EPA to Minnesota: Take action to protect people from polluted wells in eight counties

A coalition of groups had asked the EPA to declare a public health emergency. By Greg Stanley Star Tribune

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The Environmental Protection Agency Building

Saying that thousands in southeastern Minnesota are drinking unhealthy water, the U.S. Environmental Protection Agency told the state to alert residents of the hazards and clean up the farm pollution that has contaminated wells in the region for years.

The water supplies for more than 9,200 people in southeastern Minnesota are likely contaminated with dangerous levels of nitrate, according to a <u>November letter</u> the EPA sent to the heads of the three state agencies responsible for ensuring clean drinking water.

The EPA asked the agencies to immediately notify residents of the danger, provide them bottled water and come up with a plan to reduce the nitrate pollution that mostly comes from crop fertilizers and manure produced by large feedlot operations.

If the state doesn't get it done, the EPA will "consider exercising our independent emergency and enforcement authorities," the letter warns.

The EPA letter fell short of the public health emergency declaration sought by community members and advocates. But it's a relief for private-well owners in the area who have been uncertain about the safety of their water, said Carly Griffith, water program director for the Minnesota Center for Environmental Advocacy.

"This shows a way forward for them," Griffith said. "And it is an explicit recognition from the EPA that there needs to be a much more robust response from the state, both immediately and longer-term beyond these voluntary practices that the state has relied on until now."

The letter was sent to Minnesota Pollution Control Agency Commissioner Katrina Kessler, Minnesota Department of Agriculture Commissioner Thom Petersen and Minnesota Department of Health Commissioner Brooke Cunningham. The three agencies have collectively tried, and largely failed, to reduce nitrate pollution in farming areas over the years through voluntary programs and educational campaigns.

Kessler, Petersen and Cunningham declined to answer questions, writing a joint statement instead.

The agencies "share the EPA's concern and commitment" about addressing nitrate contamination, they wrote.

In April, a group of 11 local and national organizations, led by the Minnesota Center for Environmental Advocacy, <u>asked the EPA</u> to step in and take emergency action in eight counties under the federal Safe Drinking Water Act because of the failure of state and local authorities to take meaningful action.

Southeast Minnesota's groundwater is particularly vulnerable to nitrate pollution because of the many sinkholes and fractures in the porous limestone underlying the region.

"This contamination poses an imminent and substantial threat to human health, and the problem is not getting any better," the groups said in their request.

In response, the EPA issued its letter, which acknowledged the state's past efforts, but identified "an evident need for further actions to safeguard public health."

Nitrate originating in large-scale agriculture has been one of the state's most entrenched <u>environmental problems</u>. The colorless and odorless contaminant has polluted lakes and rivers, aquifers and drinking-water wells and continues to force communities to pay for drilling new wells and installing new treatment. In response, the state adopted the <u>Groundwater</u> <u>Protection Rule</u> in 2019, its most comprehensive action to prevent nitrate pollution, though farms continue to expand.

The most well-known effect of drinking water with high nitrate is the potentially fatal condition called blue baby syndrome, in which infants are starved of oxygen. Federal regulators imposed a limit at 10 milligrams of nitrate per liter of water several decades ago to guard against that. <u>Newer research</u> links drinking water with even lower levels of nitrate to colorectal cancer, thyroid disease and neural tube defects.

It is not just a groundwater problem. Winona County also has suffered four fish kills in local rivers in the last decade. <u>Most recently</u>, manure and pesticide runoff killed at least 2,500 fish in Rush Creek, mostly brown trout, near Lewiston.

The EPA told Kessler, Petersen and Cunningham that the state has tools it is not using to reduce nitrate concentrations. The agencies could design "more protective" large feedlot and manure discharge permits, for example. Specifically, the EPA encouraged the state to add monitoring

requirements to feedlot and manure application permits and to modify its standards for how and when manure is spread in karst porous regions like southeastern Minnesota.

The EPA further directed the state to identify every residence that gets drinking water from a private well within the eight southeastern counties of Dodge, Goodhue, Fillmore, Mower, Olmsted, Wabasha, Houston and Winona. An estimated 94,000 people rely on private wells in those counties.

A Star Tribune analysis of data from a voluntary private-well testing program the Department of Agriculture helped run shows at least 12% of tests in these eight counties failed to meet the federal nitrate standard. More than a third returned nitrate results of 3 mg/l or higher, levels considered by health officials to be human caused rather than natural.

Amy and Aaron Bishop, who live in Fillmore County and have been helping organize wellscreening programs and public forums with the group Responsible Ag in Karst Country, called the letter a start.

"The biggest thing, hopefully, that comes out of this is more awareness about it to the public in our area," Aaron Bishop said. "If people don't know, they don't know."

The EPA ordered the state to test water from any private-well owner in the region who submits samples and to provide alternative drinking water to any that test high for nitrate at no cost to the owner. That could be done by delivering bottled water, providing it a centralized location, giving homes reverse osmosis treatment units, or connecting them to a public water system, the EPA wrote.

The three agencies will also need to "maintain and regularly publish" records so the public can understand the scope and severity of nitrate contamination in the region and measure the state's progress.

In their statements, the agency leaders said they will develop a "coordinated and comprehensive work plan" to identify and contact residents with contaminated wells, conduct testing, and offer uncontaminated drinking water.

The statement made no mention of whether the agencies will consider any changes to large feedlot permits or manure application standards. Asked if the Department of Agriculture and Pollution Control Agency would consider such changes, Petersen and Kessler declined to comment.