Appendix A

Application for Local Approval

Wisconsin Department of Agriculture, Trade and Consumer Protection
2811 Agriculture Drive
P.O. Box 8911
Madison, WI 53708-8911
(608) 224-4630
(608) 224-4500

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Wisconsin Department of Agriculture, Trade and Consumer Protection
2811 Agriculture Drive, PO Box 8911, Madison WI 53708-8911
Phone: (608) 224-4630 or (608) 224-4500

Permitting Authority must complete

Application #:

Date Application Received:

Date Completeness Determined:

Date Notice Sent to Applicant:

Date Notice Sent to Adjacent Landowners:

Decision Date:

Approved or Disapproved:

Application for Local Approval

Wis. Stat. § 93.90

New or Expanded Livestock Facility

Wis. Admin. Code ch. ATCP 51

1. Legal Name of Applicant (Business Entity):

2. Type of Business Entity: check one

☐Individual	☐Corporation	☐Partnership	☐Cooperative	☐LLC
☐Trust	☐Other	Describe:		

3. Other names, if any, under which applicant does business (list all):

4. Contact Person	Name:
Phone:	E-mail:

5. Business Address: Street Address:

City/Village/Town:	County:	State:	Zip:

6. Principal Owners or Officers:

Name:	Title:	Phone:	
Address:	City:	State:	Zip:
Name:	Title:	Phone:	
Address:	City:	State:	Zip:
Name:	Title:	Phone:	
Address:	City:	State:	Zip:

7. Description of Proposed Livestock Facility

Check one:	☐ New Livestock Facility	☐ Expanded Livestock Facility	Premises ID ☐ Yes ☐ No
Address of Proposed Livestock Facility:			
City/Village/Town:		County:	State: Zip:
Town #	Range # (E or W)	Section #	¼ Section #

8. Total Animal Units

Enter total animal units from **worksheet 1:**

Total Animal Units: _____. This is the maximum livestock facility size for which the applicant requests approval at this time. All worksheets must be prepared based on this maximum listed size.

9. Area Map of Livestock Facility

Attach a scale map or aerial photo of the proposed livestock facility and surrounding area. The map or photo must be appropriately sized and marked, so that it clearly and legibly shows all of the following:

- All existing and proposed (new or altered) livestock structures.
- The area lying within 2 miles of any of the livestock structures. Show all existing buildings, property lines, roadways, and navigable waters within that area.
- Topographic lines at 10 ft. elevation intervals.
- Map scale and north direction indicator.

10. Site Map of Livestock Facility

Attach a scale map or aerial photo of the proposed livestock facility site. The map or photo shall be appropriately sized and marked, so that it clearly and legibly shows all of the following:

- All existing and proposed (new or altered) livestock structures. Label each livestock structure with a unique identifier that includes a description of the structure type (manure storage, housing, lot, feed storage, waste transfer system), and if proposed indicates whether the structure is new or altered. For example, “existing manure storage 1” would identify that a manure storage structure is existing and the first of a certain number of manure storage structures at the livestock facility. Include the unique identifier for each structure, when completing all relevant worksheets.
- The area lying within 1,000 ft. of any of the livestock structures. Show all existing buildings, property lines, roadways, navigable waters, and known karst features within that area.
- Topographic lines, at 2 ft. elevation intervals, for the area within 300 feet of the livestock structures.

11. Location of Livestock Structures

The applicant certifies that:

- All livestock structures (including storage structures that collect non-manure waste) must comply with applicable local property line and road setbacks. See ATCP 51.12(1). **Note**: Worksheet 2 must be completed to document the setbacks for all manure storage and Category 1 and 2 Livestock Housing.
- All manure storage and Category 1 and 2 livestock housing structures comply with setbacks in ATCP 51.12(2). ***Note****: Odor control practices documented in Worksheet 2 may reduce setbacks.*
- All livestock structures comply with applicable local shoreland, wetland, and floodplain zoning ordinances (copies available from local government).
- Wells comply with the Wisconsin well code (NR 811 and 812). New or substantially altered livestock structures are separated from existing wells (including neighbors’ wells) by setback distances required in NR 811 and 812.

12. Employee Training Plans (Required of all applicants)

Attach an Employee Training Plan for employees who will work at the *livestock facility*. Applicant determines plan contents, as long as the plan identifies all of the following:

- Training topics including, at a minimum, nutrient management, odor management, manure management and waste handling, maintenance of odor control practices, runoff management, and environmental incident response (Training on employee safety should be included in these topics).
- The number and job categories of employees to be trained.
- The form and frequency of training, which at a minimum must include a plan for at least one training per year.
- Training presenters (these may include *livestock facility* managers, consultants or professional educators).
- A system for taking and recording attendance.
- A system for documenting and retaining records of completed trainings (Permitting authorities may request to inspect these records).

13. Environmental Incident Response Plan (Required of all applicants)

Attach an Environmental Incident Response Plan for the *livestock facility*. Applicant determines plans contents, as long as the plan identifies all of the following:

- Types of environmental incidents covered. These must include, at a minimum, overflows and spills from waste storage facilities, catastrophic system failures, manure spills during transport and application, movement of manure during or after application, catastrophic mortality disposal emergency, and odor complaints.
- The name and business telephone number of at least one individual who will handle public questions and concerns related to environmental incidents.
- The names and telephone numbers of first responders (e.g. DNR, fire departments, excavation contractors)
- Incident response procedures, including emergency response, recordkeeping and reporting requirements.
- A system for documenting and retaining records involving environmental incidents. (Permitting authorities may request to inspect these records).

14. Odor Management Plan

Attach an odor management plan if the livestock facility has any existing manure storage located within 600 feet of any property line or any existing livestock housing located within 400 feet of any property line.

- The plan shall identify management practices that the livestock facility must follow to control odor from each manure storage structure and livestock housing located within the separation distances. The plan must incorporate odor control practices identified in a local approval granted before [the effective date of this rule revision] unless a financial or other justification for discontinuing the practice is provided to the permitting authority.
- In the case of a new or expanded manure storage structure and livestock housing that cannot be constructed without odor control practices to reduce setback requirements, the operator may reference Worksheet 2 in place of describing the odor control practices in the plan.
- The plan also may include practices to reduce dust, practices to reduce odor from nearby livestock structures such as animal lots, practices used to reduce odor from dead animals, activities to reduce community conflict, and water conservation practices that control odor.
- A system for documenting and retaining records concerning the operation and maintenance of odor control practices (Permitting authorities may request to inspect these records).

15. Narrative

Include narrative describing the new or expanded livestock facility, including the new or altered livestock structures using unique identifiers and the manure management system that will be implemented at the livestock facility.

16. Worksheets

Complete worksheets as required (follow instructions on each worksheet) and attach to application.

Worksheet 1 – **Animal Units**.

Worksheet 2 – **Odor Management**.

Worksheet 3 – **Waste and Nutrient Management**. If you meet the requirements for an exemption, check the appropriate box on this worksheet, and provided necessary documentation and certification with this application.

Worksheet 4 – **Waste Storage Facilities.** If you meet the requirements for an exemption, check the appropriate box on this worksheet, and provided necessary documentation and certification with this application.

