



December 1, 2023

Debra Shore
Regional Administrator and
Great Lakes National Program Manager
U.S. EPA Region 5
77 West Jackson Boulevard
Chicago, IL 60604

Dear Ms. Shore:

Safe drinking water is essential for the health and well-being of all Minnesotans, and while we have made great strides in recent decades to ensure the safety of drinking water in our state, there are a variety of threats that must be acknowledged and addressed by all levels of government. With that in mind, we thank you for your letter dated November 3, 2023. In this response, we outline Minnesota's collaborative plan to address nitrate contamination in aquifers in southeast Minnesota that serve as sources of drinking water and identify opportunities for federal-state partnership to accelerate that work.

In Minnesota, authorities and responsibilities for water are shared across several agencies in the Executive branch. The Minnesota Department of Health (MDH) is the lead public health agency and holds primacy for the federal Safe Drinking Water Act. Implementation of the Clean Water Act is the shared work of the Minnesota Department of Agriculture (MDA) and the Minnesota Pollution Control Agency (MPCA). Together with other state agencies and boards, these three agencies work in close collaboration to ensure actions are based on a deep understanding of water-related sciences and available data to ensure maximum effectiveness and efficiency. This collaboration has increased substantially since the advent of the Clean Water Fund in 2008, which enables the agencies to go above and beyond previous efforts to protect and restore Minnesota's waters for future generations.

We appreciate the work your agency has done to understand current state efforts to reduce inputs to, and concentrations of nitrate in, drinking water aquifers in southeast Minnesota. In discussions with your staff and in reading your letter, we understand that you are affirming the actions and programs currently in place, while directing the agencies to accelerate and expand the set of tools used to reduce nitrate inputs to groundwater.

We agree that nitrate in drinking water is an acute health risk for some Minnesotans. The majority of Minnesotans get their drinking water from community drinking water systems, and the news on this front is encouraging. Our implementation of the Safe Drinking Water Act with regard to public water systems focuses on going beyond compliance through education and technical support to prevent nitrate concentrations from reaching the level of a violation. In cases where this was not possible, the system notifies the public, and the MDH works with the system to return to compliance. However, there is ongoing concern about the 1.1 million Minnesotans who get their drinking water from private wells. As you are aware, aside from the Minnesota Well Code, which regulates the construction and sealing of wells, there are fewer statutory protections for Minnesotans who depend on these private wells.

As outlined in your letter, we intend to address nitrate contamination in three phases:

1. An immediate outreach program to again notify affected residents using private wells with known nitrate concentrations above the Maximum Contaminant Level and to provide alternate water to vulnerable populations,
2. A public health intervention to ensure safe drinking water for private wells users in the mid-term in which well owner participation is voluntary; and
3. Enhanced long-term environmental and conservation strategies to reduce nitrate concentrations in the aquifers that provide drinking water.

It should be noted that this increased level of activities will require redirection of current, limited resources and significant additional resources in the coming years. In the coming weeks, we will be reaching out to U.S. EPA Region 5 to discuss potential federal resources that can be provided to the State of Minnesota to support these efforts.

For the immediate response, MDH is working in partnership with MDA, MPCA, and local government partners to craft an outreach and public education program with consistent messaging, multiple delivery channels, and trustworthy messengers, all based on risk communication science. The communication program will include social media; news releases; paid advertisements; and brochures at childcare facilities, clinics, and Women Infants and Children program offices. Through a Clean Water Fund pilot grant to Olmsted County Soil and Water Conservation District (SWCD), a “Tap-in” collaborative of SWCDs and local public health agencies was developed in six of the eight counties included in the petition. We will work through this established local network to include the additional counties and strengthen their outreach and testing activities.

In addition, the agencies will use existing data from MDA’s Township Testing results, the initial water quality post-construction sample, and/or a local public health laboratory to identify private wells that exceed the health risk limit to notify affected residents and provide guidance

on appropriate treatment options. For vulnerable populations, pregnant people and infants under 1 year of age, we will provide vouchers for bottled water through clinics, faith communities, and other local partners as appropriate.

