VTA and where the liquid gets pumped to WSF 2. The Department observed approximately 2 feet of liquid within the VTA based on the amount of the hickenbottom drain that was exposed. The VTA is currently not functioning as designed and an evaluation will be required in the next permit term to return the VTA into working order.

Feed storage areas and associated process wastewater (leachate, runoff) are not managed to not have current or past indicators of discharges.

Feed storage areas and runoff control systems are not well-maintained, in good repair and in compliance with permit requirements.

Animal Mortality Disposal (see Photos on pages 47 and 53)

PPD Dairy utilizes sheds, one at the Main Dairy and one at the Heifer Site, to store mortalities until they are collected by Sandy Bay Mink Ranch daily.

Animal mortalities are managed to not have current or past indicators of discharges.

Ancillary Service Areas (see Photos on pages 48-56)

PPD stores fuel north of the shop building in large above ground storage tanks. There were no observed discharges from the fuel tanks during the inspection.

Fertilizer and other chemicals are stored in the shed located east of WSF 4. Controls are in place to collect and prevent discharges of hazardous chemicals. A concrete trench is located adjacent to the storage tanks to collect any leaks and a concrete underground storage basin is located adjacent to the building to hold any spilled chemicals.

Bedding and feed additives are stored under roof in the commodity shed and the north end of the shed located between the two feed storage areas.

PPD utilizes a CAFO outdoor vegetated area at the Heifer Site. Animals are only allowed on the vegetated area while cleaning heifer barns 1 and 2 at the Heifer Site. There was adequate vegetation on the pasture.

Preventative maintenance actions and visual inspections are occurring to minimize pollutant discharges from ancillary service and storage areas (i.e. storm water conveyance systems, driveways, etc.). Management practices are implemented to sustain sufficient vegetative cover on CAFO outdoor vegetated areas.

PPD utilizes several outdoor cattle lanes to transfer cows from one barn to another. The outdoor lanes are scraped and cleaned immediately following use to prevent discharges from manure tracking.

RECORDS REVIEW

The permittee has the current WPDES Permit and Nutrient Management Plan onsite.

The permittee provided complete production site inspection records that are required to be retained.

The permittee provided adequate documentation that the facility has a minimum of 180 days of liquid manure storage capacity.

The permittee provided land application records to demonstrate compliance with nutrient management plan requirements.

The permittee has copies of their Emergency Response and Monitoring and Inspection plans onsite. It will need to be updated to include the appropriate DNR Contact (Salscheider) and phone number.

The permittee is up to date on required reporting and actions as specified in the Schedules section of permit.

SUMMARY

Substantial Compliance

The permittee is currently not in substantial compliance with the permit.

Areas of Concern

- Dense vegetation and ponding within the VTA indicate that the VTA is not operating as designed, but operating more like a detention basin with full collection
- Residual manure settled in multiple areas at the Clyde Hill Farm Site indicating that manure is leaving the pushout areas at the end of the bed pack barns and ponding on the west side of the gravel drive
- Residual manure settled near WSF 1 at the Clyde Hill Farm Site indicate that the runoff from the solid manure stacking area and calf hutch area is ponding outside of the WSF instead of entering WSF 1
- MOL and MOS markers are not clearly designated at any WSF

- Gully erosion is present along the ramp in WSF 1 at the Clyde Hill Farm Site from the runoff controls

Permit Violations

Permit Section 1.2 Runoff Control

All runoff control systems shall be designed and maintained to comply with production area discharge limitations. Uncontaminated runoff shall be diverted away from manure and process wastewater storage and containment areas, raw materials storage and containment areas, and outdoor animal lots. All storage and containment structures associated with runoff control system shall be operated in accordance with the "Proper Operations and Maintenance" section.

- During the inspection, the Department observed the runoff controls for the feed storage area at the Main Dairy not being operated in accordance with the "Proper Operations and Maintenance" section. Liquid was heavily ponded within the VTA and concentrated flow channels were present. An evaluation of the runoff controls is required to be submitted in the "Action Items" below.

Action Items

- Conduct an engineering evaluation of the feed storage area runoff controls at the Main Dairy and submit documentation to the Department by September 30, 2020

Items for Next Permit Term

- Engineering evaluation for WSF 3 at the Main Dairy
 - Due to age
- Submit plans and specifications (if needed) for the VTA and all associated runoff controls at the Main Dairy and construct the necessary upgrades
- Engineering evaluation of the waste transfer systems located in the wet calf barns and calf hutch washing area at the Clyde Hill Farm Site

Materials Required as part of the Permit Reissuance Application

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

- 3400-025 form (Livestock/Poultry Operation WPDES Permit Application)
- 3400-025A form (Animal Units Calculation Worksheet)
- 3400-025G form (Evaluated Facilities of Systems Checklist)
- 3400-025C form (Reviewable Facilities of Systems Checklist)
- A soil survey map of the dairy's production area
- A labeled aerial map showing the existing and proposed features and structures of the dairy's production area
- Calculations documenting days liquid manure and process wastewater storage
- Supporting documentation for days storage calculations
- A complete 5-year Nutrient Management Plan (NMP). If necessary, include a description of permanent spray irrigation systems and any other landspreading or treatment systems (proposed or active)
- Plans and specifications for any proposed facilities

Attachment A



07/07/2020 14:43:57

Photo #:	1
Date/Time of Photo:	07/07/2020 14:43
Photo Location:	Heifer Site
Photo By:	Brian Hanson

Photo Description: Calves being kept under adequate roof in a calf barn located at the Heifer Site. Separated manure and straw are used for bedding. All wastewater drains to a reception basin where it is then combined with the manure transfer system.



07/07/2020 14:52:27

Photo #:	2
Date/Time of Photo:	07/07/2020 14:52
Photo Location:	Heifer Site
Photo By:	Brian Hanson

Photo Description: A calf barn in the process of being cleaned. The calf hutches are taken out and sanitized and the bed pack is scrapped and stored on the stacking pad. The floors are then washed and sanitized and all wash water is combined with the manure transfer system and stored in the on-site WSFs



Photo #:	3	Photo Description: Calf hutches that are stored outside, between the solid manure stacking pad and the southernmost calf barn. All runoff from the calf hutches is directed to surface flow into the existing WSFs on-site. This photo was taken facing east.
Date/Time of Photo:	07/07/2020 14:57	
Photo Location:	Heifer Site	
Photo By:	Brian Hanson	