Worksheet 5 – **Runoff Management**. If you meet the requirements for an exemption, check the appropriate box on this worksheet, and provided necessary documentation and certification with this application.

Authorized Signature:

I (we) certify that the information contained in this application (including worksheets and all attachments) is complete and accurate to the best of my knowledge.

Signature of Applicant # 1 or Authorized Representative #1 — Date

Print Name — Title

Signature of Applicant # 2 or Authorized Representative # 2 — Date

Print Name — Title

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Worksheet 1 - *Animal Units*

Instructions: Use this worksheet to determine the number of animal units for which you request approval. You may request approval for a number that is large enough to accommodate current and potential future expansions. If the local government approves the requested number of animal units,that is the maximum number that you may keep for 90 days or more in any 12-month period. You may not exceed that number without additional approval.

To complete this worksheet:

1. Identify each type of livestock that you might keep at the proposed facility. Enter the maximum number of animals of each type that you might keep for at least 90 days in any 12-month period.

2. Multiply the number of animals of each type by the relevant Animal Unit Factor to obtain animal units of each type.

3. Sum the animal units for all livestock types to obtain the Total Animal Units for which you request approval.

***Livestock* Type**		**Animal Unit Factor**		***Animal Units* For Proposed Facility**
Example – Milking & Dry Cows				*1.4 x 800 = 1120 AU*
Dairy Cattle	Milking and Dry Cows	**1.4**		1.4 x =
	Heifers (800 lbs. to 1200 lbs.)	**1.1**		1.1 x =
	Heifers (400 lbs. to 800 lbs.)	**0.6**		0.6 x =
	Calves (up to 400 lbs.)	**0.2**		0.2 x =
Beef	Steers or Cows (600 lbs. to market)	**1.0**		1.0 x =
	Calves (under 600 lbs.)	**0.5**		0.5 x =
	Bulls (each)	**1.4**		1.4 x =
Swine	Pigs (55 lbs. to market)	**0.4**		0.4 x =
	Pigs (up to 55 lbs.)	**0.1**		0.1 x =
	Sows (each)	**0.4**		0.4 x =
	Boars (each)	**0.5**		0.5 x =
Poultry	Layers (each)	**0.01**		0.01 x =
	Broilers (each)	**0.005**		0.005 x =
	Broilers – continuous overflow watering	**0.01**		0.01 x =
	Layers or Broilers - liquid manure system	**0.033**		0.033 x =
	Ducks – wet lot (each)	**0.2**		0.2 x =
	Ducks - dry lot (each)	**0.01**		0.01 x =
	Turkeys (each)	**0.018**		0.018 x =
Sheep (each)		**0.1**		0.1 x =
Goats (each)		**0.1**		0.1 x =
Total *Animal Units* for Which Applicant Requests Approval				**=**

Signature of Applicant or Authorized Representative

Date

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Worksheet 2 – Odor Management

Instructions: This worksheet must be completed for proposed (new and altered) manure storage structures and livestock housing with higher potential to generate odor referred to as Category 1 and 2 livestock housing.

For existing structures that are being expanded by 20 percent or more in surface area and new construction, this worksheet determines whether the structure meets the applicable property line setbacks. This worksheet enables livestock operators to reduce applicable setback distances by installing and maintaining odor control practices consistent with the "Odor Control Practice Specifications."

If livestock structures are located in clusters, an applicant may determine the setback distances for structures based on the animal units kept at each cluster. This option is not available if the clusters are separated by less than 1000 feet or a livestock structure in one cluster receives manure from animals in another cluster.

In addition to this worksheet, livestock operators must:

- Certify that livestock structures comply with the property line and public road right-of-way setbacks established by local ordinance. (See Application, #11). This certification covers compliance with (a) local setbacks for new or expanded livestock structures not covered by this worksheet including animal lots, feed storage, and livestock housing not covered under Categories 1 and 2, and (b) public road right-of-way setbacks for all livestock structures, a setback requirement not addressed by this worksheet.
- Submit an odor management plan for the following existing structures located on the livestock facility at the time of application for local approval: manure storage located within 600 feet of a property line and Category 1 and 2 livestock housing located within 400 feet of a property line (See Application, #14 – Odor Management Plan for instructions).

To complete this worksheet, follow Steps 1-5, entering information into Tables A and B for each Category 1 and 2 livestock housing and Tables C and D for each manure storage structure on the proposed facility that meet either of the following conditions:

1. Proposed for new construction
2. Proposed for expansion by 20 percent or more in surface area

Note: You may use a convenient automated spreadsheet of Table A if you prefer. The spreadsheet, which includes instructions for completing it, is available at the department's website: http://www.livestocksiting.wi.gov. Whether you use the paper version of Table A or its spreadsheet equivalent, you must submit a copy with this completed worksheet.

By signing this worksheet, the applicant or authorized representative certifies that the information provided in this worksheet is true, complete, and accurate, and further agrees to install and maintain the odor control practices identified in Tables B and D, in accordance with the specifications listed in this worksheet.

_____ _____
Signature of Applicant or Authorized Representative Date

Step 1: Enter the maximum number of Animal Units from Worksheet #1: _____

Step 2: Enter the following information for expanding (20 percent or more) and new Category 1 and 2 livestock housing into Table A, Columns:

A. Enter the type of Category 1 and 2 livestock housing. Refer to Chart 1 for housing types that qualify as Category 1 and 2.
B. Enter the unique identifier for each housing, as referenced on the facility map.
C. Enter the surface area of each housing being proposed.
D. For housing that are proposed for expansion by 20 percent or more, enter the existing surface area.
E. Enter the appropriate property line setback from Chart 1 based on the number of Animal Units listed in Step #1.
F. If each setback distance listed under Column E will be met without the use of odor control practices, enter the planned distance to property line. This distance cannot be less than the distance in Column E.

Table A

A: Category 1 and 2 housing	B: Unique ID (from map)	C: Square Footage	D: Pre-expansion Square Footage	E: Setback for Housing Built After [date of rule revision] or Expanding by 20 Percent or Greater (feet)	F: Planned Distance to Property Line, No Odor Control Practices (feet)

Chart 1: Minimum Property Line Setbacks for New and Expanded (>20%) Category 1 and 2 Livestock Housing		
Type of Structure	**Animal Unit (AU) Capacity**	**Property Line Setback**
Category 1 livestock housing: • Pork gestation/farrow/nursery with slatted floor (includes floor and pit below) • Pork finishing with slatted floor (includes floor and pit below)	<1,000 AU	600 feet
	1,000 AU - <2,500 AU	1,000 feet
	2,500 AU - <4,000 AU	1,450 feet
	4,000 AU or more	1,700 feet
Class 2 livestock housing: • Dairy housing with Alley Flush • Beef Housing with slatted floor • Pork Finishing scrape systems to storage and pull plug to storage • Poultry Layers • Ducks (liquid)	<1,000 AU	400 feet
	1,000 AU - <2,500 AU	700 feet
	2,500 AU - <4,000 AU	1,000 feet
	4,000 AU or more	1,200 feet
*May use clusters to determine AU capacity		

Step 3: If you are installing and implementing any of the odor control practices in Chart 2 at livestock housing listed in Table A, enter the following information into Table B, Columns:

A. Enter the unique identifier for each housing that will operate odor control practices.
B. Enter the setback distance from Table A, Column E that corresponds to each listed housing.
C. Enter the control practice from Chart 2 that will be installed and implemented.
D. Enter a second control practice, if any.

