



November 7, 2022

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Ms. Michelle Schutz  
Office of Superfund Remediation and Technology Innovation (5202T)  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

**Re: Docket ID No. EPA-HQ-OLEM-2019-0341; Designation of Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) as CERCLA Hazardous Substances**

Dear Ms. Schutz:

The National Waste & Recycling Association (NWRA) and Solid Waste Association of North America (SWANA) are pleased to submit comments on the U.S. Environmental Protection Agency's (EPA's) proposal to designate perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). NWRA and SWANA represent companies, municipalities, and professionals in the solid waste industry. NWRA is a not-for-profit trade association representing private solid waste and recycling collection, processing, and management companies that operate in all fifty states. SWANA is a not-for-profit professional association in the solid waste management field with more than 10,000 members from both the private and public sectors across North America. Members of both organizations strive to deliver collection, composting, recycling, and disposal services that are protective of the environment in a safe, science-based, and technologically advanced manner.

NWRA and SWANA members are pleased that EPA has committed to numerous actions under the agency's PFAS Strategic Roadmap to safeguard public health, protect the environment, and hold accountable manufacturers and heavy users of these compounds. Our sector also supports EPA's focus on broadening and accelerating the cleanup of per- and polyfluoroalkyl substance (PFAS) contamination; nevertheless, we are concerned that designating PFOA and PFOS as CERCLA hazardous substances, without providing accompanying relief in recognition of the unique role served by the solid waste industry, would impede cleanup efforts and lead to substantial environmental cleanup liability, impose significant additional costs on essential public services and their customers, and have broad repercussions throughout the economy, without any measurable environmental benefit. We therefore request that EPA consider these comments in ensuring that the rulemaking adheres to the "polluter pays" principle of CERCLA.

## I. Modern Landfills are Effective Solutions to Manage Wastes Containing PFAS.

Modern landfills are essential public services<sup>1</sup> that are subject to extensive and evolving federal, state, and local environmental, health, and safety requirements, including the Resource Conservation and Recovery Act (RCRA), the Clean Air Act, and the Clean Water Act. Regulations established under Subtitle D of RCRA establish minimum federal criteria for the operation of municipal solid waste, industrial waste, and special waste landfills, including design criteria, location restrictions, financial assurance, strict environmental monitoring, corrective action protocols (if triggered), and closure and post-closure periods to ensure facilities will not be a threat to human health and the environment. Similarly, Subtitle C of RCRA and its accompanying regulations govern the permanent disposal of hazardous wastes, and these facilities employ even greater environmental controls, which can include double liner systems, waste immobilization techniques, advanced leachate collection systems, extensive groundwater monitoring systems, offsite discharge mitigation protocols, leak detection systems, and enclosed and controlled offload areas. Both Subtitle C and Subtitle D landfills are highly regulated by permit(s) at the state level, as they typically are subjected to additional monitoring obligations as well as construction and operational requirements that go beyond the federal framework.

As a result of the stringent environmental controls required by federal and state regulation, and in recognition of our role as stewards of the environment, our industry has made significant investments to ensure that landfills are designed, constructed, and operated to reduce their environmental impact. For these reasons, EPA recognized in its *Interim Guidance on the Destruction and Disposal of PFAS and Materials Containing PFAS* that disposal of PFAS-contaminated wastes at hazardous or solid waste landfills can be effective options for managing PFAS by sequestering these compounds and preventing society from being re-exposed.<sup>2</sup>

## II. The Proposed Rule would Replace CERCLA’s “Polluter Pays” Principle with a “Community Pays” Model, Imposing Significant Costs on Landfill Customers and Ratepayers.

It is important for EPA to recognize that landfills neither manufacture nor use PFAS; instead, they are passive receivers of materials containing PFAS—compounds that are ubiquitous in residential and commercial waste streams—that must be managed once discarded. Research has shown that landfills effectively sequester a high percentage of PFAS compounds, especially longer-chain compounds such as PFOA and PFOS.<sup>3</sup> As rain percolates through landfills, the liquid will pick up some contaminants including a small amount of PFAS compounds not sequestered in the landfill environment. The resultant liquid is called leachate. Landfills are legally required to remove leachate from landfill collection systems and to properly manage this wastewater in order to protect groundwater resources. These management techniques can include onsite management, treatment prior to disposition or discharge, or collection and transport to wastewater treatment facilities. All of these activities are subject to regulatory permitting and oversight.

Despite the stringent management processes currently followed by our industry, a designation of PFOA and PFOS as CERCLA hazardous substances virtually guarantees that private parties—manufacturers of these compounds and other parties responsible for site contamination—will bring CERCLA claims for contribution

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<sup>1</sup> See *Guidance on the Essential Critical Infrastructure Workforce: Ensuring Community and National Resilience in COVID-19 Response*, V. 4.0, CYBER SECURITY & INFRASTRUCTURE SECURITY AGENCY (Aug. 18, 2020).