Photo #:	4	Photo Description: Calf hutches that are stored outside, between the solid manure stacking pad and the southernmost calf barn. All runoff from the calf hutches is directed to surface flow into the existing WSFs on-site. This photo was taken facing west.
Date/Time of Photo:	07/07/2020 14:59	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Photo #:	5	Photo Description: One of the drains that are in the wet calf barns that collects all process wastewater and transfers it to a reception basin, where it is pumped to the solid separator and the manure transfer system.
Date/Time of Photo:	07/07/2020 14:52	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Photo #:	6	Photo Description: One of the reception tanks for the wet calf barns. Wastewater from the barns gravity flows to the reception basin, where it is then pumped to the solid separator and manure transfer system.
Date/Time of Photo:	07/07/2020 14:54	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Photo #:	7	Photo Description: The manure transfer pumps located in the manure handling building located between free stall barns 5 and 6.
Date/Time of Photo:	07/07/2020 12:48	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	8	Photo Description: The reception basin at the manure handling building located between Free Stall barns 5 and 6. The reception basin has a capacity of 134,340 gallons.
Date/Time of Photo:	07/07/2020 12:49	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	9	Photo Description: The reception basin located at the manure handling building located between Free Stall Barns 5 and 6. The inlet identified in the photo is digested liquid from the digester coming back into the system to allow the system to run smoothly.
Date/Time of Photo:	07/07/2020 12:50	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	10	Photo Description: Waste Storage Facility 1 located at the Main Site between Free Stall Barns 3 and 4. Manure first enters WSF 1 before being transferred to other WSFs. WSF 1 has a capacity of 1,087,487 gallons.
Date/Time of Photo:	07/07/2020 14:09	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	11	Photo Description: Waste Storage Facility 1 located at the Main Site between Free Stall Barns 3 and 4. Manure first enters WSF 1 before being transferred to other WSFs. There was only one maker present and it identified in the photo by the black arrow.
Date/Time of Photo:	07/07/2020 14:09	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	12	Photo Description: Waste Storage Facility 2 located at the Main Site, south of WSF 1. WSF 2 has a capacity of 5,917,996 gallons and is the first cell in a two-cell system.
Date/Time of Photo:	07/07/2020 13:45	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	13	Photo Description: Waste Storage Facility 2 located at the Main Site, south of WSF 1. WSF 2 has a useable capacity of 5,917,996 gallons and is the first cell in a two-cell system.
Date/Time of Photo:	07/07/2020 13:47	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	14	Photo Description: The inlet for feed storage runoff into WSF 2 from the runoff collection system.
Date/Time of Photo:	07/07/2020 13:45	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	15	Photo Description: The berm separating WSF 2 and WSF 3. A concrete weir is located in the middle of the berm to allow waste to transfer from WSF 2 to WSF 3. This photo was taken facing west.
Date/Time of Photo:	07/07/2020 13:47	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	16	Photo Description: Waste Storage Facility 3, located south of WSF 2 at the Main Site. WSF 3 has a capacity of 10,063,816 gallons and is the second stage of a two-cell system. This photo was taken facing northwest.
Date/Time of Photo:	07/07/2020 13:48	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	17	Photo Description: Permanent markers within WSF 3. The red line represents the Margin of Safety and the Maximum Operating Level is 2 1/2 feet below the red line.
Date/Time of Photo:	07/07/2020 13:48	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	18	Photo Description: Waste Storage Facility 3, located south of WSF 2 at the Main Site. WSF 3 has a usable capacity of 10,063,816 gallons and is the second stage of a two-cell system. The permanent markers can be seen in the foreground of the photo. This photo was taken facing northwest.
Date/Time of Photo:	07/07/2020 13:48	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	19	Photo Description: Waste Storage Facility 4 located south of Ryan Radio Rd at the Main Site. WSF 4 has a usable capacity of 23,320,788 gallons. This photo was taken facing east.
Date/Time of Photo:	07/07/2020 13:02	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	20	Photo Description: Waste Storage Facility 4 located south of Ryan Radio Rd at the Main Site. WSF 4 has a usable capacity of 23,320,788 gallons. This photo was taken facing north.
Date/Time of Photo:	07/07/2020 13:03	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	21	Photo Description: Waste Storage Facility 4 located south of Ryan Radio Rd at the Main Site. WSF 4 has a usable capacity of 23,320,788 gallons. This photo was taken facing north.
Date/Time of Photo:	07/07/2020 13:07	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	22	Photo Description: The permanent markers within WSF 4. The red line represents the Margin of Safety and the Maximum Operating Level. The markers are located on a scour pad on the east side of the structure.
Date/Time of Photo:	07/07/2020 13:11	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Jul 7, 2020 at 3:00:14 PM

Photo #:	23
Date/Time of Photo:	07/07/2020 15:00
Photo Location:	Heifer Site
Photo By:	James Salscheider

Photo Description: Waste Storage Facility 1 located on the west side of the Heifer Site. WSF 1 is the first stage in a two-cell system. WSF 1 has a usable capacity of 1,500,000 gallons. This photo was taken facing west



Jul 7, 2020 at 3:04:03 PM

Photo #:	24
Date/Time of Photo:	07/07/2020 15:04
Photo Location:	Heifer Site
Photo By:	James Salscheider

Photo Description: Waste Storage Facility 2 located on the west side of the Heifer Site. WSF 2 is the second stage in a two-cell system. WSF 2 has a usable capacity of 7,000,000 gallons. This photo was taken facing southwest.



Photo #:	25	Photo Description: Waste Storage Facility 2 located on the west side of the Heifer Site. WSF 2 is the second stage in a two-cell system. WSF 2 has a usable capacity of 7,000,000 gallons. This photo was taken facing west.
Date/Time of Photo:	07/07/2020 14:58	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Photo #:	26	Photo Description: Permanent markers present within WSF 2 at the Heifer Site. The red line represents the Margin of Safety and the Maximum Operating Level is approximately 2 1/2 feet below the MOS. This photo was taken facing west.
Date/Time of Photo:	07/07/2020 15:03	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Photo #:	27
Date/Time of Photo:	07/07/2020 15:05
Photo Location:	Heifer Site
Photo By:	James Salscheider

Photo Description: The solid manure stacking pad located east of the liquid waste storage facilities at the Heifer Site. All liquid runoff is diverted to WSF 1. This photo was taken facing north.



Photo #:	28
Date/Time of Photo:	07/07/2020 15:05
Photo Location:	Heifer Site
Photo By:	James Salscheider

Photo Description: The solid manure stacking pad located east of the liquid waste storage facilities. All liquid runoff is diverted to WSF 1. This photo was taken facing north.



Jul 7, 2020 at 3:05:44 PM

Photo #:	29	Photo Description: The solid manure stacking pad located east of the liquid waste storage facilities. All liquid runoff is diverted to WSF 1. This photo was taken facing northwest.
Date/Time of Photo:	07/07/2020 15:05	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Jul 7, 2020 at 3:01:15 PM

Photo #:	30	Photo Description: Runoff from the solid manure stacking pad and calf hutch area is represented by the red arrows and is diverted to WSF 1. Settled manure solids are present in the foreground of the photo, indicating that runoff is ponding outside of the WSF.
Date/Time of Photo:	07/07/2020 15:01	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Photo #:	31	Photo Description: Gully erosion adjacent to the concrete ramp, indicating that runoff from the solid manure stacking pad and calf hutch area is flowing next to the ramp instead of on the ramp. The red arrow represents the flow path of runoff into WSF 1.
Date/Time of Photo:	07/07/2020 15:03	
Photo Location:	Heifer Site	
Photo By:	Brian Hanson	



Photo #:	32	Photo Description: Gully erosion adjacent to the concrete ramp, indicating that runoff from the solid manure stacking pad and calf hutch area is flowing next to the ramp instead of on the ramp.
Date/Time of Photo:	07/07/2020 15:02	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Jul 7, 2020 at 3:02:26 PM

Photo #:	33	Photo Description: Gully erosion adjacent to the concrete ramp, indicating that runoff from the solid manure stacking pad and calf hutch area is flowing next to the ramp instead of on the ramp. The red arrow represents the flow path of runoff into WSF 1.
Date/Time of Photo:	07/07/2020 15:02	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



07/07/2020 14:46:55

Photo #:	34	Photo Description: The pushout area for the dry calf barns located at the heifer site. When the barns are scrapped, the bed pack and solid manure are pushed to this area and then transferred to the solid manure stacking pad.
Date/Time of Photo:	07/07/2020 11:46	
Photo Location:	Heifer Site	
Photo By:	Brian Hanson	



07/07/2020 14:47:09

Photo #:	35
Date/Time of Photo:	07/07/2020 14:47
Photo Location:	Heifer Site
Photo By:	Brian Hanson

Photo Description: The pushout areas for the dry calf barns located at the heifer site. When the barns are scrapped, the bed pack and solid manure are pushed to this area and then transferred to the solid manure stacking pad. The red arrows represent the flow path of contaminated water away from the pushout areas.



Photo #:	36
Date/Time of Photo:	07/07/2020 12:44
Photo Location:	Main Site
Photo By:	James Salscheider

Photo Description: Free Stall Barn 6 at the Main Site. The barn floors are pitched to the middle where a trench collected manure and transfers the manure to the manure handling building located between barns 5 and 6.