E. Enter a third control practice, if any.
F. Referring to Chart 3, calculate the total reduction distance credited toward a setback reduction, and enter.
G. Subtracting Column F from Column B, enter the reduced setback distance.
H. Enter the planned distance to property line. This distance cannot be less than the distance in Column G.

Table B

A: Unique ID (from map)	B: Setback Distance from Table A, Column E (feet)	C: 1st Control Practice	D: 2nd Control Practice	E: 3rd Control Practice	F: Total Reduction Distance from Chart 3 (feet)	G: Reduced Setback Distance (feet)	H: Planned Distance to Property Line with Odor Control (feet)

Chart 2: Category 1 and 2 Livestock Housing Odor Control Practices

Control Practice	Effectiveness	Level
Bio-filter / Bioscrubbers	High	1
Wet Scrubber with bleach or other chemicals	High	1
Vegetable oil sprinkling (for swine only)	High	1
Wet Scrubber with water	Medium	2
Recirculated flush water	Medium	2
Treated water flush	Medium	2
Poultry Dryer Belt System	Medium	2
Air Dam (for swine only)	Medium	2

Chart 3: Category 1 and 2 Livestock Housing Setback Reductions			
Type of Structure	**Practice Effectiveness in Chart 2**	**Level 1 reduction distance**	**Level 2 reduction distance**
Category 1 livestock housing:* • Pork gestation/farrow/nursery with slatted floor (includes floor and pit below) • Pork finishing with slatted floor (includes floor and pit below)	Level 1, may combine with Level 2	250 feet	150 feet
	Level 2		200 feet
Category 2 livestock housing:* • Dairy housing with alley flush • Beef housing with slatted floor • Pork finishing scrape systems to storage, and pull plug to storage • Poultry Layers • Ducks (liquid)	Level 1, may combine with Level 2	175 feet	100 feet
	Level 2		125 feet
* Setbacks may not be reduced below the maximum allowable setback distances that apply to all livestock housing by a local ordinance (e.g. <1,000 AU = 100 feet; 1,000 AU - <2,500 AU = 200 feet; 2,500 AU or more = 300 feet).			

Step 4: Enter the following information for expanding (20 percent or more) and new manure storage structures into Table C, Columns:

A. Enter the unique identifier for each manure storage structure, as referenced on the facility map.
B. Enter the surface area of each manure storage structure being proposed.
C. For structures that are proposed for expansion by 20 percent or more, enter the existing surface area.
D. Enter the appropriate property line setback from Chart 4 based on the number of Animal Units listed in Step #1.
E. If each setback distance listed under Column D will be met without the use of odor control practices, enter the planned distance to property line. The distance cannot be less than the distance in Column D.

Table C

A: Unique ID (from map)	B: Square Footage	C: Pre-expansion Square Footage	D: Setback for Storage Built After [date of rule revision] or Expanding by 20 Percent or Greater (feet)	E: Planned Distance to Property Line, No Odor Control Practices (feet)

Chart 4: Minimum Property Line Setbacks for New and Expanded (>20%) Manure Storage		
Type of Structure	**Animal Unit (AU) Capacity***	**Property Line Setback**
Earthen or other storage	<1,000 AU	600 feet
	1,000 AU -2,500 AU	1,000 feet
	2,500 AU - <4,000 AU	1,400 feet
	>4,000 AU	1,700 feet, plus 200 feet for every 1,000 AU over 4,000 AU; but no more 2,500 feet total setback
*May use clusters to determine AU capacity		

Step 5: If you are installing and implementing any of the odor control practices in Chart 5 at manure storage listed in Table C, enter the following information into Table D, Columns:

A. Enter the unique identifier for each manure storage structure that will operate odor control practices.
B. Enter the setback distance from Table C, Column D that corresponds to each listed structure.
C. Enter the control practice from Chart 5 that will be installed and implemented.
D. Enter a second control practice, if any.
E. Enter a third control practice, if any.
F. Referring to Chart 6, calculate the total reduction distance credited toward a setback reduction, and enter.
G. Subtracting Column F from Column B, enter the reduced setback distance.
H. Enter the planned distance to property line. This distance cannot be less than the distance in Column G.

Table D

A: Unique ID (from map)	B: Setback Distance from Table A, Column F (feet)	C: 1st Control Practice	D: 2nd Control Practice	E: 3rd Control Practice	F: Total Reduction Distance from Chart 3 (feet)	G: Reduced Setback Distance (feet)	H: Planned Distance to Property Line with Odor Control (feet)

Chart 5: Manure Storage Odor Control Practices		
Control Practice	**Effectiveness**	**Level**
Wastewater Treatment	High	1
Impermeable cover	High	1
Compost	High	1
Natural crust	Medium	2
Bio cover	Medium	2
Geotextile cover	Medium	2
Anaerobic digestion	Medium	2
Manure Solids Separation and Reduction (Higher efficiency)	Medium	2

Chart 6: Manure Storage Setback Reductions			
Type of Structure & Facility Size	**Practice Effectiveness in Chart 5**	**Level 1 reduction distance**	**Level 2 reduction distance**
Uncovered earthen or other open manure storage structure for facility less than 4,000 AU*	Level 1, may combine with Level 2	500 feet	150 feet
	Level 2		300 feet
Uncovered earthen or other open manure storage structure for facility 4,000 or more AU*	Level 1, may combine with Level 2	1,000 feet	300 feet
	Level 2		600 feet
* Setbacks may not be reduced below 350 feet for facilities under 1,000 AUs; for facilities 1,000 to <2,500 AUs, setbacks may not be reduced below 500 feet; and for facilities over 2,500 AUs, setbacks may not be reduced below 750 feet.			

Odor Control Practice Specifications

Odor control practices identified in Chart 3 and 6 must meet the following specifications, and must be operated and serviced as needed to maintain effectiveness over time. The following odor control practices are organized by the source of odor they are designed to control and include the level of effectiveness of the odor control practice. If a livestock operator seeks DATCP approval for unlisted practices, DATCP may include specifications for the practice as part of its approval.

Livestock Housing

Bio-filter (High) – Vent air from animal housing areas through a bio-filter consisting of compost and wood chips, mixed at a rate of 30:70 to 50:50 (ratio by weight of compost to wood chips). The mixture must be at least 40% moisture by weight. The bio-filter must be 10" to 18" thick, and must have an area of at least 50 to 85 sq. ft. per 1000 cu. ft. per minute (cfm) of airflow. If a bio-filter treats less than 75 percent of the exhaust air from a housing structure, the operator cannot claim credit for this practice without requesting that the department approve a setback reduction for an innovative practice.

