August 25, 2017

VIA EMAIL

Larry Gunderson
Minnesota Department of Agriculture
625 Robert Street North
St. Paul, MN 55155
larry.gunderson@state.mn.us

Dear Mr. Gunderson,

We, the undersigned organizations, thank you for the opportunity to provide written comment on the Minnesota Department of Agriculture’s proposed two-part Nitrogen Fertilizer Rule.

Groundwater Protection Act of 1989

The 1989 Groundwater Protection Act established the state goal that "groundwater be maintained in its natural condition, free from any degradation caused by human activities." For agricultural chemicals including nitrogen fertilizer, implementation is led by the Minnesota Department of Agriculture (MDA).

Despite comprehensive promotion of nitrogen fertilizer “Best Management Practices”, or BMPs, throughout the state since the Act’s passage, voluntary BMPs have proven insufficient to prevent surface water and groundwater contamination from agricultural sources across the state.

Nitrate pollution in Minnesota

Groundwater contamination is a serious concern in Minnesota, and contamination of public and private wells represents an eminent public health threat. The MDA notes that nearly 10% of MDA tested private wells in vulnerable areas are already above the Health Risk Limit (HRL), including some townships with 30-40% of private wells providing water that is unsafe to drink.

Results from comprehensive state groundwater monitoring from 1985-2010 indicate that the rate of detection of nitrate in groundwater is between 50% - 99% of samples in all groundwater regions. Rates of detection and the share of samples in excess of the HRL have increased in 6 of the 7 tested groundwater regions of the state. 

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1 Min. Stat. 103H.001 Degradation Protection Goal. Available at: https://www.revisor.mn.gov/statutes/?id=103H.001
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The Groundwater Protection Act clearly states that if voluntary BMP adoption proves insufficient to achieve the goals of the Act, the MDA has authority to adopt mandatory requirements.”

Given the state of groundwater contamination in Minnesota, we conclude that voluntary BMP adoption has proven ineffective. We strongly support the MDA’s decision to establish enhanced regulatory protections against nitrate contamination via the proposed rules.

**Comments on the Proposed Nitrogen Fertilizer Rule**

The MDA is proposing a two-part Nitrogen Fertilizer Rule:

- **Part 1**: 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. We strongly support this portion of the draft rule.

- **Part 2**: The second part of the rule will apply to areas where measured nitrate levels in drinking water are elevated and it has been determined that the nitrogen fertilizer Best Management Practices (BMPs) are not being adopted.

We submit the following comments detailing our concerns with Part 2 of the proposed rule, including the following:

- Failure to protect all groundwater as required by the 1989 Groundwater Protection Act
- Inappropriate mitigation level criteria
- Reliance on profit-based nitrogen fertilizer best management practices (BMPs)
- Slow pace of intervention

**Failure to protect all groundwater resources**

The MDA’s proposed rule fails to achieve the clearly stated non-degradation goal of the Groundwater Protection Act, and unreasonably limits application of the Groundwater Protection Act to drinking water resources instead of applying the law to protect all groundwater as directed by the Act.

1. **The MDA’s proposed rule fails to achieve the clearly stated non-degradation goal of the Groundwater Protect Act.** The intent of the Act is to prevent groundwater degradation. However, the MDA’s stated goal for the draft rule is to “…reduce nitrate in

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3 Minn. Stat. §§ 103H. 275, subd. 1 (b) and 103H.005, subd.14
groundwater”, and proposes only to deploy Part 2 of the rule once groundwater has become contaminated. Reducing the amount of pollution is simply not synonymous with preventing degradation. The MDA’s approach is incompatible with the clearly stated goals of the Act.

II. **The MDA's proposed rule unreasonably limits application of the Groundwater Protection Act to drinking water resources instead of applying the law to protect all groundwater as directed by the Act.** Instead of applying the Act to all groundwater, the MDA's approach appears to eliminate application of the Act in areas with significant groundwater contamination where shallow groundwater wells are not a source of public or private drinking water. The MDA has a responsibility to apply the law based on clearly established legislative intent, and must apply its authority to prevent groundwater contamination regardless of whether or not groundwater is used as a drinking water source.

**Inappropriate mitigation level criteria**

The thresholds for Level 3 & Level 4 mitigation level criteria for private wells are excessively lenient to the detriment of public health, economic growth, and the basic principles of fairness and accountability.

The draft rule, as written, limits the State’s ability to deploy regulatory mitigation criteria when profit-derived BMPs are being adopted, even if drinking water contamination levels continue to exceed the Health Risk Limit. The MDA is proposing to hamstring its own ability to deploy regulatory measures in the event of a public health crisis simply because a given percentage of farm operations have adopted BMPs that were never intended to prevent drinking water contamination in the first place, and which the MDA acknowledges are not sufficient to meet the goals of the Act.

**Reliance on profit-based nitrogen fertilizer best management practices (BMPs)**

The MDA is proposing to use adoption rates of profit-based nitrogen fertilizer use recommendations as a substitute for actually achieving the goals of the Groundwater Protection Act and securing safe drinking water for all Minnesotans.

The MDA is proposing to prohibit Level 3 & Level 4 regulatory intervention based on adoption rates of nutrient BMPs that were simply never intended to prevent drinking water contamination in the first place. The proposed BMPs were instead created to maximize farm profit, even at application rates the state acknowledges lead to extremely high concentrations of nitrate in farm runoff.

The Minnesota Department of Agriculture’s 2015 Nutrient Fertilizer Management Plan (NRMP) states that "...in areas with highly vulnerable groundwater, the use of nitrogen fertilizer at the recommended rate, timing, source and placement...may not be enough to decrease the amount of nitrate leaching into groundwater to meet water quality goals."

The MDA has yet to provide any reasonable explanation as to how nitrogen fertilization rates that yield pollution concentrations in excess of the Health Risk Limit can possibly comply with the goals of the Groundwater Protection Act, let alone adequately protect public health.

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**Slow pace of intervention**

The rule makes it clear that under the increasingly remote scenario where the MDA would choose to intervene with Level 3 & Level 4 mitigation, it plans to do so at an alarmingly slow pace. The rule prescribes a lengthy mitigation level evaluation process that takes at least 3 years if not far longer to implement. Requiring such a time-consuming and expensive multi-step process simply to further allow farm operations to apply fertilizer at their economically optimal rate poses an unfair risk to public health and drinking water quality throughout Minnesota.

Thank you for the opportunity to provide comments on the MDA’s proposed Nitrogen Fertilizer Rule.

We look forward to working with the MDA and all water quality stakeholders to revise the current draft to better protect groundwater resources for all Minnesotans as required by the 1989 Groundwater Protection Act.

Sincerely,

Steve Morse  
Minnesota Environmental Partnership

CURE (Clean Up the River Environment)  
Friends of the Mississippi River  
Izaak Walton League – Minnesota Division  
League of Women Voters – Minnesota Division  
Mankato Area Environmentalists  
Minnesota Center for Environmental Advocacy  
Minnesota Conservation Federation  
Save Our Sky Blue Waters  
Sierra Club – North Star Chapter