<sup>2</sup> See *Interim Guidance on the Destruction and Disposal of Perfluoroalkyl and Polyfluoroalkyl Substances and Materials Containing Perfluoroalkyl and Polyfluoroalkyl Substances*, U.S. ENV’T L PROT. AGENCY (Dec. 18, 2020), at [https://www.epa.gov/system/files/documents/2021-11/epa-hq-olem-2020-0527-0002\\_content.pdf](https://www.epa.gov/system/files/documents/2021-11/epa-hq-olem-2020-0527-0002_content.pdf).

<sup>3</sup> See, e.g., *PFAS Waste Source Testing Report*, SANBORN, HEAD & ASSOCIATES, INC. (Oct. 2019), at <https://anrweb.vt.gov/PubDocs/DEC/SolidWaste/OL510/OL510%202019.10.15%20NEWSVT%20PFAS%20Source%20Testing%20Rpt%20-%20Final.pdf>.

against landfills and other essential public service providers such as water and wastewater utilities that are also passive receivers of PFAS. Given that CERCLA imposes joint, several, and retroactive environmental cleanup liability to parties connected with the presence of a hazardous substance at a site, designating PFOA and PFOS as hazardous substances will, at a minimum, generate significant litigation costs for lawful PFAS-containing waste disposal and discharges going back decades.

This type of inequitable outcome has occurred in previous CERCLA matters. As an example, industrial parties determined to be responsible under CERCLA for the cleanup of the Passaic River in New Jersey brought contribution actions against 261 third-party defendants—including 70 municipalities and other public entities—contending that they bore site cleanup responsibility. This action resulted in litigation spanning eight years and culminating in a payment of \$35.4 million by these minor parties, many of whom were merely passive receivers of the contamination at issue.

Extensive litigation costs, as well as potential significant costs relating to PFAS remediation, would be passed along to communities, drinking water and wastewater treatment facilities, and the biosolids management sector—all of which rely on landfills for disposal of media containing PFAS. These cost increases, as well as similar cost increases passed through to drinking water and wastewater treatment ratepayers, likely would have a significant and disproportionate impact on low-income households that rely on the affordability of services that the waste sector and other passive receivers provide.

### **III. PFAS Treatment and Residuals Management Will Increase Costs to Communities but Will Not Reduce CERCLA Liability.**

It has been suggested that the industry could simply treat leachate to eliminate any PFAS prior to discharging to wastewater treatment plants in order to reduce potential CERCLA liability presented by the proposed rulemaking. This premise is flawed for several reasons. Firstly, implementing treatment methods in the present day and into the future does not address potential liabilities for contribution actions that may be brought for cleanups stemming from prior POTW discharges.

Secondly, this premise does not recognize the current limitations of PFAS treatment technologies and their associated uncertainties and costs. Our industry is at the forefront of developing technologies for PFAS treatment and residuals management, however technologies for PFAS removal from leachate at scale are still developing and require a multi-step process that includes (1) pretreatment of leachate to address non-PFAS constituents, (2) subsequent PFAS treatment using one or more removal technologies (which creates PFAS-containing residuals), and (3) PFAS residuals treatment/management. Since most landfills rely on wastewater treatment plants for their leachate discharge, undertaking leachate pretreatment followed by PFAS treatment will add significantly to the costs of landfill operation.<sup>4</sup> The estimated capital cost to implement leachate pretreatment and PFAS treatment at a moderate-sized landfill (i.e., biological treatment of 30,000-40,000 gallons per day of leachate) to the extent necessary to minimize PFAS in leachate ranges from \$2 million to \$12 million, or potentially far more.<sup>5</sup> An additional layer of potential CERCLA liability could drive up these costs significantly and would ultimately be borne by the communities that rely on economical solid waste management services instead

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<sup>4</sup> These costs will be driven, in part, by potential future regulation under the Safe Drinking Water Act, Clean Water Act, and other federal and state authorities.

<sup>5</sup> The standards that would govern a PFOA or PFOS cleanup action currently are unclear, complicated by a patchwork of state regulatory standards, unknown criteria that would be required for remedial actions, and EPA's interim drinking water health advisories for PFOA and PFOS. As such, the costs of PFAS treatment borne by landfills and their customers could far exceed these estimates.

of PFAS producers and manufacturers.

Moreover, since current technologies are unable to completely destroy PFAS, further management of residual PFAS waste streams—including biosolids and spent filters—is necessary to stabilize or otherwise limit their ability to reenter leachate. The costs and operational effectiveness for PFAS residuals management is less understood as most technologies have not been evaluated at full-scale. Based on general conversations with technology developers and estimates/extrapolations from small-scale studies, however, we anticipate that implementing new technologies for PFAS removal and subsequent residuals management could increase the costs of treating landfill leachate by approximately \$0.06 to \$0.39 (potentially even higher) per gallon of raw leachate processed (i.e., a cost increase of at least 400% to 800%). Increased costs associated with PFAS management thus could total approximately \$966 million to \$8.187 billion per year for municipal solid waste landfills alone. These costs typically cannot be absorbed by local governments with municipally operated landfills.