The details of the public health intervention are currently in discussion with the agencies, the Tap-in Collaborative, and other local partners. We expect to have a complete plan by January 15, 2024. The plan will include strategies to address the seven components outlined in your letter: coordination of government partners; identification of private wells; free testing, alternate water, and remediation where needed; robust communication and outreach; public access to data and plan progress; and quarterly reporting to U.S. EPA Region 5.

As EPA notes, Minnesota needs a long-term solution for reducing nitrate in our surface water and groundwater. We do have important elements of this solution in place.

- Minnesota manages surface waters through a robust watershed framework that has been in place since 2008. As of 2023, each watershed in the eight-county area covered by the petition has an approved comprehensive watershed management plan and will receive \$9.5 million from July 2023 and through June 2025 to implement local actions to improve water quality. Pending future legislative appropriations, continuing funding may be available to them for several more years. Local government and landowners can apply for millions more in grants and loans to achieve nutrient reductions.
- Minnesota's Nutrient Reduction Strategy (NRS) was released in 2014 as a long-term framework to specifically address nitrate pollution affecting Minnesota water resources. The NRS includes: the state of nutrients in Minnesota; sources of nutrients in state waters; goals for reducing nutrients; specific strategies to promote and advance; and ways to track progress along the way to reaching the goals. The NRS is being updated based on new information, the latest science, and changing climate and land use. The revised NRS will be available in 2025 and will include additional approaches to scale up adoption of key practices for success, many of which are beneficial for reducing groundwater nitrate in geologically vulnerable areas. The NRS has spurred program advancements and investments on many fronts.
- MDA has developed the Nitrogen Fertilizer Management Plan to reduce nitrate levels in areas with vulnerable groundwater. The goal is to work with local farmers, at the township scale, to promote and adopt recommended practices to address local groundwater problems. MDA supports research and demonstration projects to inform the development of fertilizer best management practices (BMPs) and works directly with the agricultural community to adopt these practices.

- MPCA operates feedlot and wastewater permitting programs that regulate water discharges. Each program has recently incorporated permit requirements to address nitrate. The current National Pollutant Discharge Elimination System (NPDES) feedlot general permit (issued on February 1, 2021, and expires on January 31, 2026) includes two requirements that reduce nitrogen loss from soil to water. We are reviewing suggestions made by EPA and petitioners for inclusion in future feedlot permits. Where necessary, for many years wastewater permits have contained nitrogen discharge limits to protect drinking water. In 2024, the wastewater program will implement the Wastewater Nitrogen Reduction Strategy they developed with stakeholders this past year that includes specific action steps to achieve nitrogen reductions from wastewater facilities.
- In 2019, MDA began implementing the Groundwater Protection Rule, prohibiting fall application of commercial fertilizer on 71% of cropland (approximately 1.1 million acres) in southeast Minnesota in response to community water supplies with elevated nitrate. MDA is using state-of-the-art computer modeling tools to evaluate the environmental effects of different agricultural practices in different settings, including for the karst areas of southeast Minnesota. Computer modeling tools are helping to evaluate and select practices most protective of groundwater. MDA has convened local advisory teams and is working with farmers to adopt practices which will positively impact groundwater and drinking water in the region. If this is not successful, MDA could then move to further regulation.

While all these elements are important pieces of the long-term solution, we recognize the need to continue to advance nitrate reduction work. The broad patterns of nitrate that we see in our surface waters and groundwater are caused by a combination of point and nonpoint source pollution. Reducing nitrate contamination of drinking water wells will require overlapping approaches that include both regulatory and voluntary actions that are science-based and will reduce all sources of nitrogen to our waters, and work at both the state and local levels. This is long-term, adaptive management work that is already in progress, and will operate while more immediate assistance is provided to southeastern Minnesota residents.

MDA, MDH, and MPCA are discussing how to conduct stakeholder engagement with an array of partners to explore the petitioners' recommendations, consider suggestions made by EPA, as well as investigate other options. We anticipate these meetings beginning this winter.

Timely and effective actions by state agencies in concert with local partners and the voluntary engagement of private well owners are essential to protect the health of those who depend on groundwater for drinking water. Interventions to provide safe drinking water in the near term and accelerated progress to reduce nitrogen in groundwater both depend on additional

financial resources. We look forward to advancing this work in partnership with EPA, tribal partners, other state and local partners, with stakeholders and the petitioners.

Sincerely,

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