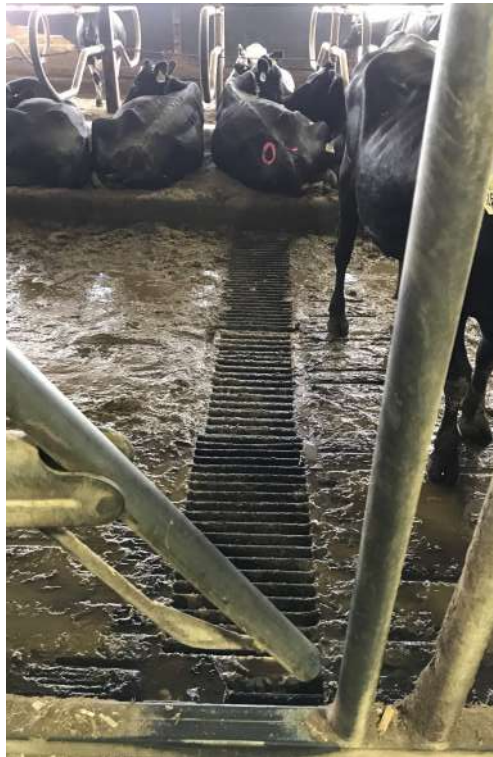


Photo #:	37	Photo Description: A flume that manure flows into and gets transferred to the reception basin between barns 5 and 6. The flume is located in the middle of the free stall barns and is the lowest point in the barn.
Date/Time of Photo:	07/07/2020 12:42	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	38	Photo Description: One of the milking parlors at the Main Site can be seen in the background of the photo. All process wastewater from the milking parlors are collected and comingled with manure, digested, and stored in the existing WSFs.
Date/Time of Photo:	07/07/2020 14:02	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	39	Photo Description: The reception basin located at the north end of Free Stall Barn 2. The reception basin has a capacity of 265,091 gallons.
Date/Time of Photo:	07/07/2020 14:01	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	40	Photo Description: The reception basin located at the north end of Free Stall Barn 2. The reception basin has a capacity of 265,091 gallons.
Date/Time of Photo:	07/07/2020 14:01	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Jul 7, 2020 at 3:11:30 PM

Photo #:	41	Photo Description: Flumes within the heifer barns at the Heifer Site that capture manure and transfer manure to the reception basin and solid separator located in Heifer Barn 2. Similar to the Main Site, the free stall barns are pitched to the middle.
Date/Time of Photo:	07/07/2020 15:11	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Jul 7, 2020 at 3:13:27 PM

Photo #:	42	Photo Description: The reception basin located in Heifer Barn 2 at the Heifer Site. All liquid waste generated in the animal housing units at the Heifer Site are transferred to this basin, where the solids are then separated and liquids are transferred to the existing WSFs that are on-site.
Date/Time of Photo:	07/07/2020 15:13	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Jul 7, 2020 at 2:16:03 PM

Photo #:	43	Photo Description: The manure digester located north of the Dry Cow Barn at the Main Site. The digester is a plug-flow digester and digests manure and process wastewater from the Main Site.
Date/Time of Photo:	07/07/2020 14:16	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Jul 7, 2020 at 2:16:07 PM

Photo #:	44	Photo Description: The manure digester located north of the Dry Cow Barn at the Main Site. The digester is a plug-flow digester and digests manure and process wastewater from the Main Site.
Date/Time of Photo:	07/07/2020 14:16	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	45	Photo Description: The dry bedding bay located at the east end of the solid separating building. Solids are separated from the manure and are dried and stored in this bay and used for bedding in the free stall barns.
Date/Time of Photo:	07/07/2020 14:16	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	46	Photo Description: The manure drying equipment located in the solid separating building. Wet manure solids are conveyed from the solid separator into the dryer.
Date/Time of Photo:	07/07/2020 14:18	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	47
Date/Time of Photo:	07/07/2020 14:20
Photo Location:	Main Site
Photo By:	Brian Hanson

Photo Description: Another bay used to stored dried manure solids to be used for bedding. Typically, these bays are used for wet bedding but due to construction after a building fire, these bays are being used for dry bedding.



Photo #:	48
Date/Time of Photo:	07/07/2020 15:12
Photo Location:	Heifer Site
Photo By:	James Salscheider

Photo Description: The solid separator located in Heifer Barn 2 at the Heifer Site. The separated solids are used as bedding at the Heifer Site. After the solids are removed, the liquid manure is transferred to the existing WSFs at the Heifer Site.



Photo #:	49	Photo Description: The east feed side of the feed storage area, where the majority of the corn silage is stored. This side of the FSA pitches east to west and then north towards the runoff control system. The red arrows represent the flow path.
Date/Time of Photo:	07/07/2020 13:20	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	50	Photo Description: The east feed side of the feed storage area, where the majority of the corn silage is stored. This side of the FSA pitches east to west and then north towards the runoff control system. The red arrows represent the flow path.
Date/Time of Photo:	07/07/2020 13:20	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	51	Photo Description: The backside of the east FSA. There was no evidence of feed solids or leachate off the backside of the feed pad.
Date/Time of Photo:	07/07/2020 13:22	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	52	Photo Description: The backside of the east FSA. There was no evidence of feed solids or leachate off the backside of the feed pad.
Date/Time of Photo:	07/07/2020 13:22	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	53	Photo Description: The backside of the east FSA. There was no evidence of feed solids or leachate off the backside of the feed pad. The red arrows represent the flow path of runoff.
Date/Time of Photo:	07/07/2020 13:23	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	54	Photo Description: The east feed side of the feed storage area, where the majority of the corn silage is stored. This side of the FSA pitches east to west and then north towards the runoff control system. The red arrows represent the flow path.
Date/Time of Photo:	07/07/2020 13:21	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	55	Photo Description: Leachate seeping under the wall in the middle of the east FSA. All runoff is still contained and captured by the runoff control system. The red arrow represents the flow path of runoff.
Date/Time of Photo:	07/07/2020 13:23	
Photo Location:	Main Dairy	
Photo By:	James Salscheider	



Photo #:	56	Photo Description: Cracks and seeps in the floor of the feed storage area. PPD has a plan in place to repair these areas.
Date/Time of Photo:	07/07/2020 13:24	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	57	Photo Description: The backside of the west feed storage area located at the Main Site. Concrete blocks are used for the back wall. The west feed storage is pitched from west to east and then north where it flows into a man-hole that transfers the runoff to the runoff control system.
Date/Time of Photo:	07/07/2020 13:50	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	58	Photo Description: The backside of the west feed storage area located at the Main Site. Concrete blocks are used for the back wall. The west feed storage is pitched from west to east and then north where it flows into a man-hole that transfers the runoff to the runoff control system.
Date/Time of Photo:	07/07/2020 13:50	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	59	Photo Description: A man-hole associated with the feed storage runoff collection system. Feed solids were present around the man-hole. This photo was taken facing south towards the west feed storage area.
Date/Time of Photo:	07/07/2020 13:51	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	60	Photo Description: The west feed storage located at the Main Site, east of WSF 3. The west feed storage is pitched from west to east and then north where it flows into a man-hole that transfers the runoff to the runoff control system. The red arrows represent the runoff flow path.
Date/Time of Photo:	07/07/2020 13:52	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	61	Photo Description: Haylage storage on the west FSA located at the Main Site. Black plastic is used to wrap the feed storage walls to prevent leakage from bay to bay. The red arrows represent the runoff flow path.
Date/Time of Photo:	07/07/2020 13:53	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	62	Photo Description: The concrete driveway between the commodity shed and the machine shed. Feed storage runoff flows between the two buildings before entering the runoff collection system. The red arrow represents the flow path that runoff takes.
Date/Time of Photo:	07/07/2020 13:53	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	63	Photo Description: The concrete driveway between the commodity shed and the machine shed. Feed storage runoff flows between the two buildings before entering the runoff collection system. The red arrow represents the flow path that runoff takes.
Date/Time of Photo:	07/07/2020 13:43	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	64	Photo Description: A man-hole associated with the runoff collection system. Feed storage runoff from the west FSA flows into this man-hole and gets transferred to the runoff control system. The red arrows represents the flow path.
Date/Time of Photo:	07/07/2020 13:43	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	65	Photo Description: The runoff collection system for the east feed storage area. Runoff from the FSA is directed north and into this concrete swale. The red arrows represent the flow path.
Date/Time of Photo:	07/07/2020 13:28	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	66	Photo Description: The runoff collection system for the east feed storage area. Runoff from the FSA is directed north and into this concrete swale. The red arrow represents the flow path.
Date/Time of Photo:	07/07/2020 13:28	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	67	Photo Description: The concrete swale that runoff from the west FSA flows through. The red arrow represents the flow path of the runoff.
Date/Time of Photo:	07/07/2020 13:29	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	68	Photo Description: The reception basin for the FSA runoff collection system. Runoff from the concrete swale is transferred to this basin and then onto the spreader bar where it then flows through the VTA.
Date/Time of Photo:	07/07/2020 13:28	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	69	Photo Description: The reception basin for the FSA runoff collection system. Runoff from the concrete swale is transferred to this basin and then onto the spreader bar where it then flows through the VTA. The red arrows represent the flow path of runoff.
Date/Time of Photo:	07/07/2020 13:29	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	70	Photo Description: The spreader bar and beginning of the vegetated treatment area. The vegetation was not mowed and ponding of contaminated runoff was present. The red arrows represent the flow path of runoff.
Date/Time of Photo:	07/07/2020 13:30	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	71
Date/Time of Photo:	07/07/2020 13:31
Photo Location:	Main Site
Photo By:	James Salscheider

Photo Description: The spreader bar and beginning of the vegetated treatment area. The vegetation was not mowed and ponding of contaminated runoff was present. The red arrows represent the flow path of runoff.