**IV. The Mere Prospect of Designating PFOA and PFOS as CERCLA Hazardous Substances Already is Disrupting the Interdependence of Drinking Water and Wastewater Treatment Facilities, Biosolids Management, and Landfill Operations—and Could Have Much Broader Unintended Consequences on Administration Priorities.**

Wastewater treatment facilities generate biosolids as a byproduct of their treatment activities. Similarly, drinking water treatment facilities generate spent filter materials from their operations. Expectedly, these biosolids and spent filter media may contain some amount of PFAS removed from the final treated wastewater and drinking water. Wastewater treatment facilities rely on landfills for biosolids management and drinking water treatment facilities depend on landfills for disposal of filter materials that may contain PFAS. At present, there are three viable options for management of biosolids: incineration, land application, and landfilling. At a time when incineration and land application are increasingly being prohibited, any further disruption to biosolids management could have a tremendous impact on municipal budgets and the environment.

Designating PFOA and PFOS as hazardous substances under CERCLA would impel landfill operators to revisit their waste acceptance criteria, likely choosing to limit inbound wastes with known elevated concentrations of PFAS—including filter materials, biosolids, and impacted soils—and/or increase disposal costs for certain media. Indeed, the mere prospect of a CERCLA designation has begun to disrupt the interdependence of the drinking water, wastewater, and solid waste sectors, as wastewater treatment facilities have begun to prohibit the acceptance of leachate while landfills are considering similar restrictions on the acceptance of biosolids and other PFAS-containing materials.

Regulation of PFOA and PFOS under CERCLA also could inadvertently undercut the Administration's broader environmental goals. The increased costs associated with disposal that are attributable to the rulemaking could incentivize bad actors to seek alternative means of disposal of PFAS-contaminated media and remediation wastes that are less protective of public health and the environment. Landfill operators choosing to limit specific inbound streams of waste containing elevated levels of PFAS also could curtail the ability of some wastewater treatment facilities to continue operating and frustrate EPA and DOD cleanup activities around military installations and other affected communities.

Moreover, EPA's action could lead to decreased composting services nationwide. Food waste compost may contain PFAS due to contact with PFAS-lined packaging materials. As a result, a CERCLA designation could result in communities diverting food waste from organics recycling programs, hindering federal, state, and local climate and waste reduction goals. Finally, and as mentioned above, the increased costs on ratepayers that are

attributable to the proposed rule likely will have disproportionate adverse impacts on low-income communities and frustrate the Administration’s broader policies around environmental justice.

**V. Recommendations**

The solid waste sector and the communities we serve should not be held financially or legally liable under CERCLA for PFAS contamination, as landfills are only passive receivers of PFAS and are part of the long-term solution to manage these compounds. In its proposed designation, EPA announced that it “will use enforcement discretion and other approaches to ensure fairness for minor parties who may have been inadvertently impacted.”<sup>6</sup> We greatly appreciate EPA’s apparent willingness to exercise its discretion to foster equitable outcomes in direct enforcement matters; however, our industry remains concerned that this assurance would not sufficiently insulate landfills from third-party contribution litigation as discussed above. Accordingly, we suggest that concrete liability protections should be implemented in conjunction with this proposed rulemaking and respectfully request that EPA and the Interagency Policy Committee on PFAS<sup>7</sup> consider exercising existing legal authority to provide relief to landfills and other passive receivers of PFAS. *See, e.g.*, 42 U.S.C. §§ 9602(a) and 9615 (providing flexibility in the promulgation of regulations under CERCLA).

In the event EPA opines that it has limited authority to provide the solid waste sector with relief from third-party contribution litigation, the Administration should work with Congress to support a narrow legislative exemption from CERCLA liability in cases where a landfill discharges leachate in compliance with all applicable laws and regulations. Doing so would keep CERCLA liability on the industries that created and profited from these PFAS compounds —not on taxpayers.

Thank you for your consideration of our comments, and we look forward to continuing to partner with EPA to ensure the safe and effective management of waste streams containing PFAS. Should you have any questions about this letter, please contact Anne Germain, COO & SVP of Regulatory Affairs for NWRA, at [agermain@wasterecycling.org](mailto:agermain@wasterecycling.org). You may also contact Jesse Maxwell, Senior Manager, Advocacy & Safety for SWANA, at [jmaxwell@swana.org](mailto:jmaxwell@swana.org).

Very truly yours,



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<sup>6</sup> EPA Proposes Designating Certain PFAS Chemicals as Hazardous Substances Under Superfund to Protect People’s Health, U.S. ENV’T L PROT. AGENCY (Aug. 26, 2022), at <https://www.epa.gov/newsreleases/epa-proposes-designating-certain-pfas-chemicals-hazardous-substances-under-superfund>.

<sup>7</sup> We request that the interagency committee broaden its scope when considering CERCLA liability concerns caused by the use of PFAS-containing firefighting foams at airports to include similar concerns from the waste sector. Just as certain airports are required by law to use firefighting foam containing PFAS, permitting authorities often require landfills to accept waste streams containing PFAS.