



October 5, 2026

Submitted via www.regulations.gov

Tess Richman
Engineering and Science Division
Office of Water (4504-T)
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, DC 20460

Re: Docket ID No. EPA-HQ-OW-2026-0001 – Guidance: Reducing Risk from Perfluorooctanoic Acid and Perfluorooctane Sulfonic Acid in Biosolids

Dear Ms. Richman:

The National Waste & Recycling Association (NWRA) appreciates the opportunity to provide comments on the U.S. Environmental Protection Agency's (EPA) *Draft Guidance for Reducing Risk from PFOA and PFOS in Biosolids*. NWRA represents private-sector waste and recycling companies in the United States, as well as manufacturers and service providers that support the industry. NWRA members operate in all fifty states and the District of Columbia and provide essential waste and recycling services to communities across the country.

NWRA previously submitted comments on EPA's 2025 *Draft Sewage Sludge Risk Assessment for PFOA and PFOS*. Those comments emphasized the need for a risk-management framework to accompany the risk assessment, more representative exposure scenarios and data, appropriate context for modeled concentrations, and consideration of the practical limitations associated with alternative biosolids management pathways.

NWRA appreciates that the current draft guidance addresses several of these concerns and represents an important progression from identifying potential risks toward evaluating how those risks can be managed in practice. In particular, the guidance places greater emphasis on source identification and reduction and provides additional context for interpreting the modeled scenarios evaluated in the 2025 risk assessment.

As EPA finalizes the guidance and considers future actions, NWRA encourages the Agency to continue this progress by evaluating PFAS management across the full lifecycle of biosolids

and recognizing the implications that changes in one management pathway can have for other parts of the environmental management system.

1. Support a Practical, Risk-Based Approach to PFAS Management

NWRA supports efforts to reduce potential human and environmental exposure to PFAS and appreciates EPA's development of guidance intended to help wastewater treatment systems and biosolids managers evaluate and manage potential risks associated with PFOA and PFOS. NWRA believes that thoughtful, strategic source reduction is the most effective long-term approach for reducing PFAS throughout wastewater, biosolids, and solid waste management systems. Source-reduction efforts should be informed by available data and focus on identifying and reducing meaningful upstream sources and uses that contribute to PFAS loading and potential exposure, rather than broadly targeting materials or management pathways based solely on the presence of PFAS. Targeted reductions before PFAS enters wastewater and waste streams can reduce concentrations throughout downstream management systems while helping to ensure that responsibility for addressing PFAS remains focused upstream, rather than simply transferring PFAS and the associated management burden to downstream passive receivers, including landfills.

NWRA also appreciates EPA's movement toward a more practical, risk-based and risk-management approach compared with the 2025 Draft Sewage Sludge Risk Assessment. The draft guidance provides important context for interpreting modeled scenarios, recognizes the role of site-specific conditions and exposure pathways, and places greater emphasis on source identification and reduction. NWRA supports this progression and encourages EPA to maintain these principles as it finalizes the guidance and considers future actions.

2. Continue Advancing a Risk-Based and Risk-Management Framework

NWRA's 2025 comments raised concerns regarding the use of the 1 ppb modeling concentration, higher-exposure hypothetical scenarios, and limited nationally representative occurrence data. These assumptions created the potential for modeled results to be interpreted as broadly representative of biosolids management practices when actual conditions vary substantially among facilities and sites. The draft guidance provides additional context for interpreting those results and shifts the discussion toward risk-management approaches. NWRA supports this progression.

As EPA continues developing its approach, the Agency should ensure that modeled concentrations or scenarios are not treated as universal regulatory or management thresholds. Risk-management decisions should consider available occurrence data, site-specific conditions, actual exposure pathways, management practices, and the uncertainties associated with modeled scenarios.

EPA should also continue updating its analysis as additional nationally representative

information becomes available.

3. Evaluate Cross-Media and Lifecycle Implications of Biosolids Management Decisions

NWRA encourages EPA to explicitly evaluate the cross-media consequences of changes in biosolids management. PFAS management presents a unique challenge because changing the management pathway for a PFAS-containing material does not eliminate the PFAS contained within that material. Instead, PFAS may move among environmental media and management systems.

For example, reducing land application of biosolids may increase the quantity of biosolids directed to municipal solid waste (MSW) landfills. PFAS contained in those biosolids would then enter the solid waste management system, and some PFAS may subsequently be present in landfill leachate at some point in time. That leachate may, in turn, be managed through wastewater treatment or other treatment and disposal pathways.

EPA should therefore consider the entire management system when evaluating alternatives. Actions intended to address potential exposure through one pathway should not inadvertently shift PFAS and associated management challenges to another pathway without evaluating the environmental and operational consequences of that shift.

A lifecycle approach should consider where PFAS mass moves, potential exposure pathways, available management infrastructure, and the practical consequences associated with each alternative.

4. Prioritize Source Reduction and Recognize the Passive-Receiver Role of Landfills

NWRA supports EPA's emphasis on identifying and reducing upstream sources of PFAS entering wastewater treatment systems. Reducing PFAS at its source can reduce PFAS concentrations throughout downstream systems, including wastewater effluent, biosolids, and ultimately solid waste management systems. Source-reduction strategies should therefore focus on preventing PFAS from entering wastewater and waste streams in the first place. At the same time, EPA should clearly distinguish entities that manufacture, use, or introduce PFAS into commerce from facilities that receive and manage PFAS-containing materials after their use.

