November 30, 2016

Harold Spahn 7285 County Road K Middleton, WI 53562

Subject: Additional Management Recommendations to Harold Spahn Conditional Use Permit (CUP)#2360

On November 18, 2016 the Dane County Land and Water Resources Department (LWRD) received notice that a CUP was granted by the Town of Springfield to allow 50 animal units of livestock on the concrete feedlot located at 4996 Enchanted Valley Road for a period of one year ending November 1, 2017. In order to reduce manure runoff from the feedlot to an acceptable level, the LWRD is recommending the following short-term and long-term manure management practices be implemented:

Short-term use requirements – Up to one year:

Development of a manure management plan that will include

- 1. A Nutrient Management Plan that meets the Natural Resources Conservation Service (NRCS) 590 Technical Standard to be submitted and reviewed by the LWRD.
- 2. Identification of manure headland stacking sites meeting the NRCS 313 Technical Standard Table 10 (enclosed), or a permitted manure storage facility for manure that is not stackable, <16% solids, when fields are inaccessible for manure application after cleaning the feedlot.
- 3. Scraping of the lot a minimum of once every three days and immediately hauling it to a stacking site or applying it to a field in accordance with the nutrient management plan. No stacking of manure on the concrete lot.

Long-term use requirements – beyond one year depending on conditions of CUP:

- A. Development of a manure management plan consistent with the short-term use requirements and one of the following 4 options,
 - 1. Confine all of the animals under a roof on site or,
 - 2. Abandon the feedlot and construct a roof to house the animals at another site or,
 - 3. Divert all farmstead water from running through the feedlot and install gutters on all rooflines that drain directly to the feedlot, diverting them around the feedlot, plus reduce the animal units to 15 or,
 - 4. Divert all farmstead water from running through the feedlot and install gutters on all rooflines that drain directly to the feedlot, diverting them around the feedlot, plus reduce the lot size to no more than 10,000 sq.ft. and install a sediment basin and a vegetated treatment area.

The LWRD can work with you to identify suitable headland stacking sites or acceptable manure storage facilities for the manure collected from the feedlot. Staff are also available to assist in developing plans for some of the long-term management practices. You will, however, have to work with an agronomist to develop a NMP meeting the requirements of the NRCS 590 Standard. Cost share funding may be available to assist with implementing some practices.

By implementing the afore mentioned management practices the LWRD feels that manure runoff from the feedlot will be reduced to an acceptable level.

If you have any questions about any of the identified best management practices or, if you would like to discuss their implementation, feel free to contact me at (608)-283-1521 or via e-mail at esser.shawn@countyofdane.com

Thank you,

Shawn Esser

Soil and Water Conservationist

Amy Callis

County Conservationist

Cc: Town of Springfield Clerk, e-mail

Roger Lane, Dane County Zoning Administrator, e-mail

D. Specific Criteria For Temporary, Unconfined Stacks of Manure and Derivatives Outside the Animal Production Area

This includes solid type manure and derivatives that are deposited for subsequent loading and spreading. Waste material having less than 16% solids shall not be stacked in the field. Storage of these materials shall be in facilities meeting the criteria in section V.B.1 and 2. Criteria for unconfined waste stacks are shown in Table 10.

Conservation BMPs shall be used above stacking sites to divert overland flow, and below stacking sites to provide containment or buffering to downstream channels and lakes.

The maximum amount of manure that is stacked on any one field shall be limited to the nutrient needs of fields adjacent to the stacking site in accordance with a 590 nutrient management plan.

Table 10 - Temporary, Unconfined Stacks of Manure and Derivatives Outside the Animal Production Area

1. Waste Consistencies Note 1		
	> 32% Solids	16% to 32% Solids Note 2
2. Size & Stacking Period		
Stacking Period	8 months	8 months
Maximum Volume/Stack	\leq 40,000 cu ft.	\leq 15,000 cu ft.
Maximum Number of Stacks/40 acres Note 3	_	2
Frequency of Stacking Site Use	1 year out of 2	1 year out of 3
3. Hydrologic Soil Groups		
	B or C	B or C
4. Subsurface Separation Distance		
Subsurface Saturation	\geq 3 ft.	\geq 3 ft.
Bedrock	≥ 3 ft.	≥ 5 ft.
5. Surface Separation Distance		
Wells Note 4	≥ 250 ft.	≥ 250 ft.
Lakes	≥ 1,000 ft.	≥ 1,000 ft.
Sinkholes, or other Karst Features	≥ 1,000 ft.	≥ 1,000 ft.
Quarries	≥ 1,000 ft.	\geq 1,000 ft.
Streams	≥ 300 ft.	≥ 500 ft.
Wetlands and Surface Inlets	≥ 300 ft.	≥ 500 ft.
Areas of Concentrated Flow	≥ 100 ft.	≥ 300 ft.
Land Slope Down Gradient of Stack	≤ 6%	≤ 3%
Floodplain	≥ 100 ft.	≥ 300 ft.
Tile lines	≥ 40 ft.	≥ 40 ft.

Note 1 Refer to AWMFH, Figure 9-1 for consistency values and Chapter 4 for % solids, for specific livestock types.

Note 2 16% to 32% solids represents waste at near saturation conditions where additions of free water from runoff, rain, or snowmelt can result in liquid flow conditions.

Note 3 The separation distance between stacks shall be at least 100 feet.

Note 4 Community water system wells may require larger separation distances (see NR 812).