



May 17, 2017

Acting Administrator Robert Kaplan
US Environmental Protection Agency, Region V
Ralph Metcalfe Federal building
77 West Jackson Blvd.
Chicago IL 60604-3590

Subject: Actions Related to Groundwater Concerns in Kewaunee County

Dear Mr. Kaplan *Bob!*

I wanted to provide you and your agency an outline and summary of the actions our department and state has taken to address the concerns raised in a Safe Drinking Water Act petition to the US Environmental Protection Agency (EPA) related to groundwater and private drinking water well contamination in Kewaunee County Wisconsin. I would note that these concerns are based on areas that are sensitive to groundwater areas due to karst bedrock geology overlain by shallow soils, which occurs in other areas of the state as well. Consequently, while we have focused many of our efforts on Kewaunee County, most of the solutions discussed here are applicable to other areas of the state where this occurs.

Background – Starting in the fall of 2014, the department, in conjunction with EPA staff, held a series of stakeholder meetings to better determine the nature of the issue and develop a grassroots approach. This resulted in the formation of several workgroups consisting of states local and federal agency staff, agricultural producers, Kewaunee County citizens and the petitioning groups. These workgroups met multiple times through the summer and fall of 2015 and winter of 2016 and a final report of their recommendations was issued in June, 2016. These recommendations included steps to be considered not only by our agency, but also local government, EPA, agricultural producer and citizens.

Research – In order to derive scientifically-based solutions and policies, the department also commissioned a two-year research study to determine the types, sources, and locations of the groundwater and well contaminants. In May of 2015 the department identified \$80,000 in initial funding and began to solicit interest from researchers. The study began in November of 2015 and was the **first**, and **most comprehensive** of its kind. It is being conducted by researchers independent of our two agencies including the US Department of Agriculture's Agriculture Research Service, the University of Wisconsin – Oshkosh, the US Geological Survey and the Kewaunee County Land Conservation Department. Final results of this research are currently being analyzed and indicate both agriculture and human sources of contaminants.

Workgroup Recommendations – The following are the recommendations from the workgroups that are applicable to our department and the status of addressing them:

Short-Term Solutions Workgroup

- Provide emergency drinking water to well owners with contaminated wells – The department worked with our legal staff to clarify authorities that had been established in a revision of NR 738, Wis. Admin. Code in November, 2013. Providing emergency drinking water involves multiple programs that worked together to develop a protocol to provide emergency drinking water to well owners whose wells are contaminated by fecal bacteria from livestock. Communication tools were also developed and implemented. This program is statewide in scope, and also dovetails nicely with other emergency water programs in Kewaunee County provided by the Peninsula Pride Farmer-led Council and the Algoma School District.
- Investigate e-coli well tests and conduct microbial source tracking (MST) tests at no cost – The department performs these services, including providing MST tests at no cost.
- Streamline the creation of special areas of eligibility for the well compensation program – The department is currently investigating methods to streamline this process.
- Provide additional funding for e-coli testing and revise the well compensation program – These initiatives require legislative action either through the budget or a separate bill. The state budget is currently being considered by the state legislature and state representative for Kewaunee County, Representative Kitchens, has introduced a bill to revise the well compensation program.

Compliance Workgroup

- Conduct more manure land application audits – The department began a more formal audit program to determine the level of CAFO compliance with their nutrient management plans in the fall of 2015. We audited again in the spring of 2016 and held a workshop in Kewaunee County to review the results of the audits in August, 2016. We found good compliance in many areas and some improvements were necessary. We also trained local Kewaunee county land conservation staff in the audit protocols so they could conduct a similar program for livestock facilities that are not CAFOs. The land spreading audit program is now in the process of being implemented statewide.
- Add a DNR compliance staff position and/or fill the Kewaunee County warden position - The department determined that compliance needs would best be met by adding an environmental compliance staff position in the regional area. This position was filled in early 2016.
- Provide additional CAFO staff to enable additional facility inspections and review of nutrient management plans and reports – The department reallocated four positions from other program areas to enhance the CAFO permit program.
- Implement more stringent review of CAFO emergency land spreading variances – The department revised its guidance to staff in this area to clarify and tighten up standards.
- Require all land applicators to have spreading restriction maps and spreading instructions – This is being implemented as part of our land spreading audit program.
- Focus on proper well-abandonment – This has always been a focus of the department as improperly abandoned wells are a significant conduit of contaminants in groundwater.
- Evaluate and review enforcement procedures – This is an effort that our CAFO staff and management are addressing jointly with EPA staff.
- Develop guidance to define “substantial compliance” for CAFO permit reissuance – Currently in progress.
- Develop a communication plan on regulations and potential liabilities for landowners who rent their land – A policy that is currently under consideration.
- Improve review and approval process for non-agricultural waste land storage and land spreading – Currently in progress.
- Develop a communication plan for public regarding compliance and enforcement activities – Currently under consideration.

