

United States Department of Agriculture



Natural Resources Conservation Service
2118 West Park Court
Champaign, Illinois 61821
(217) 353-6600

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STATE OF ILLINOIS
Pollution Control Board

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PCH 30

SUBJECT: Comments Regarding Rulemaking R12-23
Concentrated Animal Feeding Operations:
Proposed Amendments to 35 ILL ADM.CODE PARTS 501, 502, and 504
DATE: December 18, 2013

TO: Pollution Control Board
John Therriault, Assistant Clerk
James R. Thompson Center
100 W. Randolph Street, Suite 11-500
Chicago, IL 60601

In reviewing the first notice amendments to the subject regulations, Illinois NRCS submits the following comments and concerns.

- Section 501.200(a) and 502.510. NRCS suggests that the board consider the use of the current NRCS 590 Nutrient Management Standard in regards to development of nutrient management plans, and add a reference to the NRCS 590 Standard in these sections.
- Section 501.244 Erosion Factor T. This is a response to Question #2 on page 256 (Filing Comments on the Board's First-Notice Proposal). The definition of T Factor should read as follows: "The T factor is an estimate of the maximum average annual rate of soil erosion by wind and/or water that can occur without affecting crop productivity over a sustained period. The rate is in tons per acre per year." Illinois soils information, including the T factor, is available from the United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey (WSS) at <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>
- Section 501.360 Revised Universal Soil Loss Equation. This is a response to Question # 3 on page 256 (Filing Comments on the Board's First-Notice Proposal). The citation for the Revised Universal Soil Loss Equation as found in 7 C.F.R. 610.12 (2013) is correct. NRCS suggests that the following language found in the same reference be added after the definition. "For further information about RUSLE see the U.S. Department of Agriculture Handbook 703, "Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE)." Copies may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.)" The web address for obtaining a copy of the official NRCS Rusle2 software is correct as listed. http://fargo.nser1.purdue.edu/rusle2_dataweb/RUSLE2_Index.htm
- Section 501.360 and other Sections. NRCS recommends that the Revised Universal Soil Loss section require the use of RUSLE2, rather than allowing use of former versions of the soil loss model. Also, it would be helpful to add a statement that "Specific soils and climate data, and cropping templates for Illinois are available for the program at the RUSLE2 download site" listed in the draft rule.
- Section 501.404(d) Runoff Field Application Systems. NRCS has several recommendations to help small livestock producers in our state and to clarify the intent:
 - As written, this provision applies to "the treatment of livestock waste from fewer than 300 animal units" for eligible livestock management facilities. It may be beneficial to allow the runoff field application system to be used to treat dilute runoff from feedstock (such as hay

bales) as well. This would serve to reduce containment and land application costs for small producers who do not have covered feed storage areas.

