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Environmental Working Group  
111 Third Ave. South Suite 240  
Minneapolis, MN 55401

Rep. Peter Fischer  
Minnesota House of Representatives  
Water Division

March 9, 2020

Dear Chairman Fischer and Members,

The Environmental Working Group (EWG) would like to thank Representatives Torkelson, Fischer, Brand and Lippert for authoring HF 3950 and express strong support for the bill, which requires water testing of private wells for bacteria, nitrate and arsenic before the sale or transfer of real property.

Over the past several months, EWG has gathered and reported on all available state nitrate drinking water test data for private wells and public community water systems. Our analysis shows that half a million Minnesotans may be drinking water with elevated levels of nitrate at or above 3 mg/L. According to the Minnesota Department of Health, “[w]hile 3 mg/L is less than the EPA standard, it suggests human-made sources of nitrate have contaminated the water and the level could increase over time.”<sup>1</sup> For this reason, EWG’s reporting focuses on providing information regarding Minnesota wells that have water tests showing nitrate contamination at or above 3 mg/L.

EWG data analysis and reporting also show that Minnesotans drinking private well water face considerable health risks from nitrate contamination. Data from the Minnesota Departments of Health and Agriculture shows that in the past ten years, 7,657 Minnesota households drank from private wells with at least one water test at or above 3 mg/L nitrate. Of those, 5,825 households had at least one water test at or above 5 mg/L nitrate and 3,364 households had at least one water test at or above the federal Safe Drinking Water Act Standard of 10 mg/L nitrate. Of the 3,364 wells testing above the federal standard, 368 household wells had at least one water test at or above 20 mg/L- twice the federal Safe Drinking Water Act standard. If each of these household wells serves just 3 individuals, our analysis indicates that 22,971 Minnesotans are likely drinking water from private wells with elevated levels of nitrate that could increase over time.

Research on the negative health impacts from nitrate is growing. The current federal Safe Drinking Water Act standard was set in 1962 to guard against so-called “blue baby syndrome,” a potentially fatal condition that starves infants of oxygen if they ingest too much nitrate. However, more recent research indicates that drinking water with 5 mg/L

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<sup>1</sup> <https://www.health.state.mn.us/communities/environment/water/wells/waterquality/nitrate.html>



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nitrate or even lower is associated with higher risks of colorectal cancer, thyroid disease and adverse birth outcomes.

To better protect the 20% of Minnesotans drinking private well water, the state and well owners need far better information on nitrate levels in private wells. Under the Safe Drinking Water Act, all community drinking water systems using groundwater are required to test annually for nitrate, and federal law requires quarterly testing when source water tests show nitrate levels above 5 mg/L.<sup>2</sup> Regular nitrate testing of community drinking water systems gives state health officials and communities time to evaluate potential sources of nitrate contamination, determine whether nitrate levels are rising and spend resources effectively to protect public health. Without similar nitrate test data information, private well owners are less able to effectively ensure the safety of their drinking water.

Using the greater volume of test data available for community drinking water systems, EWG conducted a nitrate trend analysis. Our analysis shows that nitrate levels are rising in approximately two-thirds of Minnesota's community drinking water systems with elevated nitrate levels. Unfortunately, due to a lack of nitrate test data, EWG is unable to conduct the same trend analysis for private wells. This represents a critical information gap for those relying on private well water.

All Minnesotans deserve equal protection of their drinking water, and equal protection begins with adequate information. By requiring additional private well testing, HF 3950 represents a great step forward in better protecting drinking water for the 20% of Minnesotans relying on private wells. Thank you for considering this important piece of legislation.

Sincerely,

Jamie Konopacky  
Midwest Director  
Environmental Working Group

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<sup>2</sup> 40 C.F.R. §141.23(d)