From:	Joe Smentek
To:	Gunderson, Larry (MDA)
Subject:	N Fertilizer Rule Comments
Date:	Thursday, January 28, 2016 9:46:59 PM
Attachments:	N Fertilizer Comments.docx

Mr. Gunderson,
Please find attached the comments on the N fertilizer rule from the Minnesota Soybean Growers Association.

Joe

Joseph Smentek
Minnesota Soybean
Director of Public Affairs
507-388-1635

January 29, 2016

Larry Gunderson
Pesticide and Fertilizer Management Division
Minnesota Department of Agriculture
625 Robert Street North
St. Paul, MN 55155-2538

Dear Mr. Gunderson:

The Minnesota Soybean Growers Association appreciates the opportunity to comment on the Nitrogen Fertilizer Management Plan and associated rule. It is important to remember that Minnesota's farmers and farm organizations take the protection of Minnesota's ground water very seriously. While soybean growers do not apply N fertilizers generally for the use by the soybean plants, residual N from other crops is an important input for soybeans.

MSGA reminds you that the issues of nitrate effects on groundwater are very complicated and urge you to carefully examine all relevant data as you proceed with rulemaking. We offer the following comments to assist you and to help insure that the rules developed under the Nitrogen Fertilizer Management Plan (NFMP) might reasonably expected to achieve the goal of protecting groundwater from adverse impacts of nitrogen fertilizer use.

The first crucial issue to address is the lack of authority given to the Minnesota Department of Agriculture (MDA) when it comes to Nitrogen. The MDA has no authority to regulate nitrogen in groundwater from manure. The MDA also lacks the authority to regulate Nitrogen in groundwater from natural sources. 78 percent of the Earth's atmosphere is made up of Nitrogen. Manure is a rich source of Nitrogen used in rural Minnesota. MSGA is very concerned with the lack of differentiation in this rule regarding the different sources of Nitrogen. If a well is contaminated with Nitrogen and that Nitrogen came from historic poor manure management then the MDA has no authority to continue with this rule's proposed actions and best management practices. MSGA does not support the contamination of wells in any way, shape or form, but is concerned that this rule will far exceed the authority given to the MDA. Without a way to determine where the Nitrogen came from leaves the MDA without the ability to enact these plans.

MSGA objects strongly to the use of domestic wells for testing for Nitrogen. Public wells are built to strict standards to prevent contamination of ground water by surface waters through the short circuiting process. Private wells are not constructed to those standards. Use of these wells in the monitoring system would lead to biased, artificially high nitrate levels in these areas. On page 11, the process of short circuiting, movement of surface water to ground water, can circumvent natural filtration by karst geology. This same process can easily occur adjacent to private wells. The MDA should not enact any portion of this plan without dedicated monitoring wells to ensure that the levels of Nitrogen being observed are not from a poorly constructed well or other well problem.

The NFMP clearly outlines that the plan and associated rule applies to those areas of the state where groundwater is vulnerable to contamination, generally those areas with sandy soils or karst geology. Thus while it is a statewide plan, it is truly focused on a small fraction of the state. The MDA estimates in the NFMP that 250-350 townships (15-20% of all townships) may be targeted for nitrate testing. The MDA should clearly state this focus of the NFMP and rule and clearly state that all other areas are not subject to the proposed rule.

The MDA should refrain from using statewide statistics, which are not relevant given the clearly defined areas of focus outlined in the plan. The fact that "three out of four Minnesotans rely on groundwater for their drinking water supply" may be true, but it would be more useful to know how many Minnesotans get their drinking water from groundwater in the areas of focus covered by the NFMP. Likewise, statewide crop acreages, fertilizer sales and related figures mean little in the context of actually focusing on and prioritizing efforts to protect vulnerable groundwater.

We strongly recommend that the MDA exclude wells of questionable construction or with known problems from their groundwater assessments. While it is important for all Minnesotans to have access to safe drinking water, it is also important to account for other factors aside from current agricultural fertilizer use as rules are developed. Is the actual impact due to septic systems or feedlots? Is the nitrate condition ongoing or due to decades-old contributions? The answers to these questions may also vary considerably across the state.

MDA should work with local advisory teams once priority areas have been identified. These local advisory teams should require that a majority of members be farmers and agronomists with knowledge of local conditions and their input should be both actively sought and highly regarded.

With regards to the question of defining "fall" as after August 1, we propose that the MDA give consideration to late planted crops, which are becoming more common in irrigated areas, and which may require nitrogen applications into August or early September. The MDA should also consider that more frequent, smaller applications of nitrogen may necessitate applications to growing crops further into the late summer and early fall. Fall should be defined no sooner than September.

If the MDA were to require Alternative Management Tools under this plan that might restrict crop choices, some farms and some fertilizer retailers may face costs in excess of $25,000.

With regards to the question of criteria for vulnerable groundwater areas, we understand the difficulty of defining geography for purposes of a rule, given the highly variable nature of soil types and their shapes. In the request for comments, the MDA seems to suggest that the identification of vulnerable groundwater areas includes elevated groundwater nitrate levels. We would suggest that the identification of vulnerable groundwater areas be considered as a separate step-wise process from the evaluation of groundwater nitrate levels.

An area deemed vulnerable based on geology may have groundwater with elevated nitrate levels or it may not. Any movement toward nitrogen regulation must be accompanied by documented nitrate impacts to groundwater associated with the use of nitrogen fertilizers, as outlined in the Nitrogen Fertilizer Management Plan and as authorized in the Groundwater Protection Act.

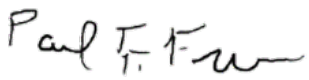
We would also suggest that the MDA define coarse textured soils based on NRCS classifications as dominated by sand and loamy sand. MSGA also suggests that the MDA develop criteria that more accurately reflects the variability in groundwater vulnerability throughout the karst region. Even in this area, some areas have greater topsoil depths that reduce vulnerability and fall nitrogen applications can be done without undue risk of groundwater contamination.

While the township scale proposed by the MDA should be small enough to address local condition, we would suggest that the MDA also consider some exemptions for those townships in which there are clear and marked differences in soil type and groundwater vulnerability across a township.

MSGA recommends that notification be sent to affected counties and townships, farm organizations and Extension professionals. The newly formed Nitrogen Fertilizer Education and Promotion Team should also play an integral role in guiding MDA efforts under this plan.

We also encourage the MDA to support ongoing educational programs of Minnesota farm organizations and the Minnesota Agricultural Water Resource Center, especially the annual Nutrient Management Conference and the annual Nitrogen Fertilizer Management Conference. Commodity groups do a lot of education to our members in a variety of ways. Using their existing programs, magazines, and newsletters would make clear sense to get the message out to farmers.

Sincerely,



Paul Freeman
MSGA President
Minnesota Soybean Growers Association