



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

THE ADMINISTRATOR

February 14, 2019

The Honorable Thom Tillis
U.S. Senator
185 Dirksen Senate Office Building
Washington, DC 20510

Dear Senator Tillis,

Thank you for your inquiry regarding the EPA's actions to address per- and polyfluoroalkyl substances (PFAS). The EPA recognizes the challenges states, tribes, and communities are facing and is committed to working side-by-side with our federal, state, local, and tribal partners to address these concerns. The EPA is committed to continuing to work with you and other members of Congress on these matters. I appreciate your leadership introducing legislation last Congress and your planned legislation for this Congress. The EPA stands ready to assist you and your staff with any technical assistance or briefings you may require for your work. I appreciate the opportunity to respond to your letter and each of your questions.

PFAS chemical classes are found in a wide array of consumer and industrial products. PFAS manufacturing and processing facilities, facilities using PFAS in production of other products, airports, and military installations are some of the contributors of PFAS releases into the air, soil, and water. Due to their widespread use and persistence in the environment, most people in the United States have consumed PFAS. For certain PFAS, there is evidence that continued consumption above specific levels may lead to adverse health effects. To provide Americans, including the most sensitive populations, with a margin of protection from a lifetime of exposure to PFOA and PFOS in drinking water, the EPA has established the health advisory level at 70 parts per trillion. The EPA has worked with states and public water systems (PWSs) to characterize the occurrence of six different PFAS compounds in the nation's drinking water. From 2013-2015, drinking water samples were collected and analyzed for six PFAS compounds in nearly 5,000 PWSs across the nation, accounting for approximately 80 percent of the U.S. population served by PWSs (approximately 250 million people). The EPA found that 1.3 percent of the participating PWSs had at least one sample that measured PFOA, PFOS, or a combined value for PFOA and PFOS at concentrations greater than 70 ppt. The EPA found that 4 percent of PWSs reported results in which one or more of the six PFAS (PFOA, PFOS, perfluorononanoic acid (PFNA), perfluorohexane sulfonic acid (PFHxS), (perfluoroheptanoic acid) PFHpA, or perfluorobutane sulfonate (PFBS)) was measured at or above the minimum reporting limit (MRL) during one or more sampling events at one or more sampling locations.

We understand that your constituents are concerned and are seeking information on PFAS risks, how to prevent future PFAS releases and consumption, and how to identify and appropriately address releases that have already occurred. The EPA is working on all fronts to address these matters. The Agency's efforts, which are complemented by dedicated efforts by states, academia, and other federal government agencies, include:

- **Enforcement:** The Safe Drinking Water Act gives the EPA the authority to order action to prevent a potential imminent and substantial endangerment to the health of persons. That authority applies to any contaminant. The EPA also has enforcement authorities under other statutes such as the Clean Water Act, Clean Air Act, and Resource Conservation and Recovery Act, depending on the circumstances of the release and potential exposures. For example, the EPA has issued emergency orders under the Safe Drinking Water Act to require Dupont/Chemours as well as various Department of Defense installations to provide treatment or alternate water supplies for public and private water systems in areas where drinking water supplies have been contaminated with PFOA and PFOS. The EPA will also continue to provide assistance to states when requested in support of their actions to address PFAS.
- **Support for State Agencies:** The EPA assists states with their actions relating to PFAS. As you may know, at the request of the North Carolina Department of Environmental Quality in 2017 and 2018, the EPA provided significant laboratory assistance in support of the State of North Carolina's investigation of GenX in the Cape Fear River which resulted in a state enforcement action and settlement at the end of last year. Currently, the EPA is coordinating with the State of Michigan by overseeing a federal Comprehensive Environmental Response Compensation and Liability Act (CERCLA) removal action focused on hazardous substances at the Wolverine World Wide Tannery and House Street Disposal Site. The EPA is also providing technical assistance to the Michigan Department of Environmental Quality, including sampling residential wells in December of 2017, while it responds to PFAS contamination of residential wells from the former tannery, shoe factory, and disposal locations in the Rockford, Michigan area. The EPA also added the Hoosick Falls, New York, site to the National Priorities List under CERCLA in July 2017 which also includes response to PFAS releases.
- **Toxic Substances Control Act Authority:** The EPA has an ongoing rulemaking under the Toxic Substances Control Act (TSCA) for Long-Chain Perfluoroalkyl Carboxylate and Perfluoroalkyl Sulfonate Chemical Substances that would require manufacturers (including importers) of PFOA and PFOA-related chemicals, including as part of articles, and processors of these chemicals to notify the EPA at least 90 days before starting or resuming new uses of these chemicals in any products for EPA review and approval. EPA is continuing to review hundreds of new chemical substitutes for PFOA, PFOS, and other long-chain PFAS under the EPA's New Chemicals Program. Notably, in 2009, the

EPA issued DuPont/Chemours a TSCA order requiring 99% capture of GenX chemicals at the DuPont/Chemours facilities in North Carolina, West Virginia, and New Jersey. The EPA continues to enforce that order for compliance.

