GenX Frequently Asked Questions Regarding Groundwater / Private Well Sampling

For frequently asked questions about the river testing, please go to: https://deg.nc.gov/news/hot-topics/genx-investigation.

What is GenX?

GenX is a trade name for a man-made and unregulated chemical used in manufacturing nonstick coatings and for other purposes. Chemours' facility in Fayetteville began producing GenX commercially in 2009 as a replacement for PFOA. The same chemical is also produced as a byproduct during other manufacturing processes and it may have been present in the environment for many years before being produced commercially as GenX.

How are drinking water standards developed?

Like other states nationwide, North Carolina has adopted and implemented federal drinking water standards established by the EPA. The standards take into account several factors, including the health benefits, efficiency and cost of removing waste from a drinking water system.

GenX has been described as an "emerging contaminant" or compound. What does that mean? Under the Unregulated Contaminant Monitoring Rule, the EPA gathers data about select unregulated contaminants to determine how often they appear in drinking water and at what levels. The EPA uses that data along with relevant health effect studies to determine if regulation is necessary, and if so, at what levels. For information on the Unregulated Contaminant Monitoring Rule, please visit: https://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule

How did the state learn that GenX is in the Cape Fear River?

The EPA and Detlef Knappe, professor of Civil, Construction and Environmental Engineering at N.C State University, conducted a study that identified the presence of GenX in the Cape Fear River. The report was produced in conjunction with EPA and reflects the importance of emerging technologies being used to detect unregulated contaminants. It is not unusual for unregulated contaminants to come to light as technology gets better at detecting them.

Where are private well samples being collected?

DEQ is sampling groundwater wells at the Chemours facility to determine if additional testing in the surrounding area is warranted. DEQ officials began the week of July 31 conducting sampling of 14 groundwater wells that are at the Chemours facility and not used for public purposes. The results of these tests will help the state determine whether additional testing is warranted at private drinking water wells near the facility.

Thirteen of 14 industrial wells at the company's Fayetteville Works facility had detections of GenX in violation of state groundwater standards. The wells tested are used for environmental monitoring at the facility and are not a source of drinking water.

Based on those test results, DEQ and DHHS notified local officials and initiated plans to start testing the private wells of residents nearest the facility Sept. 15. Preliminary results continue to come in, but when GenX is detected above the state's provisional health goal, DEQ has directed Chemours to provide those well owners with bottled water.

In mid-October, DEQ directed Chemours to expand its sampling plan. It is collecting samples from private wells located one mile from the property boundary in all directions. DEQ will continue to direct Chemours to expand its sampling until the edge of the contamination plume is found.

Why are you testing private water wells near the Chemours Fayetteville Works facility? DEQ and Chemours collected drinking water well samples as a follow-up to contamination found in the groundwater on the Chemours' property. Samples were collected to determine if the contamination on the Chemours' property has traveled to nearby drinking water wells.

Why not test all private water wells in the area?

DEQ decided to sample wells closest to the facility as part of a phased approach to sampling. It is sampling to determine the edge of the contamination plume. Once it has results from this round of sampling, it will determine if further sampling is needed. Chemours collected samples from drinking water wells within a mile of the facility.

What are you testing for?

DEQ's sampling plan tests for GenX, PFOA and PFOS, which were detected in the preliminary test results from the industrial wells at Chemours' facility. Chemours is only analyzing for GenX.

What are you doing to notify well owners of the concentration levels in their drinking well water?

As DEQ receives results from both its and Chemours' sampling, it is notifying well owners whose wells show concentrations of GenX above the state's provisional health goal and providing guidance on how to use their water. DEQ staff began calling well owners the week of Sept. 25 to provide those results and answer questions. It has also had two community information sessions to address any concerns.

Why is Chemours providing bottled water?

After preliminary results from private water well sampling showed concentrations of GenX above the state's provisional health goal, DEQ directed Chemours to provide bottled water to those residents whose wells tested above the health goal. The company is also providing bottled water to residents who live one mile from the facility. Residents living outside of the one-mile area should contact Chemours to have their well sampled and see if they are eligible for bottled water.

Can I use my private well water to wash clothes or dishes? What about bathing?

You can continue to use your well water for bathing, washing dishes and laundry. Use bottled water to rinse food from your garden before eating. Chemours is providing you with bottled water.

Should I drink my private well water if I've been notified that it had concentrations of GenX above the state's provisional health goal?

We recommend that you do not use your well water for drinking, cooking or preparing baby formula.

What is the long-term solution to fix this, and how long will it take?

DEQ is evaluating long-term solutions for the Chemours facility. Currently, possible solutions include: drilling deeper wells, using a filtration system to remove the contamination or connecting residences to municipal water lines. Before a comprehensive solution can be determined and implemented, the extent of the plume must be found. However, Chemours will continue to provide bottled water until a long-term solution is determined.