Photo #:	72
Date/Time of Photo:	07/07/2020 13:31
Photo Location:	Main Site
Photo By:	James Salscheider

Photo Description: The spreader bar and beginning of the vegetated treatment area. The vegetation was not mowed and ponding of contaminated runoff and concentrated flow channels were present. The red arrows represent the flow path of runoff.



Photo #:	73	Photo Description: The south end of the VTA, where contaminated runoff collects and ponds. A hickenbottom inlet collects the ponded runoff and transfers it to a reception basin where it is pumped to WSF 2 at the Main Site.
Date/Time of Photo:	07/07/2020 13:33	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	74	Photo Description: The berm at the south end of the VTA area that prevents runoff from continuing down the grassed area south of the VTA. The berm collects and ponds the runoff at the south end of the VTA.
Date/Time of Photo:	07/07/2020 13:34	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	75	Photo Description: The hickenbottom inlet and the reception basin, adjacent to the VTA. Runoff enters the hickenbottom and flows into the reception basin, where it is pumped to the reception basin adjacent to the concrete swales and then to WSF 2.
Date/Time of Photo:	07/07/2020 13:34	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	76	Photo Description: The reception basin adjacent to the VTA, which pumps runoff back to the reception basin adjacent to the concrete swale and then to WSF 2. The dashed red arrows represent the transfer lines.
Date/Time of Photo:	07/07/2020 13:34	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	77	Photo Description: The reception basin and pump adjacent to the concrete swales. Runoff is pumped from this reception basin to WSF 2 at the Main Site.
Date/Time of Photo:	07/07/2020 13:28	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	78	Photo Description: The animal mortality shed located at the Main Site, north of WSF 1. Animals are stored here until they are picked up by Sandy Bay Mink Ranch.
Date/Time of Photo:	07/07/2020 14:04	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	79	Photo Description: The commodity shed located at the home site, between the west FSA and the east FSA.
Date/Time of Photo:	07/07/2020 13:28	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	80	Photo Description: The commodity shed located at the home site, between the west FSA and the east FSA.
Date/Time of Photo:	07/07/2020 13:26	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	81	Photo Description: Another commodity shed for bedding storage at the Main Site, located in the shed south of the main commodity shed.
Date/Time of Photo:	07/07/2020 13:26	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	82	Photo Description: Bedding storage bays located on the south end of the main commodity shed.
Date/Time of Photo:	07/07/2020 13:26	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	83	Photo Description: Chemical storage located in the building east of WSF 4 at the Main Site. Runoff controls are in place to prevent discharges from the building.
Date/Time of Photo:	07/07/2020 13:13	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	84	Photo Description: Chemical storage located in the building east of WSF 4 at the Main Site. Runoff controls are in place to prevent discharges from the building, including the concrete gully that will capture any discharges of chemicals.
Date/Time of Photo:	07/07/2020 13:13	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	85	Photo Description: The concrete trench that is in-place to capture any discharges of chemicals from the large storage tanks.
Date/Time of Photo:	07/07/2020 13:13	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	86	Photo Description: The reception tank outside of the chemical storage building that is in-place to temporarily store any chemicals that are spilled and recovered. The storage capacity is approx. 2,000 gallons.
Date/Time of Photo:	07/07/2020 13:12	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	87	Photo Description: The fuel storage area located at the Main Site, north of the machine shop.
Date/Time of Photo:	07/07/2020 13:58	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	88	Photo Description: Bedding storage located at the end of a small heifer barn at the Heifer Site. Separated solids and straw are used for bedding in the calf and small heifer barns.
Date/Time of Photo:	07/07/2020 14:42	
Photo Location:	Heifer Site	
Photo By:	Brian Hanson	



Photo #:	89	Photo Description: Separated solids storage bay located at the end of a small heifer barn. Separated solids and straw are used for bedding the calf and small heifer barns.
Date/Time of Photo:	07/07/2020 14:45	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Photo #:	90	Photo Description: The animal mortality shed at the Heifer Site. The shed is located on the north side of the machine shed on the south side of the production site.
Date/Time of Photo:	07/07/2020 15:04	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Jul 7, 2020 at 3:09:02 PM

Photo #:	91	Photo Description: The CAFO outdoor vegetated area located at the southeast corner of the Heifer Site. Animals are let out on the pasture when the large heifer barns (1 and 2) are being scraped. Sufficient vegetation was present on the pasture.
Date/Time of Photo:	07/07/2020	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Jul 7, 2020 at 3:08:51 PM

Photo #:	92	Photo Description: The CAFO outdoor vegetated area located at the southeast corner of the Heifer Site. Animals are let out on the pasture when the large heifer barns (1 and 2) are being scraped. Sufficient vegetation was present on the pasture.
Date/Time of Photo:	07/07/2020 15:08	
Photo Location:	Heifer Site	
Photo By:	James Salscheider	



Photo #:	93	Photo Description: The wash shed located at the south end of the production site. Calf hutches are brought here to be washed and sanitized. All process wastewater is captured and transferred to the existing waste storage facilities on-site.
Date/Time of Photo:	07/07/2020 15:06	
Photo Location:	Heifer Site	
Photo By:	Brian Hanson	



Photo #:	94	Photo Description: Stormwater conveyance man-hole located between Free Stall Barns 5 and 6 at the Main Site. The transfer line from the milking parlor can also be seen with the breathers in the background of the photo and represented by the red arrow.
Date/Time of Photo:	07/07/2020 12:48	
Photo Location:	Main Site	
Photo By:	Brian Hanson	



Photo #:	95	Photo Description: One of the five wells located at the Main Site. This well is located west of the digester.
Date/Time of Photo:	07/07/2020 14:20	
Photo Location:	Main Site	
Photo By:	James Salscheider	



Photo #:	96	Photo Description: The CAFO Calendar that is used to track the monitoring and inspection permit requirements.
Date/Time of Photo:	07/07/2020 12:04	
Photo Location:	N/A	
Photo By:	James Salscheider	

QUARTERLY INSPECTION SUMMARY REPORT FORM

For WPDES-Permitted CAFO Operations

Date: June 30th Monitoring Quarter: April-June

Facility Name: Pagel's Ponderosa Name of Person Performing Inspection: _____

Quarterly reporting forms should be completed at the end of each quarter and kept on-site until submitted to the Department on an annual basis as part of the Annual Report for a WPDES-permitted CAFO (keep copies for your records). This information is due by the compliance date in the WPDES permit - typically January 31st of each year. This reporting form can be used for the quarterly monitoring requirements of your WPDES permit; you may also use your own quarterly monitoring form if you choose.

Per NR 243.19 WI Adm. Code, at minimum, quarterly report summaries shall include:

- 1) Identified permit violations, including all discharges of manure or process wastewater to surface waters; overflows of liquid manure or process wastewater storage and containment structures; and number of missed inspections. Note dates, times and approximate volume of discharges and corrective actions taken.
- 2) A summary of the condition of runoff control systems and storage and containment structures; summary of recorded levels of materials in liquid storage and containment structures, including exceedances of the maximum operating level and margin of safety level.
- 3) Other information requested by the Department in writing or in the permit.

