



Memorandum

To Winona County Board of Commissioners

From Mark Gernes – Feedlot Officer

Date November 24, 2009

Subject Responses to Ordinance Questions by the County Board

Staff received the following Ordinance questions from County Commissioners. The questions predominately relate to feedlots.

Question

Mark Gernes told me that we are following the State rules regarding manure application in all areas. He did say there is only one area that we are taking a BMP and turning it into a rule. It is the winter–feeding setbacks. What exact maps are we using to say if something needs to be setback from. One map shows we have an intermittent stream through our pasture, another does not. What areas are these setback applied to? I want to confirm it is perennial streams only. Also, the numbers on page 102 for setbacks in WFA do not match from the chart to the written piece.

Staff Response

The question is referencing is Section #8.5.2.3.i. (see below). The setback only applies to perennial streams. The 125–foot indicated on the chart/graphic is incorrect and should indicate 100 feet so that it corresponds to the language in Section #8.5.2.3.i. The noted error was give to Mike Huth for correcting in the final Ordinance.

*8.5.2.3.i Winter feeding areas shall not be located within one hundred (100) feet of the ordinary high water mark of **any perennial stream**. Winter-feeding area setback requirements may be reduced to fifty (50) feet if a fifty (50) foot permanent non-pastured grass buffer is established in-between the winter-feeding area and the perennial stream.*

Question

Why is the RC and ARL setback from smaller feedlots different? Shouldn't the setback be the same?

Staff Response

The question is referencing is Section #8.5.2.2. The setback distance for smaller feedlots (Class 1 feedlots & Class 2 feedlots) are arbitrary distances intended to provide some separation between a small feedlot and neighboring residence to help avoid livestock related conflict between neighboring property owners yet allow a lesser distance than the 1,000-foot requirement that the existing Ordinance requires or that would be required for a Class 3 feedlot in the revised Ordinance. The primary justification for having a smaller setback requirement in the RC District is because the average parcel size in the RC District is smaller than the average parcel size in the ARL District.

Question

Does State of MN State have phosphorus rules in the application of manure? If so, what are they and how do ours compare, both in Special Protected areas and the rest of the land?

Staff Response

Yes. The State of MN Chapter 7020 rules relating to application of manure are primarily based on nitrogen, but include some requirements/restrictions relating to phosphorus.

Phosphorus requirements/restrictions can be found in section 7020.2225 of the State of MN Chapter 7020 feedlot rules (sections referenced are below).
7020.2225 Subpart 3 C. (**note - relates to nutrient application rate standards for sites with 300 AU or more)

C. For land receiving manure or process wastewater from animal feedlots capable of holding 300 or more animal units or manure storage areas capable of holding the manure produced by 300 or more animal units, soil samples from the upper six inches must be collected at a minimum frequency of once every four years and analyzed for phosphorus using the Bray P1 or Olsen test. If soil phosphorus levels exceed the levels in subitems (1) and (2), then the owner must complete a manure management plan in accordance with subpart 4, item D, and submit it with a permit application to the agency or delegated county for review in accordance with subpart 4, item B, subitem (1).

(1)Fields in special protection areas or within 300 feet of open tile intakes that have an average soil phosphorus test level exceeding 75 ppm using the Bray P1 test or 60 ppm using the Olsen test.

(2)Fields outside the special protection areas and more than 300 feet from open tile intakes that have an average soil phosphorus test level exceeding 150 ppm using the Bray P1 test or 120 ppm using the Olsen test.

7020.2225 Subpart 4 D. (5), (6) and (11) (**note - relates to manure management planning requirements for sites with 300 AU or more)

(5)planned manure application rates and assumptions used to determine these rates, including assumptions of crop nitrogen and phosphorus needs and nitrogen and phosphorus supplied from all manure and nonmanure sources;

(6)total nitrogen and phosphorus amounts from manure and nonmanure sources to be applied per acre on each field and for each crop in the rotation when applied in accordance with the planned manure or process wastewater application rates established under subitem (5);

(11)a description of how phosphorus from manure is to be managed to minimize phosphorus transport to surface waters resulting from soil phosphorus build-up to levels described in subpart 3, item C;

7020.2225 Subpart 5 B. (3) and (6) (**note – relates to recordkeeping requirements for sites with 300 AU or more)

(3)manure test nitrogen and phosphorus content, as required by subpart 2;

