



WPDES PERMIT

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
**PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE
ELIMINATION SYSTEM**

Burr Oak Heifers, LLC

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a livestock facility located in the NW¼, Section 36, T18N, R7E, Town of Richfield, Adams County to

Little Roche-A-Cri Watershed of the Wisconsin River Basin and groundwater's of the state

in accordance with the effluent limitations, monitoring requirements and other conditions on the management of manure and process wastewater set forth in this permit.

The permittee shall not discharge after the date of expiration. If the permittee wishes to continue to discharge after this expiration date an application shall be filed for reissuance of this permit, according to Chapter NR 200, Wis. Adm. Code, at least 180 days prior to the expiration date given below.

State of Wisconsin Department of Natural Resources
For the Secretary

By *Pam Biersach*
Pam Biersach, Director
Bureau of Watershed Management

December 2, 2014
Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE– January 1, 2015

EXPIRATION DATE– December 31, 2019

TABLE OF CONTENTS

1 LIVESTOCK OPERATIONAL AND SAMPLING REQUIREMENTS	1
1.1 PRODUCTION AREA DISCHARGE LIMITATIONS	1
1.2 RUNOFF CONTROL	1
1.3 MANURE AND PROCESS WASTEWATER STORAGE	1
1.3.1 <i>Proper Operation and Maintenance</i>	1
1.3.2 <i>Discharge Prevention</i>	2
1.3.3 <i>Liquid Manure – 180-day storage</i>	2
1.3.4 <i>Facility Closure and Abandonment</i>	2
1.4 SOLID MANURE STACKING	3
1.5 ANCILLARY SERVICE AND STORAGE AREAS	3
1.6 NUTRIENT MANAGEMENT	3
1.6.1 <i>General Spreading Restrictions</i>	4
1.6.2 <i>Non-Cropland Applications</i>	4
1.6.3 <i>Additional Nutrient Management Plan Requirements</i>	4
1.6.4 <i>Frozen or Snow Covered Ground – General Spreading Restrictions</i>	5
1.6.5 <i>Frozen or Snow Covered Ground – Solid Manure (12% solids or more)</i>	5
1.6.6 <i>Frozen or Snow Covered Ground – Allowances for Surface Applications of Liquid Manure (<12% solids)</i>	6
1.6.7 <i>Frozen or Snow Covered Ground – Process Wastewater</i>	7
1.6.8 <i>Spreading Sites Submittals</i>	7
1.7 MONITORING AND SAMPLING REQUIREMENTS	8
1.7.1 <i>Monitoring and Inspection Program</i>	8
1.7.2 <i>Sampling Requirements</i>	8
1.8 SAMPLING POINT(S)	9
1.8.1 <i>Manure and Process Wastewater Storage Facilities - Sampling Required</i>	9
1.8.2 <i>Runoff Control System(s) - No Sampling Required</i>	10
1.8.3 <i>Sampling Point 001 - WSF #1 and 005- Feed Pad Collection Basin</i>	11
1.8.4 <i>Sampling Point 002 - Settled Solids (WSF #1); 004- Waste Feed., and 006- Bedpack Manure</i>	13
2 PRODUCTION AREA MONITORING REQUIREMENTS	15
2.1 GROUNDWATER MONITORING SYSTEM FOR PRODUCTION AREA	16
3 SCHEDULES	18
3.1 EMERGENCY RESPONSE PLAN	18
3.2 MONITORING & INSPECTION PROGRAM	18
3.3 PRODUCTION AREA MONITORING - GROUNDWATER MONITORING WELL INSTALLATION	18
3.4 ANNUAL REPORTS	18
3.5 NUTRIENT MANAGEMENT PLAN	18
3.6 SUBMIT PERMIT REISSUANCE APPLICATION	19
4 STANDARD REQUIREMENTS	20
4.1 GENERAL CONDITIONS	20
4.1.1 <i>Duty to comply</i>	20
4.1.2 <i>Permit Actions</i>	20
4.1.3 <i>Property Rights</i>	20
4.1.4 <i>Schedules</i>	20
4.1.5 <i>Inspection and Entry</i>	20
4.1.6 <i>Transfers</i>	20
4.1.7 <i>Duty to Mitigate</i>	21
4.1.8 <i>Duty to Provide Information</i>	21
4.1.9 <i>Recording of Results-Sampling</i>	21
4.1.10 <i>Recording of Results-Inspections</i>	21
4.1.11 <i>Spill Reporting</i>	21
4.1.12 <i>Planned Changes</i>	21

<i>4.1.13 Submittal of Plans and Specifications</i>	22
<i>4.1.14 Other Information</i>	22
<i>4.1.15 Noncompliance - 24 Hour Reporting</i>	22
<i>4.1.16 Reports and Submittal Certification</i>	22
4.2 GROUNDWATER STANDARD REQUIREMENTS	22
<i>4.2.1 Groundwater Sampling</i>	22
<i>4.2.2 Appropriate Formulas for Groundwater</i>	22
<i>4.2.3 Reporting Depth to Groundwater</i>	23
<i>4.2.4 Groundwater Elevation</i>	23
<i>4.2.5 Groundwater Grab Samples</i>	23
<i>4.2.6 Groundwater Data Log</i>	23
<i>4.2.7 Application of NR 140 to Substances Discharged</i>	23
<i>4.2.8 Indicator Parameter – Preventive Action Limits</i>	23
<i>4.2.9 Groundwater Monitoring Forms</i>	23
<i>4.2.10 Preventive Action Limit (PAL) Exceedance</i>	24
<i>4.2.11 Enforcement Standard Exceedance Within the Design Management Zone</i>	24
<i>4.2.12 Enforcement Standard Exceedance Outside the Design Management Zone</i>	24
<i>4.2.13 Groundwater Standard Exemptions and ACLs</i>	24
4.3 LIVESTOCK OPERATION GENERAL REQUIREMENTS	24
<i>4.3.1 Responsibility for Manure and Process Wastewater</i>	24
<i>4.3.2 Distribution of Manure and Process Wastewater</i>	25
<i>4.3.3 Emergency Response Plans</i>	25
<i>4.3.4 Mortality Management</i>	25
<i>4.3.5 Department Review of Nutrient Management Plans</i>	25
<i>4.3.6 Requirements for Digesters for Biogas Production</i>	26
<i>4.3.7 Record Keeping and Retention</i>	26
<i>4.3.8 Reporting Requirements</i>	26
<i>4.3.9 Duty to Maintain Permit Coverage</i>	27
5 SUMMARY OF REPORTS DUE	28

1 Livestock Operational and Sampling Requirements

1.1 Production Area Discharge Limitations

The permittee shall comply with the livestock performance standards and prohibitions in ch. NR 151. In accordance with s. NR 243.13, the permittee may not discharge manure or process wastewater pollutants to navigable waters from the production area, including approved manure stacking sites, unless all of the following apply:

- Precipitation causes an overflow of manure or process wastewater from a containment or storage structure.
- The containment or storage structure is properly designed, constructed and maintained to contain all manure and process wastewater from the operation, including the runoff and the direct precipitation from a 25-year, 24-hour rainfall event for this location (**Adams County – 4.7 inches**).
- The production area is operated in accordance with the inspection, maintenance and record keeping requirements in s. NR 243.19.
- The discharge complies with surface water quality standards.

A permittee may not discharge any pollutants from the production area to a 303(d) listed surface water if the pollutants discharged are related to the cause of the impairment, unless the discharge is allowed under an EPA approved TMDL.

All structures shall be designed and operated in accordance with ss. NR 243.15 and NR 243.17 to control manure and process wastewater for the purpose of complying with discharge limitations established above and groundwater standards.

The permittee may not discharge pollutants to navigable waters under any circumstance or storm event from areas of the production area, including manure stacks on cropland, where manure or process wastewater is not properly stored or contained by a structure.

NOTE: Wastewater treatment strips, grassed waterways or buffers are examples of facilities or systems that by themselves do not constitute a structure.

Production area discharges to waters of the state authorized under this permit shall comply with water quality standards, groundwater standards and may not impair wetland functional values.

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 systems shall be operated in accordance with the “Proper Operations and Maintenance” section.

1.3 Manure and Process Wastewater Storage

All permittees shall have and maintain adequate storage for all manure and process wastewater generated at the operation to ensure that wastes can be properly stored and land applied in compliance with the conditions and timing restrictions of the permit, a Department approved nutrient management plan and s. NR 243.14(9).