Summary of permit violations, spills, discharges, etc. (attach additional sheets if necessary):

MANURE STORAGE CONDITION

Is fencing installed around all storages? NO YES

Are there any rodent holes or erosion problems in berm walls? NO YES

Are there any signs of leakage or seepage problems? NO YES

Are transfer lines and/or overflow channels & berms functioning? NO YES

Is vegetation on outside berm walls mowed regularly? NO YES

Are there any large cracks visible in concrete? NO YES

Are storage level markers missing or in need of repair? NO YES

ADDITIONAL COMMENTS:

Photo #:	97
Date/Time of Photo:	07/07/2020 12:04
Photo Location:	N/A
Photo By:	James Salscheider

Photo Description: The CAFO Calendar that is used to track the monitoring and inspection permit requirements.

PAGEL'S PONDEROSA DAIRY

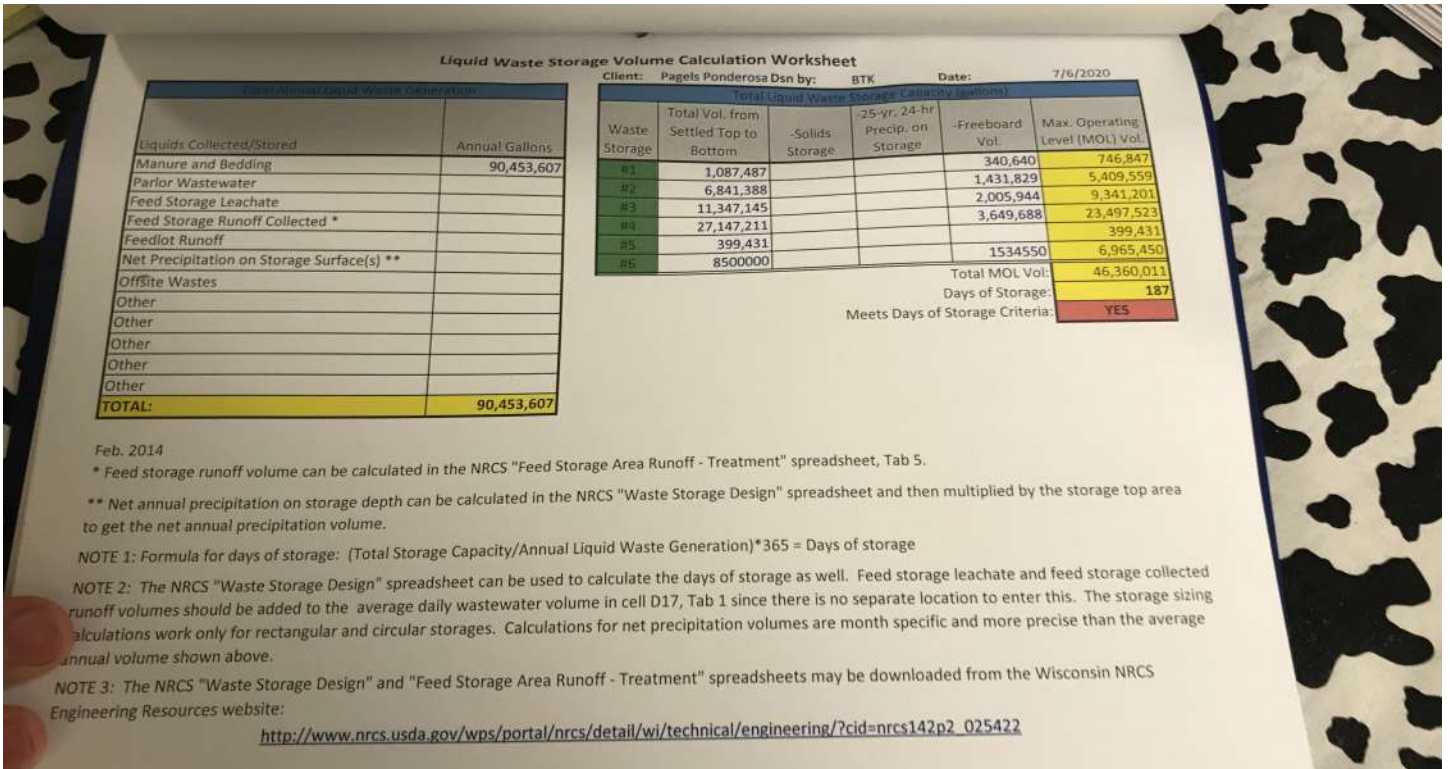
CONTAINMENT STRUCTURE INSPECTION REPORT

INSPECTION & LEVEL OF:

Inspector:	Date:	Reception Pits:		Manure Pit: 1		Manure Pit: 2		Manure Pit: 3		Manure Pit: 4		Feed Run off Control System:	Comments:
		Insp.	Level	Insp.	Level	Insp.	Level	Insp.	Level	Insp.	Level		
Todd Koss	1-4	✓	8	✓	8	✓	15.5	✓	9	✓	6.5	good	
Todd Koss	1-11	✓	8	✓	8	✓	15.5	✓	10	✓	6.5	good	
Todd Koss	1-18	✓	8	✓	8	✓	15.5	✓	10	✓	9.5	good	
Todd Koss	1-26	✓	8	✓	8	✓	15.5	✓	10	✓	9.5	good	
Todd Koss	2-1	✓	8	✓	8	✓	15.5	✓	10	✓	10.5	good	Manure frozen in pit 1
Todd Koss	2-8	✓	8	✓	8	✓	15.5	✓	10	✓	11.5	good	hard to tell snow coming in
Todd Koss	2-15	✓	8	✓	8	✓	15.5	✓	10	✓	12.5	good	Lots of snow on top of pits
Todd Koss	2-22	✓	8	✓	8	✓	15.5	✓	10	✓	13.5	good	Hot snow
Todd Koss	2-29	✓	8	✓	8	✓	15.5	✓	10	✓	14.5	good	snow on pits
Todd Koss	3-8	✓	8	✓	8	✓	15.5	✓	10	✓	15.5	good	
Todd Koss	3-15	✓	8	✓	8	✓	15.5	✓	10	✓	17.5	good	
Todd Koss	3-22	✓	8	✓	8	✓	15.5	✓	11	✓	18	good	
Todd Koss	3-29	✓	8	✓	8	✓	15.5	✓	13	✓	18.5	good	
Todd Koss	4-5	✓	8	✓	8	✓	15.5	✓	14	✓	19	good	
Todd Koss	4-12	✓	8	✓	8	✓	15.5	✓	15	✓	20.5	good	
Todd Koss	4-19	✓	8	✓	8	✓	15.5	✓	15	✓	21.5	good	
Todd Koss	4-26	✓	8	✓	8	✓	15.5	✓	16	✓	21.75	good	
Todd Koss	5-3	✓	8	✓	8	✓	15.5	✓	17.5	✓	22	good	
Todd Koss	5-10	✓	8	✓	8	✓	15.5	✓	14	✓	21.75	good	
Todd Koss	5-17	✓	8	✓	8	✓	15.5	✓	14	✓	20.5	good	hauling out

Photo #:	98
Date/Time of Photo:	07/07/2020 12:06
Photo Location:	N/A
Photo By:	James Salscheider

Photo Description: The spreadsheet that is used to track waste levels in the manure storages that are apart of the monitoring and inspection permit requirements.



Feb. 2014

* Feed storage runoff volume can be calculated in the NRCS "Feed Storage Area Runoff - Treatment" spreadsheet, Tab 5.

** Net annual precipitation on storage depth can be calculated in the NRCS "Waste Storage Design" spreadsheet and then multiplied by the storage top area to get the net annual precipitation volume.

NOTE 1: Formula for days of storage: (Total Storage Capacity/Annual Liquid Waste Generation)*365 = Days of storage

NOTE 2: The NRCS "Waste Storage Design" spreadsheet can be used to calculate the days of storage as well. Feed storage leachate and feed storage collected runoff volumes should be added to the average daily wastewater volume in cell D17, Tab 1 since there is no separate location to enter this. The storage sizing calculations work only for rectangular and circular storages. Calculations for net precipitation volumes are month specific and more precise than the average annual volume shown above.

NOTE 3: The NRCS "Waste Storage Design" and "Feed Storage Area Runoff - Treatment" spreadsheets may be downloaded from the Wisconsin NRCS Engineering Resources website:

http://www.nrcs.usda.gov/wps/portal/nrcs/detail/wi/technical/engineering/?cid=nrcs142p2_025422

Photo #:	99
Date/Time of Photo:	07/07/2020 12:05
Photo Location:	N/A
Photo By:	James Salscheider

Photo Description: Documentation of compliance with the 180-day storage requirements. As of July 06, 2020, PPD has 187 days of manure storage.