(6)expected plant-available amounts of nitrogen and phosphorus released from manure and commercial fertilizers on each field where manure is applied;

7020.2225 Subpart 6 B. (2) (**note – relates to Manure and process wastewater application requirements in special protection areas)

(2)The following practices must be complied with:

(a)no application within 25 feet of the protected water, protected wetland, intermittent stream, or drainage ditch in the special protection area;

(b)inject or incorporate within 24 hours and prior to rainfall; and

(c)apply at a rate and/or frequency which will not allow soil phosphorus levels to increase over any six-year period with the following exception: soil phosphorus may be increased to 21 ppm (Bray P1) or 16 ppm (Olsen) when soil testing indicates soil phosphorus test concentrations are less than these values.

The revised Ordinance #8.5.5 indicates, “All land application of manure or Process Wastewater shall comply with Minnesota Rules Part 7020.2225.” The revised Ordinance does not include additional requirements/restrictions beyond those listed in 7020.2225.

Question

The Special Protected Areas listed on page 103 and defined on page 46 are from the State or us?

Staff Response

The references to Special Protection Areas in the revised Ordinance reiterate the Special Protection Area definition and Special Protection Area requirements found in the State of MN Chapter 7020 feedlot rules.

Question

Page 103 – 8.5.6 C c. What are these other approved practices from MPCA? Are these MPCA mandated practices or BMP?

Staff Response

The language found in Section #8.5.6 C c. reiterates language found in the State of MN Chapter 7020 feedlot rules (7020.2225 Subpart 6 B (3)). The intent of including the referenced language in the state rules was to allow alternative practices (yet to be developed or determined) that would provide the same level of water quality protection as would be provided with the requirements found in 7020.2225 Subpart 6 B (1) & (2).

Basically, by including the language found in 7020.2225 Subpart 6 B (3) it gives the MPCA the flexibility to approve an alternative practice without having to go through the process of revising their rule.

Staff is not aware of any alternative practices that have been demonstrated through research by a Land Grant College to provide the same level of water quality protection and then have been approved by the MPCA.

Section #8.5.6 C. c. is not a mandate or a BMP, but rather one of the three options that can be used to comply with requirements if manure or process wastewater is to be applied to unfrozen soils in special protection areas. The other two options for complying with requirements if manure or process wastewater is to be applied to unfrozen soils in special protection area are listed under Section #8.5.6 C. a. and Section #8.5.6 C. b.

Question

Regarding the manure spill language, I agree with the language that the staff put forth. Will the language that the PC wants in there going to set us up for legal issues or impair our ability to get the actual clean-up accomplished by using our staff for notification?

Staff Response

Staff (Planning Department, Attorney's Office, and the County Administrator) feel that the language recommended/approved by the Planning Commission does present potential legal issues for the County and the impairs the ability of the County focus resources on evaluating the impacts of the spill and notifying those most likely impacted.

Planning Department Staff in consultation with the Attorney's Office, and the County Administrator have worked to develop alternative language that meets the intent (making the County Administrator & County Board aware of the spill & notifying property owners & residences that are or may be affected) of the Planning Commission while mitigating potential legal issues associated with the language recommended/approved by the Commission.

The County Administrator intends to discuss the spill language and present alternative language that has been drafted with the County Board at a future meeting or work session relating to the Ordinance.

Question

Why are the feedlot numbers listed as # head instead of animal units?

Staff Response

The references head numbers rather than animal unit (AU) numbers when describing "Class One Feedlots" and "Class Two Feedlots" and the corresponding setback requirements.

Staff had recommended the using a head numbers rather than AU numbers for "Class One Feedlots" and "Class Two Feedlots" because of the intent to allowing a lower setback requirement from very small feedlot sites (i.e. 4-H project sites, small hobby feedlot sites, sites where the livestock is more of a pet than a farming enterprise) yet still provide some separation between neighbors so that livestock related conflicts (i.e. odor, livestock noise) can still be avoided.

Since AU numbers are based on a multiplier, a low number of animal units can be a large number of animals. A few examples are below.

5 horses = 5 AU

5 beef cows = 5 AU

25 beef calves = 5 AU

16.6 pigs over 55 pounds = 5 AU

100 pigs under 55 pounds = 5 AU

1666.6 chickens under 5 pounds = 5 AU

Staff felt it was more reasonable to use the head count when establishing a setback requirement for small feedlots so as to reduce potential livestock related conflicts between neighbors.