Best Management Practices Workgroup

- The recommendations from this workgroup were largely technical practices designed to reduce the risk of groundwater contamination from agricultural sources in these sensitive karst areas. These recommendations are being implemented by many local producers in a voluntary fashion – especially through the efforts of the Peninsula Pride Producer group. However, the department is proceeding to address these recommendations by revising its administrative code, NR151, which establishes performance standards for nonpoint pollution.

NR 151 - The department met with a technical advisory group (TAC) on this rule six times through the fall of 2016 and early 2017. We started the TAC discussions with the recommendations from the Kewaunee County Best Management Practices work group and are currently engaged in writing the draft rule language based on the feedback from the TAC. The basis for this rule revision is to establish standards targeted at areas of karst geology with shallow soils. Public hearings on the rule will be conducted this summer with a final draft to be submitted to our Natural Resources Board in December of 2017 and submittal to our legislature for approval in early 2018. Please note that a typical rule revision process takes from 3 to 5 years to complete, and we are on track to complete this revision in 18 months.

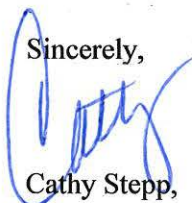
Innovative energy and water quality approaches – Governor Walker has initiated an innovative approach designed to address these issues (and more). The governor directed the state Public Service Commission, the Department of Agriculture, Trade and Consumer Protection and our Department to work together to establish a program that would couple a regional manure digester to produce renewable energy, with a water treatment system and improved manure and nutrient management. This has resulted in a Request for Proposal (RFP) for this project that envisions submittals by consortiums of private sector entities to implement this approach. The RFP was issued in January 2017, proposals are due by July 3, 2017 and awards anticipated in August, 2017. A copy of the RFP is attached.

Enforcement – While there is always room for improvement, the department believes that much of the criticism of its compliance and enforcement approach is unwarranted. Our approach is always to ensure that water quality standards are met in the most efficient and effective manner possible, and to follow a stepped enforcement is an appropriate process. For example, a small manure spill that is reported properly and cleaned up by the producer without any environmental impact warrants a measured response in relation to a large spill that pollutes a stream and there are attempts by the producer to cover it up. A current example of a situation in which the department took action is a farm in the karst area that spread on a field with known conduits to groundwater, contaminated an adjacent drinking water well and sickened several family members in the home. This was a medium-sized livestock operation that did not have a CAFO permit at the time. As part of our enforcement effort, we are requiring this farm to obtain a CAFO permit with all the manure storage, nutrient management, reporting and compliance liability requirements associated with it.

Another example of an enforcement action is the incident in October 2016, when a farmer spread manure on a field with shallow soils. The next day the area received 1 inch of rain, and the adjacent homeowner experienced brown water coming from her tap that smelled like manure. Upon investigation the department found that this farmer had a small 60 cow dairy and that requiring a permit would have put him out of business. The department inspected his farm and found that his production area already met standards that would have been required of a CAFO. Since the problem was his land spreading practices, the department issued the farmer a Notice of Discharge that required his land spreading practices to conform to the same standards as if he did, in fact, have a CAFO permit. This includes such requirements as submitting a nutrient management plan to the department for approval, identifying and avoiding karst features and direct conduits to groundwater in fields where he spreads manure, and abiding by setback restrictions. In addition, the department assisted the well owner in replacing her well through our well compensation program.

I hope this gives you a better idea of the numerous actions the Department of Natural Resources has and is taking to address the groundwater quality concerns not only in Kewaunee County, but across the state. Thank you and your staff for working with us through this effort to reach our mutual goal that all Wisconsin citizens have access to clean and safe drinking water.

Sincerely,



Cathy Stepp,

Secretary