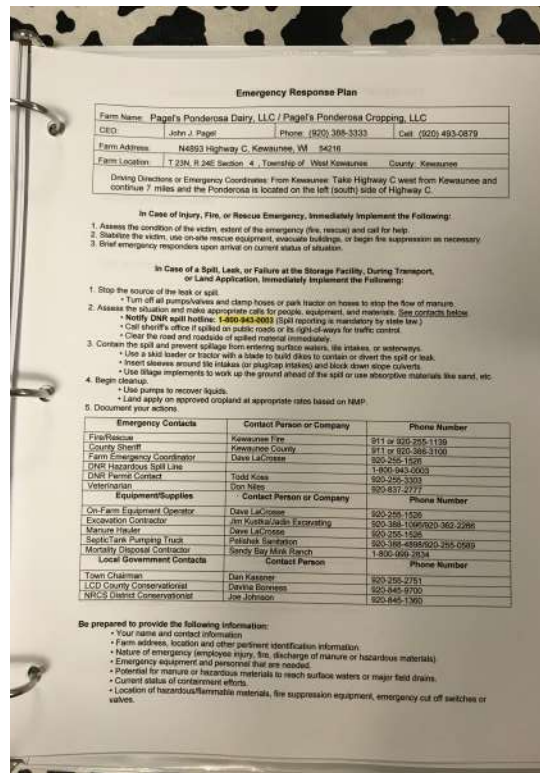


Photo #:	100
Date/Time of Photo:	07/07/2020 12:07
Photo Location:	N/A
Photo By:	James Salscheider

Photo Description: The Emergency Response Plan for PPD. The plan will need to be updated to include Salscheider as the new DNR CAFO Contact.

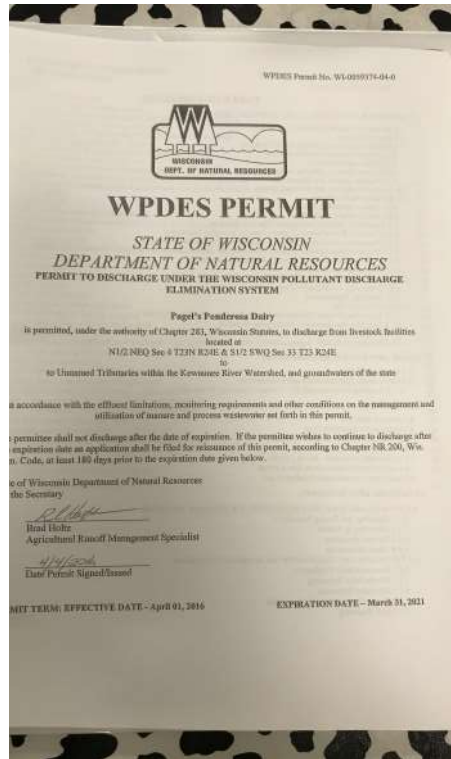


Photo #:	101	Photo Description: PPD's current WPDES Permit.
Date/Time of Photo:	07/07/2020 12:10	
Photo Location:	N/A	
Photo By:	James Salscheider	



Photo #:	102	Photo Description: PPD's most recent nutrient management plan update. The farm also had their past 5 NMP updates present during the inspection.
Date/Time of Photo:	07/07/2020 12:12	
Photo Location:	N/A	
Photo By:	James Salscheider	



March 20, 2024

FILE REF: R-2024-0060
 WPDES Permit #: WI-0059374

John Pagel
 Pagels Ponderosa Dairy LLC
 N4893 County Road C
 Kewaunee, WI 54216

Subject: Days of Storage Review for Pagels Ponderosa Dairy LLC T23N, R24E, Section 04 in West Kewaunee Township, Kewaunee County – NO ADDITIONAL ACTION REQUIRED

Dear Mr. Pagel:

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 Bob Pofahl, Resource Engineering Associates Inc on March 13, 2024 on behalf of Pagels Ponderosa Dairy LLC.

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 Pagels Ponderosa Dairy LLC has **182** 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 **11,394**. The liquid waste volumes are based on manure hauling logs for a collection period of 365 days. The hauling logs include waste generated from the main Pagels site, Clyde Hill calf site, and the Hilltop Ponderosa Dairy site (formally known as Legend Farms). A 25yr – 24hr storm from the Main Dairy feed storage area, Clyde Hill manure stacking pad, and Hilltop Ponderosa feed storage area is included in the MOL calculation. A manure agreement to allow Pagels Ponderosa Dairy, LLC to use 6,000,000 gallons of Dairy Dreams LLC’s (WI-0062057) WSFs to meet 180 day storage requirements was provided from March 8, 2024 through December 31, 2034. The 6,000,000 gallon of offsite waste transferred to Dairy Dream LLC will reduce their available liquid waste storage to 194 days (Project Reference: R-2023-0103).

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.
PPD WSF1	802,580	75,876	45,274	0	121,535	559,895
PPD WSF2	6,841,388	748,150	175,133	1,768,242	484,921	3,664,942
PPD WSF3	10,130,619	816,853	245,934	0	677,165	8,390,667
PPD WSF4	26,095,159	1,370,892	515,551	0	1,425,690	22,783,026
CH WSF5	872,815	102,014	51,583	83,604	135,387	500,227
CH WSF6	6,827,027	974,357	242,345	0	664,392	4,945,933
HD WSF7	6,009,390	0	156,280	175,825	439,852	5,237,433
Agreement	6,000,000	-	-	-	-	6,000,000
Total MOL Vol:						52,082,123
Days of Storage:						182

Annual Manure and Process Wastewater Application Volumes			
Year	Gallons Applied	Avg. Yearly AUs	Gallons/AU
2019	90,453,607	9,466	9,556
2020	86,453,607	10,366	8,340
2021	83,093,622	9,683	8,581
2022	108,621,446	11,496	9,449
2023	112,232,563	11,394	9,850
Average Volume/AU			9,155
Average Annual Volume for Current AUs			104,314,148

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

NOTICE OF APPEAL RIGHTS

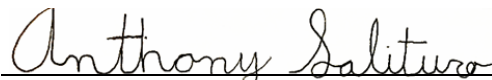
If you believe that you have a right to challenge this decision, you should know that the Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to WIS. STAT. §§ 227.52 and 227.53, 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



Tony Salituro, E.I.T.
CAFO Review Engineer
Watershed Management Program

Email: John J. Pagel; Pagels Ponderosa Dairy LLC
(920) 492-0728; johnj@pagelsponderosa.com

Robert Pofahl; Resource Engineering Associates, Inc.
(608) 819-2773; bob@reaeng.com

Davina Bonness; Kewaunee County LCD
(920) 845-9743; bonness.davina@kewauneeco.org

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

James Salscheider; DNR-Northeast Region
(920) 367-3007; james.salscheider@wisconsin.gov

Joe B Baeten; DNR-Northeast Region
(920) 366-2072; Joseph.Baeten@wisconsin.gov

Anthony Salituro; DNR-Central Office
(608) 444-2869; anthony.salituro@wisconsin.gov

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



March 29th, 2024

Kewaunee County
Approval

John J. Pagel
Pagel's Ponderosa Dairy, LLC
N4893 Hwy C
Kewaunee, WI 54216

SUBJECT: Conditional Approval of Pagel's Ponderosa Dairy, LLC Nutrient Management Plan,
WPDES Permit No. 0059374-05-0

Dear Mr. Pagel:

After completing a review of Pagel's Ponderosa Dairy, LLC 2023-2027 Nutrient Management Plan (NMP) the Wisconsin Department of Natural Resources (Department) is providing conditional approval that it is consistent with s. NR 243.14, 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 Pagel's Ponderosa Dairy, LLC 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 Pagel's Ponderosa Dairy, LLC 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 Pagel's Ponderosa Dairy, LLC 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 11,395 animal units (6,877 milking & dry cows, 252 heifers at 1,000 lbs, 1,856 heifers at 600 lbs, and 1,881 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 104,314,148 gallons of manure and process wastewater and 5,364 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 Pagel's Ponderosa Dairy, LLC currently has 10,964 acres (3,040.55 owned and 7,923.45 controlled through contracts, rental agreements or leases, or under manure agreements) of which 10,548.5 are spreadable acres.
6. That some fields included in the NMP are directly adjacent to or have high potential to deliver nutrients and sediment to Ahnapee River (listed 303(d) impaired water by 'PCB's' & Unknown Pollutant'), Rio Creek, East Twin River, Black Creek, King Creek, Neshota River, Silver Stream (listed 303(d) impaired water by 'total phosphorus'), Kewaunee River (listed 303(d) impaired water by 'total phosphorus' & 'PCB's').
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: Little Scarboro Creek, East Twin River.
8. That 157 fields are tiled.

