

Desk Statement

EPA's Review of DoD's *Interim Guidance on Destruction or Disposal of Materials Containing Per- and Polyfluoroalkyl Substances in the United States*

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On July 12, 2023, the Department of Defense released their *Interim Guidance on Destruction or Disposal of Materials Containing Per- and Polyfluoroalkyl Substances in the United States*, which EPA reviewed and finds generally consistent with EPA's 2020 Interim Guidance on PFAS Destruction and Disposal. EPA is committed to continued research and collaboration with DoD and across the federal family as part of our mission to address PFAS pollution and protect public health and the environment.

Additional Background:

EPA understands that the DoD Interim Guidance *Interim PFAS Disposal Decision Tree* is intended to satisfy Congressional requirements found in the National Defense Authorization Act and is intended to guide DoD managers of PFAS and PFAS-containing materials in making decisions regarding destruction and disposal that mitigate the potential for release, understanding that there remains uncertainty with these technologies. And while EPA recognizes that relative cost may be a factor in some situations regarding PFAS destruction and disposal, EPA does not consider cost to be one of the major factors as the options described in the EPA Interim Guidance are all relatively in wide use and available in the U.S.

- EPA believes protection of communities already overburdened by pollution is critical when making decisions on the destruction and disposal of PFAS. EPA values the document's discussion of the importance of environmental justice and impacts on vulnerable communities, and its support for ongoing work to better protect these communities.
- EPA appreciates the DoD Interim Guidance reliance on the additional oversight and controls provided at disposal and destruction facilities with environmental permits.
- The DoD Interim Guidance includes two forms of thermal treatment of PFAS-containing materials, carbon reactivation systems and hazardous waste incinerators. As the EPA Interim Guidance states, thermal treatment of PFAS has higher levels of uncertainties regarding its capacity to manage the migration of PFAS into the environment. EPA appreciates DoD's consideration of onsite waste storage for PFAS or PFAS-containing materials before thermal treatment is selected as the destruction option.

- EPA understands that DoD considers high temperature incinerators to be an effective destruction option. EPA notes that, at this time, it is difficult to determine whether high temperature incinerators are an effective PFAS destruction option because data on PFAS releases from incinerators are generally lacking. Data from pilot-scale experiments conducted by EPA researchers suggest that temperatures above approximately 1100 degrees Celsius may result in high destruction efficiencies and few detectable fluorinated products of incomplete combustion. The applicability of these results to real-world incinerators, however, is currently unknown. EPA continues to look for opportunities to partner with hazardous waste combustion facilities to conduct testing and gather additional data on the effectiveness of high temperature incinerators for PFAS destruction.

EPA appreciates that DoD plans to update its interim guidance annually to reflect changes as technologies mature, as EPA updates its interim guidance, and as additional data, including air emission detection methods, becomes available.

It is important to note that the uncertainties and data gaps identified in EPA's Interim Guidance remain, and continued research and collaboration is needed to reduce the uncertainties and fill the data gaps. EPA is using the best available science to update its interim guidance and anticipates issuing it in December 2023.

The science of PFAS destruction and disposal is still evolving. While advances in scientific understanding since 2020 may allow EPA to make some recommendations in the 2023 update, there continue to be information gaps and uncertainties that, if addressed, may alter the recommendations presented or could lead to additional recommendations in the future.

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