Bioscrubbers (High): Install a scrubber system that operates in a manner similar to a bio-filter in that bacteria growing on biomass within the scrubber converts ammonia into nitrate and nitrite. Nitrogen in the water has to be kept below levels that will inhibit bacteria. They tend to use 8 to10 times more water than acid scrubbers. The ammonia removal efficiency averages approximately 70%, and the odor removal efficiency averages 50%. Appropriate maintenance includes skimming of solids and replacement of water. If a bioscrubber treats less than 75 percent of the exhaust air from a housing structure, the operator cannot claim credit for this practice without requesting that the department approve a setback reduction for an innovative practice.

Wet Scrubbers-Chemical Acid scrubbers (High): Install scrubbers to trap alkaline material, such as ammonia, in a sulfuric acid solution that is circulated over a packed bed at a pH of 2 to 4. The ammonia removal efficiency tends to be over 90%, while the odor removal rate is around 30%. This same technology can be used with a base solution if hydrogen sulfide was the targeted chemical for removal. If a web scrubber treats less than 75 percent of the exhaust air from a housing structure, the operator cannot claim credit for this practice without requesting that the department approve a setback reduction for an innovative practice.

Vegetable oil sprinkling (High) – Sprinkle vegetable oil on floors in animal housing areas (swine) each day. Apply oil at start-up rate of approximately 40 milliliters per square meter per day (mL/m^2-day) in the first 1-2 days of each production cycle. During the remainder of each production cycle, apply oil at maintenance rate of 5 mL/m^2-day. Avoid oil applications to pens near fans, to areas near heaters, and to areas surrounding feeders.

Wet Scrubbers-Water (Medium) – Install exhaust air filtration systems to remove dust particles and ammonia from animal housing or under building waste storage facilities. These systems consist of a treated paper or fabric media, minimally 6" thick, through which the exhaust air passes and over which recirculated water flows To adequately capture solid particles and absorb ammonia, the media (including film of water) must have a face area of at least 15 square feet for every 10,000 cubic feet per minute of exhaust air flow, and there must be a minimum of 3 gallons per minute of recirculated water flowing over that portion of the media to keep it continuously wetted. Accumulated solids must be skimmed off the recirculation water reservoir on a weekly basis, and the water must be replaced when its pH reaches 8.2. The discarded water must be sent to manure storage, and then land applied according to an approved nutrient management plan. If a web scrubber treats less than 75 percent of the exhaust air from a housing structure, the operator cannot claim credit for this practice without requesting that the department approve a setback reduction for an innovative practice.

Recirculated water flush (Medium) – Use recirculated wastewater to flush manure from floors of animal housing areas into collection or waste storage facilities. Flush at least 3 times a day, and more often if necessary, to prevent manure from drying and sticking to floors. Flush velocity must be adequate to remove manure solids effectively. To qualify for a higher odor control credit (as compared to a conventional alley flushed barn), the wastewater must meet the either of the following definitions of recirculated: returned to the flush alley immediately, or after being stored for no more than 3 days, such that it remains in an aerobic state.

Treated water flush (Medium) – Use treated manure effluent to flush manure from floors of animal housing areas into collection or waste storage facilities. Flush at least 3 times a day, and more often if necessary, to prevent manure from drying and sticking to floors. Flush velocity must be adequate to remove manure solids

effectively. Flush with waste storage effluent must treated by a recognized means such as solid separation and reduction or other equally effective approach.

Poultry Dryer Belt System (Medium) – Install a manure conveyance and treatment system for poultry layer operations that consists of a series of conveyor belts configured to receive the litter and then immediately pass it through a positively ventilated air chamber. The residence time of the litter in the air chamber must be sufficient to thoroughly dry it, and thereby prevent it from becoming anaerobic when stored. The dried litter must be stored in a facility separate from the animal housing.

Air Dam (Medium) – Erect and maintain a wall placed at the end of positively ventilated animal housing, in close proximity to the exhaust. The barrier must be of sufficient height and width to deflect the exhaust air and odor plume (typically 10' x 10' for each fan).

Manure Storage

Wastewater Treatment (High) – Install and use a physical, chemical or biological process that removes the majority of contaminants from the waste stream, resulting in a liquid effluent meeting surface water discharge standards.

Impermeable cover (High) – Cover the entire surface of waste storage structure with an impermeable barrier that prevents gas from escaping. The cover must meet NRCS technical guide roofs and covers standard 367 (April 2016). Gas must be drawn off, and either treated, used for energy production, or flared off.

Compost (High) – Aerobically treat solid or semi-solid manure to create compost in accordance with NRCS Technical Standard Composting Facility 317 (January 2017). Compost must be sited and properly managed to control odors, including regular turnings, as detailed in the technical standard.

Natural crust (Medium) – Maintain a natural crust of dry manure on the surface of stored manure. The natural crust must cover 80% of the surface area of the stored manure~~,~~ 80% of the time between the months of April and October. Organic bedding material must be used, sand bedding will not produce an adequate natural crust.

Bio-cover (Medium) – Cover the surface of waste storage structure with an 8" to 12" thick blanket of dry wheat, barley or good quality straw. The blanket must cover 80% of the waste surface 80% of the time between the months of April and October. Add to the blanket as necessary to maintain the required cover.

Geotextile cover (Medium) – Cover the surface of waste storage structure with a geotextile membrane that is at least 2.4 mm thick. The membrane must cover 80% of the surface of the structure between the months of April and October.

Anaerobic digestion (Medium) – Subject manure to managed biological decomposition within a sealed oxygen-free container ("digester"). Anaerobic digestion must meet design and operational standards necessary to achieve adequate odor control as listed in NRCS Technical Standard Anaerobic Digester 366 (January, 2018), including requirements for solids concentration, flow rates, retention time, and minimum temperatures.

Solids Separation and Reduction (Medium) – Reduce the solid content of stored manure with solid capture efficiency of more than 50% through mechanical separation, multi-tiered pits or other means. Mechanical separation systems must meet the requirements in NRCS Technical Standard Waste Separation Facility 632 (April 2014). Solids content in multi-tiered pits must be as measured after the stored manure has been thoroughly mixed.

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Worksheet 3 - Waste and Nutrient Management

Instructions. Complete and sign Parts A, B and C of this worksheet. Part D must be completed and signed by a *qualified nutrient management planner* (the applicant must also sign) unless the exemption applies.

Exemption.

You do not need to complete and submit Worksheet 3, Part D if you check the box and initial the certification and acknowledgement.

☐ Attached is a copy of the most recent nutrient management plan checklist related to (an initial application) (an annual update) (a permit renewal) [Strike all that do not apply] of *WPDES* permit for the livestock facility.

_____ (Initial) By checking the box above and initialing this worksheet, the applicant certifies that the most current nutrient management plan covers the same or greater number of animal units than the number requested in this application, the *WDPES* permit and the nutrient management plan are current, and the livestock facility has met all *WPDES* permit conditions related to the nutrient management plan. The applicant further acknowledges that the applicant is responsible for providing supporting documentation to verify that the conditions for permit substitution are satisfied, and that the plan meets the applicable technical standards.

Part A. Waste Generation

Complete the following table[1] to provide an annual estimate of manure generated.