- A-1	- A-2-3	- AB-1	- AB-2
- A-Salz-1	- A-Salz-2	- A-Salz-3	- A-Salz-4
- A-Salz-5	- A-Salz-6-7	- A-Salz-8	- A-Salz-20
- A-Salz-GD-2	- AZim-L-1	- AZim-L-2	- AZim-L-3
- Azim-L-4	- Azim-L5	- Azim-R-1-2-3	- Azim-R-4-5-6
- B-1	- BK-1	- BS-1	- BS-2
- BS-3	- BS-4	- CK-1	- DJ-1
- DJ-3	- DJ-4	- DJ-5-6	- DJ-7
- DJ-8	- DJ-9	- GB-1	- GB-2
- GB-3	- GB-4	- GB-5	- GB-6
- GO-1	- GR-1	- GR-2	- GR-3
- H-1	- H-4	- H-6	- H-7
- H-9	- H-9A	- H-10	- H-11
- H-12	- HT-1	- HT-2	- HT-3
- HT-4	- HT-5	- HT-6	- J-1
- J-2	- J-3	- J-5	- J-6
- J-7	- J-9	- J-10	- J-11
- J-14	- J-15	- J-15A	- J-16
- JKielpikowski-LK-1	- Josh Treml WL-1	- Kevin Pribyl 1-2	- Kevin Pribyl 3
- Kevin Pribyl 4-5	- Kevin Pribyl 6	- Kevin Pribyl-Norman	- KSwagel-H-1
- KSwagel-H-5-6	- KSwagel-MS-2	- KSwagel-S-2	- KSwagel-S-5
- KSwagel-VS-1	- KSwagel-VS-2-4	- KSwagel-VS-3	- L-1
- LH-1	- LH-3	- LH-4	- LH-5
- LH-6	- LH-7	- LH-8	- LH-9
- LH-13	- LH-14	- Lyons 1-2	- Lyons 7
- M Chervenka-1	- M Chervenka-3	- M-Chervenka-4	- M-Chervenka-16
- Merlin Pribyl 1-2	- Merlin Pribyl 3-4	- ML-JP-1	- ML-Kroll-1
- ML-Kroll-2	- ML-Kroll-3	- ML-Kroll-4	- MP-1
- M-Steinhorst-DR-1	- MY-2	- NM-1	- O-1
- O-5	- PR-1	- PR-2	- PW-1
- PW-2	- PW-3	- PW-4	- RP-1
- RP-2	- RP-3	- RP-4	- RP-5
- RP-6	- RP-7	- RP-8	- S Sevcik-4
- S Sevcik-5	- S Sevcik-6	- S Sevcik-7	- S Sevcik-TB-29
- Salentine-K-3	- Salentine-K-4	- Salentine-K-5	- School House-1

- School House-2
- Silver B-13
- SP-1
- Tim Mleziva 3-4-6
- WSelner-2-4
- School House-3
- Silver-B Wochos 1
- SP-2
- Tim Mleziva-26
- Silver B-10
- Silver B- Wochos 2
- Tim Mleziva-1
- TR-1
- Silver B-11-12
- SilverB- Gulbrand-1
- Tim Mleziva-2
- WSelner-1-3

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 2023-2027 Pagel's Ponderosa Dairy, LLC 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:	Other Permittee Field ID:	DNR #:
A-Salz-GD-1	PACKERLAND WHEY PRODUCTS INC	2	116741
Jason W Hermans	NLC ENERGY DENMARK LLC	1	96923
WS-5	PACKERLAND WHEY PRODUCTS INC	4	42622
Tim Mleziva-3-4-6	TIMMAR SANITATION, INC.	4	45320
A-Salz-GD-3	PACKERLAND WHEY PRODUCTS INC	2	116741
Tim Mleziva-3-4-6	TIMMAR SANITATION, INC.	3	51890
Tim Mleziva-3-4-6	TIMMAR SANITATION, INC.	1	51888
A-Salz-18	PACKERLAND WHEY PRODUCTS INC	18	116737
Tim Mleziva-1	TIMMAR SANITATION, INC.	3	51890
A-Salz-1	PACKERLAND WHEY PRODUCTS INC	1	116730

Tim Mleziva-3-4-6	TIMMAR SANITATION, INC.	2	51889
A-Salz-6-7	PACKERLAND WHEY PRODUCTS INC	6	116735
Tim Mleziva-15-16	TIMMAR SANITATION, INC.	1	51692
Tim Mleziva-2	TIMMAR SANITATION, INC.	4	45320
RSwagel-7	PACKERLAND WHEY PRODUCTS INC	7	109019
Tim Mleziva-2	TIMMAR SANITATION, INC.	3	51890
Tim Mleziva-15-16	TIMMAR SANITATION, INC.	2	51693
A-Salz-2	PACKERLAND WHEY PRODUCTS INC	2	116731
A-Salz-19	PACKERLAND WHEY PRODUCTS INC	19	116738
Tim Mleziva-1	TIMMAR SANITATION, INC.	4	45320
A-Salz-GD-3	PACKERLAND WHEY PRODUCTS INC	3	116742
RSwagel-12-13	PACKERLAND WHEY PRODUCTS INC	4	42622
A-Salz-4	PACKERLAND WHEY PRODUCTS INC	4	116733
Jason W Hermans	NLC ENERGY DENMARK LLC	2	116075
Jason W Home	NLC ENERGY DENMARK LLC	1	67520
A-Salz-20	PACKERLAND WHEY PRODUCTS INC	20	116739
RSwagel-14-15	PACKERLAND WHEY PRODUCTS INC	9	109037
RSwagel-4-5-6	PACKERLAND WHEY PRODUCTS INC	1	42620
A-Salz-GD-1	PACKERLAND WHEY PRODUCTS INC	1	116740
A-Salz-3	PACKERLAND WHEY PRODUCTS INC	3	116732
A-Salz-5	PACKERLAND WHEY PRODUCTS INC	5	116734
A-Salz-GD-2	PACKERLAND WHEY PRODUCTS INC	2	116741

Prior to any manure applications on these fields Pagel's Ponderosa Dairy, LLC 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 Pagel's Ponderosa Dairy, LLC 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: Pagel's Ponderosa Dairy, LLC 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:

The following fields have expired soil tests or insufficient soil sampling density* listed below:

- | | | |
|--------------------------|-----------------------|---------------------|
| - PFS PFS-1 (>200 ppm P) | - A-Salz-20 | - A-Salz-3 |
| - A-Salz-4 | - A-Salz-5 | - A-Salz-GD-1 |
| - CKinstetter-13 | - CKinstetter-14 | - CKinstetter-21-22 |
| - CKinstetter-B-1 | - CKinstetter-B-2 | - CKinstetter-DNR |
| - CKinstetter-LJ-1-LJ-1A | - H-Paplham-B5 | - H-PaplhamB-7 |
| - H-Paplham-SR-3-4 | - Kevin Pribyl 1-2 | - Joe M.NH-5 |
| - Kevin Pribyl 3 | - Kevin Pribyl 4-5 | - Kevin Pribyl-21 |
| - Kevin Pribyl-22 | - Kevin Pribyl-23 | - Kevin Pribyl-24 |
| - Kevin Pribyl-6 | - Kevin Pribyl-Norman | - LL Mart |
| - Lyons 10 | - Lyons 11 | - Lyons 12 |
| - Lyons 1-2 | - Lyons 14 | - Lyons 16 |
| - Lyons 16A | - Lyons 17 | - Lyons 18 |
| - Lyons 24 | - Lyons 25 | - Lyons 26 |
| - Lyons 26A | - Lyons 27 | - Lyons 28 |
| - Lyons 3 | - Lyons 4 | - Lyons 5 |
| - Lyons 6 | - Lyons 7 | - Lyons 9 |
| - Matt Kin-DNR-3 | - Miesler-29 | - Mile Long Farm 7 |
| - Mile Long Farm 8 | - Mile Long Farm 9 | - RDebroux-RD-1 |
| - RDebroux-RD-2 | - RDebroux-RD-3 | - RDebroux-RD-4 |
| - Silver B-Trust | - D Rank LT-9* | - M Chervenka-2N* |
| - S Sevcik-4* | | |