1.3.1 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all manure and process wastewater facilities and systems in compliance with the conditions of this permit. The permittee shall comply with the permit and s. NR 243.17, including the following requirements:

- All liquid manure and process wastewater storage or containment facilities shall have the permanent markers specified in s. NR 243.15(3)(e) (margin of safety and maximum operating level for liquid manure and process wastewater storage and the 180-day storage marker for liquid manure storage).
- Chemicals and other pollutants may not be added to manure, process wastewater or stormwater storage facilities or treatment systems without prior Department approval.
- Liquid manure storage facilities or systems shall be emptied to the point that the 180-day level indicator is visible on at least one day between October 1 and November 30, except for liquid manure remaining due to unusual fall weather conditions prohibiting manure applications during this time period. The permittee shall record the day on which the 180-day level indicator was visible during this time period. Permittees unable to empty their storage facility to the 180-day level indicator between October 1 and November 30, shall notify the department in writing by December 5.
- The permittee shall maintain a design storage capacity of 180 days for liquid manure unless the Department approves a temporary reduction in design storage capacity to 150 days in accordance with s. NR 243.17(4).
- Prior to introducing any influent additives to a digester, other than manure, the permittee shall obtain written Department approval. If any materials other than manure are used in the digester, the permittee shall maintain daily records of the volumes of all manure and non-manure components added to the digester influent. As part of its approval, the Department may apply additional requirements in accordance with s. NR 243.17(1). As part of the Department's review, the Department may also require amendments to the permittee's nutrient management plan and the permittee shall submit an amended plan to the Department to incorporate the additional requirements.

1.3.2 Discharge Prevention

A permittee shall operate and maintain storage and containment facilities to prevent overflows and discharges to waters of the state.

- The permittee may not exceed the maximum operating level in liquid storage or containment facilities except as a result of recent precipitation or conditions that do not allow removal of material from the facility in accordance with permit conditions.
- The permittee shall maintain a margin of safety in liquid storage or containment facilities that levels of manure, process wastewater and other wastes placed in the storage or containment facility may not exceed. Materials shall be removed from the facility in accordance with the approved nutrient management plan to ensure that the margin of safety is not exceeded. Failure to maintain a margin of safety is permit noncompliance that must be reported to the Department in accordance with the timeframes specified in the Noncompliance-24 Hour Reporting subsection in the Standard Requirements.

1.3.3 Liquid Manure – 180-day storage

The permittee shall demonstrate, to the Department, in writing, compliance with the 180-day design storage capacity requirement at all the following times:

- As part of an application for permit reissuance.
- At the time of submittal of plans and specifications for proposed reviewable facilities or systems.
- In annual reports to the department.
- When an operation is proposing, at any time, a 20% expansion in animal units above the baseline or an increase by an amount of 1,000 animal units or more, unless the Department has approved reductions in design storage in accordance with s. NR 243.17(4). The baseline for calculating a 20% expansion is 2,675 animal units or the number of animal units present at the operation based on the operation's most recent annual report required under s. NR 243.19(3)(c), whichever is greater.

1.3.4 Facility Closure and Abandonment

In accordance with s. NR 243.17, if the permittee plans to close or abandon structures or systems regulated by this permit, a closure or abandonment plan shall be submitted to the Department and written Department approval must be granted before closing the facility. Manure storage facilities shall be closed or abandoned in accordance with NRCS Standard 360 (December 2005). Closure or abandonment of a manure storage facility shall occur when manure has not been added or removed for a period of 24 months, unless the owner or operator can provide information to the

Department that the structure is designed to store manure for a longer period of time or that the storage structure will be utilized within a specific period of time.

1.4 Solid Manure Stacking

All proposed stacking of solid manure outside of a Department approved storage facility shall be submitted to the department for approval and identified in the permittee's nutrient management plan. A permittee may not stack manure on a site unless the permittee has obtained Department approval to stack. Stacking practices shall comply with requirements of s. NR 243.141. Stacking approvals may be rescinded by the Department based on documented impacts to waters of the state at or from the stacking site or runoff onto another person's land. Stacking shall comply with following requirements:

- When piled in a stack, the solid manure stack must be able to maintain its shape with minimal sloughing such that an angle of repose of 45 degrees or greater is maintained when the manure is not frozen.
- Stacking of solid manure outside of a department approved manure storage facility shall, at a minimum, meet the specifications in NRCS Standard 313, Table 9, dated December 2005. Alternatively, stacks may be placed on sites with soils in the hydrologic soil group D provided the manure has a solids content of greater than 32% and all other criteria in NRCS Standard 313, Table 9, are met.
- The permittee shall implement any necessary additional best management practices to ensure stacking areas maintain compliance with the production area requirements in s. NR 243.13. Best management practices may include upslope clean water diversions or downslope containment structures.
- The stacked manure shall have minimal leaching so that leachate from the stack is contained within the designated stacking area and does not cause an exceedance of groundwater quality standards.
- Solid manure may not be stacked in a water quality management area.
- Stacks may only be placed on cropland.

As part of the Department approval, the Department may require additional restrictions on stacking of solid manure needed to protect water quality. The permittee shall manage the stack in compliance with the additional restrictions specified in the approval.

1.5 Ancillary Service and Storage Areas

The permittee may discharge contaminated storm water to waters of the state from ancillary service and storage areas provided the discharges of contaminated stormwater comply with groundwater and surface water quality standards. The permittee shall take preventive maintenance actions and conduct periodic visual inspections to minimize the discharge of pollutants from these areas to surface waters. For CAFO outdoor vegetated areas, the permittee shall also implement the following practices:

- Manage stocking densities, implement management systems and manage feed sources to ensure that sufficient vegetative cover is maintained over the entire area at all times.
- Prohibit direct access of livestock or poultry to surface waters or wetlands located in or adjacent to the area unless approved by the department.

1.6 Nutrient Management

Except as provided for in s. NR 243.142(2), the permittee is responsible for ensuring that the manure and process wastewater generated by the operation is land applied or disposed of in a manner that complies with the terms of this permit, the approved nutrient management plan and s. NR 243.14.

The permittee shall land apply manure and process wastewater in compliance with the Department approved nutrient management plan, s. NR 243.14 and the terms and conditions of this permit. Land application practices shall not exceed crop nutrient budgets determined in accordance with NRCS Standard 590, this permit and s. NR 243.14 and shall be based on manure and process wastewater analyses, soil tests, as well as other nutrient sources applied to a

field. The permittee shall review and amend the nutrient management plan on an annual basis to reflect any changes in operations over the previous year (including incorporation of the previous year's amendments and new soil test results) and to include projected changes for the upcoming year. Annual updates are due in accordance with the Schedules section of the permit.

The management plan may be amended at any time provided the proposed amendments are approved in writing by the department and meet the requirements of s. NR 243.14. Changes requiring a plan amendment include, but are not limited to, changes to application rates, new spreading sites, changes in the number of livestock, changes in manure storage procedures, or changes in the type of manure spreading equipment. Unless specified in the "Special Permit Conditions" section of the permit, an amendment does not become effective and may not be implemented until the department has reviewed and approved the amendment. In addition, all approved amendments in a given year shall be included in the Annual Update.

The permittee shall maintain daily spreading records and submit annual reports relating to land application activities in accordance with s. NR 243.19.

1.6.1 General Spreading Restrictions

The permittee shall land apply manure and process wastewater in compliance with the following:

- Manure or process wastewater may not pond on the application site.
- During dry weather conditions, manure or process wastewater may not run off the application site, nor discharge to waters of the state through subsurface drains.
- Manure or process wastewater may not cause the fecal contamination of water in a well.
- Manure or process wastewater may not run off the application site nor discharge to waters of the state through subsurface drains due to precipitation or snowmelt except if the permittee has complied with all land application restrictions in NR 243 and this permit, and the runoff or discharge occurs as a result of a rain event that is equal to or greater than a 25-year, 24-hour rain event.
- Manure or process wastewater may not be applied to saturated soils.
- Land application practices shall maximize the use of available nutrients for crop production, prevent delivery of manure and process wastewater to waters of the state, and minimize the loss of nutrients and other contaminants to waters of the state to prevent exceedances of groundwater and surface water quality standards and to prevent impairment of wetland functional values. Practices shall retain land applied manure and process wastewater on the soil where they are applied with minimal movement.
- Manure or process wastewater may not be applied on areas of a field with a depth to groundwater or bedrock of less than 24 inches.
- Manure or process wastewater may not be applied within 100 feet of a direct conduit to groundwater.
- Manure or process wastewater may not be applied within 100 feet of a private well or non-community system as defined in ch. NR 812 or within 1000 feet of a community well as defined in ch. NR 811.
- Unless specified otherwise in this permit, where incorporation of land applied manure is required, the incorporation shall occur within 48 hours of application.
- Manure or process wastewater may not be surface applied when precipitation capable of producing runoff is forecast within 24 hours of the time of planned application.
- Manure may not be spread in a waterway, terrace channel or any areas where there may be a concentration of runoff.
- Fields receiving manure and process wastewater may not exceed tolerable soil loss ("T").