The estimate must be prepared by a qualified nutrient management planner other than operator, and must capture the manure generated by the maximum number of animal units for which the approval is requested. The planner must account for all waste generated, must determine the livestock facility's capacity to store waste, and develop a nutrient management plan that adequately reflects the livestock facility's storage capacity and includes an adequate land base for manure applications.

The table's source is the *Wisconsin Conservation Planning Technical Note WI-1* (Feb. 2016), which reproduced the table from another publication, *Midwest Plan Service publication number MWPS-18 "Manure Characteristics" Section 1 (2000).* Consult the *Technical Note* for guidance in completing this table. The guidance in the *Technical Note* includes the following:

> Solid volumes are as excreted. The liquid dairy and beef values are computed from the MWPS daily production and have approximately equal nutrient values annually as solid manure. MWPS liquid dairy and beef factors are multiplied by 1.8 and 3.2 respectively. Dilution on your operation may be substantially different. Use manure analysis and manure storage volumes to determine manure production whenever possible.

To the extent that the guidance in the *Technical Note* is not consistent with the requirements of ch. ATCP 51, ATCP 51 requirements should be followed.

[1] In lieu of completing this table, attach a manure tracking report prepared using SnapPlus http://snapplus.wisc.edu/.

Manure estimate using MWPS-18 "Manure Characteristics"

Animal	Size	Daily Manure Production To Apply						Annual Manure Production To Apply				
	Lbs	Solid		Liquid				Number x	Daily x	365 Day x	% =	Total
		Lbs/day	ft^3/day	MWPS ft^3/day x WI dairy & beef dilution factor	ft^3/day & WI dilution	MWPS gal./day x WI dairy & beef dilution factor	gal./day & WI dilution	of Head	Total **Tons or Gal.**	Total	Collected	Collected **Tons or Gal.**
Dairy												
Calf	150	13	0.200	.21*1.8=	.37	1.53*1.8=	2.80					
Calf	250	21	0.320	.33*1.8=	.60	2.47*1.8=	4.50					
Heifer	750	65	1.000	1.03*1.8=	1.85	7.70*1.8=	13.8					
Lact. Cows	1000	106	1.700	1.71*1.8=	3.07	12.7*1.8=	23.0					
	1400	148	2.400	2.38*1.8=	4.28	17.7*1.8=	32.0					
Dry Cows	1000	82	1.300	1.30*1.8=	2.35	9.7*1.8=	18.0					
	1400	115	1.820	1.82*1.8=	3.33	13.6*1.8=	25.0					
Beef												
Calf	450	26	0.420	.415*3.2=	1.3	3.1*3.2=	9.9					
High Forage	750	62	1.000	1.00*3.2=	3.2	7.5*3.2=	24.0					
High Forage	1100	92	1.400	1.48*3.2=	4.8	11*3.2=	35.0					
High Energy	750	54	0.870	.87*3.2=	2.7	6.5*3.2=	20.8					
High Energy	1100	80	1.260	1.27*3.2=	4.1	9.5*3.2=	30.5					
Beef Cow	1000	63	1.000	1.00*3.2=	3.2	7.5*3.2=	24.0					
Swine												
Nursery Pig	25	2.7	0.040		.04		.30					
Grow-Finish Pig	150	9.5	0.150		.17		1.20					
Gestating Sow	275	7.5	0.120		.14		1.00					
Sow & Litter	375	22.5	0.360		.42		3.00					
Boar	350	7.2	0.120		.14		1.00					
Poultry / Other												
Layers	4	0.26	0.004		.004		.03					
Broilers	2	0.18	0.003		.003		.02					
Turkeys	20	0.9	0.014		.015		.11					
Duck	6	0.33	0.005		.006		.04					
Sheep	100	4	0.060		.055		.40					
Horse	1000	50	0.800		.827		5.98					

Part B – Land Base for Applying Nutrients

1. What percentage of the manure and waste identified in Part A will be:
   a. Applied to land: _____%.
   b. Processed and sold as commercial fertilizer, under a fertilizer license: _____%.
   c. Disposed of in other ways: _____%. Describe: _____

2. Total acres of cropland currently available for land application (owned, rented, or landspreading agreement):
   _____

3. Attach map(s) showing the land where waste will be applied and any restrictions limiting the application of waste to that land. Additional documentation may be required by the political subdivision to verify that rental land is available.

Part C – Cropland Performance Standards

The applicant (operator) certifies that the livestock facility is in compliance, or shall implement conservation practices that achieve compliance, with the following requirements, and makes a commitment that the livestock facility will remain in compliance with these cropland performance standards:

1. Control soil erosion on all fields covered by the nutrient management plan to remain at or below the T-value as specified in ATCP 50.04(2).

2. Maintain of an average a phosphorus index of 6 or less over an accounting period and an annual phosphorus index of less than 12, as defined NR 151.04(2)(a), for all fields included in the nutrient management plan.

Part D – Nutrient Management Checklist

The checklist Part D must be completed, unless you claim the exemption by checking the box and initialing the certification and acknowledgement at the beginning of this worksheet. Part D must be completed and signed by a *qualified nutrient management planner* (the applicant must also sign).

Applicant affirms that the information provided in Parts A, B and C is accurate.

_____ _____
Signature of Applicant or Applicant's Authorized Representative Date

Wisconsin Department of Agriculture, Trade and Consumer Protection
Division of Agricultural Resource Management
Bureau of Land and Water Resources
PO Box 8911, Madison WI 53708-8911, Phone: 608-224-4605

Use this form to check nutrient management (NM) plans for compliance with the WI NRCS 2015-590 Standard.

Nutrient Management Checklist

Wis. Stat. §92.05(3) (k), Wis. Admin. Code §ATCP50.04(3) and Ch. 51

COUNTY	DATE PLAN SUBMITTED	GROWING SEASON YEAR PLAN IS WRITTEN FOR	(from harvest to harvest)
TOWNSHIP: (T. N.) RANGE: (R. E., W).		CHECK ONE: ☐ Initial Plan or ☐ Updated Plan	

NAME OF FARM OPERATOR RECEIVING NM PLAN First Name LastName	FARM NAME (OPTIONAL)	BUSINESS PHONE ( ) -	
STREET ADDRESS	CITY	STATE	ZIP
REASON THE PLAN WAS DEVELOPED: Click and choose. (Ordinance, NR 243 WPDES or NOD, DATCP-FP or cost share (cs), DNR-cs, USDA-cs, Other)		CROPLAND ACRES (OWNED & RENTED)	
RENTED FARM(S) LANDOWNER NAME(S) AND ACREAGE: add sheet(s) if needed			

WAS THE PLAN WRITTEN IN SNAPPLUS? ☐ YES ☐ NO		If yes, which software version, if known?	
CHECK PLANNER'S QUALIFICATION: Click and choose. (1. NAICC-CPCC, 2. ASA-CCA, 3. SSSA-Soil Scientist, 4. DATCP approved training course, 5. Other approved by DATCP)			
NAME OF QUALIFIED NUTRIENT MANAGEMENT PLANNER First Name Last Name		BUSINESS PHONE ( ) -	
STREET ADDRESS	CITY	STATE	ZIP

Use header sections to add comments. Mark NA in the shaded sections if no manure is applied.