MSW landfills are passive receivers of PFAS. Landfills do not manufacture PFAS or intentionally introduce PFAS into the waste stream. They provide an essential public service by managing discarded materials that may already contain PFAS when received. This distinction is particularly important if changes in biosolids management result in additional biosolids being directed to MSW landfills. In those circumstances, PFAS detected in landfill leachate reflects PFAS present in materials received by the facility and should not be

interpreted as evidence that the landfill is the original source of those compounds. EPA should maintain its focus on upstream source identification and reduction while recognizing the passive-receiver role of downstream waste management facilities.

5. Consider the Operational and Capacity Implications of Increased Biosolids Disposal at MSW Landfills

NWRA's 2025 comments emphasized that landfill disposal cannot necessarily absorb significant shifts in biosolids management because of capacity and material-management considerations. That concern remains important as EPA evaluates and works to balance potential risk-management approaches.

Reducing the availability of land application can place additional pressure on other portions of the waste-management system. EPA's discussion of the experience in Maine provides an important example of the challenges that can occur when a significant biosolids management pathway becomes unavailable.

Landfill capacity should not be considered solely in terms of remaining permitted airspace. Biosolids sent to landfills for disposal can contain substantial amounts of water, often with solids content of less than 10 percent. As a result, biosolids can present facility-specific operational considerations that extend beyond the volume of material received. Increased reliance on landfill disposal for biosolids also raises a broader capacity-allocation question: to what extent should finite landfill capacity be used to manage biosolids rather than the municipal solid waste generated by the communities those facilities serve?

Depending on the characteristics of the biosolids and the receiving facility, increased disposal may affect:

- moisture and leachate management;
- material handling and placement;
- odors;
- landfill stability and operating conditions;
- landfill gas management;
- transportation and truck traffic; and
- overall facility capacity and useful life.

The significance of these considerations and ability to overcome these challenges varies among facilities. A landfill with available permitted capacity may not necessarily have the operational ability to accept significant additional quantities of biosolids.

EPA should therefore avoid assuming that landfill disposal is an unlimited or universally available alternative to land application and should evaluate the practical implications of

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management shifts before recommending actions that could substantially increase biosolids disposal at MSW landfills.

6. Clearly Distinguish Part 503 Surface Disposal Units from Subtitle D MSW Landfills

NWRA encourages EPA to clearly distinguish sewage sludge surface disposal units regulated under 40 CFR Part 503 from MSW landfills regulated under Subtitle D of the Resource Conservation and Recovery Act.

This distinction is particularly important because terminology related to biosolids disposal can be used inconsistently, even among experienced professionals. The term “surface disposal,” in particular, may be interpreted as a general description of land-based disposal rather than as a specific regulatory category under Part 503. As public awareness and engagement around PFAS and biosolids management continue to increase, imprecise terminology may also create confusion regarding which requirements, engineering controls, and management practices apply to different types of facilities. EPA should therefore use clear and consistent terminology throughout the final guidance and explicitly identify when its discussion applies specifically to Part 503 surface disposal units.

This distinction is especially important when discussing liners, leachate management, and other engineering controls. The characteristics and regulatory requirements applicable to Part 503 surface disposal units should not be conflated with those applicable to Subtitle D MSW landfills.

EPA should ensure that discussion of surface disposal units in the final guidance does not inadvertently imply that additional PFAS-specific design or operational requirements are necessary for Subtitle D MSW landfills.

MSW landfills already operate within an established regulatory framework governing design, operation, groundwater monitoring, closure, and post-closure care. Any future consideration of PFAS-specific requirements for these facilities should be based on a separate technical and regulatory evaluation appropriate to the MSW landfill sector.

7. Engage the Solid Waste Sector in Future Biosolids Risk-Management Decisions

NWRA’s 2025 comments encouraged EPA to engage stakeholders from the waste, composting, recycling, and biosolids sectors in developing practical, science-based policies. NWRA reiterates that recommendation.

Decisions affecting biosolids management extend beyond wastewater treatment plants and agricultural users. Changes affecting land application, incineration, or other pathways can directly affect landfill operations, capacity, transportation, leachate management, and other components of the solid waste system.

EPA should engage the solid waste sector early in the development of future policies that could materially alter biosolids management practices. Such engagement can provide EPA

with practical information regarding facility capacity, waste acceptance, material handling, transportation, leachate management, and other operational considerations necessary to evaluate management alternatives comprehensively.

Conclusion

NWRA appreciates EPA's consideration of concerns raised regarding the 2025 Draft Sewage Sludge Risk Assessment and the Agency's efforts to move toward a more practical risk-management framework.

As EPA finalizes the guidance and considers future actions, NWRA encourages the Agency to maintain a systems-based perspective. PFAS-containing materials move through interconnected wastewater, biosolids, solid waste, and environmental management systems. Changing where those materials are managed does not necessarily eliminate PFAS or reduce overall risk and may create consequences for other management systems, including increased demands on existing waste management infrastructure and finite landfill capacity. EPA should therefore continue emphasizing source reduction, realistic and site-specific risk evaluation, and scientifically supported management approaches while considering the lifecycle, cross-media, operational, and infrastructure consequences of changes in biosolids management. Clear and consistent terminology will also be important to ensure that recommendations applicable to one management pathway or regulatory framework are not inadvertently interpreted as applying to another.

NWRA looks forward to continuing to work with EPA to develop practical, science-based PFAS policies that protect human health and the environment while preserving viable management options and maintaining the essential waste management infrastructure on which communities rely.

Very truly yours,



Anne M. Germain, BCEE, P.E., CAE
Chief of Technical & Regulatory Affairs