



Minnesota Department of Agriculture

Pesticide and Fertilizer Management Division

REQUEST FOR COMMENTS

Proposed Rule Governing Nitrogen Fertilizer, *Minnesota Rules, 1573*; Revisor's ID Number R-04337

The Minnesota Department of Agriculture (MDA) is requesting comments on a proposed new rule to protect groundwater called the Nitrogen Fertilizer Rule. The rule will address agronomic crops that require significant amounts of nitrogen fertilizer. These crops include corn, small grains, edible beans, sugarbeets and irrigated potatoes in the rotation.

The purpose of this request for comments is to solicit stakeholder feedback on the regulation of nitrogen fertilizer application. The proposed Nitrogen Fertilizer Rule will require the regulatory provisions discussed in the state's blueprint for preventing or minimizing the impact of nitrogen fertilizer on groundwater, called the Nitrogen Fertilizer Management Plan (NFMP). A copy of the plan is available at <http://www.mda.state.mn.us/nfmp>. The 2015 NFMP was developed over the course of a three year period with the input of an advisory committee and a public comment period. Comments received during the public comment period were addressed before releasing the final version of the NFMP in a document titled "Response to Comments on the draft Nitrogen Fertilizer Management Plan". This document is available at <http://www.mda.state.mn.us/en/chemicals/fertilizers/nutrient-mgmt/nitrogenplan/~media/Files/chemicals/nfmp/commentsresponse.pdf>.

The rule will consist of two parts. The first part of the rule will apply to areas of the state overlying vulnerable groundwater. In these vulnerable groundwater areas, nitrogen fertilizer applications either in the fall or to frozen soils will have restrictions. The second part of the rule will apply to areas where measured nitrate levels in groundwater are elevated and it has been determined that the nitrogen fertilizer Best Management Practices (BMPs) are not being adopted. Restrictions will vary for different regions and soil types and will be based on the nitrogen BMPs developed by the University of Minnesota and adopted by the MDA.

Persons Affected. The proposed rule will likely affect local government, landowners, farmers, agricultural retailers and applicators as well as others in the agricultural industry.

Statutory Authority. *Minnesota Statutes*, section 103H.275, subdivision 1 (b) authorizes the MDA to adopt rules for nitrogen fertilizer that are "consistent with maintaining groundwater in its natural condition, free from any degradation caused by human activities and are commensurate with the groundwater pollution if the implementation of best management practices has been proven to be ineffective." *Minnesota Statutes*, section 103H.275, subd. 2. states, "The water resource protection requirements must be based on the use and effectiveness

of best management practices, the product use and practices contributing to the pollution detected, economic factors, availability, technical feasibility, implementability, and effectiveness.”

Minnesota Statutes, 18C and 18D, give enforcement authority to the Department of Agriculture as well as the authority to issue administrative, civil and criminal penalties.

Public Comment Instructions

Deadline: January 29, 2016

Response format: Submit your written response electronically to Larry Gunderson at larry.gunderson@state.mn.us, by mail to 625 Robert Street North, St. Paul, MN 55155, or by FAX to 651-201-6112.

Questions: All questions and inquiries regarding this request for comment should be directed to Larry Gunderson at larry.gunderson@state.mn.us or 651-201-6168.

The MDA is soliciting stakeholder input on the topics listed below. The items listed here are not final, but rather topics the agency is gathering public input on before drafting the rule:

- 1) The MDA is considering using a definition of fall as after August 31st. This is based on the climatological start of fall (<http://www.ncdc.noaa.gov/news/meteorological-versus-astronomical-summer%E2%80%9494what%E2%80%9499s-difference>). Nitrogen fertilizer applications in vulnerable groundwater areas after August 31st would be subject to some level of restriction.
- 2) As stated above and in the NFMP, the proposed rule would 1) restrict application in fall and frozen soils in vulnerable groundwater areas and 2) require the adoption of nitrogen fertilizer BMPs in areas that have elevated nitrate in their groundwater and BMPs are not being adopted voluntarily. The MDA is seeking comments on whether the cost of complying with the proposed rule in the first year after the rule takes effect will exceed \$25,000 for any small business or small city (a small business is a business (either for profit or nonprofit) with fewer than 50 full-time employees and a small city is a city with fewer than ten full-time employees.).
- 3) The MDA is considering using the following criteria for determining vulnerable groundwater areas and is seeking comments on the proposed criteria for vulnerable areas. An area will be considered a vulnerable area if it meets any one of the following criteria:
 - a. Areas with coarse textured soils. The MDA proposes that coarse textured soils would be defined based on USDA NRCS classifications as dominated by sand, sandy loam, and loamy sand.
 - b. Geology defined as karst or fractured bedrock. The MDA proposes that karst or fractured bedrock would be defined as “a type of geology that is formed from the dissolution of limestone, dolomite, or gypsum and that is characterized by closed

depressions or sinkholes, and underground drainage through conduits enlarged by dissolution.” (Minnesota Rules 7035.0300, subp. 51.)