1.6.2 Non-Cropland Applications

Manure may be applied to non-cropland if pre-approval in writing is issued by the Department. Considerations for approval may include acceptable application timing, amounts and methods.

1.6.3 Additional Nutrient Management Plan Requirements

- If applicable, the permittee shall specify the method(s) of incorporation in its nutrient management plan.

- The permittee shall identify, to the maximum extent practicable, the presence of subsurface drainage systems in fields where its manure or process wastewater is applied as part of the nutrient management plan.
- In accordance with s. NR 243.14(3), the permittee shall account for 1st and 2nd year nutrient credits.
- On a field-by-field basis, the permittee shall select and implement one of the practices listed in s. NR 243.14(4) for manure and process wastewater applications in a SWQMA (defined in ch. NR 243), and include the selected practices in the nutrient management plan. Whenever manure or process wastewater is applied within a SWQMA, the permittee shall apply the material in compliance with the SWQMA practices specified in the approved nutrient management plan.
- On a field-by-field basis, the permittee shall select one of the methods specified in s. NR 243.14(5) for assessing and minimizing the potential delivery of phosphorus to surface waters, and include the selected method in the nutrient management plan. The permittee shall apply manure and process wastewater to fields in compliance with the phosphorus methods specified in the approved nutrient management plan. On a field-by-field basis, the permittee shall select and implement one of the methods.

1.6.4 Frozen or Snow Covered Ground – General Spreading Restrictions

If the permittee applies manure on frozen or snow-covered ground, the permittee shall land apply the manure in compliance with all of the restrictions in s. NR 243.14(6)-(8). Some of these restrictions include:

- Any incorporation of manure on frozen or snow-covered ground must be done immediately after application.
- The permittee shall identify acceptable sites for allowable applications on frozen or snow-covered ground as part of its nutrient management plan.
- The permittee shall evaluate each field at the time of application to determine if conditions are suitable for applying manure and complying with the requirements of this permit. All surface applications of manure or process wastewater on frozen or snow-covered ground shall occur on those fields that represent the lowest risk of pollutant delivery to waters of the state and where the application results in a winter acute loss index value of 4 or less using the Wisconsin phosphorus index.
- Manure or process wastewater may not be land applied on fields when snow is actively melting such that water is flowing off the field.
- On fields with soils that are 60 inches thick or less over fractured bedrock, manure may not be applied on frozen ground or where snow is present.
- Manure may not be incorporated on areas of fields with greater than 4 inches of snow.

[NOTE: Please refer to ch. NR 243 for all requirements contained in s. NR 243.14(6)-(8).]

1.6.5 Frozen or Snow Covered Ground – Solid Manure (12% solids or more)

The permittee may surface apply solid manure on frozen or snow-covered ground in compliance with the following restrictions:

- Solid manure may not be surface applied on slopes greater than 9%.
- Solid manure may not be surface applied from February 1 through March 31 on areas of fields where an inch or more of snow is present or where the ground is frozen.
- The surface application shall comply with the restrictions in Table 1.

Table 1 Restrictions for Surface Applying Solid Manure on Frozen or Snow Covered Ground		
Criteria	Restrictions for fields with 0-6% slopes	Restrictions for fields with slopes > 6% and up to 9%
Required fall tillage practice prior to application	Chisel or moldboard plow, no-till or a department approved equivalent ^A	Chisel or moldboard plow, no-till or department approved equivalent ^A
Minimum % solids allowed	12%	> 20%

Table 1 Restrictions for Surface Applying Solid Manure on Frozen or Snow Covered Ground		
Criteria	Restrictions for fields with 0-6% slopes	Restrictions for fields with slopes > 6% and up to 9%
Application rate (cumulative per acre)	Not to exceed 60 lbs. P ₂ O ₅ per winter season, the following growing season's crop P ₂ O ₅ budget taking into account nutrients already applied, or phosphorus application restrictions specified in a department approved nutrient management plan, whichever is less	Not to exceed 60 lbs. P ₂ O ₅ per winter season, the following growing season's crop P ₂ O ₅ budget taking into account nutrients already applied, or phosphorus application restrictions specified in a department approved nutrient management plan, whichever is less
Setbacks from surface waters	No application allowed within SWQMA	No application allowed within 2.0 x SWQMA
Setbacks from downslope areas of channelized flow, vegetated buffers, and wetlands	200 feet	400 feet
Setbacks from direct conduits to groundwater	300 feet	600 feet
<p>A – All tillage and farming practices shall be conducted in accordance with the following requirements; 0-2% slope = no contouring required, >2-6% slope = tillage and practices conducted along the general contour, >6% slope = tillage and farming practices conducted along the contour. The department may approve alternative tillage practices on a case-by-case basis in situations where conducting practices along the contour is not possible. Allowances for application on no-till fields only apply to fields where no-till practices have been in place for a minimum of 3 years.</p>		

1.6.6 Frozen or Snow Covered Ground – Allowances for Surface Applications of Liquid Manure (<12% solids)

The permittee is prohibited from surface applying liquid manure during February and March, and is prohibited from surface applying liquid manure on frozen or snow-covered ground except for the following conditions:

- The permittee may surface apply liquid manure on frozen or snow covered ground, including during February and March, on an emergency basis in accordance with Table 2 and s. NR 243.14(7)(d) on fields the Department has approved for emergency applications. The permittee must notify the department verbally prior to the emergency application. Unless the emergency application is necessitated by imminent impacts to the environment or human or animal health, the permittee may not apply manure to a field on an emergency basis until the department has verbally approved the application. The permittee shall submit a written description of the emergency application and the events leading to the emergency application to the department within 5 days of the emergency application.
- Liquid manure that is frozen and cannot be transferred to a manure storage facility may be surface applied on frozen or snow-covered ground, including during February and March, in accordance with the restrictions in Tables 2 and s. NR 243.14(f). Surface applications of frozen liquid manure do not require prior department approval or notification provided application sites for frozen liquid manure are identified in the approved nutrient management plan. During February and March, the permittee shall notify the department if the permittee expects to surface apply frozen liquid manure more than 5 days in any one month.

Table 2 Restrictions for Surface Applications of Liquid Manure on Frozen or Snow Covered Ground		
Criteria	Restrictions for fields with 0-2% slopes	Restrictions for fields with >2-6% slopes
Required fall tillage practice prior to application	Chisel or moldboard plow or department approved equivalent ^A	Chisel or moldboard plow or department approved equivalent ^A
Application rate (cumulative per acre)	Maximum application volume of 7,000 gallons per acre per winter season, not to exceed 60 lbs. P ₂ O ₅ , the following growing season's crop P ₂ O ₅ budget taking into account nutrients already applied or other phosphorus application restrictions specified in a department approved nutrient management plan, whichever is less	Maximum application volume of 3,500 gallons per acre per winter season, not to exceed 30 lbs. P ₂ O ₅ , the following growing season's crop P ₂ O ₅ budget taking into account nutrients already applied, or other phosphorus application restrictions specified in a department approved nutrient management plan, whichever is less
Setbacks from surface waters	No application allowed within SWQMA	No application allowed within SWQMA
Setbacks from downslope areas of channelized flow, vegetated buffers, wetlands	200 feet	200 feet
Setbacks from direct conduits to groundwater	300 feet	300 feet
<p>A – All tillage and farming practices shall be conducted along the contour in accordance with the following requirements; 0-2% slope = no contouring required, >2-6% slope = tillage and practices conducted along the general contour. The department may approve alternative tillage practices on a case-by-case basis in situations where conducting practices along the contour is not possible</p>		

1.6.7 Frozen or Snow Covered Ground – Process Wastewater

If a permittee land applies process wastewater on frozen or snow-covered ground, the permittee shall land apply the process wastewater in compliance with s. NR 214.17(2) through (6) and the other land application restrictions in this permit, except for the restrictions in the “Frozen or Snow Covered Ground – Solid Manure (12% solids or more)” and “Frozen or Snow Covered Ground – Allowances for Surface Applications of Liquid Manure (<12% solids)” sections of this permit.

