Detailed Analysis of Options for the Destruction/Disposal of Covered Materials Containing Per- and Polyfluoroalkyl Substances: U.S. Department of War Report

Walter Wright, Jr.
wwright@mwlaw.com
(501) 688.8839

03/24/2026

The United States Department of War ("DoW") has issued a February 26 report titled:

Department of War Detailed Analysis of Options for the Destruction and Disposal of Covered Materials Containing Per- and Polyfluoroalkyl Substances ("Report").

The Report is issued by the Office of the Assistant Secretary of War for Energy, Installations, and Environment.

The DoW notes that since the 1970's that it has used Aqueous Film-Forming Foam ("AFFF") to rapidly suppress fires that involve jet fuel. AFFF formulations are stated to quickly extinguish petroleum-based fires, thus minimizing loss of life and protecting equipment and facilities.

AFFF are noted to contain various PFAS over the years, including PFOS and PFOA. Therefore, the DoW states it has undertaken a significant initiative to develop and demonstrate PFAS-free alternatives for AFFF.

DoW is required pursuant to section 322 of the National Defense Authorization Act for Fisal Year 2020 to cease the use of AFFF on military installations, and inherent in this process is the removal of existing AFFF. The total volume of AFFF that requires disposal is estimated to be over two million gallons. In addition, firefighting equipment and facilities with AFFF systems will need to be rinsed before the new F3 firefighting agent is installed, and this PFAS-containing rinsate will also require disposal. This is estimated to be an additional 1.5 million gallons of rinsate requiring management.

In addition to DoW's transition from the use of AFFF at its military installations, quantities of PFAS-containing materials are generated from DoW's nationwide cleanup program, emergency use of AFFF, and spills of AFFF. This is estimated to exceed the DoW's long-term storage capabilities. Therefore, the DoW is stated to require a comprehensive destruction and disposal strategy to address covered DoW PFAS-containing materials being sent to an offsite commercial destruction or disposal facility.

The Report addresses:

- Prior U.S. EPA and DoW PFAS Destruction and Disposal Interim Guidance documents.
- Updated 2025 DoW PFAS Destruction and Disposal Guidance and Analysis.

- Evaluation of Available Off-site Commercial Destruction & Disposal Options.
- Screening Criteria for Options.
- Options Analysis.
- Carbon Reactivation Units with environmental permits (for use with granular activated carbon only).
- Hazardous Waste Landfills with environmental permits.
- Solid Waste Landfills that have composite liners and leachate collection and treatment systems, with environmental permits. (Not an option for AFFF concentrate).
- Hazardous waste incinerators with environmental permits.
- Underground injection control with environmental permits (for liquids only).
- Thermal desorption units that use off-gas collection and thermal oxidation with environmental permits (for soils).
- Other emerging PFAS destruction technologies with Environmental permits or regulator-acceptance.
- On-site hazardous waste storage with environmental permits.
- DoW Implementation of Section 330 of the FY 2020 NDAA.
- Relevant Resource Conservation and Recovery Act and Clean Air Act Permitting Requirements.
- Existing Data on Destruction Capabilities of Incinerators.
- DoW's Finding for Section 330.

A copy of the Report can be found here.