

Manure Storage Permitting

Presentation to LCC – November 12, 2020

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**LAND&WATER
RESOURCES
DEPARTMENT**

Outline

- Ordinance Revision
- Manure Storage
 - New Facilities
 - Substantial Alterations
 - Closure of Existing Facilities
- Certificate of Use
- Questions



2019 Ordinance Revision

- **New Manure Storage Facilities**

- New liner requirements
- Setbacks

- **Existing Storage Facilities**

- Certificate of Use required



New or Substantial Alteration

- Permits Required

- New manure storage facilities (replacement)
 - Engineering design required
 - 20 year permit term
- Substantial Alteration
 - Expansion of a facility
 - Re-lining of a facility
- \$1,000 Permit Fee
- Exemption for small tanks
- (1,000 gallons or less).



Permit Numbers

<u>Year</u>	<u>New</u>	<u>Alteration</u>	<u>Closure</u>	<u>Total</u>
2020	1	0	1	2
2019	1	0	5	6
2018	2	1	3	6
2017	6	0	11	17
2016	6	1	3	10
2015	7	0	2	9

Existing Facilities

- **Certificate of Use Required**
 - Any manure storage facility being used
 - \$1,000 permit fee
 - Fees were waived up to Nov. 1, 2020

Facilities not in use do not require a Certificate of Use but should be strongly considered for closure.



Certificate of Use Numbers

<u>LCD Inventory</u>	<u>Applications Received</u>	<u>Remainder</u>
470	281	189

31 – facilities inspected

No Certificates issued as of today

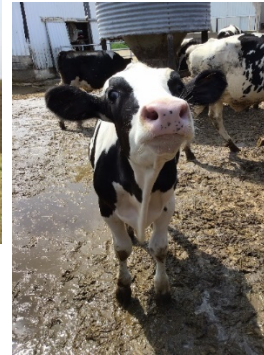
Winter Spreading Permits

Presented to LCC – November 12, 2020

Shawn Esser – Dane County LWRD

02/14/2018 14:51

4-year permit to apply manure to frozen
and/or snow or ice covered ground



Permit Fees

Permit Fee Schedule	Fee	Conditions	Fee Charged
Winter Spreading Permit w/out Nutrient Management Plan	\$100	Farm size 1 – 200 acres	<input type="checkbox"/>
Winter Spreading Permit w/out Nutrient Management Plan	\$200	Farm size 201 – 500 acres	<input type="checkbox"/>
Winter Spreading Permit w/out Nutrient Management Plan	\$300	Farm size 501 – 1,000 acres	<input type="checkbox"/>
Winter Spreading Permit w/out Nutrient Management Plan	\$400	Farm size 1,001 + acres	<input type="checkbox"/>
Winter Spreading Permit w/Nutrient Management Plan	\$100	Fee waived* if nutrient management plan meeting NRCS 590 (dated 12/2015) is submitted as an electronic SNAP Plus database and SNAP Maps digital shapefile	<input type="checkbox"/>

Note: Cost-share assistance may be available to develop a nutrient management plan.

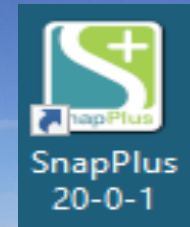
*Fee waiver eligibility determined by LCD staff.

Checks shall be made out to: **Dane County Treasurer** Check #


Waiver of Fee: Yes ☐ No ☐

Note:

1. Waiver of the permit fee must meet the requirements set by the Land Conservation Committee.
2. By submitting this application, permittee and landowner permit the Department to enter the project property for inspection or curative action per Chapter 49.21, Dane County Code of Ordinances.



Winter Spreading Plan Components

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- Winter Spreading Plan
 - Quantity of Manure Produced– 120 days
 - Storage\Stacking Capacity
 - Fields planned for application
 - Aerial Photos with fields and restricted areas
 - Manure Application Tracking Log
 - Emergency Response Plan

Manure Production, Storage Capacity and Planned Fields for Application

The operation currently has approximately 25 Dairy Calves, 88 Dairy Youngstock, 100 Dairy Lactating Cows, and 15 Dairy Dry Cows. Manure pit storage capacity is roughly 10,000 cubic feet. Liquid manure is spread roughly every 40 - 60 days. Solid manure is spread 1 - 2 times per week.

There is adequate acreage available for the manure that is produced / applied. Manure is spread using a Kuhn Knight 8118 Slinger type spreader, that holds approximately 10 tons of manure per load.

The P-Index is the method used for phosphorus management on all fields.

Soil Samples were taken according to the guidelines set forth in the UW Publication A2100. Samples will need to be taken again before the 2021 NMP can be updated.