1.6.8 Spreading Sites Submittals

Permittee requests to amend a nutrient management plan to include landspreading sites not found in an approved management plan shall include the following information:

- The location of the site on maps and aerial photographs, and soil survey maps.
- A unique site identification number
- Information used to verify the site meets locational requirements of the permit,
- A nutrient budget for the site consistent with permit requirements. This includes a completed worksheet outlining the process in determining appropriate spreading rates for each additional site, including a crop history identifying the previous season's crops and future cropping plans for each site and estimated nutrient uptake.

- A demonstration that the field(s) in question meets tolerable soil loss rate.
- Maps that show where land application is prohibited or restricted on a map or aerial photograph of the site.
- Soil samples if available for one-time applications. If the permittee wishes to use the site for subsequent applications, soil samples shall be submitted prior to additional landspreading.

1.7 Monitoring and Sampling Requirements

The permittee shall comply with the monitoring and sampling requirements specified below for the listed sampling point(s), and the following conditions.

1.7.1 Monitoring and Inspection Program

As specified in the Schedules section of this permit, the permittee shall submit a monitoring and inspection program designed to determine compliance with permit requirements. The program shall be consistent with the requirements of this section and shall identify the areas that the permittee will inspect, the person responsible for conducting the inspections and how inspections will be recorded and submitted to the department.

Visual inspections shall be completed by the permittee or designee in accordance with the following frequencies:

- Daily inspections for leakage of all water lines that potentially come into contact with pollutants or drain to storage or containment structures or runoff control systems, including drinking or cooling water lines.
- Weekly inspections to ensure proper operation of all storm water diversion devices and devices channeling contaminated runoff to storage or containment structures.
- Weekly inspections of liquid storage and containment structures. For liquid storage and containment facilities, the berms shall be inspected for leakage, seepage, erosion, cracks and corrosion, rodent damage, excessive vegetation and other signs of structural weakness. In addition, the level of material in all liquid storage and containment facilities shall be measured and recorded in feet or inches above or below the margin of safety level.
- Quarterly inspections of the production area, including outdoor animal pens, barnyards and raw material storage areas. CAFO outdoor vegetated areas shall be inspected quarterly.
- Periodic inspections and calibration of landspreading equipment to detect leaks and ensure accurate application rates for manure and process wastewater. An initial calibration of spreading equipment shall be followed by additional calibration after any equipment modification that may impact application of manure or process wastewater or after changes in product or manure or process wastewater consistency. Spreading equipment for both liquid and solid manure shall be inspected just prior to the hauling season, and equipment used for spreading liquids shall be inspected at least once per month during months when hauling occurs.
- Inspections of fields each time manure or process wastewater is surface applied on frozen or snow-covered ground to determine if applied materials have run off the application site. Inspections shall occur during and shortly after application.

The permittee shall take corrective actions as soon as practicable to address any equipment, structure or system malfunction, noncompliance, failure or other problem identified through monitoring or inspections. If the permittee fails to take corrective actions within 30 days of identifying a malfunction, noncompliance, failure or other problem, the permittee shall contact the Department immediately following the 30-day period and provide an explanation for its failure to take action.

1.7.2 Sampling Requirements

The permittee shall collect and analyze representative samples of land applied manure and process wastewater for the parameters outlined in the monitoring requirements for each sample point. The permittee shall also collect and analyze soils from fields used for manure or process wastewater applications at least once every four years. Sampling of manure, process wastewater and soils shall be done in accordance with s. NR 243.19(1)(c).

1.8 Sampling Point(s)

The permittee is authorized to use only the facilities identified below, in accordance with the conditions specified in this permit. The permittee may not install or use new facilities or structures or land apply manure or other process wastewaters from these facilities unless written Department approval is received. A new facility is any facility that is not specifically identified in this permit. If a new facility is approved in writing by the Department, the conditions in the corresponding 'New Facility' sampling point (e.g. Manure Storage Facilities, Runoff Control Systems) will apply.

1.8.1 Manure and Process Wastewater Storage Facilities - Sampling Required

In accordance with the Production Area Discharge Limitations subsection, manure and process wastewater storage facilities shall be operated and maintained to prevent discharges to navigable waters and to comply with surface water quality standards. In addition, manure and process wastewater storage facilities shall be operated and maintained to minimize leakage for the purpose of complying with groundwater standards. Unless specifically approved and designated by the Department as a sampling point, in-field unconfined storage of manure (manure stacking) is prohibited. The permittee is authorized to use facilities identified below, in accordance with the conditions specified in this permit.

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, System Description (including capacity, legal location, and action needed as applicable), and Treatment Description
001	Waste Storage Facility #1 (WSF #1). This sample point addresses all manure and process wastewater stored within the concrete lined manure storage facility located on the East side of the Phase 1 Burr Oak livestock housing facilities. WSF #1 was constructed in 2013 with a top dimension of 176' X 600' X 14.5' deep (to the MOL). The design capacity is estimated at 7.05 million gallons and provides approximately 192 days of storage capacity, based upon manure and process wastewater generated by 2,675 animal units (Phase 1 construction). Manure will be scraped from the freestall barn with a skidsteer and pushed across a transfer apron into WSF #1. The storage facility was constructed with a loading area (30' wide X 16' deep vertical wall section), which is utilized for lowering a skidsteer to the floor when it is necessary to remove sand laden manure to maintain adequate storage capacity.
002	Settled Solids (WSF #1). This sample point addresses all settled sand laden manure solids to be scraped and removed from the floor and sump of WSF #1 and then land applied. A representative sample to analyze nutrient content of the scraped sand laden manure solids is required prior to land application.
004	Waste Feed. This sample point addresses any waste feed generated on the feed pad or feed residue removed from the leachate collection tank or collection basin. Waste or Spoiled feed can be stacked on the feed pad or headland stacked within a crop field that is identified within the facilities NMP and approved by the Department. A representative sample to analyze the nutrient content of solid waste feed sources is required prior to land application.
005	Feed Pad Runoff Collection Basin. This sample point addresses all feed pad runoff that is captured within the 417,000 gallon feed pad runoff collection basin. The basin was constructed in 2013 and sized to collect approximately six-months of runoff during the non-growing season, and always have capacity available to capture the 25-year, 24-hour rain event (4.7"). The basin captures feed pad runoff after leachate and first flush (0.05") is collected and transferred to WSF #1 from the leachate collection tank. The level of liquid held within the basin is to be maintained below the Maximum Operating Level. A representative sample to analyze for nutrient content is required prior to land application
006	Bedpack Manure. This sample point addresses all bedpack manure generated at Burr Oak Heifers. A representative sample to analyze for nutrient content of the bedpack manure is required prior to headland stacking or land application. All headland stacking sites must be included within an approved nutrient management plan.

Manure and Process Wastewater Storage Facilities - Action Needed: For manure and process wastewater storage facilities that are to be installed, evaluated or abandoned (as indicated in the above table), see the Schedules section herein for actions required. Although this permit may require actions for installing permanent facilities, or controls, or modifications to existing facilities, interim measures shall be immediately implemented to prevent discharges of pollutants to navigable waters. Specifically, if monitoring or inspection reports indicate any storage facility may not be able to prevent discharges to navigable waters in accordance with the conditions in the Production Area Discharge Limitations subsection, the permittee shall immediately install interim control measures to contain the discharges. Plans and specifications for permanent facilities must be submitted to the Department for review and approval in accordance with Chapter 281.41, Wis. Statutes, and Chapter NR 243, Wis. Adm. Code.

1.8.2 Runoff Control System(s) - No Sampling Required

In accordance with the Production Area Discharge Limitations subsection, the permittee shall control contaminated runoff from all elements of the livestock operation to prevent a discharge of pollutants to navigable waters and to comply with surface water quality standards and groundwater standards.

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, System Description (including capacity, legal location, and action needed as applicable), and Treatment Description
003	Feed Leachate Tank. This sample point addresses leachate and first flush feed pad runoff collected within a 6,000 gallon collection tank located along the South edge of the feed pad. A 6" pipeline with automated pump is designed to transfer the leachate and 0.05" of first flush runoff to WSF #1 for long-term storage. The feed pad is located on the East side of 1st Drive, approximately 950' Northwest of WSF #1. Feed pad overflow beyond first flush capture will gravity flow into a feed pad runoff collection basin (Sample Point 005). Sampling for nutrient content is required if the feed leachate tank is manually pumped and the liquid is directly land applied. .