- As written, the provision is for a single runoff field application system per eligible livestock management facility. It may be beneficial to allow more than one runoff field application system to be constructed and operated on an eligible livestock management facility, as long as each serves no more than 300 animal units. This would also facilitate the use of the runoff field application system for feedstock (as mentioned above), separately from livestock waste.
- Livestock management facilities that are classified as a medium CAFO will generally develop an improvement plan so that they no longer meet the definition of a CAFO. The improvement plan could potentially include a runoff field application system, since they will meet the definition of an eligible livestock management facility (ie, non-CAFO) once the complete improvement plan is in place, IF the language in the regulation will allow this type of predictive eligibility. Provision in the regulation to allow “any livestock management facility not meeting the definition of a CAFO in Section 501.238 when the runoff field application system is installed” will broaden the applicability of this practice
- Section 502.615(a) Nutrient Transport Potential. NRCS suggests that the Board consider adoption and use of newly developed tools in the Dec 2013 update to the Illinois NRCS 590 standard. New tools consist of the Illinois Phosphorus Index and Illinois Nitrogen Management Guidelines. These tools are available in Section IV of the Illinois NRCS Field Office Technical Guide. The Illinois eFOTG site can be found at: http://efotg.sc.egov.usda.gov/efotg_locator.aspx?map=
- Section 502.615(c)(6) Nutrient Transport Potential. The intent of this measure is to ensure that within 200 feet of surface water, livestock waste applied must be injected or incorporated within 24 hours. Field sizes can vary considerably and runoff from a single field can flow in more than one direction, if a watershed divide exists in the field. As written, the provision would require the entire field to receive this special treatment even though most of the field is farther than 200 feet from surface water, and regardless of the direction in which runoff flows from the field. Suggested language “the livestock waste applied to the *portions of the field that are within 200 feet of surface water* shall be...” will address this potential concern.
- Section 502.615 (d)(3) Nutrient Transport Potential. The term “neutral” as applied to phosphorus-based application rates needs clarification. It is reasonable to allow some buildup of Phosphorus (P) above a soil test of 50. In order for a build-up to occur, P application rates would be higher than the amount removed by the next year’s crop. NRCS suggests that “neutral” be defined as an application amount based on crop nitrogen needs between soil test phosphorous levels of 50 and 300, at which time 502.615(d)(4) requires application based on the crop’s P needs for the next year.
- Section 502.620(f) Protocols To Land Apply Livestock Waste. This section requires special treatment of land applied livestock waste on land where the average soil loss is greater than “T”. This portion of the proposed regulation represents a significant change. To avoid confusion, the language needs to be very specific on which soil “T” applies, given the typical field with multiple soil types present. NRCS recommends the use of Agronomy Technical Note IL-3, available in Section 1 of the Illinois NRCS Field Office Technical Guide, as a guide to determining the dominant critical soil type.
- Section 502.620(h) Protocols To Land Apply Livestock Waste. This section specifies that liquid livestock waste is not to be applied to land with less than 36 inches of soil covering fractured bedrock, sand or gravel. While this provision will protect the environment, demonstrating soil depth over geologic materials for each nutrient management plan would be problematic. Conducting an extensive geologic investigation to delineate allowable land application area on each field where liquid livestock waste is to be applied would be prohibitively costly. It is possible that the authors of

the proposed rule were expecting nutrient management planners to consult the NRCS soil survey for the soil profile information. However, while the NRCS soil survey is an excellent tool, it is not mapped to a close enough scale to exclusively allow or exclude a particular site, where natural variations from the norm can and do exist. NRCS recommends that this section be eliminated. However, if this provision is to remain in the regulation, we strongly recommend adding clarification as to an acceptable protocol (such as the soil survey) for delineating locations where the soil cover over fractured bedrock, sand or gravel is less than 36 inches.

- Section 502.620(j) Protocols To Land Apply Livestock Waste. This section specifies a reduced application rate where there is less than 60 inches of unconsolidated material (i.e., soil) over bedrock. This proposal, similar to section 520.620(h) above, will also prove to be difficult to implement without an onsite geologic investigation. In addition, NRCS is unaware of any scientific basis for the 60 inch threshold. NRCS recommends that this section be eliminated. However, if this provision is to remain in the regulation, we recommend adding similar clarification as to an acceptable protocol for the delineation of these areas.
- Section 502.620(k) Protocols To Land Apply Livestock Waste. This section specifies a reduced application rate where the minimum soil depth to seasonal high water table is less than or equal to 2 feet. Again as above, this proposal will prove to be difficult to implement without an onsite geologic investigation. If this provision is to remain in the regulation, we recommend adding similar clarification as to an acceptable protocol for the delineation of these areas.
- Section 502.630 (a)(1)(B) Protocols To Land Apply Livestock Waste During Winter. As written, interpretation of this section could vary significantly. "Surface land application of waste on frozen ... is prohibited, unless ... liquid waste cannot be injected or incorporated within 24 hours due to soil conditions". It would be helpful to clarify the intent: to allow application of waste if injected within 24 hours, to not allow application at all within 24 hours, or to allow surface application if soil conditions are such that the waste can't be injected.
- Section 502.635 Manure and Soil Sampling and Analysis. NRCS suggests that similar requirements for the laboratories that do soil/manure testing, as outlined in the Dec 2013 Illinois NRCS 590 standard, be adopted. These guidelines are to assure that the laboratories performing the testing are following established guidelines and that their testing methods give consistent results.

Thank you for the opportunity to comment.



IVAN N. DOZIER
State Conservationist

cc:

Ruth Book, State Conservation Engineer, NRCS, IL
Kerry Goodrich, State Resource Conservationist, NRCS, IL
Ron Collman, State Soil Scientist, NRCS, IL