Manure Production for 2021

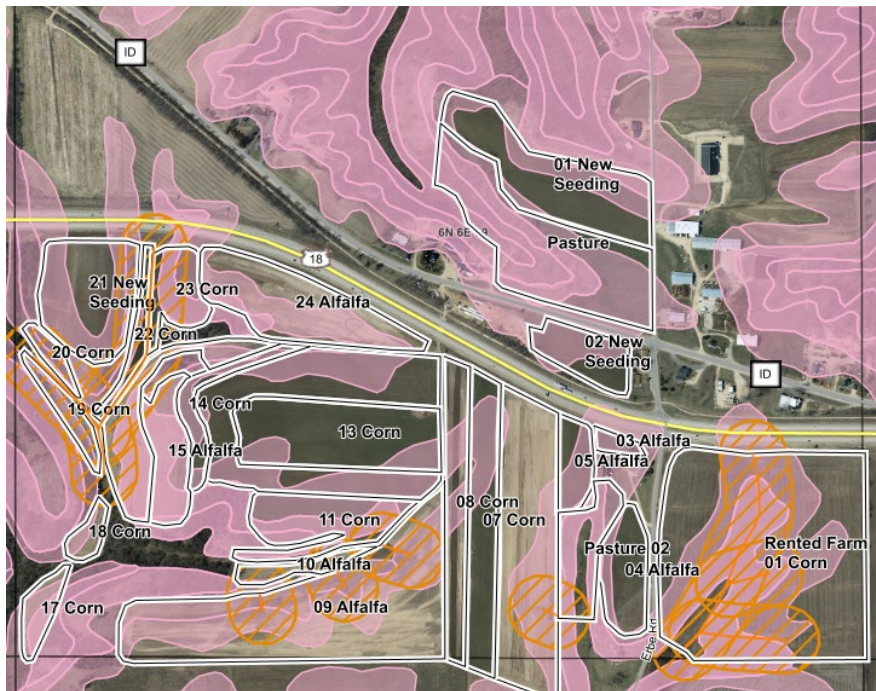
Animal Type and Size	No. of head	lb/day per animal	Liquid gal/day per animal	14-day production as tons*	14-day production as gallons*	120-day production as tons*	120-day production as gallons*
Dairy Calf 250 lbs	45	21	4.5	7	2,835	57	24,300
Dairy Dry Cows 1400 lbs	17	115	25	14	5,950	117	51,000
Dairy Heifer 750 lbs	75	65	13.8	34	14,490	293	124,200
Dairy Lactating Cows 1400 lbs	93	148	32	96	41,664	826	357,120
Totals				151	64,939	1,293	556,620

* These are estimates of the total manure produced by all the animals on a farm for a 14-day and a 120-day period. The intent of this calculation is for comparison to planned winter spreading amounts. Total production is shown both in tons and in gallons to make it easier for planners to compare to whichever units are used on a farm. The 2015 590 standards requires all producers with livestock to plan for winter-spreading for a minimum of 14-days of manure production. The 120-day manure production is shown because that is the approximate length of the frozen soil period in southern Wisconsin and is therefore the very minimum amount of days that should be planned for winter application or storage.

Field Name	Winter Acres	Slope %	Other Field Avail. If SI>6%*	Conc. Flow	Winter Application Strategies	Winter Compliance Prob.	Problem Explanation
1	14.8	9	yes		d. Apply on no more than 25% of the field during each application waiting a minimum of 14 days between applications. e. Reduce application rate to 3,500 gallons or 30 pounds of P2O5, whichever is less.		
2	26	4	n/a				
4	12	8	yes		b. Leave all crop residue (this prohibits removal of silage or bedding) and no fall tillage. d. Apply on no more than 25% of the field during each application waiting a		

Field Restriction Maps

West side of county



East side of county



Application Tracking Logs and Emergency Action Plan



Emergency Action Plan for Manure Runoff/Spills

Farm Name: _____

Owner/Operator: _____

Farm Address: _____

Township/Legal Description: _____

Emergency Responder	Name	Telephone
Farm Contact(s)		
Manure Hauler		
Equipment Operator(s) <small>(examples: excavation equipment, vacuum pumper (septic), etc.)</small>		

Manure Runoff/Spills Emergency Steps:

- 1. Stop the flow**
 - Incorporate manure if possible
 - Till ground ahead of manure flow to increase infiltration
 - Divert manure away from streams, ditches, waterways, concentrated flow areas, lakes, ponds, tile inlets, sinkholes and wells
- 2. Contact DNR Spill Hotline at 1-800-943-0003.** Make sure you talk to a person. If you are unable to contact a person, contact the County Sheriff at 608-266-4948
- 3. Contact Dane County Land Conservation Division at 608-224-3730.**
- 4. Clean up all accumulated manure.** Collected manure/runoff should be placed in storage or spread on another field where it cannot runoff. Other options may also be available.
- 5. Document your actions on the back of this page.**



Winter Manure Application Log

Date of Application	Farm and Field #	Liquid or Solid	Spreader Capacity <small>(gallons/tons)</small>	Loads <small>(# of trips)</small>	Total Volume Applied <small>(gallons/tons)</small>	Acres Applied	Practices in Place When Required <small>(select a practice letter below)</small>



Current Permit Numbers :

- 190 Applications received
- 185 Permits issued
 - Covers 30,800 Acres
 - 35.1 million gallons
 - 109,000 tons



Questions?