- c. The township or Drinking Water Supply Management Areas (DWSMAs) meets the groundwater nitrate concentration criteria of mitigation level 1 or higher as indicated in the NFMP on pages 69 and 70 and in Chapter 10.
 - d. The MDA is also considering using the Minnesota Department of Natural Resource’s Procedure for Determining Near-Surface Pollution Sensitivity as an additional criterion. More information about this procedure can be found at http://files.dnr.state.mn.us/waters/groundwater_section/mapping/sensitivity/docs/nearsurfacepollutionsensitivity.pdf. The geologic information required to make this determination is not always available but it would be used in areas where it is available.
- 4) Vulnerable groundwater areas will need recognizable boundaries. The MDA is proposing to use townships and DWSMAs as these boundaries. Township boundaries would be used for mitigating private wells. DWSMA boundaries would be used for mitigating public wells. Any township with more than 50% of its land meeting the definition of vulnerable groundwater areas would have a restriction on nitrogen fertilizer application in the fall or to frozen soils.
- 5) The MDA is considering exceptions to the first part of the rule restricting fall application or application to frozen ground for specific crops and/or agricultural practices. Exceptions being considered are:
- a. Nitrogen fertilizer needed to establish cover crops. The amount of nitrogen applied depends on the type of crop. Nitrogen rates would be crop dependent and recommendations should use the University of Minnesota or other appropriate recommendations from land grant universities contiguous with Minnesota borders.
 - b. Nitrogen fertilizer needed to establish small grains in the fall in accordance with University of Minnesota or other appropriate recommendations from land grant universities contiguous with Minnesota borders.
 - c. Nitrogen fertilizer needed to establish perennials in the fall. Nitrogen rates would be crop dependent and recommendations should use the University of Minnesota or other appropriate recommendations from land grant universities contiguous with Minnesota borders.
 - d. Nitrogen needed for fall pasture fertilization. Nitrogen rates would be crop dependent and recommendations should use the University of Minnesota or other appropriate recommendations from land grant universities contiguous with Minnesota borders.

- e. Application of Monoammonium Phosphate (MAP) and Diammonium Phosphate (DAP) when following University of Minnesota phosphorus recommendations. The total nitrogen rate should include any crediting for nitrogen from phosphorous fertilizers.
 - f. Land application of agricultural chemical contaminated soil and other media as defined in and in accordance with Minnesota Statute 18D.1052 is allowed as approved by the MDA.
- 6) According to the Statute 103H.275, the Commissioner of Agriculture would issue a Commissioner's Order detailing the townships or Drinking Water Supply Management Areas affected by the rule and the practices required to minimize nitrogen leaching. The Commissioner is required to provide notice to the public before the Commissioner's Order goes into effect. What reasonable methods of notification should be used to notify the affected townships and Drinking Water Supply Management Areas of the Commissioner's Order?
- 7) The Commissioner's Order will contain a list of activities required for mitigation that will be specific to each township or wellhead protection area. The mitigation activities would be selected from a menu of options contained in the rule. These activities would be based on region specific BMPs as well as other recommended practices such as record keeping or farmer education. A proposed list of these activities can be found on pages 81 and 82 of the NFMP. (<http://www.mda.state.mn.us/chemicals/fertilizers/nutrient-mgmt/~media/Files/chemicals/nfmp/nfmp2015.pdf>).
- 8) Emergency nitrogen fertilizer treatment approved by the MDA in response to extreme weather events or other causes of crop damage, loss or failure.

The comments provided through this process are for planning purposes only. All comments will be available for public review on the Nitrogen Fertilizer Rule website (<http://www.mda.state.mn.us/en/chemicals/fertilizers/nutrient-mgmt/nitrogenplan/mitigation/wrpr.aspx>)

Rule Updates. Updates on the rule can be found on the Nitrogen Fertilizer Rule website, <http://www.mda.state.mn.us/en/chemicals/fertilizers/nutrient-mgmt/nitrogenplan/mitigation/wrpr.aspx>. To receive email updates on the rule, sign up for the Nitrogen Management List here, <http://webmail.mnet.state.mn.us/mailman/listinfo/nitrogen-management>.

Alternative Format. Upon request, this information can be made available in an alternative format, such as large print, braille, or audio. To make such a request, please contact the MDA contact person at the address or telephone number listed above.

NOTE: Comments received in response to this notice will not necessarily be included in the formal rulemaking record submitted to the administrative law judge if and when a proceeding to adopt rule is started. The agency is required to submit to the judge only those written comments received in response to the rule after they are proposed. If you submit comments during the development of the rule and want to ensure that the Administrative Law Judge reviews the comments, you should resubmit the comments after the rule is formally proposed.

Jim Boerboom, Deputy Commissioner
Minnesota Department of Agriculture
(signed copy on file)

October 14, 2015