

NUTRIENT MANAGEMENT FOR CROP PRODUCTION AND WATER PROTECTION

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Hopefully before the end of 2006, the Wisconsin Department of Agriculture, Trade and Consumer Protection's (DATCP) Board will approve a rule related to nutrient management on farms. Current rules are mostly based on nitrogen and can be inconsistently implemented from county to county. This rule would incorporate the September 2005 Natural Resources Conservation Service's 590 nutrient management standard based on nitrogen and phosphorus. DATCP adopted the current rules in 2002 as part of a redesign of state nonpoint pollution abatement programs mandated by the Legislature. DATCP proposes to incorporate the updated federal standard in state nutrient management rules to help prevent manure and phosphorus runoff and improve water quality. This will also to help ensure that manure is applied in a cost-effective and environmentally sound manner. It will also reduce fish kill and well contamination risks. Adopting this rule amendment will fulfill DATCP's nonpoint-rules commitment to keep Wisconsin rules consistent with federal standards.

Cost Sharing

Updating ATCP 50 Wis. Admin. Code will allow state cost sharing to be provided to county land conservation departments, and then to farmers, for implementing the September 2005, 590 nutrient management standard. Under this existing DATCP rule, all farmers who apply manure or commercial fertilizer to cropland (not just livestock operators) must implement a nutrient management plan. This requirement took effect on January 1, 2005 in certain watersheds, and will take effect on January 1, 2008 elsewhere. However, state law makes enforcement contingent on cost sharing for farms not regulated by other means. Enforcement is therefore limited by the availability of cost-share funds and state and local authorities. Farms that must comply regardless of cost-sharing include those holding a pollution discharge elimination system permits from the Department of Natural Resources, farms that claim farmland preservation tax credits, and farms that are required by local ordinances to have permits for manure storage facilities or livestock facilities expansions. Current DATCP cost-share funding levels make it possible to target about 20,000 acres per year starting in late 2006 (less than 1% of Wisconsin's crop acreage). These cost-share funds will be mainly targeted where runoff has caused fish kills or well contamination or at priority farms noted in the county's *Land and Water Resource Management Plan*.

Counties have *Land and Water Resource Management Plan* to promote compliance with farm conservation requirements (see s. ATCP 50.12). Counties will seek voluntary compliance and will offer information, cost-sharing and technical assistance to help landowners comply. As a last resort, a county may seek enforcement action against a landowner who refuses to implement required conservation practices. A county may not seek enforcement action until it complies with applicable cost-sharing requirements under s. ATCP 50.08. A county may pursue any of the following enforcement options, as appropriate:

- The county may suspend a violator's eligibility for farmland preservation tax credits (see s. ATCP 50.16(6)).
- DNR may issue a notice of discharge, requiring a violator to obtain a pollution discharge permit from DNR (see ch. NR 243).
- The department of justice or a district attorney may file a civil forfeiture action against the violator (see s. 281.98, Stats. that authorizes penalties not less than \$10 nor more than \$5,000 for each violation).

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- The county, town, city, or village may take action to enforce its own ordinance, if any.
- County compliance procedures should be consistent with ss. ATCP 50 and ss. NR 151.09 and 151.095. A county should spell out compliance procedures in its land and water resource management plan, as provided in s. ATCP 50.12(2). The DATCP and DNR will work with counties to develop suggested guidelines for county compliance programs.

Nutrient Management Planning Requirements

A nutrient management plan must be prepared or approved by a qualified nutrient management planner. A farmer may prepare his or her own plan if the farmer has completed a DATCP-approved training course within the preceding 4 years, or is otherwise qualified under current rules. A nutrient management plan must identify the lands on which the operator will apply manure and other nutrients. It must be based on soil tests that determine the nutrient needs of the affected cropland. A soil test laboratory, certified by DATCP, must conduct the soil tests. A nutrient management plan must comply with the NRCS 590 nutrient management standard. The draft rule also incorporates requirements for manure nutrient values in a nutrient management plan to be based on either standard “book values” in WI Conservation Planning Tech Note WI-1, or manure analysis conducted at a laboratory that participates in the Manure Analysis Proficiency (MAP) program.

Changes to 590 - DATCP and NRCS held joint public hearings on the NRCS nutrient management standard that is incorporated in this rule. Some of the changes to the standard are:

- Allowed phosphorus calculations over a maximum 8-year, rather than 4-year, crop rotation to better reflects the length of a typical dairy rotation when manure is applied during the rotation. The federal requirements to assess P using the PI or soil test P levels are incorporated into the Wisconsin 590 standard to allow producers more flexibility than either single method. The Wisconsin P Index is based on results from P research and is a tool to rank fields on their potential to deliver phosphorus to surface water bodies. The PI is available on the web as part of the SNAP-Plus nutrient management, get this software from <http://www.snapplus.net>.
- The conservation plan must address cropping practices that control sheet and rill erosion to tolerable levels (T) and provides treatment of ephemeral soil erosion. Sheet and rill soil erosion calculations shall be based on current NRCS erosion prediction technology or the soil loss assessment calculated using the Wisconsin Phosphorus Index model. If you do not use the Wisconsin Phosphorus Index model to determine sheet and rill soil erosion rates, contact your local conservation department for assistance in developing a current conservation plan.
- Manure applications to frozen or snow-covered land must comply with supplementary local restrictions, if any, spelled out in an individual farm conservation plan agreed upon between the farmer and the county land conservation committee.
- Clarified provisions related to wells and winter manure applications near lakes and streams. Exempted manure deposited by grazing animals.
- Restrictions on liquid manure applications near lakes and streams.

References

USDA Natural Resources Conservation Service. 2005. Nutrient Management Code 590 Conservation Practice Standard, NRCS, WI September 2005.

Wis. Department of Agriculture, Trade and Consumer Protection. ATCP 50 Wis. Admin. Code 2002 and Proposed Final Draft ATCP 50 Wis. Admin. Code, October 24, 2005.