Runoff Control System(s) - Action Needed: For runoff control systems that are to be installed, evaluated or abandoned (as indicated in the above table), see the Schedules section herein for actions required. Although permanent control measures may be required by this permit, interim measures shall be implemented to prevent discharges of pollutants to navigable waters. Specifically, if monitoring or inspection reports indicate that manure or process wastewater may be discharged to navigable waters from the animal production area, in violation of the conditions in the Production Area Discharge Limitations subsection, the permittee shall immediately install interim control measures to contain the discharges. Plans and specifications for permanent runoff controls must be submitted to the Department for review and approval in accordance with Chapter 281.41. Wis. Statutes, and Chapter NR 243, Wis. Adm. Code.

1.8.3 Sampling Point 001 - WSF #1 and 005- Feed Pad Collection Basin

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limits 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	

Reporting: Sampling test results shall be submitted with the Annual Report. Sampling is only required when land application has actually occurred.

Daily Log Requirements

The permittee shall document all discharge and monitoring activities on daily log report form 3200-123A or a Department approved equivalent log sheet. Originals of the daily log reports shall be kept by the permittee as described under Record Keeping and Retention in the Standard Requirements section, and if requested, made available to the Department.

Parameters	Units
Date of Application	Date
Field ID	Number/Name
Acres Applied	Number of Acres
Manure/Process Wastewater Source	Specify Storage Facility or Barn
Spreader Volume	Tons or Gallons
Number of Loads	Number
Soil Conditions	Dry, Wet, Frozen, Snow Covered
Temperature During Application	°F
Precipitation During Application	Describe Precipitation
Application Method	Surface Applied, Injected, Incorporated

Annual Report

The permittee shall submit an Annual Report, including Form 3200-123 or a Department approved equivalent, that summarizes all landspreading activities and includes the information identified below, the lab analyses of the manure and other waste landspread, the "T" compliance worksheet for all fields, and the soil test frequency in the past four years. The Annual Report is due each year by the date specified in the Schedules section of this permit. Nitrogen and phosphorus from all sources applied to a given field, including commercial fertilizers, shall be included in the "Total Nitrogen" and "Total Phosphorus" sections of the Annual Report.

Parameters	Units	Sample Type
Date of Application	Date	-
Field ID	Number/Name	-
Acres Applied	Number of Acres	-
Slope	Percent	-
Soil Test P Ave.	ppm	-
Manure Source	-	Composite
Current Crop	-	-
Crop Nitrogen Needs (per soil test)	Pounds/Acre	-
Crop P ₂ O ₅ Needs (per soil test)	Pounds/Acre	-
Manure/Process Wastewater Analysis: Available Nitrogen	Pounds/1000 Gallons	Calculated

Annual Report		
<p>The permittee shall submit an Annual Report, including Form 3200-123 or a Department approved equivalent, that summarizes all landspreading activities and includes the information identified below, the lab analyses of the manure and other waste landspread, the "T" compliance worksheet for all fields, and the soil test frequency in the past four years. The Annual Report is due each year by the date specified in the Schedules section of this permit. Nitrogen and phosphorus from all sources applied to a given field, including commercial fertilizers, shall be included in the "Total Nitrogen" and "Total Phosphorus" sections of the Annual Report.</p>		
Parameters	Units	Sample Type
Manure/Process Wastewater Analysis: Available P ₂ O ₅	Pounds/1000 Gallons	Calculated
Manure/Process Wastewater Application Rate	Gallons/Acre	-
Manure/Process Wastewater Applied: Nitrogen	Pounds/Acre	-
Manure/ Process Wastewater Applied: P ₂ O ₅	Pounds/Acre	-
Previous Crop	-	-
Legume Nitrogen Credit	Pounds/Acre	-
Second Year Manure Credit	Pounds/Acre	-
Additional Fertilizer: Nitrogen	Pounds/Acre	-
Additional Fertilizer: P ₂ O ₅	Pounds/Acre	-
Total Nitrogen Applied	Pounds/Acre	-
Total P ₂ O ₅ Applied	Pounds/Acre	-
Soil Conditions	Dry, Wet, Frozen, Snow Covered	-
Application Method	Surface Applied, Injected, Incorporated	-
Banked	Yes/No	-
Field Restrictions	Per Nutrient Management Plan	-

1.8.4 Sampling Point 002 - Settled Solids (WSF #1); 004- Waste Feed., and 006-Bedpack Manure

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

Available					
Solids, Total		Percent	Quarterly	Grab	

Reporting: Sampling test results shall be submitted with the Annual Report. Sampling is only required when land application has actually occurred.

Daily Log Requirements	
<p>The permittee shall document all discharge and monitoring activities on daily log report form 3200-123A or a Department approved equivalent log sheet. Originals of the daily log reports shall be kept by the permittee as described under Record Keeping and Retention in the Standard Requirements section, and if requested, made available to the Department.</p>	
Parameters	Units
Date of Application	Date
Field ID	Number/Name
Acres Applied	Number of Acres
Manure/Process Wastewater Source	Specify Storage Facility or Barn
Spreader Volume	Tons or Gallons
Number of Loads	Number
Soil Conditions	Dry, Wet, Frozen, Snow Covered
Temperature During Application	°F
Precipitation During Application	Describe Precipitation
Application Method	Surface Applied, Injected, Incorporated

Annual Report		
<p>The permittee shall submit an Annual Report, including Form 3200-123 or a Department approved equivalent, that summarizes all landspreading activities and includes the information identified below, the lab analyses of the manure and other waste landspread, the “T” compliance worksheet for all fields, and the soil test frequency in the past four years. The Annual Report is due each year by the date specified in the Schedules section of this permit. Nitrogen and phosphorus from all sources applied to a given field, including commercial fertilizers, shall be included in the "Total Nitrogen" and "Total Phosphorus" sections of the Annual Report.</p>		
Parameters	Units	Sample Type
Date of Application	Date	-
Field ID	Number/Name	-
Acres Applied	Number of Acres	-
Slope	Percent	-
Soil Test P Ave.	ppm	-
Manure Source	-	Composite

Annual Report		
<p>The permittee shall submit an Annual Report, including Form 3200-123 or a Department approved equivalent, that summarizes all landspreading activities and includes the information identified below, the lab analyses of the manure and other waste landspread, the "T" compliance worksheet for all fields, and the soil test frequency in the past four years. The Annual Report is due each year by the date specified in the Schedules section of this permit. Nitrogen and phosphorus from all sources applied to a given field, including commercial fertilizers, shall be included in the "Total Nitrogen" and "Total Phosphorus" sections of the Annual Report.</p>		
Parameters	Units	Sample Type
Current Crop	-	-
Crop Nitrogen Needs (per soil test)	Pounds/Acre	-
Crop P ₂ O ₅ Needs (per soil test)	Pounds/Acre	-
Manure Analysis: Available Nitrogen	Pounds/Ton	Calculated
Manure Analysis: Available P ₂ O ₅	Pounds/Ton	Calculated
Manure Application Rate	Tons/Acre	-
Manure/Process Wastewater Applied: Nitrogen	Pounds/Acre	-
Manure/ Process Wastewater Applied: P ₂ O ₅	Pounds/Acre	-
Previous Crop	-	-
Legume Nitrogen Credit	Pounds/Acre	-
Second Year Manure Credit	Pounds/Acre	-
Additional Fertilizer: Nitrogen	Pounds/Acre	-
Additional Fertilizer: P ₂ O ₅	Pounds/Acre	-
Total Nitrogen Applied	Pounds/Acre	-
Total P ₂ O ₅ Applied	Pounds/Acre	-
Soil Conditions	Dry, Wet, Frozen, Snow Covered	-
Application Method	Surface Applied, Injected, Incorporated	-
Banked	Yes/No	-
Field Restrictions	Per Nutrient Management Plan	-

2 Production Area Monitoring Requirements

In accordance with the requirements below and the Schedules section of the permit, the permittee shall further enhance the existing groundwater monitoring system for the purpose of monitoring the manure and process wastewater handling structures and systems within the expanded production area. The permittee shall install a minimum of two additional groundwater monitoring wells to compliment the three existing groundwater monitoring

wells. The additional wells shall be installed within a location to best monitor potential impacts from the feed pad / leachate collection system area and the manure storage facility / livestock barn area.

