



November 19, 2019

Daniel Guild
Rhineland City Administrator
135 S Stevens Street
Rhineland WI 54501

Subject: Rhineland PFAS Information and Results for City's Municipal Wells

Dear City Administrator Guild:

The Wisconsin Department of Natural Resources (the "department") appreciates actions taken to date and those actions planned by Rhineland Water and Wastewater utility (Rhineland) relating to *PFAS*^{*}, as described in your November 5, 2019 Notice to Water Utility Customers. As you know, the presence of PFAS in drinking water and other environmental media is a growing concern nationally and in the State of Wisconsin.

As we all learn more about PFAS and how it moves through the environment, we want to make sure that all of us are providing clear and the most accurate information to the public. The reason for this letter is to highlight language from your November Notice that may not be consistent with our drinking and groundwater experts' understanding of the PFAS situation in Rhineland and its impacts on your municipal wells.

Specifically, your Notice read:

"I am happy to report to you that we have no repeated detections of the previous PFAS chemicals first sampled in May 2019. This has raised several questions about the both the accuracy and veracity of the original sample which the detect was previously discovered. Remember these detections were incredibly small, in the range of trillioneths, making sample contamination a theoretical possibility".

As you'll recall, the City first detected PFAS in 2013 during monitoring required by EPA's Unregulated Contaminant Monitoring Rule (UCMR 3). PFAS discovered in Well #7 in 2013 was again confirmed to be present in 2019. The laboratory method used, EPA Method 537, was developed with particular attention to accuracy and precision, went through multi-lab validation, and was demonstrated during UCMR 3 to be a robust and reliable method. The use of field and trip blanks are included to determine sample contamination and ensure the integrity of the results. Northern Lake Service was one of the laboratories approved by EPA to analyze PFAS under the UCMR3 and continues to use this method to analyze drinking water samples for PFAS. Therefore, the department has no reason to question the accuracy of these previous PFAS sampling results, the laboratory or the test methods upon which they were based.

The downward trend in PFAS concentrations found in Well #7 is more likely due to inactivity – that is, the lack of pumping the well may have resulted in not drawing contaminated groundwater into the well's zone of influence. It is likely that under normal use (if it were put back in service), the concentrations of PFAS in well #7 would again increase. The department requests well #7 not be returned to service without first consulting the WI DNR Drinking Water Field Engineer for Rhineland, Aryn Webster (715-365-8846).

As you know, there is a drinking water advisory issued by the US EPA for *PFOA* and *PFOS** combined of 70 parts per trillion (ppt), and the Wisconsin Department of Health Services (DHS) has recommended to the department a health-based groundwater standard of 20 ppt for those same compounds. Additionally, PFOA and PFOS are not the only PFAS substances for which there are recognized health concerns. Other states have set drinking water or groundwater standards or guidance values for other PFAS, including PFHxS* which is found in stain-resistant fabrics, fire-fighting foams, food packaging, and as a surfactant in industrial processes. Results from Well 8 indicate that the concentration of PFHxS* is increasing. At this time, DHS is working on developing recommended groundwater standards for up to 20 other PFAS. Because of the potential health risk from other PFAS, continued monitoring is advised when other PFAS are detected in water, even if levels of PFOA and PFOS are below the recommended groundwater standards of 20 ng/L.

In the letter dated July 11, 2019 the department outlined additional actions that could be taken including notifying the public of the ongoing sample results. The department recommends that Rhinelander accomplish this effort by posting all PFAS results on the city website as soon as reasonably practicable.

We look forward to continuing to work with Rhinelander to address this issue, inform your customers and evaluate solutions to this challenge. We appreciate your cooperation in maintaining and providing a safe water supply.

Sincerely,



Steven B. Elmore
Program Director, Bureau of Drinking Water and Groundwater
Wisconsin Department of Natural Resources
Phone: (608) 264-9246

cc: Mayor Christopher Frederickson – City of Rhinelander
Linda Conlon – Oneida County Health
James Yach – WI Dept. of Natural Resources

*PFAS = *Per and Polyfluoroalkyl Substances*

*PFOA = *Perfluorooctanoic acid*

*PFOS = *Perfluorooctanesulfonic acid*

*PFHxS – *Perfluorohexane sulfonic acid*