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Kansas CAFO Regulations

Livestock Manure Management Conference

November 18, 2008

Garden City, Kansas

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EPA CAFO Rule Timeline

November 2008

CAFO rule revisions published in *Federal Register*

October 31, 2008

EPA Administrator signed final rule revisions responding to *Waterkeeper* decision

March 7, 2008

Supplemental proposed rule with additional options

June 30, 2006

Proposed rule published to specifically address *Waterkeeper* decision

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Highlights of the CAFO Rule

- Additional nutrient management plan (NMP)-related requirements:
 - Adds requirements for operators to submit NMPs w/ permit applications; permit authorities and public review of NMPs; terms of NMP into permit
 - Allows two approaches for rates of application as terms of NMP
- Alternative NSPS provision for new sources swine, poultry and veal calf facilities

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Highlights of the CAFO Rule

- Affirms BCT limitations:
 - Best Conventional Technology (BCT) limitations established in 2003 represent the Best Conventional Control Technology for achieving fecal coliform reductions.

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CAFO Rule NMP Requirements

NMP-related requirements

- The permitting authority is required to make the entire NMP and the draft terms of the NMP available to public through the public notice process.
- The permitting authority must incorporate the terms of the NMP into the permit, which include the information, protocols, best management practices (BMPs) and other conditions in the NMP necessary to meet the NMP requirements of the 2003 rule.



CAFO Rule NMP Requirements

- What are the two approaches in the final rule for expressing rates of application?
 - The “linear approach” expresses field-specific maximum rates of application in terms of the amount of nitrogen and phosphorus from manure, litter, and process wastewater allowed to be applied.
 - The “narrative rate approach” expresses the field-specific rate of application as a narrative rate prescribing how to calculate the amount of manure, litter, and process wastewater allowed to be applied.



CAFO Rule NMP Requirements

- Do either of the two approaches in the final rule for identifying terms of the NMP for expressing rates of application address the concern regarding flexibility of the NMP?
 - Yes. The narrative rate approach allows CAFO operators to change their crop rotation and form and source of manure, litter, and process wastewater, as well as the timing and method of application. The narrative rate approach allows the use of “real time” data for determining rates of application and provides the most flexible approach for farmers.



CAFO Rule NMP Requirements

- The final rule includes a list of changes to the NMP that constitute a substantial change that would trigger permit modification.
- Addition of new land application areas not previously included in the CAFO's NMP.
- Addition of any crop not included in the terms of the CAFO's NMP and corresponding field-specific rates of application.
- Changes to field-specific components that would increase N or P risk of transport.

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Water Quality-based Effluent Limitations

- EPA clarifies that permit authorities may require water quality-based effluent limitations (WQBELs) in CAFO permits if necessary to meet applicable water quality standards
 - To further limit discharges from the production area; and/or
 - With respect to any non-agricultural stormwater discharges from the land application areas.



Technology-based Effluent Limitations

- EPA did not identify any economically achievable, technologically available, and cost reasonable technologies on which to establish national effluent limitations for fecal coliform.
 - EPA affirmed the BCT limitations are the same as the 2003 rule BPT and BAT limitations:
 - No discharge from production area.
 - Limited exemption for precipitation-based overflows under specified conditions.
 - Land application rates that minimize transport of nutrients; required setback or vegetated buffer.

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Technology-based Effluent Limitations

- What are the requirements for new source swine, poultry, and veal calf CAFOs?
 - Basic new source requirements are the same as 2003 CAFO rule:
 - No discharge from 100 years of precipitation data.
 - Alternative provision in the rule for demonstrating the new CAFO is a no discharge facility based on USDA models.
 - Flexibility for Director to approve other models



Possible Extensions

- EPA is not extending the existing February 27, 2009, compliance deadlines for CAFOs to apply for NPDES permits and to develop NMPs.
- States have one year to update programs; two years if statutory changes are needed.

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Nutrient Management Plan



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Nutrient Management Plan

➤ EPA Requirements

- Ensure adequate storage
- Ensure proper operation and maintenance of storage facilities
- Ensure proper management of animal mortality
- Ensure clean water is diverted from production area

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Nutrient Management Plan

➤ EPA Requirements

- Prevent direct contact of confined animals with waters of the state
- Ensure that chemicals and other contaminants handled on-site are not disposed of in any manure storage treatment system
- Identify any site-specific conservation practices to be implemented

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Nutrient Management Plan

➤ EPA Requirements

- Identify protocols for appropriate testing of waste and soil
- Establish protocols to land apply waste

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Record Keeping



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Record Keeping

- EPA Record Keeping - GENERAL
 - Permittee must create and maintain for five years
 - Kept on site or central location for employee use
 - Made available to EPA/KDHE upon request

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Record Keeping

- EPA Record Keeping
 - Method used to apply the waste
 - Dates of manure application equipment inspection
 - Expected crop yields
 - Date waste is applied to each field
 - Weather conditions at the time of application and for 24 hours prior to and following the application

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Operational Logs

- Daily Precipitation Amounts
- Soil Conditions when Waste is Applied
- Quantity of Waste Applied
- Application Area
- Crop on the Application Area

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Operational Logs

- Available Storage in Retention Structures
 - 1st and 15th of the month
 - When storage capacity is less than required, daily storage measurements will be recorded until adequate storage capacity is achieved



Annual Report

- Once a year an Annual Report must be submitted
 - Type and Number of Animals
 - Manure, Litter, and Process Wastewater Production
 - Manure, Litter, and Process Wastewater Transferred to Other Persons

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Annual Report

- Land Application of Manure, Litter, and Process Wastewater
- Summary of Discharges
- Instances of Noncompliance not Previously Reported

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Exporting

- Requirements relating to the transfer of manure or process wastewater to other persons
 - Must provide the recipient with the most current nutrient analysis
 - CAFO must retain for five years records of the date, recipient name and address, and approximate quantity transferred
 - Signed agreements for liquid land application transfers



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