

# EPA Road Map For Addressing PFAS Is Taking Shape

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The regulatory landscape for per- and polyfluoroalkyl substances (PFAS), man-made, forever chemicals found in the environment, currently consists of a patchwork of standards and regulations promulgated by individual states and proposed by the U.S. Environmental Protection Agency. That will change in 2024, when the first federal regulation to list PFAS chemicals as a hazardous substance becomes law.



One of the most anticipated federal environmental regulations in recent history is now just one step away from final enactment. The proposed rule designates several widely used man-made chemicals — perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS) and several other per- and polyfluoroalkyl substances (PFAS) — as hazardous substances under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). That designation, along with proposed national drinking water standards, will pave the way for enforcement actions.

PFOS and PFOA are among the most widely studied PFAS, the “forever chemicals” found in everything from carpets and nonstick cookware to firefighting foam. Known for their toxicity and ability to accumulate in the environment, PFAS break down very slowly over time and are shown to pose health concerns for humans and animals.

By designating these PFAS and their precursors as hazardous substances, the U.S. Environmental Protection Agency (EPA)

is signaling its intent to increase the frequency of enforcement actions requiring PFAS-contaminated site remediation under CERCLA.

Since its enactment in 1980, CERCLA has served as the regulatory driver behind the cleanup of hundreds of hazardous-waste sites and accidental releases of pollutants and contaminants into the environment. Also known as the Superfund program, CERCLA gives EPA the power to identify and assign liability to those parties responsible for this contamination to pay for the cleanup of the sites. It will now provide the foundation for federal regulatory programs governing PFAS as well.

## Replacing a Regulatory Patchwork

Until the federal government formally enacts final comprehensive regulations for managing PFAS in multimedia matrices, the regulatory landscape for these compounds remains a hodgepodge of standards and regulations that vary widely from state to state. The new listings will add yet

another layer of complexity to the regional, state and local policies already under EPA oversight through the Superfund, Resource Conservation and Recovery Act (RCRA) corrective actions, Underground Storage Tank, and Brownfield programs.

The lack of PFAS regulatory uniformity presents significant operational and compliance challenges to responsible parties, especially those that operate similar facilities across multiple states. For example, the Alaska Department of Environmental Conservation (DEC) published cleanup levels for PFOS and PFOA in 2016. In 2017, Vermont established a law that requires parties that contaminate groundwater to take responsibility for connecting those affected by the contamination to a municipal water supply.

### Enforcement Focused on Major PFAS Handlers

By establishing the CERCLA hazardous substance listing for PFAS, EPA intends to address many challenges.

EPA's action will result in enforceable cleanup standards impacting many industries. The cleanup efforts required to comply with these new standards will have trickle-down effects that intersect with other developing PFAS regulations, including the new drinking water maximum contaminant levels (MCLs), evolving EPA National Pollutant Discharge Elimination

System (NPDES) monitoring efforts and state-specific programs. Through public listening sessions and preliminary announcements, EPA has expressed its intent to grant some discretion regarding where and how those standards are enforced.

For example, the CERCLA listing provides a regulatory pathway for EPA to trace contamination found at drinking water and wastewater treatment plants back to its source. That will make it possible to focus enforcement actions on the upstream/upgradient handlers and releasers of these chemicals, rather than the downstream receivers of PFAS. In addition to enforcement leniency for public drinking water and water and wastewater treatment facilities, the approach is also expected to be used for municipal landfills, utilities, farms that receive biosolids from wastewater treatment plants, and other secondary, downstream receivers of PFAS.

Upstream PFAS handlers and releasers can expect to bear the financial brunt of the new legislation. As of June 2022, Environmental Working Group, a nonprofit group dedicated to environmental activism, found that nearly 3,000 sites in the U.S., including military installations, industrial manufacturing facilities and drinking water systems, were known to be contaminated by PFAS. Industries most likely to be impacted