2.1 Groundwater Monitoring System for Production Area

This section applies to groundwater monitoring wells installed in accordance with the Schedules section of the current permit or installed as a requirement of a previous WPDES permit.

Location of Monitoring System: Immediate vicinity of the Burr Oak Heifers production area.

Installation of Additional Production Area Monitoring Wells: In accordance with the Schedules section of the permit, a minimum of two additional groundwater monitoring wells shall be installed for the purpose of providing a more comprehensive monitoring system within the expanded Burr Oak Heifers production area. The new monitoring wells are in addition to three existing monitoring wells currently in operation.

Groundwater Level Measurements: As a result of possible influences of local high capacity irrigation wells on groundwater flow within the Burr Oak Heifers production area, providing groundwater level measurements will be required to assist in evaluating data analysis variations in groundwater flow. Depth to groundwater and groundwater elevation monitoring will be required for all monitoring wells on a monthly basis for a period of two years, beginning at the time in which all new wells (i.e., MW-13, MW-14) are installed and activated. After two-years, groundwater level monitoring may return to a quarterly monitoring frequency. The facility may opt to manually gather groundwater level measurements monthly, or install individual water level pressure transducers in each well from which the information can then be downloaded on a quarterly basis when grab samples are obtained.

Wells to be Monitored: MW-1, MW-2, MW-3 (Existing); MW-13, MW-14 (New).

Required Monitoring: Grab samples shall be collected from each well to be monitored at the frequency identified in the table below. For newly installed monitoring wells, monitoring shall commence within 30 days of installation. The groundwater grab samples shall be analyzed for the parameters specified in the table below.

Parameter	Units	Preventive Action Limits (PAL)	Enforcement Standard (ES)	Frequency
Depth to Groundwater	Feet	N/A	N/A	Monthly/Quarterly*
Groundwater Elevation	Feet MSL	N/A	N/A	Monthly/Quarterly*
Total Dissolved Solids (TDS)	mg/l	To Be Determined	N/A	Quarterly
Chemical Oxygen Demand (COD)	mg/l	To Be Determined	N/A	Quarterly
Chloride	mg/l	125	250	Quarterly
Nitrogen, Ammonia (NH ₃ -N) Total	mg/l	0.97	9.1	Quarterly
Organic Nitrogen	mg/l	To Be Determined	N/A	Quarterly
Nitrogen, Nitrate + Nitrite**	mg/l	2.0**	10.0**	Quarterly

pH	su	N/A	N/A	Quarterly
Total Coliform Bacteria	#100ml	0/100	0/100	Quarterly

*Monthly monitoring required for a period of two-years for all wells, beginning at the time the new monitoring wells are installed and activated. Monitoring can revert to quarterly monitoring after two years of monthly monitoring is attained.

**After monthly monitoring requirements identified under the “Frequency” column heading in the table above are met, the Department will re-evaluate all data collected. The data will be utilized to establish background levels and determine whether to grant an exemption and establish an ACL in accordance with procedures identified within Chapter NR 140, Wis. Adm. Code, and these values will be placed in the table above at the next permit issuance.

3 Schedules

3.1 Emergency Response Plan

Update the Emergency Response Plan

Required Action	Due Date
Update the Emergency Response Plan: Develop a written Emergency Response Plan within 30 days of permit coverage, available to the Department upon request.	02/01/2015

3.2 Monitoring & Inspection Program

Submit a plan detailing items necessary for permit reporting and compliance.

Required Action	Due Date
Proposed Monitoring and Inspection Program: Consistent with the Monitoring and Sampling Requirements subsection, the permittee shall submit a proposed monitoring and inspection program within 90 days of the effective date of this permit.	04/01/2015

3.3 Production Area Monitoring - Groundwater Monitoring Well Installation

The permittee shall install a minimum of two additional groundwater monitoring wells to monitor potential impacts to groundwater within the production area.

Required Action	Due Date
Monitoring Well Installation: Complete the installation of two new monitoring wells in accordance with ch. NR 141, Wis. Adm. Code, and commence monitoring in accordance with permit requirements. Note: Documentation of well construction must be submitted to the Department within 60-days of well installation per s. NR 141.23, Wis. Adm. Code.	12/15/2014

3.4 Annual Reports

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

Required Action	Due Date
Submit Annual Report #1:	01/31/2015
Submit Annual Report #2:	01/31/2016
Submit Annual Report #3:	01/31/2017
Submit Annual Report #4:	01/31/2018
Submit Annual Report #5:	01/31/2019
Ongoing Annual Reports: Continue to submit Annual Reports until permit reissuance has been completed	

3.5 Nutrient Management Plan

Submit annual updates of the Nutrient Management Plan by March 31st.

Required Action	Due Date
Management Plan Submittal: Submit any necessary updates to the Nutrient Management Plan to meet the conditions outlined in this permit (see conditions in the Livestock Operational and Sampling Requirements section).	03/31/2015
Management Plan Annual Update #1: Submit an Annual Update to the Nutrient Management Plan at least 30 days before the start of each cropping season. Note: In addition to Annual Updates, submit Management Plan Amendments to the Department for written approval prior to implementation of any changes to nutrient management practices, in accordance with the Nutrient Management requirements in the Livestock Operational and Sampling Requirements section.	03/31/2016
Management Plan Annual Update #2: Submit an Annual Update to the Nutrient Management Plan.	03/31/2017
Management Plan Annual Update #3: Submit an Annual Update to the Nutrient Management Plan.	03/31/2018
Management Plan Annual Update #4: Submit an Annual Update to the Nutrient Management Plan.	03/31/2019
Ongoing Management Plan Annual Updates: Continue to submit Annual Updates to the Nutrient Management Plan until permit reissuance has been completed.	

3.6 Submit Permit Reissuance Application

Required Action	Due Date
Reissuance Application: Submit a complete permit reissuance application 180 days prior to permit expiration.	07/01/2019

4 Standard Requirements

4.1 General Conditions

NR 205, Wisconsin Administrative Code: The conditions in s. NR 205.07(1), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements. Some of these requirements are outlined in the Standard Requirements section of this permit. Requirements not specifically outlined in the Standard Requirement section of this permit can be found in s. NR 205.07(1).

4.1.1 Duty to comply

The permittee shall comply with all conditions of the permit. Any permit noncompliance is a violation of the permit and is grounds for enforcement action, permit revocation or modification, or denial of a permit reissuance application.

4.1.2 Permit Actions

As provided in s. 283.53, Stats., after notice and opportunity for a hearing the permit may be modified or revoked and reissued for cause. If the permittee files a request for a permit modification, revocation or reissuance, or a notification of planned changes or anticipated noncompliance, this action by itself does not relieve the permittee of any permit condition.

4.1.3 Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. The permit does not authorize any injury or damage to private property or any invasion of personal rights, or any infringement of federal, state or local laws or regulations.

4.1.4 Schedules

Reports of compliance or noncompliance with interim and final requirements contained in any schedule of the permit shall be submitted in writing within 14 days after the schedule date, except that progress reports shall be submitted in writing on or before each schedule date for each report. Any report of noncompliance shall include the cause of noncompliance, a description of remedial actions taken and an estimate of the effect of the noncompliance on the permittee's ability to meet the remaining schedule dates.

4.1.5 Inspection and Entry

The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to:

- enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records are required under the conditions of the permit;
- have access to and copy, at reasonable times, any records that are required under the conditions of the permit;
- inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under the permit; and
- sample or monitor at reasonable times, for the purposes of assuring permit compliance, any substances or parameters at any location.

4.1.6 Transfers

A permit is not transferable to any person except after notice to the Department. In the event of a transfer of control of a permitted facility, the prospective owner or operator shall file a new permit application and shall file a stipulation of permit acceptance with the Department WPDES permit section. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and to reflect the requirements of ch. 283, Stats.

4.1.7 Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any adverse impact on the waters of the state resulting from noncompliance with the permit.

4.1.8 Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking or reissuing the permit or to determine compliance with the permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by the permittee.

4.1.9 Recording of Results-Sampling

For each manure, process wastewater or soil sample taken by the permittee, the permittee shall record the following information:

- The date, exact place, method and time of sampling or measurements,
- The individual or lab that performed the sampling or measurements,
- The date of the analysis was performed,
- The individual who performed the analysis,
- The analytical techniques or methods used
- The results of the analysis.

