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Is "Forever" Really Forever? EPA's New Guidance on PFAS Destruction and Disposal

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EPA recently published a 2024 update to itsInterim Guidance on the Destruction and Disposal of Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) and Materials Containing PFAS (Interim Guidance), as required by the National Defense Authorization Act of 2020. This updated guidance was published concurrently with the EPA's final National Primary Drinking Water Regulation, which requires that water systems implement solutions to reduce certain PFAS in drinking water to levels below the specified Maximum Contaminant Levels (MCLs) or Hazard Index levels by 2029. Water systems will be required to properly dispose of spent carbon or other media from treating PFAS and/or other contaminants in their drinking water.

Does the EPA's Updated Interim Guidance Impose New PFAS Requirements?

No. EPA's updated Interim Guidance does not establish any requirements for the destruction or disposal of PFAS materials. In fact, EPA does not currently have any regulatory requirements for the treatment, destruction, and disposal of waste materials that contain only PFAS.

Do PFAS Substances Need to Be Disposed of as Hazardous Waste?

Not under current federal law. PFAS alone is not considered hazardous waste under federal law, but state laws vary. There are also no PFAS currently listed or proposed to be listed as hazardous wastes under the Resource Conservation and Recovery Act (RCRA)[1]. However, PFAS-containing waste may qualify as hazardous waste if PFAS is mixed with a listed hazardous waste or if a PFAS-containing mixture exhibits a hazardous characteristic (e.g., ignitability, corrosivity, reactivity, or another characteristic stemming from the material that is mixed with PFAS).

EPA has proposed to amend its regulations under RCRA to add specific PFAS to the list of hazardous constituents at 40 CFR part 261 appendix VIII, which would primarily impact the requirements imposed on RCRA treatment, storage, and disposal facilities. EPA has also recently designated PFOA and PFOS as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), but this designation does not specify that waste containing PFAS be disposed of in any specific fashion or type of landfill. The CERCLA hazardous substance designation does require that certain PFAS releases – any release (other than a federally permitted release) of PFOA, PFOS, or their salts or structural isomers from any vessel or facility of one pound or more within a 24-hour period – be reported.

However, state law and specific federal, state, or local permit requirements may require the disposal of PFAS-containing substances as hazardous waste. For example, EPA may require specific destruction or disposal methods to be used for a substance following its review of a manufacturer's pre-manufacture notice submitted under Section 5 of the Toxic Substances Control Act (TSCA).

What Is EPA's New Guidance on Methods for Destruction and Disposal of PFAS-Containing Materials?

EPA's updated Interim Guidance reviews three widely used, commercially available destruction and disposal (D&D) technologies for materials containing PFAS: landfilling, underground injection, and thermal treatment under certain conditions, including incineration. EPA recommends using technologies with the lower potential for environmental release of PFAS, which it has determined include:

- **Interim storage with controls:** Although storage is not a D&D technology, the EPA notes it may be an appropriate short-term option if on-site storage capacity is readily available and there are proper controls in place to reduce releases into the environment. Interim storage may be more appropriate for PFAS materials like containerized or high PFAS-content materials. In contrast, interim storage may be less appropriate for PFAS materials that are continuously generated or have high-volume and low-PFAS content;
- **Underground injection for liquids – Permitted Class I non-hazardous industrial or hazardous waste injection wells:** These wells are designed to isolate liquid wastes deep below the land surface and ensure protection of underground sources of drinking water. EPA has found that they have the lowest potential for environmental release when compared to other D&D technology options. However, only a limited number of wells currently receive offsite PFAS, and waste transportation logistics may limit the feasibility of this D&D option;
- **Landfill disposal for solids – Permitted hazardous waste landfills:** EPA recommends using an RCRA Subtitle C hazardous waste landfill when landfill disposal is selected and PFAS levels of the waste are relatively high. Hazardous waste landfills have leachate emission protections that help control environmental releases of PFAS. However, the EPA has found that, for all landfill types, new information shows landfills release more PFAS to the environment than previously thought in 2020; and
- **Thermal treatment of solids, liquids, or gases – Permitted hazardous waste combustors that operate under certain conditions:** EPA has found that new research since 2020 indicates that thermal treatment units operating under certain conditions are more effective at destroying PFAS and minimizing releases or exposures. However, significant uncertainties remain. For example, the EPA has noted that more information is needed to determine whether harmful products of incomplete combustion or PFAS air emissions are formed by units operating at lower temperatures (e.g., municipal waste combustors).

Do You Have Feedback for the EPA?

EPA has opened a public docket for input on how to improve its Interim Guidance. Comments are due October 15, 2024.

If you have questions regarding the EPA's new Interim Guidance, please reach out to Elizabeth Haskins, Noelle E. Wooten, or a member of Baker Donelson's Environmental Group.

[1]EPA has proposed to amend its regulations under RCRA to add nine specific PFAS to the list of hazardous constituents at 40 CFR part 261 appendix VIII, which is a first step towards listing these PFAS as hazardous waste. RCRA's cradle to grave requirements are only triggered after a substance is listed as a hazardous waste.