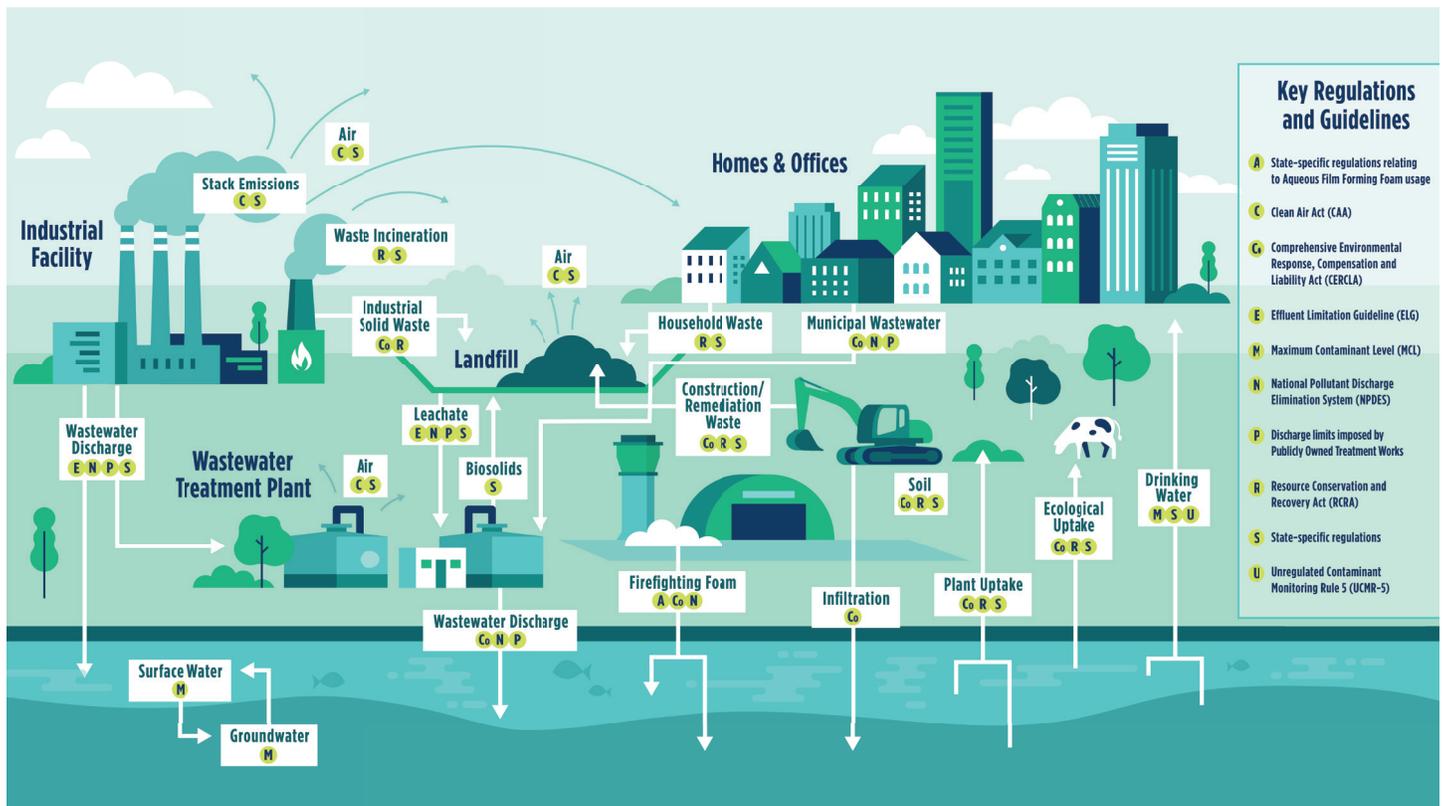


Figure 1: PFAS Regulatory Framework. The CERCLA listing adds another layer of complexity to the PFAS regulatory landscape, which includes a patchwork of regional, state and local policies already under EPA oversight.

include aviation, oil and gas, mining and defense, as well as others that rely on firefighting foams containing these chemicals. A variety of manufacturers also use PFAS to make their products more stable and waterproof.

These producers and manufacturers will potentially be required to evaluate the concentration of these substances throughout their properties and implement remediation programs as required by EPA under CERCLA.

## EPA's Proposed List of Hazardous Substances

EPA proposes listing the following PFAS or subsets of these substances, along with their salts and structural isomers, as hazardous substances. Also included are precursors to PFOA, PFOS and other forms of PFAS.

- Perfluorobutanesulfonic acid (PFBS)
- Perfluorohexanesulfonic acid (PFHxS)
- Perfluorononanoic acid (PFNA)
- Hexafluoropropylene oxide dimer acid (HFPO-DA), also known as GenX
- Perfluorobutanoic acid (PFBA)
- Perfluorohexanoic acid (PFHxA)
- Perfluorodecanoic acid (PFDA)

## Impact on Cleanup

Following a strategic road map that it has developed, EPA plans to address the risks of PFAS by increasing research, restricting their release and requiring their cleanup.

The CERCLA legislation will therefore establish reporting requirements for PFAS releases that exceed a defined threshold of 1 pound or more in a 24-hour period. Producers will be required to notify the National Response Center, impacted municipalities and other applicable agencies of these releases, within a specified time frame. EPA will then decide what, if any, intervention is required and identify the party or parties responsible for completing and financing the cleanup.

Some current and former Superfund sites may also be subject to the new monitoring and reporting requirements, given that PFAS were not previously included in most site investigations or considered when developing remedial objectives. Should PFAS contamination be suspected, EPA may require responsible parties to reopen closed sites and test for PFAS substances under the proposed regulations. Current Superfund sites may likewise be required to extend their closure time frame to address PFAS contamination.

## Managing Future Due Diligence and Liability

Looking forward, the final rule places greater importance on environmental due diligence. It will require the federal government to disclose the presence of PFAS on federally owned property when it is sold or transferred. While property owners in the private sector will not face the same regulatory hurdle with the current proposed rule, prospective property purchasers will have a vested interest in evaluating PFAS to predict future financial obligations for potential cleanup liabilities. EPA is expected to address liability in future rulemaking. Changes in how due diligence is conducted are also expected in the future.

The final CERCLA listing, in combination with proposed national drinking water standards, will fundamentally change PFAS management. Now is the time for manufacturers and other industrial operations with suspected PFAS contamination to begin monitoring operations and seeking ways to restrict PFAS use. The preparations begun today may help minimize liability tomorrow.

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