



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

WG-15J

December 21, 2022

Andrea Gelatt
Adam Voskuil
Staff Attorneys
Midwest Environmental Advocates
612 West Main Street, Suite 302
Madison, WI 53703

Dear Ms. Gelatt and Mr. Voskuil:

I am writing to provide an update on the Environmental Protection Agency's continuing response to your October 22, 2014 Petition for Emergency Action Pursuant to the Safe Drinking Water Act, 42 U.S.C. § 300i, to Protect the Citizens of Kewaunee County, Wisconsin from Imminent and Substantial Endangerment to Public Health Caused by Nitrate and Bacteria Contamination of an Underground Source of Drinking Water, and Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9604, and the Resource Conservation and Recovery Act, 42 U.S.C. § 6973 ("Petition").

Since receiving your Petition, EPA Region 5 has worked on a number of fronts to address surface and groundwater contamination in Kewaunee. Senior leaders met with local citizens and environmental groups in Luxemburg, Wisconsin to discuss and understand their concerns about state and federal actions in Kewaunee County. In response to citizen concerns, Region 5 has conducted permit reviews and inspections, and we have brought enforcement actions where violations were found. Further, EPA has worked with state and local agencies to address the underlying issues and put in place measures to ensure access to drinking water supplies. Among other actions, Region 5 has:

- Inspected a total of 13 medium Animal Feeding Operations and large Concentrated Animal Feeding Operations (CAFOs) in Kewaunee and performed detailed reviews of nutrient management plan (NMP) for six Kewaunee CAFOs. These inspections and reviews have resulted in three administrative enforcement actions for permit violations

such as improper manure applications, the failure to sample the nutrient content of manure, and faulty recordkeeping;

- Identified several areas for improvement of NMP compliance, based on common themes that emerged during the NMP reviews. The Region continues to engage with Wisconsin Department of Natural Resources (WDNR) on programmatic improvements;
- Coordinated with WDNR on its ability to provide emergency supplies of drinking water where drinking water wells become contaminated. Subsequently, WDNR created a new program to provide emergency water supplies to homeowners whose wells become contaminated by cow manure;
- Assisted with WDNR's enforcement response to an October 2016 well contamination event from improper manure spreading. WDNR's Notice of Discharge prohibited the farmer from spreading in the area that resulted in well contamination, and required the farmer to work with Kewaunee County Land and Water Conservation staff prior to any manure spreading in 2017; and,
- Participated in a technical advisory committee related to proposed amendments to WDNR manure spreading rules (Wis. Admin. Code Ch. NR 151) to better protect groundwater.

WDNR, with EPA involvement where appropriate, has also taken several important steps to address groundwater contamination in Kewaunee. Most recently, WDNR has announced that it is utilizing federal funding through the American Rescue Plan Act of 2021 to provide \$10 million to support the replacement, reconstruction, treatment, or abandonment of contaminated private wells. Along with the significant boost in funding, the new program removes many of the previous barriers that citizens faced to obtaining well compensation funding. For example, the new program: 1) removes the requirement that that a nitrate-contaminated well is only eligible for a grant if it is used as a water supply for livestock; 2) lowers the threshold requirement for nitrate-contaminated wells from 40 ppm to 10 ppm; and, 3) increases the family income limit for grant eligibility from \$65,000 to \$100,000.

WDNR has also taken several other actions to address groundwater concerns in Kewaunee. Among other actions, WDNR has:

- Formed a Groundwater Collaboration Workgroup, which produced a report with policy, funding, and technical recommendations that workgroup participants are implementing;
- Created a program to provide emergency supplies of water to citizens whose wells are contaminated by cow manure;
- Promulgated amendments to Wis. Admin. Code Ch. NR 151 that impose new manure spreading restrictions in vulnerable areas of northeastern Wisconsin. The amendments closely tracked the recommendations of the Groundwater Collaboration Workgroup final report;
- Responded to individual well-contamination events by working with homeowners to ensure a safe drinking water supply and by investigating and requiring improved management practices by those responsible for the contamination; and,
- Improved its audits of land applications of manure and provides annual training in March.

Kewaunee County, local citizen groups, and agricultural producers also play an important role in addressing groundwater threats. Kewaunee County restricts the application of solid and liquid manure during winter months, locally adopted the NR 151 spreading restrictions, as well as an ordinance regulating the use of manure irrigation. The Kewaunee County Land and Water Conservation Department staff also provide critical enforcement and compliance assistance functions. Citizen groups are collecting water quality information, reporting manure spills, and helped establish a water kiosk at a local school. Agricultural producers are sharing best management practices and have also created a program to provide water supplies and partially fund home water treatment systems.

Kewaunee's geology, vulnerable groundwater, numerous large dairy farms, and the high proportion of residents who rely on private wells for their drinking water present unique manure management challenges. The results of the 2015-2016 county-wide groundwater contamination study by Dr. Borchardt, Dr. Muldoon, and others have confirmed extent of the groundwater contamination problem in Kewaunee. The study found that at any time about thirty percent of the wells tested in Kewaunee are positive for total coliform, *E. coli*, or elevated levels of nitrates. While the study found pathogens from both humans and cows in the contaminated wells, some of the pathogens associated with cows are of particular concern to human health. Moreover, the study results reinforce the common understanding that areas with thin soils over fractured bedrock are vulnerable to groundwater contamination from land-applied manure.

EPA recognizes that groundwater contamination persists in Kewaunee despite the significant efforts described above. EPA is continuing to work with state and local authorities and the community to improve the situation, including assessing the need for additional actions. Thank you for your continued engagement on these important issues. If you have questions about the contents of this letter, please contact Christopher Grubb in the Office of Regional Counsel at grubb.christopher@epa.gov or (312) 886-7187.

Sincerely,

Ireland, Scott  Digitally signed by Ireland,
Scott
Date: 2022.12.21 11:55:07
-06'00'

D. Scott Ireland
Acting Director, Water Division

cc: James A. Zellmer, WDNR (James.Zellmer@wisconsin.gov)