ENVIRONMENT NORTH CAROLINA

GenX and Emerging Contaminants

WHAT'S IN OUR WATER?

What is GenX?

GenX is a chemical utilized in the production of nonstick coatings. It belongs to the group of chemicals –called perfluoroalkyls and polyfluoroalkyls (PFOs and PFOAs) –It can be found in nonstick cookware, stain-resistant carpets and foam used by firefighters (1).

The exact health risks of exposure to GenX remain uncertain, However, testing on laboratory animals has shown the substance to cause thyroid problems, increased instances of liver, pancreatic, testicular, and uterine cancers, and life-threatening pregnancy complications (2, 14).

GenX is an emerging contaminant, meaning it is currently unregulated under the Clean Water Act, and the EPA has not released studies to determine safe levels for human consumption. Therefore, there are no federally enforceable standards (2).

A growing crisis

How did this happen?

Headlines about GenX and the company Chemours, a subsidiary of Dupont, have been hitting North Carolina papers over the past year. On June 14, 2017, the North Carolina Department of Environmental Quality (DEQ) began investigating reports of GenX in the Cape Fear River. They promptly began sampling the water sources near the Chemours Plant, which manufactures the chemical compound and began investigating the impact on water-users downstream (3).

In August of 2017, Gov. Roy Cooper requested \$2.6 million in additional funding from the state legislature for DEQ and the Department of Health and Human Services (DHHS) to monitor GenX contamination and study its health effects (4). The North Carolina General Assembly (NCGA) responded by passing a funding package of just \$435,000 that went mostly to the University of North Carolina Wilmington (UNCW) and the Cape Fear Utility Authority, not DHHS or DEQ. The measure was far short of the \$2.6 million Gov. Cooper requested (5).

In November of 2017, after Chemours failed to report a spill, DEQ moved to revoke the company's discharge permit (6). In February, DEQ issued its third notice to Chemours, stating that the company had not taken measures to limit air pollution that was contributing to GenX groundwater contamination (4).

Instead of getting a handle on this critical issue, the General Assembly has turned it into a political football.

Key Points

- Over the past several years, long-standing safeguards that were in place to protect our clean water have been dismantled for the benefit of corporate polluters, and that has put the people of North Carolina and our drinking water at risk. North Carolina's families deserve better. We deserve to know that our drinking water is safe.
- Since 2013, because of budget cuts, DEQ has been forced to reduce staffing in the Division of Water Resources by 41 percent (16). The department faces a two-year backlog in renewals of industrial discharge permits. Approximately 40 percent of permits have expired. DEQ is now so overstretched they do not have the capacity to adequately perform their federally mandated job of safeguarding our waters (5). The General Assembly has, in effect, taken our clean air and water cops off the beat.
- In February of 2017, DuPont and Chemours agreed to pay \$670.7 million to settle almost 3,550 lawsuits in Ohio and West Virginia over exposure to PFOAs, in what appears to be a similar situation (7).
- Chemours is currently providing bottled water for any residents whose wells have tested above a provisional health goal set by DHHS, or who live within a mile of the plant. The DEQ has recommended drinking and cooking with bottled water as a precautionary measure as the health effects and safe levels have not been fully studied and no guidance has been published by the EPA (2).
- Pollution is not limited to the immediate vicinity of the plant.
 Chemical contaminants have now been found in water throughout the state. In at least one instance, the chemical contamination was 20 times higher than what the EPA recommends. (13)
- Our troops are also at risk, as PFOs and PFOAs are particularly prevalent around military bases, presumably because of firefighting exercises at the bases (8).





Federal Issues

- The new EPA budget calls for the continued study of PFAS, chemicals including GenX, but slashes the agency's overall research and development funding by nearly half. This sends a mixed message on the administration's priorities and could slow down the progress on developing regulations (10).
- In December 2017, North Carolina's two GOP senators came out in opposition to the administration's nominee to head EPA's chemical safety office, industry consultant Michael Dourson, in part because of the GenX crisis (14).
- Emails released under the Freedom of Information Act indicate that a Department of Health and Human Services report on the nationwide PFAS water-contamination crisis was suppressed by EPA and the White House when a White House official voiced concern that the release could be a "potential public relations nightmare." The report was being prepared for release in January but has still not been made public and the agency producing it says it has no timeline for doing so (8).
- In May 2017, EPA Administrator Scott Pruitt held a Leadership Summit on PFAS where he announced a Four-Step Action Plan. The summit included representatives from over 40 states, tribes, and territories; 20 federal agencies; Congressional staff; associations; industry groups; and non-governmental organizations - but the summit has been criticized for barring some news outlets, Congressional staff, and affected communities from attending, and for including opening presentations from the American Chemistry Council (15)
- Under the Safe Drinking Water Act, the EPA is responsible for the selection of which chemicals will be selected for regulation. When making this determination the EPA must consider the health effects, the likelihood of exposure to drinking water, and whether a meaningful reduction can be achieved (11).
- At the moment only a health advisory has been put in place for two subcategories of PFAS chemicals. No advisory is in place for GenX and many other PFAS chemicals. EPA must be pressured to expeditiously conduct studies on the chemicals and provide health advisories to inform state and local regulations (12).
- EPA has failed to regulated even one new contaminant under the Safe Drinking Water Act in the last 20 years. The EPA's 2016 drinking water advisory is not binding, but rather provides guidance to water managers at the state and local level (14).





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