

Frequently asked questions about Wedgefield's water and the chlorine dioxide pilot project

Q: Is my water safe?

A: Yes. Although the county's test results from May indicated elevated levels of disinfection byproduct and low levels of chlorine, there is no immediate health risk or need for Wedgefield residents to change their daily routines or to find an alternate source of water. Federal drinking water standards are calculated so that a person would need to drink two liters of water that exceeds the standard every day for 70 years before having an increased chance of adverse health effects.

Residents with specific health-related questions should contact their physician or the Orange County Health Department.

Q: What do recent results indicate about Wedgefield's drinking water?

A: While the test results do not indicate any immediate health risk per the federal Safe Drinking Water Act, the test results do indicate that Pluris needs to make changes in its operations to address elevated levels of disinfection byproducts, specifically Total Trihalomethanes (TTHM), Haloacetic Acids (HAA5s).

DEP is working with Pluris to ensure the timely implementation of all necessary corrective actions.

Q: How is my drinking water monitored?

A: Under federal regulations, all public water systems must test drinking water for approximately 100 different substances on a regular basis to ensure drinking water standards are met. These substances include disinfection byproducts such as TTHM and HAA5s, both of which were recently tested for at Wedgefield.

Federal standards establish Maximum Contaminant Levels (MCLs) for each substance. These levels are established by the U.S. Environmental Protection Agency (EPA) to protect public health and are calculated based on a lifetime of exposure.

Q: Who regulates Pluris-Wedgefield's drinking water?

A: Pluris-Wedgefield's water quality is regulated by the Florida Department of Environmental Protection (DEP). EPA establishes federal drinking water standards to protect public health, and EPA grants authority to DEP to implement the federal Safe Drinking Water Act. These regulations set limits for certain substances in drinking water and outline when and how providers must test drinking water.

Q: What is being done to address elevated levels of disinfection byproducts?

A: While Pluris' levels of disinfection byproducts do not violate federal guidelines, the levels are high enough so that Pluris must sample quarterly for disinfection byproducts. DEP is closely

monitoring the more frequent sampling to ensure compliance. DEP will continue to make these results available to the community.

DEP is working with Pluris to identify operational improvements to reduce levels of disinfection byproducts as quickly as possible. DEP is experienced with working with water providers to address the challenge of balancing the flow of water with the proper application of chlorine while minimizing disinfection byproducts.

Q: What about bacteria in the water?

A: Total coliform is not a threat to human health, but can be an indicator of the potential presence of E. coli, which is dangerous to human health. Total coliform bacteria were detected only in samples collected inside homes in April by Orange County. Coliform bacteria are not uncommon in the home around sinks and faucets. Water tests at the water distribution system have shown no coliform bacteria present.

Q: Will Pluris be held accountable to meet federal water quality standards?

A: Yes, Pluris is legally required to meet state and federal drinking water standards. Whenever sampling or other evaluations verify compliance issues, DEP holds utilities accountable and works with them to identify and implement corrective actions as quickly as possible to protect water resources and ensure a safe water supply.

Q: Why does Pluris flush the water lines?

A: Flushing water lines is a key part of distribution system maintenance and is an industry-wide practice used to maintain water quality. This can be safely performed without impacts to daily use.

Q: How can I learn more about my drinking water?

A: DEP staff is available to answer questions about drinking water regulations. Contact Nathan Hess (407.897.4140 or Nathan.hess@dep.state.fl.us) or Dave Herbster (407-897-2944 or dave.herbster@dep.state.fl.us).

January 11, 2017 update – FAQ's about the chlorine dioxide pilot project

Frequently asked questions about the chlorine dioxide pilot project

Q: What is chlorine dioxide?

A: Chlorine dioxide is an EPA registered chemical compound used to remove impurities in water. By removing these impurities, it limits the production of unwanted byproducts such as trihalomethanes.

Q: Did DEP approve Pluris to use chlorine dioxide as a disinfectant at the water plant in Wedgfield?

A: DEP approved Pluris to conduct a pilot project using chlorine dioxide in an effort to reduce the production of trihalomethanes in Wedgfield's water. The project is expected to start around January 12, 2016 and continue for three months.

Q: What is a pilot study?

A: A pilot study evaluates proven technology to determine its effectiveness in a specific application. In this case, chlorine dioxide is already proven elsewhere in other applications. The Pluris pilot study will determine whether chlorine dioxide is an effective solution to the particular challenges posed by Wedgfield's water.

Q: Who will conduct the pilot study at Pluris?

A: The product manufacturer and a licensed professional engineer will be onsite to direct Pluris staff for the duration of the pilot study to ensure that the product is properly prepared and applied. The manufacturer, Twin Oxide (<http://www.twinoxide.us/>), has experience conducting similar projects in the U.S., Europe and Australia.

Q: Is Wedgfield the first to try chlorine dioxide?

A: No, chlorine dioxide has been used for decades to treat water. Today, chlorine dioxide is commonly used prior to chlorination of drinking water to destroy natural water impurities that would otherwise produce [trihalomethanes](#) on exposure to free chlorine. In Central Florida, chlorine dioxide is being tried in another pilot project as a primary disinfectant in a public water supply in Volusia County (Magnolia Village). The Magnolia Village project is a three-month pilot begun October 26, 2016.

Q: What are the regulations for chlorine dioxide as a disinfectant?

A: Same stringent regulations as with all methods of disinfection.