1. Does the plan include the following nutrient application requirements to protect surface and groundwater?

This section applies to fields and pastures. If no manure is applied, check NA for 1.c., 1.h., 1.i., 1.n., 1.o., 1.q., 1.s.	Yes	No	NA
a. Determine field nutrient levels from soil samples analyzed by a DATCP **certified laboratory**.	☐	☐	☐
b. For fields or pastures with mechanical nutrient applications, determine field nutrient levels from **soil samples** collected within the last **4 years** according to 590 Standard (590) and UWEX Pub. A2809, *Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin* (A2809) typically collecting **1 sample per 5 acres** of 10 cores. Soil tests are not required on **pastures** that do not receive mechanical applications of nutrients if either of the following applies: 1. The pasture average stocking rate is one animal unit per acre or less at all times during the grazing season. 2. The pasture is winter grazed or stocked at an average stocking rate of more than one animal unit per acre during the grazing season, and a nutrient management plan for the pasture complies with 590 using an assumed soil test phosphorus level of 150 PPM and organic matter content of 6%.	☐	☐	☐
c. For **livestock siting permit approval**, collect and analyze soil samples meeting the requirements above in 1. b., excluding pastures, within 12 months of approval and revise the nutrient management plan accordingly. Until then, either option below maybe used: 1. Assume soil test phosphorus levels are greater than 100 ppm soil test P, OR 2. Use preliminary estimates analyzed by a certified DATCP laboratory with soil samples representing > 5 ac/sample.	☐	☐	☐
d. **Identify all fields'** name, boundary, acres, and location.	☐	☐	☐
e. Use the field's previous year's legume credit and/or applications, predominant soil series, and realistic yield goals to determine the crop's nutrient **application rates consistent with A2809 for ALL forms of N, P, and K**.	☐	☐	☐
f. Make no **winter applications of N and P** fertilizer, except on grass pastures and winter grains.	☐	☐	☐
g. Document method used to determine **application rates**. Nutrients shall not runoff during or immediately after application.	☐	☐	☐
h. Identify in the plan that **adequate acreage** is available for manure produced and/or applied.	☐	☐	☐
i. Apply a single phosphorus (P) assessment using either the **P Index** or **soil test P** management strategy to all fields within a tract when fields receive manure or organic by-products during the crop rotation.	☐	☐	☐
j. Use **complete crop rotations** and the field's **critical soil** series to determine that sheet and rill erosion estimates will not exceed **tolerable soil loss** (T) rates on fields that receive nutrients.	☐	☐	☐
k. Use contours; reduce tillage; adjust the crop rotation; or implement other practices to **prevent ephemeral erosion**; and maintain perennial vegetative cover to **prevent reoccurring gullies** in areas of concentrated flow.	☐	☐	☐
l. Make no nutrient applications within 8' of **irrigation** wells or where **vegetation is not removed**.	☐	☐	☐
m. Make no nutrient applications within **50' of all direct conduits to groundwater**, unless directly deposited by gleaning/pasturing animals or applied as starter fertilizer to corn.	☐	☐	☐

	Yes	No	NA
n. Make no **untreated manure applications** to areas within 1000' of a **community potable water well** or within 100' of a **non-community potable water well** (ex. church, school, restaurant) unless manure is treated to substantially eliminate pathogens.	☐	☐	☐
o. Make no manure applications to areas **locally delineated** by the Land Conservation Committee or in a conservation plan as areas contributing runoff to direct conduits to groundwater unless manure is substantially buried within 24 hours of application.	☐	☐	☐
p. Make no applications of **late summer or fall commercial N fertilizer** to the following areas UNLESS needed for establishment of fall seeded crops OR to meet A2809 with a blended commercial fertilizer. Commercial fertilizer N applications shall not exceed 36 lbs. N/acre on: • Sites vulnerable to N leaching **PRW Soils** (P=high permeability, R= bedrock < 20 inches, or W= wet < 12 inches to apparent water table); • Soils with depths of 5 feet or less to bedrock; • Area within 1,000 feet of a community potable water well. On **P soils, when commercial N is applied** for full season crops in **spring and summer**, follow A2809 and apply one of the following: 1. A split or delayed N application to apply a majority of crop N requirement after crop establishment. 2. Use a nitrification inhibitor with ammonium forms of N. 3. Use slow and controlled release fertilizers for a majority of the crop N requirement applied near the time of planting.	☐	☐	☐
q. Limit manure applications in late summer or fall using the lesser of A2809 or the following 590 rates on **PRW Soils.** *Use ≤ 120 lbs. available N/acre on:* **P and R soils** on *all crops, except annual crops*. Additionally, manure with ≤ 4% dry matter (DM) wait until after soil temp. < 50°F or Oct. 1, and use either a nitrification inhibitor OR surface apply and do not incorporate for at least 3 days. **W soils or combo. W soils** on *all crops.* Additionally, manure with ≤ 4% DM on *all crops* use at least one of the following: **1.** Use a nitrification inhibitor; **2.** Apply on an established cover crop, an overwintering annual, or perennial crop; **3**. Establish a cover crop within 14 days of application; **4**. Surface apply & don't incorporate for at least 3 days;**5.** Wait until after soil temp. < 50°F or Oct. 1. *Use ≤ 90 lbs. available N/acre on:* **P and R soils** on *annual crops* wait until after soil temp. < 50°F or Oct. 1. Additionally, manure with ≤ 4% DM use either a nitrification inhibitor OR surface apply and do not incorporate for at least 3 days. **W soils or combination W soils** receiving manure with ≤ 4% DM on *all crops*.	☐	☐	☐
r. Use at least one of the following practices on **non-frozen soils for all nutrient applications** within **Surface Water Quality Management Area (SWQMA)** = 1000' of lakes/ponds or 300' of rivers: **1.** Maintain > 30% cover after nutrient application; **2.** Effective incorporation within 72 hours of application; **3.** Establish crops prior to, at, or promptly following application; **4.** Install/maintain vegetative buffers or filter strips; **5**. Have at least 3 consecutive years no-till for applications to fields with < 30% residue (silage) and apply nutrients within 7 days of planting.	☐	☐	☐
s. Limit mechanical applications to **12,000 gals/acre of unincorporated liquid manure or organic by-products with 11% or less dry matter where subsurface drainage is present** OR **within SWQMA**. Wait a minimum of 7 days between sequential applications AND use one or more of the practice options on non-frozen soils listed in 1.r.1. through **1.r.5.**	☐	☐	☐

2. When frozen or snow-covered soils prevent effective incorporation, does the plan follow these requirements for winter applications of all mechanically applied manure or organic by-products? *This section doesn't apply to winter gleaning/pasturing meeting 590 N and P requirements.*

