



WHAT ARE PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)?

Perfluoroalkyl and Polyfluoroalkyl (PFAS) chemicals are manmade, are stable and persistent in the environment, bioaccumulative, toxic at low concentrations, and easily transferred to groundwater and other media. The chemicals perfluorooctanoic acid (PFOA) and perfluorooctanesulfonate (PFOS) became widely used in household products and industrial settings as early as the 1950s. PFOA and PFOS are sometimes referenced in a group of similar chemicals called PFAS.

Both PFOA and PFOS were historically used in firefighting foams due to their effectiveness at quickly extinguishing petroleum-based fires. Because they have a unique ability to repel oil, grease, water, and heat, they were also used in many common products that we use regularly. PFOA and PFOS have been used to make non-stick cookware, stain-resistant carpets and furniture, water-resistant clothing, heat-resistant paper/cardboard food packaging (like microwave popcorn and pizza boxes), and some personal care products.

The lingering presence of PFAS is now widespread and a national, and perhaps even global, issue. Maine is one of the first states to actively respond to the challenges presented to communities and businesses impacted by PFAS contamination. Federal agencies have yet to orchestrate a coordinated and comprehensive response plan. However, there are signals that they are beginning to move in that direction. In the meantime, Maine must continue to do everything it can to protect the health and livelihoods of its citizens from PFAS exposure and its effects.

PFAS RISKS

PFOA and PFOS are widespread and persistent in the environment, and health agencies are working to understand the health effects of low-level, long-term exposure. Studies suggest that these chemicals may affect cholesterol levels, thyroid function, birth weight, liver function, infant development, and the immune system.

PFAS chemicals can intersect with the environment through air, water, and soil. PFAS may enter soil through the application of residuals such as biosolids and industrial sludges. PFAS chemicals can also end up in a wastewater treatment plant's sludge from everyday household activities and industrial sources.

MAINE'S RESPONSE

In 2019, shortly after taking office, Governor Mills convened the Governor's Task Force to mobilize state agencies and other stakeholders to review the prevalence of PFAS in Maine and put forward a plan to address it. The Task Force Report can be found on the DEP [website](#).

In a recent letter to Maine's Congressional Delegation, Governor Mills requested that the Federal government provide dedicated funding to address the growing issue of PFAS both in Maine and across the country.

MAINE'S RESPONSE (CONTINUED)

The Maine Department of Environmental Protection (DEP) and Department of Agriculture, Conservation and Forestry (DACF), and Department of Health and Human Services' Center for Disease Control and Prevention (CDC) are working collaboratively to ensure a safe food supply in Maine, support our agricultural community, and protect public health through safe drinking water.

DEP is actively investigating PFAS contamination in private drinking water wells in Fairfield after DACF detected perfluorooctanesulfonic acid (PFOS) in an on-farm milk sample taken from an area dairy farm. That investigation has led to installing water filtration systems in homes, with more anticipated. The investigation is expanding into Benton, Unity Township, and Oakland.

DACF is working with impacted dairy farms to identify on-farm feed and/or water contamination sources, adjust crop management practices, depurate contaminated animals, and investigate animal depopulation and manure management options. Our on-farm consultation, testing, and analysis give the Department a first-hand understanding of the long-term challenges facing PFAS-contaminated farms and their struggles to remain viable.

CDC toxicologists have been instrumental in studying the agronomic pathways of PFAS contamination and have developed food action levels and modeled soil screening levels for certain types of crops (hay, corn, corn silage) to assist farmers in gauging whether they can continue to grow feed safely on their fields.

These activities have required intensive staff resources and strained budget capacities. We require immediate funding to begin taking the following actions:

- Ramp up efforts to protect citizens from exposure to unsafe levels of PFAS, including by addressing PFAS in wastewater treatment plant residuals, firefighting foam, private drinking water wells, or other sources.
- Provide funding to install and maintain water treatment systems to remove PFAS from impacted drinking water sources.
- Expand sampling and analysis of water, soil, milk, animal feed, and other media.
- Expand live and post-mortem sampling and analysis of livestock.
- Enhance capacity to address animal depopulation, composting, and waste management.
- Support PFAS-contaminated waste transport, treatment, and disposal.
- Support farm viability with appropriate and targeted financial assistance.
- Partner with the University of Maine and other research universities to expand PFAS research and PFAS-mitigation and remediation strategies specific to Maine's natural resource and climate conditions.
- Enhance capacity for coordination between the agencies, including efficient data management, and improve public information sharing.

These efforts will require substantial investment in departmental staff capabilities. Our agencies are currently hard at work responding to the emerging threat of PFAS. However, with an infusion of funds, which the State will ultimately seek to recover from PFAS manufacturers, Maine could more broadly and aggressively undertake these critically needed actions.