- **Clean Up Recommendations:** The EPA is currently developing groundwater cleanup recommendations for PFOA and PFOS at contaminated sites. When issued, the guidance will provide recommendations for sites being evaluated and remediated under the EPA's CERCLA federal cleanup program or at federal-led Resource Conservation and Recovery Act corrective action sites.
- **Continuing Scientific Research:** Our efforts include working to move research forward on PFAS to better understand their health impacts, options for treatment, and how information on better known PFAS (such as PFOA and PFOS) can be applied to inform our actions for other PFAS. In late 2018, the EPA released draft toxicity assessments for GenX chemicals and perfluorobutane sulfonic acid (PFBS) for public input. In December 2018, the EPA initiated toxicity assessments for an additional five PFAS chemicals using the Agency's IRIS program (specifically for, Perfluorononanoic Acid (PFNA), Perfluorobutanoic Acid (PFBA), Perfluorohexanoic Acid (PFHxA), Perfluorohexane Sulfonate (PFHxS), Perfluorodecanoic Acid (PFDA)). When finalized, these toxicity assessments may be used by federal partners, states, tribes, and local communities to better understand the potential risk associated with human exposures to these PFAS chemicals.

Since 2017, EPA has been using state of the art in vitro high throughput toxicity testing (HTT) and high throughput toxicokinetic (HTTK) assays to inform hazard characterization and promote prioritization of chemicals for further testing and assessment. The EPA updates the Health and Environmental Research Online (HERO) database with the latest scientific literature on the toxicity of PFAS to allow all stakeholders, including state partners, access to the latest information.

The EPA is developing new reliable sampling and laboratory analytical methods to detect, identify and quantify relevant PFAS in different environmental media (including water, air, and soil) and in other kinds of samples (e.g. blood, urine) as needed. We are building predictive models to enable PFAS exposure assessment at multiple scales, to better understand where and how PFAS are potentially coming into contact with people and ecosystems. This information will enable decision makers to prioritize the PFAS exposures which are of greatest relevance and impact to them, enabling them to prioritize their management actions and allocate their resources to achieve the maximum reduction in risk. We are evaluating different drinking water treatment technologies for removal of

PFAS from drinking water. This effort includes evaluation of performance and cost of treatment, consideration of differently sized systems, and analysis of potential unintended consequences. The data will be placed within a publicly accessible database and provide input into newly developed EPA cost models. Finally, we are evaluating the effectiveness and cost of existing treatment and remediation technologies relevant to different kinds of PFAS contaminated sites, in order to help site-managers make decisions about remediation approaches.

To help inform future actions, the EPA held a National Leadership Summit in Washington, D.C. in May 2018, and visited several states across the nation to hear directly from communities about PFAS issues in their areas. Following the Summit, the EPA hosted a series of visits during the summer of 2018 in communities directly impacted by PFAS to better understand ways the EPA can best support the work being done at the state, local, and tribal levels. The EPA interacted with more than 1,000 people during events held in New Hampshire, Pennsylvania, Colorado, North Carolina, Kansas, Michigan and with tribal representatives. Using information from the National Leadership Summit, community engagements, and public input submitted to the EPA's docket, the EPA plans to release a PFAS Action Plan today.

In the Action Plan, EPA will outline the Agency's approach to addressing the PFAS challenge including both the regulatory and nonregulatory approaches to most effectively address PFAS. Contrary to misinformation in the press, EPA is moving forward with the maximum contaminant level (MCL) process outlined in the Safe Drinking Water Act for PFOA and PFOS. Specifically, EPA will propose a Regulatory Determination for PFOA and PFOS which is the next regulatory step required in the Safe Drinking Water Act process for establishing a MCL. A Regulatory Determination is similar to an Advanced Notice of Public Rulemaking and is a formal decision on initiating a rulemaking process to develop a regulation for a specific contaminant or group of contaminants. After the EPA makes a determination to regulate a particular contaminant, the Agency proposes the National Primary Drinking Water Regulation. This process is expressly prescribed under the Safe Drinking Water Act to ensure scientific integrity and transparency for the regulation of contaminants in public water systems. A failure to complete all aspects of the process could create legal risks to the regulation. The EPA is also beginning the regulatory process to designate PFOA and PFOS as "hazardous substances" under CERCLA.

I trust that these activities answer your questions concerning the EPA's past and current approach to PFAS regulation and releases. The EPA would look forward to continuing to work

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with you to address any future or more specific questions involving areas in North Carolina. Should your office require further information concerning this letter, please contact Troy Lyons, Associate Administrator for the EPA's Office of Congressional and Intergovernmental Affairs at (202) 564-5200 or lyons.troy@epa.gov. I look forward to continuing to work with you on these matters.

Sincerely,

A handwritten signature in black ink, appearing to read "Andrew Wheeler", with a long horizontal flourish extending to the right.

Andrew Wheeler
Acting Administrator