If no manure is applied, check NA for 2.a. through 2.g..	Yes	No	NA
a. Identify **manure quantities planned to be spread during the winter**, or the amount of manure generated in 14 days, whichever is greater. *For daily haul systems, assume 1/3 of the manure produced annually will need to be winter applied.*	☐	☐	☐
b. Identify **manure storage capacity** for each type applied and stacking capacity for manure ≥ 16% DM if permanent storage does not exist.	☐	☐	☐
c. Show on map and make no applications within the **SWQMA**.	☐	☐	☐
d. Show on map and make no surface applications of liquid manure during **February and March** where **Silurian dolomite** is within 60 inches of the soils surface OR where **DNR Well Compensation** funds provided replacement water supplies for wells contaminated with livestock manure.	☐	☐	☐
e. Show on map and make no applications of manure within **300 feet** of **direct conduits to groundwater**.	☐	☐	☐
f. Do not exceed the P removal of the following growing season's crop when applying manure. Liquid manure applications are limited to **7,000 g/acre**. All winter manure applications are not to exceed **60 lbs. of P2O5/acre**.	☐	☐	☐
g. Make no applications of manure to fields with ***concentrated flow channels*** unless using two of the following: **1.** Contour buffer strips or contour strip cropping; **2.** Leave all crop residue and no fall tillage; **3.** Apply manure in intermittent strips on no more than 50% of field; **4.** Apply manure on no more than 25% of the field waiting a minimum of 14 days between applications; **5.** Reduce manure app. rate to 3,500 gal. or 30 lbs. P2O5, whichever is less; **6.** No manure application within 200 feet of all concentrated flow channels; **7.** Fall tillage is on the contour and slopes are lower than 6%. Make no applications to **slopes greater than 6%** (soil map units with C, D, E, and F slopes) unless the plan documents that no other accessible fields are available for winter spreading AND two of the options 2.g.1. through 2.g.5. are used.	☐	☐	☐

I certify that the plan represented by the answers on this checklist complies with Wisconsin's NRCS 2015-590 NM Standard or is otherwise noted.

Qualified NM planner signature NAICC-*Certified Professional Crop Consultant*, ASA-*Certified Crop Adviser*, or SSSA-*Soil Scientist* Date

Qualified NM farmer-planner or Authorized farm operator signature receiving and understanding the plan Date Signature if reviewed for quality assurance Date

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Wisconsin Department of Agriculture, Trade and Consumer Protection
2811 Agriculture Drive, PO Box 8911, Madison WI 53708-8911
Phone: (608) 224-4630 or (608) 224-4500

Worksheet 4 - Waste Storage Facilities

Instructions. This worksheet must account for every structure that stores or transfers manure or process wastewater on the proposed livestock facility, and must be signed by the applicant. A registered engineer or conservation engineering practitioner must sign unless the applicant qualifies for an exemption for all structures. If an applicant is unable to submit the documentation required to claim an exemption for one or more structures, applicable sections of the worksheet must be completed to demonstrate compliance.

Exemptions.
_____ (Initial) By initialing this worksheet, checking one or more boxes below, and submitting the required documentation, the applicant is certifying:

☐ The following existing, substantially altered or new facilities were reviewed and approved by DNR as part of the *WPDES* permit (identify by unique identifiers listed on the site map: _____). In support of this submission, the applicant (1) provides copies of applicable plan and specification approvals or other determinations for waste storage facilities of the same size and type as those proposed for the new or expanded livestock facility, and (2) certifies that the WDPES permit is current, and that the livestock facility is in compliance with all WPDES permit conditions and requirements.

☐ The following existing, substantially altered or new facilities (list by unique identifier as noted on the site map: _____) was approved by DNR for storage of agricultural wastewater and other related products under NR 213. (DNR approval is attached.)

☐ The following existing facilities (list by unique identifier as noted on the site map: _____) was constructed within the last 3 years in accordance with then-existing NRCS standards, as documented by the attached as-built plan or local approval under a s. 92.16 ordinance.

***Section A: New* or *Substantially Altered* Facilities**. The following storage facilities and transfer systems **(**identify by unique identifiers listed on the site map: _____) comply with applicable NRCS Technical Guide Standards: 313 (October, 2017R, 520 (October, 2017R), 521 (October, 2017R), 522 (October, 2017R) and 634 (January, 2014), as documented by the attached design specifications.

Section B: Existing Storage Facilities Retained. The following storage facilities will continue in use without being substantially altered. Each facility meets one of the following:

☐ The facility (identify by unique identifiers listed on the site map: _____) was constructed within the last 10 years according to then-existing NRCS technical standards, and a visual inspection of the facility shows no apparent signs of structural failure or significant leakage.

☐ The facility (identify by unique identifiers listed on the site map: _____) was constructed over 10 years ago according to then-existing NRCS technical standards, and a visual inspection of the emptied facility shows no apparent signs of structural failure or significant leakage.

☐ The construction standard of facility identify by unique identifiers listed on the site map: _____) cannot be verified from reliable document, a full investigation of the facility was performed, and this investigation established that the facility is in good condition and repair, shows no apparent signs of structural failure or significant leakage, and is located on a site at which the soils and separation distances to groundwater meeting the requirements for the appropriate liner type referenced in NRCS technical guide manure storage facility standard 313 October, 2017R) and the related liner standards listed in Section A.

Section C: Facilities That Must Be Closed. Closure is required for the following facilities (identify by unique identifiers listed on the site map: _____), and the attached closure plans comply with NRCS Technical Guide Standard 360 (May, 2018).

Section D: Facility Operation. The applicant (operator) certifies that that livestock facility is in compliance with the following requirements and will remain in compliance as long as the facility is permitted:

1. All manure storage facilities in existence as of October 1, 2002 that pose an imminent threat to public health, fish and aquatic life, or groundwater shall be upgraded, replaced, or abandoned in accordance with s. NR 151.05(4)(b).
2. Levels of materials in storage facilities may not exceed the margin of safety level as defined in s. NR 243.03(37).

If not in compliance, the applicant must submit plans for achieving compliance.

_____ _____
Signature of Applicant or Applicant's Authorized Representative Date

Professional Engineer's
Embossed Seal

_____
Print Name of Engineer (include WI License No.) or Certified Practitioner

_____ _____
Signature of Engineer or Practitioner Date

_____
Name of Firm and Address

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Wisconsin Department of Agriculture, Trade and Consumer Protection
2811 Agriculture Drive, PO Box 8911, Madison WI 53708-8911
Phone: (608) 224-4630 or (608) 224-4500

Worksheet 5 - Runoff Management

Instructions. This worksheet must account for all sources of runoff including animal lots, feed storage structures, and milking centers on the proposed livestock facility, and must be signed by the applicant. A registered engineer or conservation engineering practitioner must sign unless the applicant qualifies for an exemption for all structures. If an applicant is unable to submit the documentation required to claim an exemption for one or more structures, applicable sections of the worksheet must be completed to demonstrate compliance.

Exemptions.
_____ (Initial) By initialing this worksheet, checking one or more boxes below, and submitting the required documentation, the applicant is certifying:
☐ The following existing, substantially altered or new facilities animal lots or feed structure structures were reviewed and approved by DNR as part of the WPDES permit (identify by unique identifiers listed in the site map): _____. In support of this submission, the applicant (1) provides copies of applicable plan and specification approvals or other determinations that cover animal lots or storage structures of the same size and type as those proposed for the new or expanded livestock facility, and (2) certifies that the WDPES permit is current, and that the livestock facility is compliance with all WPDES permit conditions and requirements.

