

STOPPING PFAS POLLUTION AT ITS SOURCE

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WHY IT MATTERS

Per- and polyfluoroalkyl substances (PFAS) are a group of over 15,000 chemicals that can adversely impact human health and the environment.¹ They are commonly known as “forever chemicals” because they do not readily break down but instead build up in our bodies, soil, water, and wildlife, processes known as **bioaccumulation** and **biomagnification**.² PFAS, even at very low levels, can significantly increase human health risks, including cancers, impacts to the heart and the liver, developmental harm to infants and children, reduced immune function, and endocrine disruption including thyroid disease.^{3,4} The **U.S. Environmental Protection Agency (U.S. EPA)** has set the Maximum Contaminant Level Goal for two PFAS, PFOA and PFOS, in drinking water at Zero, stating that “there is no level of exposure to these contaminants without risk of health impacts, including certain cancers.”⁵

Virginians are exposed to PFAS most commonly through dietary and water ingestion and inhalation of dust and air particles. PFAS are also present in a wide range of consumer goods, and are frequently found in sewage sludge sometimes used as fertilizer for farms and forests (see *PFAS in Rural Communities*, page 29).

PFAS water pollution is a statewide problem in Virginia, having already been detected in 62 drinking water utilities,⁶ and is costly to Virginia’s economy and public health. Recent estimates show that Virginia’s public water systems will need to spend hundreds of millions of dollars to comply with federal PFAS drinking water standards.⁷ The **Virginia Department of Environmental Quality (DEQ)** maintains a public dashboard of current PFAS data, which indicates that over 65% of all surface water, sediment, and fish tissue samples contain PFAS.⁸ The prevalence of PFAS in Virginia’s waters and wildlife endanger human health and the environment.

CURRENT LANDSCAPE

EPA finalized enforceable drinking water standards for PFAS in 2024,⁹ though the current administration has proposed plans this spring to delay or rescind some of these standards.^{10,11} Meanwhile, DEQ is working to identify PFAS pollution impacting public drinking water supplies,^{12,13} but this study will not address the more than one million Virginia households that rely on private wells.¹⁴ Studies show that members of low-income communities and communities of color are more likely to live within five miles of a PFAS-contaminated site and that these communities may be disproportionately exposed to PFAS in drinking

water.¹⁵

The **Virginia Department of Health (VDH)** has issued fish consumption advisories for several species in the Chickahominy River¹⁶ and the Occoquan River¹⁷ watersheds, as fish tissue in these areas contain PFOS. These waters are listed as impaired in DEQ’s draft 2026 Water Quality Assessment Integrated Report,¹⁸ but fish consumption advisories or impairment designations have not been issued in other PFAS-impacted watersheds. Contamination of game and other wildlife remains unaddressed.

State law requires certain facilities in the Occoquan Reservoir watershed to test for and reduce the concentrations of PFAS in their wastewater to below the federal drinking water standards.¹⁹ In 2026, legislation passed that will require certain industrial users of publicly owned treatment works to monitor for PFAS,²⁰ and will establish PFAS testing and landowner notification requirements for sludge, as well as narrow limitations on the land application of PFAS-contaminated sludge.²¹

OPPORTUNITIES

The most cost-effective and efficient way to tackle PFAS pollution is at the sources, before it reaches our drinking water and the environment.

Federal law provides DEQ with the authority to act on PFAS pollution under multiple regulatory regimes, and EPA has released guidance about how to use these existing laws to require disclosure, monitoring, and control of industrial PFAS water pollution.^{22,23} Although DEQ has broad authority, its PFAS work to date has been limited to implementing directives established by Virginia law.

DEQ has existing authority under the **Clean Water Act (CWA)** to require disclosure, monitoring, pre-treatment, and control of PFAS in wastewater, landfill leachate discharges, and biosolids under the **Virginia Pollutant Discharge Elimination System (VPDES)** and **Virginia Pollution Abatement (VPA)** permit programs. Fully implementing this authority by including PFAS testing, limits, and disclosure in discharge permits will help DEQ generate data about PFAS discharges statewide and ensure polluters, not downstream and farming communities, pay for treatment costs.

Other states provide examples of pathways toward phasing out known PFAS ingredients in common consumer goods, including food packaging, cleaning products, and personal care items.²⁴ Reducing the production and sale of these chemicals will help limit human exposure and decrease the long-term

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environmental and financial costs associated with PFAS release and waste management.

Lastly, increased dedicated funding for DEQ to hire staff and develop more robust programs to address this issue, from its source to disposal, would improve the agency's ability to protect human health and the environment.

ENDNOTES

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11. Rescission of Regulatory Determinations and Removal of Related Provisions for Four PFAS Substances (PFHxS, PFNA, HFPO-DA (GenX), and the Mixture of These Three PFAS Plus PFBS). 91 Fed. Reg. 29413 (2026). <https://www.govinfo.gov/content/pkg/FR-2026-05-20/pdf/2026-10085.pdf>
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There is no safe level of PFAS. PFAS are associated with significant human health harms, including cancers, organ damage, and developmental harm to infants and children.

Controlling sources of PFAS is the best way to tackle PFAS pollution. Virginia should fully utilize its CWA authority to control industrial wastewater PFAS pollution and consider phasing out PFAS ingredients in common consumer goods.

Dedicated funding is needed to help DEQ better study, control, and disclose PFAS pollution.