If Pagel's Ponderosa Dairy, LLC 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 ≥ 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 $\text{NH}_4\text{-N}$, percent $\text{NO}_3\text{-N}$, 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, Pagel's Ponderosa Dairy, LLC may use the following equation to adjust the first year available nitrogen when applications are injected or incorporated within 1 hour:

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

7. Pagel's Ponderosa Dairy, LLC shall record daily manure applications by using form 'Manure Application Checklist/Loadsheets'. These forms shall be retained at the farm and provided to the department upon request.
8. Pagel's Ponderosa Dairy, LLC shall annually submit a spreading report that summarizes the land application activities listed under NR 243.19(3)(c)5., Wis. Adm. Code by using 'CAFO Annual Spreading Report' as generated by Snap Plus.

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:
- | | | | |
|------------------|--------|----------|--------|
| - H-1 | - H-7 | - BL-2 | - BL-3 |
| - CK-4 | - CK-5 | - DJ-5-6 | - HT-3 |
| - HT-4 | - HT-5 | - HT-6 | - J-15 |
| - O-5 | - LH-5 | - LH-6 | - RP-4 |
| - Silver B Trust | - SP-2 | - K-3 | - A-4 |
| - A-4A | | | |
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. No headland stacking sites are approved.

MANURE & PROCESS WASTEWATER IRRIGATION

15. Irrigation of manure or process wastewater is prohibited.

NR243.143/151.075 SILURIAN BEDROCK PERFORMANCE STANDARDS

16. Manure generated by Pagel’s Ponderosa Dairy, LLC that is mechanically applied to the following approved fields meet planning requirements under NR243.143/151.075, Silurian bedrock performance standards. The following fields are required to meet all requirements under NR243.143/151.075, Silurian bedrock performance standards immediately following this approval.

- A- Salz-17	- A-Salz-10-11-12	- A-Salz-13-14-15	- A-Salz-16
- A-Salz-18	- A-Salz-20	- A-Salz-8	- BK-1
- CB-1	- CB-2	- CB-3	- CB-4
- CKinstetter-LJ-1- LJ-1A	- D Rank LT-1	- D Rank LT-2	- D Rank LT-5
- D Rank LT-9	- D Rank-13-14	- D Rank-16	- D Rank-17
- DM-1	- DM-1A	- DM-2	- DM-2A
- DM-3	- DM-4	- Dubuois LT-1 (S01)	- J-2
- J-3	- J-5	- J-6	- JL-Nooker-1
- Joe M.NH-5	- Kevin Strabel-16	- Kevin Strabel-17	- KSwagel-JH-1
- KSwagel-JH-2	- LA-7-8	- Lyons 10	- Lyons 24
- Lyons 3	- Lyons 4	- Lyons 5	- Lyons 6
- Lyons 7	- Lyons 9	- MI-1	- Miesler-29

- | | | | |
|----------------|----------|----------------|------------|
| - ML-Dufek 2A | - MY-1 | - MY-2 | - PFS CU-2 |
| - PFS CU-3 | - PFS-3A | - PFS-4 | - PFS-5 |
| - PFS-7 | - PFS-8 | - Renke-Izzy-1 | - STP-2 |
| - TRabas-24-28 | | | |

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.

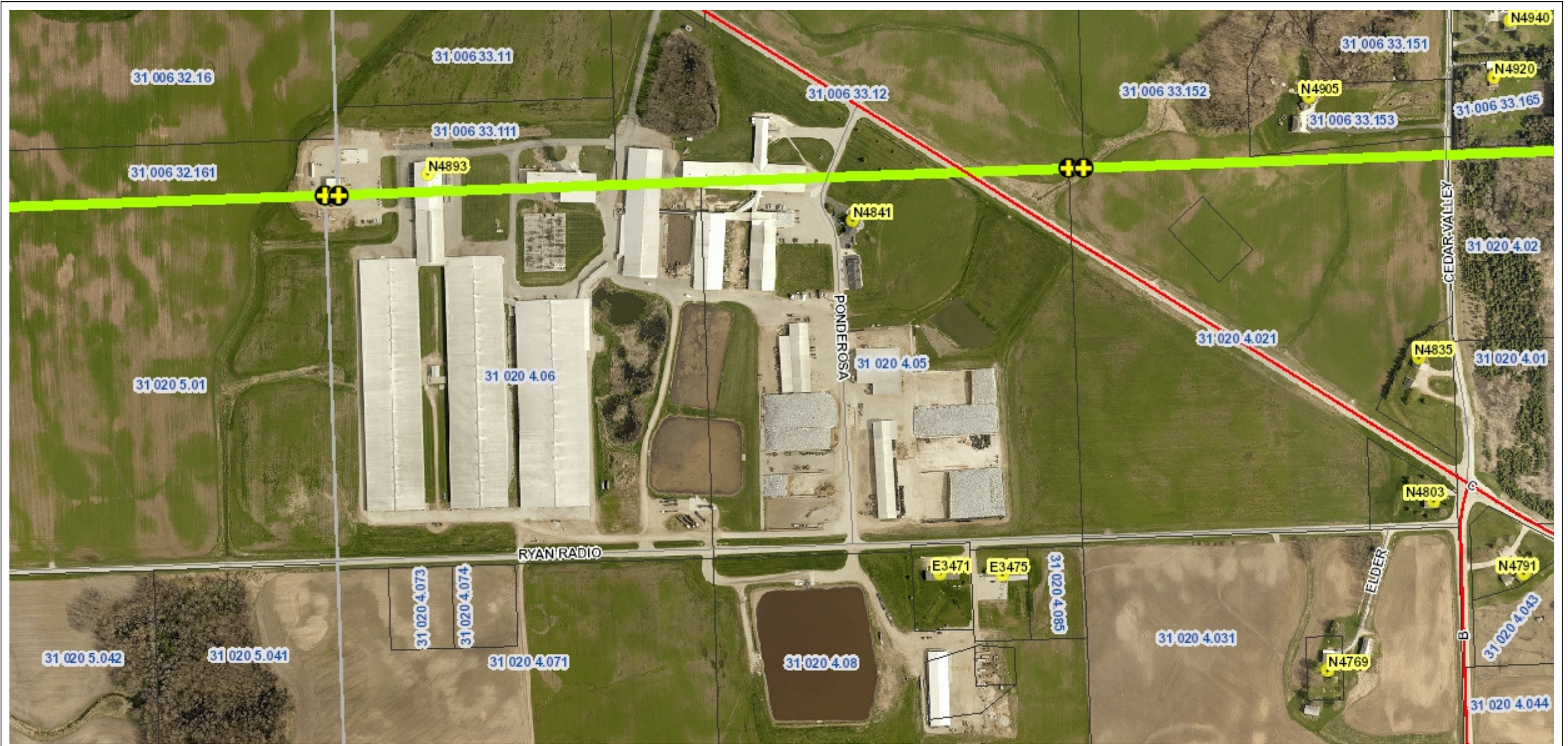
If you have any questions regarding this approval I can be reached at 608-212-8460 or Ashley.Scheel@Wisconsin.gov.

Sincerely,



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

cc: James Salscheider, WDNR Agricultural Runoff Specialist (James.Salscheider@Wisconsin.gov)
Joseph Baeten, WDNR Watershed Field Supervisor (Joseph.Baeten@Wisconsin.gov)
Christopher Clayton, WDNR Runoff Management Section Chief (Christopherr.Clayton@Wisconsin.gov)
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Susan LaCrosse, Attorney-Pagel Family Businesses (Susanl@Pagelsponderosa.com)
File



Pagel's Ponderosa Dairy, LLC Site Map



Clyde Hill Site Map



Hilltop Ponderosa Site Map