Part A: Animal Lots[1]

1. General. The applicant (operator) certifies that no animal lot has direct runoff to surface waters of the state or discharges to any direct conduit to groundwater, and makes a commitment that the proposed livestock facility will have no such runoff or discharge from any animal lot.

2. *New* or *Substantially Altered Animal Lots.* The following new or substantially altered animal lots (identify by unique identifiers listed on the site map: _____) will collect and store animal lot runoff for future land application or will be constructed according to the attached design specifications that comply with *NRCS* Technical Guide Standard 635 (September, 2016R).

3. Existing *Animal Lots* Near Sensitive Areas. The following animal lots (identify by unique identifiers listed on the site map: _____) are located within 1,500 feet of navigable lakes, ponds, and flowages; 450 feet of wetlands and navigable streams and rivers; 750 feet of conduits to groundwater; 450 feet of surface inlets that discharge to navigable waters; 225 feet of channelized flow; and 225 feet of subsurface drains (measured from the edge of the animal lot). According to the BARNY runoff model, each of these animal lots has (or with minor alterations[2] will have) predicted average annual phosphorus runoff of less than 5 lbs. per year (measured at the end of the treatment area).

4. Other Existing *Animal Lots.* The following animal lots (identify by unique identifiers listed on the site map: _____) are NOT located within 1,500 feet of navigable lakes, ponds, and flowages; 450 feet of wetlands and navigable streams and rivers; 750 feet of conduits to groundwater; 450 feet of surface inlets that discharge to navigable waters; 225 feet of channelized flow; and 225 feet of subsurface drains (measured from the edge of the animal lot). According to the *BARNY runoff model*, each *animal lot* has (or with minor alterations[3] will have), a treatment area that reduces phosphorus runoff to an average of less than 15 lbs. per year (measured at the end of the treatment area).

Part B: Process Wastewater

1. General. The applicant (operator) certifies that all existing livestock structures have no significant discharge of process wastewater to waters of the state or to a direct conduit to groundwater, and makes a commitment that the proposed livestock facility will have no such discharge from any livestock structure.

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[1] Treat multiple lots as one animal lot if runoff from the animal lots drains to the same treatment area or if runoff from the animal lot treatment areas converges or reaches the same surface water within 200 feet of any of those treatment areas.

[2] "Minor alterations" of an animal lot means a repair or improvement that may include lot management such as cleaning; shaping, seeding and other non-structural changes to address flow issues, and installation of conservation practices such as roof gutters, diversions, surface inlets, underground outlets, and gravel spreaders.

Part C: Feed Storage (buildings, bunkers, paved areas)

1. Existing Feed Storage Structures.[1] The following feed storage structures (identify by unique identifiers listed on the site map: _____) meet the criteria for continued use:

(a) They have been designed and constructed according to applicable NRCS standards that existed at the time of construction or in the absence of documentation to support this, they are located on a site with soils and separation distances that comply with Tables 1, 2, or 3 in *NRCS* Technical Guide Standard 629 (January, 2017).

(b) They are in good condition and repair.

(c) They show no apparent signs of structural failure, significant leakage, or significant discharges to surface water.

2. For each structure identified in the applicant (operator) agrees to operate and maintain structures as follows: divert clean water from entering each of the structures, collect and store surface discharge of leachate from stored feed and initial runoff volume of 0.2 inches from each precipitation event before it leaves structures or paved areas covering more than one acre, prevent collected leachate from discharging to waters of the state, prevent leachate and contaminated runoff from infiltrating below the storage structure, avoid accumulation of debris in the loading area, and ensure proper functioning of collection and treatment areas.

Note: Structures with roofs are not required to divert clean water as required, or collect and store runoff from precipitation events.

3. New and Substantially Altered Feed Storage Structures that are One Acre or More.

The following feed storage structures (identify by unique identifiers listed on the site map: _____)

(a) Are designed according to the attached specifications to comply with NRCS Technical Guide Standard 629 (January, 2017), and

(b) Will manage leachate and contaminated runoff by collecting and storing for future land application or treating the runoff in accordance with NRCS Technical Guide Standard 635 (September, 2016R).

4. New and Expanded Feed Storage Structures Less than One Acre.

The following feed storage structures (identify by unique identifiers listed on the site map: _____) are:

(a) Less than one acre in size.

(b) **Not** located within 1,500 feet of navigable lakes, ponds, and flowages; 450 feet of wetlands and navigable streams and rivers; 750 feet of conduits to groundwater; 450 feet of surface inlets that discharge to navigable waters; 225 feet of channelized flow; and 225 feet of subsurface drains.

(c) Designed or constructed with storage floors that meet the applicable Table 1, 2, or 3 of NRCS Technical Guide Standard 629 (January, 2017), as indicated by the attached designs.

(d) Designed or constructed to collect and store all leachate from stored feed and an initial runoff volume of 0.20 inches from each precipitation event, as indicated by the attached designs.

(e) Located in areas that do not have soils with a high potential for leaching contaminants to groundwater.

(f) Located on sites with conditions such that runoff from a 25-year, 24-hour precipitation event will not result in a significant discharge to waters of the state.

5. Operation and Maintenance

New and substantially altered feed storage shall be operated and maintained in accordance with NRCS Technical Guide Standard 629 (January, 2017), and NRCS Technical Guide Standard 635 (September, 2016R).

Part D: Milking Center Wastewater

☐ Check if all of the milking center wastewater is transferred to a waste storage facility or another structure that meets the design criteria of NRCS waste facility storage technical standard 313.

If any such wastewater is not stored, the applicant and engineer certify that the livestock facility generates less than 500 gallons of wastewater daily, does not store the wastewater for an extended period, and is implementing the treatment practices described in NRCS waste treatment technical standard 629 (January, 2019).

[1] For the purposes of the requirements in this section, a feed storage structure includes any building, bunker, or paved area used for feed storage or handling, but does not include silos, storage bags, and grain bins.

Part E: Nonpoint Pollution Standards

The applicant (operator) certifies that that livestock facility is in compliance with the following requirements and will remain in compliance as long as the facility is permitted:

(a) Runoff is diverted from contact with animal lots, waste storage facilities, paved feed storage areas or manure piles within 300 ft. of a stream or 1,000 ft. of a lake.

(b) No unconfined manure pile are located within 300 ft. of a stream or 1,000 ft. of a lake.

(c) There is no overflow of waste storage facilities.

(d) Access of livestock is restricted to waters of the state, as necessary to maintain adequate vegetative cover on banks adjoining the water (this does not apply to properly designed, installed and maintained livestock or farm equipment crossings).

If not in compliance, the applicant may submit plans for achieving compliance.

_____ _____
Signature of Applicant or Applicant's Authorized Representative Date

Professional Engineer's
Embossed Seal

_____
Print Name of Engineer (include WI License No.) or Certified Practitioner

_____ _____
Signature of Engineer or Practitioner Date

_____
Name of Firm and Address