August 25, 2017

Mr. Larry Gunderson
Minnesota Department of Agriculture
625 Robert St. North
St. Paul, MN 55155

Dear Mr. Gunderson:

The Red River Valley Sugarbeet Growers Association (RRVSGA) submits these comments on proposed nitrogen fertilizer rule. The RRVSGA has several concerns regarding the proposed rule as outlined below and these comments are generally focused in response to information provided in the Department’s “Nitrogen Fertilizer Rule Frequently Asked Questions” document.

Part I

Part 1 of the Rule is “based on soils and geology” and therefore will not change over time. A field in a vulnerable groundwater area will always be subject to the rule, regardless of whether or not nitrates are present, detections have occurred, or HRLs have been exceeded. It is ridiculous for the Department to propose restrictions on fall applications of fertilizer based solely on soil type when it is possible that no detections of nitrates have ever been found in those areas.

The Department has proposed a purely arbitrary term when defining a vulnerable groundwater area—the term “near.” What does “near-surface bedrock” mean? And who decides how to apply the term “near”?

The Department has also proposed an arbitrary figure of 50% when restricting fall and frozen application of fertilizer. In areas where more than 50% of the section has vulnerable groundwater, the proposed rule would prohibit fall and frozen application in the entire section. The figure 50% is purely arbitrary, and there is no nexus between that number and the need to restrict applications in the entire section.

The same is true in areas where less than 50% of the section contains vulnerable groundwater. The Department has proposed restricting fall applications without any nexus to nitrate detections.
Testing Methodology

There is also an issue with the underlying testing methodology itself. It appears the sampling is based on the voluntary township private well testing program and as a result the Department is relying on the limited information provided solely by the people who took the time to submit samples. This is clearly a flawed methodology of sampling. The geographic distribution of wells within a township is not uniform. In some townships, the number of wells is very small, either because there are few wells or because participation in the voluntary testing program is very low. It is hardly a reliable process to base regulations on. Does the voluntary sampling program tell regulators whether nitrate levels are trending up or down? Are samples from bad wells or contaminated wells the only ones in the data set?

Trigger Levels

As a general matter, a HRL set by the Minnesota Department of Health is a number based on science that, when exceeded, allows a state agency to regulate activity related to that HRL. In several places in the proposed rule, the Department requires growers to adopt BMPs or places restrictions on fertilizer use prior to the HRL being reached.

The regulatory trigger levels are arbitrary. For example, the Level 2 BMPS are triggered if 10% or more of sampled wells exceed the HRL. Let’s say there are 100 wells in an area or township, and only 10% of them are actually sampled. The rule states that if 10% of the sampled wells exceed the HRL, BMPs must be used. That means as little as a single well out of 100 will trigger the use of BMPs. The same is true for Levels 3 and 4 determinations.

The public well data trigger levels are even worse. In each of the four levels described, none of the trigger levels exceed the HRL of 10. Level 1 is triggered when concentrations are between 5.4-8.99, and Levels 2, 3, and 4 are triggered if the detections are only 9.0. In addition, the triggers could be reached in Levels 2 and 3 if the detections are even less than 9.0, if the “concentration is trending upward, likely to exceed HRL in ten years” – how is this to be determined? While we recognize the Department has regulatory authority over groundwater under the 1989 Groundwater Protection Act, we question whether the Department has the authority to regulate fertilizer when the HRL is not even triggered.

BMPs

The proposed rule states that after three years of using BMPs, the Department will reevaluate the mitigation level. The three-year period is completely arbitrary. There is no scientific basis to use a three-year period, rather than a one-year period or five-year period (or some other time frame). The rule goes on to state that if BMPs are being used on 80% or more of cropland in the designated area, regulations will not be required. Again, this figure is completely arbitrary. There is nothing scientific about an 80%
adoption rate and the Department has offered no explanation as to why that number was chosen. If the 80% figure is not attained, the “area can move into a regulatory level.” Since crop rotations change each year, it is hard to imagine how the Department will actually calculate the 80% figure. One year the figure might 55% and the next year it might be 90%, or the figure might be 79% one year and 81% the next year. The line between regulation and no regulation is going be that close?

**Old or New Problem**

The Department has not offered any explanation as to how to determine the actual source of nitrates in well water. It is conceivable that nitrate presence in any given well has been there for a period of time. It is also conceivable the nitrates came from a source other than fertilizer or animal manure. Growers have increasingly been adopting variable rate application technology and the commodity research councils have been researching ways to improve nitrogen uptake. Any nitrates found in wells today are could be old and do not account for reduced trends based on research and new application methods. It may be that the Department is trying to regulate activities from the past that have no relevance to today’s modern technology.

**Conclusion**

This proposed rule is riddled with arbitrary detection figures and regulatory trigger levels. In addition, the Department is proposing to regulate fertilizer even before a HRL is ever reached. Much of what the Department is proposing can be categorized as arbitrary and unsupported by scientific evidence.

We urge the Department to increase awareness of BMPs, use of recommended University application guidelines, increase research efforts on Discovery farms, and firm up the township testing program to ensure fertilizer is actually the cause of nitrates in wells before adopting any part of this rule.

Very truly yours,

Duane W. Maatz, Executive Director