4.1.10 Recording of Results-Inspections

For each inspection conducted by the permittee, the permittee shall record the following information:

- The date and name of the person(s) performing the inspection,
- An inspection description, including components inspected,
- Details of what was discovered during the inspection,
- Recommendations for repair or maintenance,
- Any corrective actions taken.

4.1.11 Spill Reporting

The permittee shall notify the Department in in the event that a spill or accidental release of any material or substance results in the discharge of pollutants to the waters of the state at a rate or concentration greater than the effluent limitations or restrictions established in this permit, or the spill or accidental release of the material that is unregulated in this permit, unless the spill or release of pollutants has been reported to the Department in accordance with s. NR 205.07 (1)(s), Wis. Adm. Code, and the “Noncompliance - 24 Hour Reporting” section of this permit.

4.1.12 Planned Changes

The permittee shall report to the Department any facility or operation expansion, production increase or process modifications which will result in new, different or increased amount of manure or process wastewater produced or handled by the permittee or which will result in new, different or increased discharges of pollutants to waters of the state. The report shall either be a new permit application, or if the new discharge will not violate the conditions of this permit, a written notice of the planned change. The report shall contain a description of the planned change, an estimate of the new, different or increased discharge of pollutants and a description of the effect of change will have on current manure and process wastewater handling practices. Changes cannot be implemented prior to reporting changes to the Department. Following receipt of this report, the Department may require that the permittee submit plans and specifications, or modify its nutrient management plan to address the planned change. Changes requiring Department action or approval may not be initiated prior to Department action or approval.

4.1.13 Submittal of Plans and Specifications

In accordance with s. NR 243.15, the permittee shall submit plans and specifications for proposed new or upgraded reviewable facilities or systems to the Department for approval prior to construction. Post construction documentation for these projects shall be submitted within 60 days of completion of the project, or as otherwise specified by the Department.

4.1.14 Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the department, it shall promptly submit such facts or correct information to the department.

4.1.15 Noncompliance - 24 Hour Reporting

The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. This includes any upset which exceeds any effluent limitation in the permit, or violations of the discharge limitations listed in the permit.

NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources **immediately** of any discharge not authorized by the permit. The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at **1-800-943-0003**.

4.1.16 Reports and Submittal Certification

Signature(s) on reports required by this permit shall certify to the best of the permittee's knowledge the reports to be true, complete and accurate. All reports required by this permit shall be signed:

- for a corporation by a principal executive officer of at least the level of Vice President or his duly authorized representative having overall responsibility for the operation of the facility of which this permit issued,
- for a partnership by a general partner, and
- for a sole proprietorship by the proprietor.

4.2 Groundwater Standard Requirements

The following requirements apply to groundwater monitoring conducted in accordance with a Department approved groundwater monitoring plan for production areas.

4.2.1 Groundwater Sampling

Groundwater sampling shall be performed in accordance with procedures contained in the WDNR publications, Groundwater Sampling Desk Reference (PUBL-DG-037-96) and Groundwater Sampling Field Manual (PUBL-DG-038-96).

4.2.2 Appropriate Formulas for Groundwater

Total Nitrogen = Total Kjeldahl Nitrogen (mg/l) + [NO₂ + NO₃] Nitrogen (mg/l)

Organic Nitrogen (mg/l) = Total Kjeldahl Nitrogen (mg/l) – Ammonia Nitrogen (mg/l)

4.2.3 Reporting Depth to Groundwater

Depth to groundwater shall be reported in feet, to the nearest 0.01 foot, below the top of the well casing. A report shall be on file with the Department stating the well casing top elevation in feet above mean sea level (MSL), to the nearest 0.01 foot, for each groundwater monitoring well.

4.2.4 Groundwater Elevation

Groundwater elevation shall be calculated by subtracting the depth to groundwater measurement from the well casing top elevation and shall be reported in feet above mean sea level (MSL) to the nearest 0.01 foot.

4.2.5 Groundwater Grab Samples

Grab samples shall be taken of the groundwater only after adequate removal or purging of standing water within the well casing has been performed. For those wells which will refill with water as fast as the water can be removed by bailing or pumping, four well volumes shall be removed prior to sample collection and analysis. For those wells which will not refill with water as fast as the water can be removed by bailing or pumping, the existing volume of water inside the well casing shall be removed and samples collected after the well has refilled to at least half the original volume in the well.

4.2.6 Groundwater Data Log

A data log shall be used to record the results of all field sampling and analysis events. This log shall include date of sampling event, groundwater sampler's name, well identification, depth from the pipetop to water, depth from pipetop to well bottom, time of purging (start to end), volume of water purged, indication of whether the well was purged dry, time of sample withdrawal, and the following applicable field observations: pH, field conductivity, temperature, color, odor and turbidity, indications of whether field filtering was performed and time of filtering, indication of cap and lock replaced, and comments.

4.2.7 Application of NR 140 to Substances Discharged

This permit does not authorize the permittee to discharge any substance in a concentration which would cause an applicable groundwater standard of ch. NR 140, Wis. Adm. Code, to be exceeded. The Department may seek a response under NR 140 if the permittee's discharge causes exceedance of an applicable groundwater standard for any substance, including substances not specifically limited or monitored under this permit.

4.2.8 Indicator Parameter – Preventive Action Limits

Preventive action limits (PAL) for indicator parameters are calculated using a minimum of eight sample analysis results available from a representative background well in accordance with the procedures in s. NR 140, Wis. Adm. Code.

4.2.9 Groundwater Monitoring Forms

Results of the groundwater analyses shall be summarized and reported on Groundwater Monitoring Forms supplied by the Department. This report form is to be returned to the Department no later than the date indicated on the form. The original and one copy of the Groundwater Monitoring Form shall be submitted to your DNR regional office. A copy of the Groundwater Monitoring Form shall be retained by the permittee.

4.2.10 Preventive Action Limit (PAL) Exceedance

Analysis results that are less than this permit's PALs indicate that operation of the production area is protective of groundwater quality. Substance concentrations that exhibit a trend over time of being greater than the PAL may indicate that additional technically and economically feasible actions are needed to reduce the discharge. This may include permit modification to require submittal of a groundwater evaluation report and implementation of a feasible response as specified in s. NR 140.24(1)(b), Wis. Adm. Code.

4.2.11 Enforcement Standard Exceedance Within the Design Management Zone

Substance concentration greater than this permit's enforcement standard (ES) in a permittee's monitoring well located within the property boundary and within the design management zone of the production area may indicate that the groundwater concentration exceeds an ES outside these boundaries. If the Department determines there is reasonable evidence that an ES is being attained or exceeded beyond the property boundary or beyond the design management zone, the Department may request an evaluation and response (or propose a permit modification to require an evaluation report and appropriate response) as specified in s. NR 140.26, Wis. Adm. Code.

4.2.12 Enforcement Standard Exceedance Outside the Design Management Zone

The permittee's production area shall not cause the concentration of a substance in groundwater to attain or exceed this permit's enforcement standard at any point or present groundwater use, at any point beyond the property boundary, or at any point beyond the design management zone established under s. NR 140.22, Wis. Adm. Code. When this condition is not met, **the permittee shall, within 120 days following notification by the Department of the attainment or exceedance of an ES beyond the compliance boundary, submit a groundwater quality evaluation and response report** as specified in s. NR 140.26(1)(b), Wis. Adm. Code. The Department may propose modification of this permit to require the permittee to implement additional treatment or other actions as specified in s. NR 140.26, Wis. Adm. Code.

4.2.13 Groundwater Standard Exemptions and ACLs

The Department may grant an exemption to a ch. NR 140 groundwater quality standard PAL or ES at a facility, practice or activity location, in accordance with s. NR 140.28, Wis. Adm. Code. In conjunction with granting an exemption, an alternative concentration limit (ACL) may be established for a groundwater quality standard at the facility, practice or activity location. Please note that the Department may seek a response, in accordance with ss. NR 140.24 or NR 140.26, Wis. Adm. Code, for attainment or exceedance of an ACL established for a ch. NR 140 groundwater quality standard PAL or ES.

4.3 Livestock Operation General Requirements

4.3.1 Responsibility for Manure and Process Wastewater

The permittee is responsible for the storage, management and land application of all manure and process wastewater generated by the operation. The permittee is also responsible for any manure or process wastewater received from non-permitted operations that are accepted by the permittee for storage, management or land application.

4.3.2 Distribution of Manure and Process Wastewater

All manure and process wastewater generated by the permittee is the responsibility of the permittee and shall be stored and applied in compliance with the terms and conditions of this permit and the approved nutrient management plan, except if the manure or process wastewater is distributed to another person in accordance with s. NR 243.142 and the Department has approved the transfer of responsibility in writing.

