

ENHANCED MANAGEMENT

NYS issues 4th generation CAFO permit

NYS first issued a CAFO Permit in 1999 at the request of the dairy and livestock industry. This request came after a federal court case in the early 1990's found that a well-managed dairy farm had discharged manure to waters of the United States without a permit, in violation of the Clean Water Act. Given that NYS did not have a CAFO permit available for farms, the industry organized and approached the NYS Department of Environmental Conservation to develop one.

Since the first permit was issued, the NYS DEC has received permit related input through the CAFO Work Group, consisting of various agricultural and environmental stakeholders, as well as staff from other state and federal agencies, and Cornell, as the state's land grant institution. The Work Group has provided an important line of communication and played a strong role in helping the NY dairy and livestock industry achieve the highest compliance level of any newly regulated industry that NYS DEC oversees.

Even so, each new round of permits has brought new changes, and this round also includes several significant updates. NYS offers two permits: one under the federal Clean Water Act, and the other under NYS Environmental Conservation Law (ECL).

The Clean Water Act permit (CWA) requires that the production area (essentially the farmstead) is designed and managed to prevent discharge of polluted water up to the 25 year/24 hour storm event (generally around five inches of rain in a 24 hour period in NYS). The new CWA permit institutes a public participation process and requires submission of an annual nutrient management plan.

The ECL permit calls for no discharge of polluted water from the production area up to a 100 year storm (approximately 5.5 to 6.5 inches of rain, depending on the location). One key new requirement is that the farm and planner must identify wet weather standard operating procedures that will be implemented if a 25/24 storm or greater is expected.

Since inception, both permits have required implementation of a comprehensive nutrient management plan developed by a third party certified planner. This includes soil erosion assessment and control, soil tests at least every three years, and that all manure sources be tested at least annually, along with field by field manure application rates, setbacks from wells and waterways, and other BMPs as specified.

On the field side, both permits prohibit manure application when soils are saturated, either wet or frozen. The frozen saturated condition is also called "concrete frost," where soil pores fill with water from rain or snowmelt, followed closely by subfreezing weather. This prohibition means that all NYS CAFO's will need

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to store manure during these field conditions. Further, both permits identify winter spreading conditions when an assessment must be made and additional care is required if manure will be applied. The farm must follow "Revised Winter and Wet Weather Manure Spreading Guidelines to Reduce Water Contamination Risk" when there is more than four inches of snow on the ground, significant ice on the soil surface or in the snow-pack, or if frost is more than four inches deep.

The guidelines are online: <http://nmsp.cals.cornell.edu/publications/files/WinterSpreadingGuidelines2015.pdf>. This document identifies additional high risk conditions when manure should not be applied except in an emergency, such as risk of manure storage overflow. Permitted farms that expect to apply manure in the winter are required to develop a winter spreading plan, including identification of fields for emergency applications, evaluate soil and general field conditions, as well as weather forecast before application, and make adjustments to rate per acre, total spread quantity, setbacks, monitor tile outlets, and incorporate or inject manure where appropriate.

Another key change relates to specific steps for identification of at-risk groundwater areas and implementation of protective practices. The permits refer to 2004 groundwater protection guidelines as well as special guidelines for karst areas of Genesee County, NY. Three categories of soil types are identified as potentially risky. Farm plans need to determine if those soils are present and if so, identify additional practices to protect wells and groundwater.

In February, producers and planners learned about the permit from DEC officials and other educators through training sessions offered around the state that were organized by the Northeast Dairy Producers Association and NY Farm Bureau. By late spring, farm managers will need to decide which permit best meets their situation, and notify DEC of the decision by submitting a notice of intent to comply. More information is online at: www.dec.ny.gov/permits/6285.html.

Across NYS and the US, many dairy farms have made significant adjustments to manure management practices in the last 15 years. Increasingly there are signals that consumers and the retail chain may have as much or more to say about our farm practices than governmental regulations. Managers should evaluate how to be best positioned to meet the possibility of a faster rate of change ahead. □

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