To transfer responsibility for handling, storage and application of manure or process wastewater, a permittee shall submit a written request to the Department. At minimum the request shall indicate how the permittee will comply with all conditions identified in ch. NR 243.142(3), Wis. Adm. Code. If approved, the permittee will be responsible for the following recordkeeping and reporting:

- Update the nutrient management plan to include the estimated amount of manure and process wastewater to be transferred, and record the actual amount transferred at the time of transfer.
- Maintain records that identify the name and address of the recipient of the manure or process wastewater, quantity, and dates of transfer.
- Provide the recipient with written information regarding the nutrient content (nitrogen and phosphorus at minimum) of the manure and process wastewater.
- Submit transfer reports to the Department with the annual report.
- Records shall be maintained for at least 5 years.

Upon written approval from the Department, the permittee is not responsible for the land application, use or disposal of distributed manure or process wastewater if the manure or process wastewater is distributed in compliance with the conditions of the Department approval and s. NR 243.142.

4.3.3 Emergency Response Plans

Within 30 days of the effective date of the permit, the permittee shall develop a written emergency response plan, or update an existing plan if necessary, in accordance with s. NR 243.13(6). The plan shall be made available to the Department upon request. The emergency response plan shall be reviewed and, if appropriate or necessary, amended whenever the operation undergoes significant expansions or other changes that affect the volume or location of potential unauthorized spills or discharges. The plan shall be amended as needed to reflect changes in available equipment, available clean-up contractors or procedures to address unauthorized spills or discharges, or amended in accordance with comments provided by the department. The plan shall be retained at the production area and the permittee shall notify all employees involved in manure and process wastewater handling of the location of the plan.

4.3.4 Mortality Management

Animal carcasses may not be disposed of in a manner that results in a discharge of pollutants to surface waters, violates groundwater standards or impairs wetland functional values. Animal carcasses may not be disposed of directly into waters of the state. In addition, carcasses may not be disposed of in liquid manure or process wastewater containment, storage or treatment facilities unless the containment, storage or treatment facility is adequately designed to contain and treat carcasses and the facility has been approved by the department for that use.

The permittee shall record the date and method of carcass disposal.

[NOTE: The permittee should be aware that there are additional restrictions on the disposal of animal carcasses in ch. 95, Stats., and ATCP 3, Wis. Adm. Code. Furthermore, there may be local regulations regarding disposal of carcasses. If a carcass is disposed of off-site, the disposal may be subject to the requirements in ch. NR 502.12 or 518, Wis. Adm. Code]

4.3.5 Department Review of Nutrient Management Plans

The Department reserves the right to review the Nutrient Management Plan at any time for application rates and cover crop nutrient removal rates, as well as the timing and methods of application. If the Department determines that a

land spreading site is no longer acceptable for manure and process wastewater applications, the permittee shall modify the Nutrient Management Plan to remove the site from the plan. In addition, if the Department determines application rates need to be adjusted for individual fields, the permittee shall modify the Nutrient Management Plan. All Department initiated modifications shall be completed by the permittee within 3 months of written notification from the Department.

4.3.6 Requirements for Digesters for Biogas Production

New Installation - Plans and Specifications: New construction of digester facilities for biogas production shall be in accordance s. NR 243.15. In accordance with s. NR 243.15, additional requirements under ch. NR 213, Wis. Adm. Code, may apply based on materials added or chemical characterization of the digester influent/effluent. Exemptions to the design criteria may be given on a case-by-case basis. Prior written approval is required. The following (minimum) information shall be included in the plans and specifications submitted for the new construction of a digester for biogas production (three complete copies are required):

- a narrative describing the proposed facility(s);
- a written management and site assessment;
- an operation and maintenance plan;
- an assessment of the ability of the facility(s) to meet the applicable design requirements in s. NR 243.15;
- the adequacy of each facility's proposed linings to prevent exfiltration of manure (untreated or digested) and other contaminants to groundwater and the facility's ability to permanently meet the conditions in the Production Area Discharge Limitations and Manure and Process Wastewater Storage subsections;
- the proximity of bedrock and the water table to the proposed elevation of each facility's floors verified through on-site soil test borings or pits;
- scaled drawings showing the design details and locations of each proposed storage unit, any surface water, water supply wells, property boundaries, and other pertinent information;
- details concerning the proposed materials of construction;
- relevant engineering calculations; and
- additional design considerations based on operation of the digester (e.g., proposed additives, operational temperatures, etc.).

4.3.7 Record Keeping and Retention

The permittee shall keep records associated with production area and land application activities in accordance with s. NR 243.19(2). The permittee shall retain these records and copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 5 years from the date of the sample, measurement, report or application. The Department may request that this period be extended by issuing a public notice to modify the permit to extend this period. These records shall be made available to the Department upon request.

Note: A form for recording daily land application activities (Form 3200-123A) can be obtained at regional offices of the Department or the Department's Bureau of Watershed Management, 101 S. Webster St., P.O. Box 7921, Madison, Wisconsin 53707.

4.3.8 Reporting Requirements

The permittee shall submit the following reports in accordance with s. NR 243.19(3)

- **Corrective Actions:** If the permittee fails to take corrective action within 30 days of identifying a malfunction, failure, permit noncompliance or other identified problem, the permittee shall contact the Department immediately following the 30-day period and provide an explanation for its failure to take action.
- **Quarterly Reports:** The permittee shall summarize the results of inspections conducted at the production area in a written quarterly report. The permittee shall maintain the quarterly reports onsite until the quarterly report is submitted to the Department as part of the annual report.

- **Annual Reports:** The permittee shall submit written annual reports to the department by the date specified in the Schedules section of permit for all manure and other process wastewater that is generated by the permittee. These annual reports shall cover quarterly reports, annual spreading activities and other information required in s. NR 243.19(3) for the previous calendar year or cropping year, as specified in this permit.

Note: Form 3200-123 (Annual Spreading Report) can be obtained at regional offices of the department or the department's Bureau of Watershed Management, 101 S. Webster St., P.O. Box 7921, Madison, Wisconsin 53707.

4.3.9 Duty to Maintain Permit Coverage

The permittee shall submit a reissuance application in accordance with s. NR 243.12(2)(b) at least 180 days prior to the expiration date of its current WPDES permit, unless the permittee submits a letter to the Department documenting all of the following:

- That the permittee has ceased operation or is no longer defined as a large CAFO under s. NR 243.03(28).
- That the permittee has demonstrated to the Department's satisfaction that it has no remaining potential to discharge of manure or process wastewater pollutants to waters of the state that was generated while the operation was a CAFO.

5 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Emergency Response Plan -Update the Emergency Response Plan	February 1, 2015	18
Monitoring & Inspection Program -Proposed Monitoring and Inspection Program	April 1, 2015	18
Production Area Monitoring - Groundwater Monitoring Well Installation - Monitoring Well Installation	December 15, 2014	18
Annual Reports -Submit Annual Report #1	January 31, 2015	18
Annual Reports -Submit Annual Report #2	January 31, 2016	18
Annual Reports -Submit Annual Report #3	January 31, 2017	18
Annual Reports -Submit Annual Report #4	January 31, 2018	18
Annual Reports -Submit Annual Report #5	January 31, 2019	18
Annual Reports -Ongoing Annual Reports	See Permit	18
Nutrient Management Plan -Management Plan Submittal	March 31, 2015	19
Nutrient Management Plan -Management Plan Annual Update #1	March 31, 2016	19
Nutrient Management Plan -Management Plan Annual Update #2	March 31, 2017	19
Nutrient Management Plan -Management Plan Annual Update #3	March 31, 2018	19
Nutrient Management Plan -Management Plan Annual Update #4	March 31, 2019	19
Nutrient Management Plan -Ongoing Management Plan Annual Updates	See Permit	19
Submit Permit Reissuance Application -Reissuance Application	July 1, 2019	19

Report forms shall be submitted electronically in accordance with the reporting requirements herein. All engineering evaluations, plans and specifications, and post-construction reports shall be submitted to the Wisconsin Department of Natural Resources, CAFO Intake Specialist, WT/3, P.O. Box 7185, Madison, WI 53707-7185. All other submittals required by this permit shall be submitted to:

South Central Region - Dodgeville, 1500 N. Johns Street, Dodgeville, WI 53533-2116