



# DERP FORUM

*Achieving Greater Success Through Strong Partnerships*

November 14-17, 2023 • Kansas City, MO

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# PFAS Remediation Technologies

Lia Gaizick

Cleanup Program Manager

ODASD(E&ER)

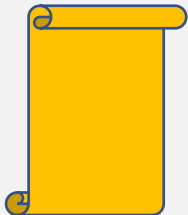
# PFAS Remediation Technology Overview



Research and Development  
(R&D) Efforts



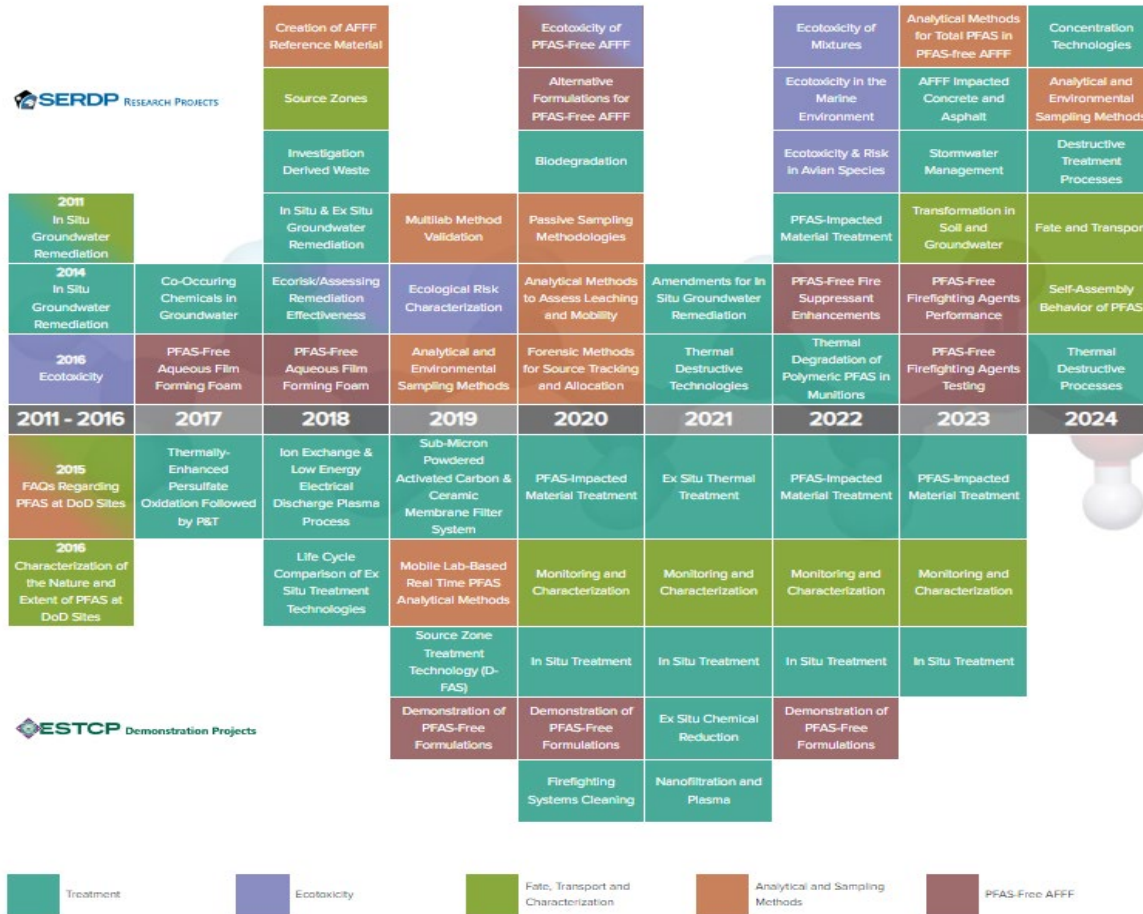
Technical Guidance  
Documents/Tools



DoD Policies/Guidance

**Communicate  
Collaborate  
Coordinate  
Partner**

# R&D Efforts



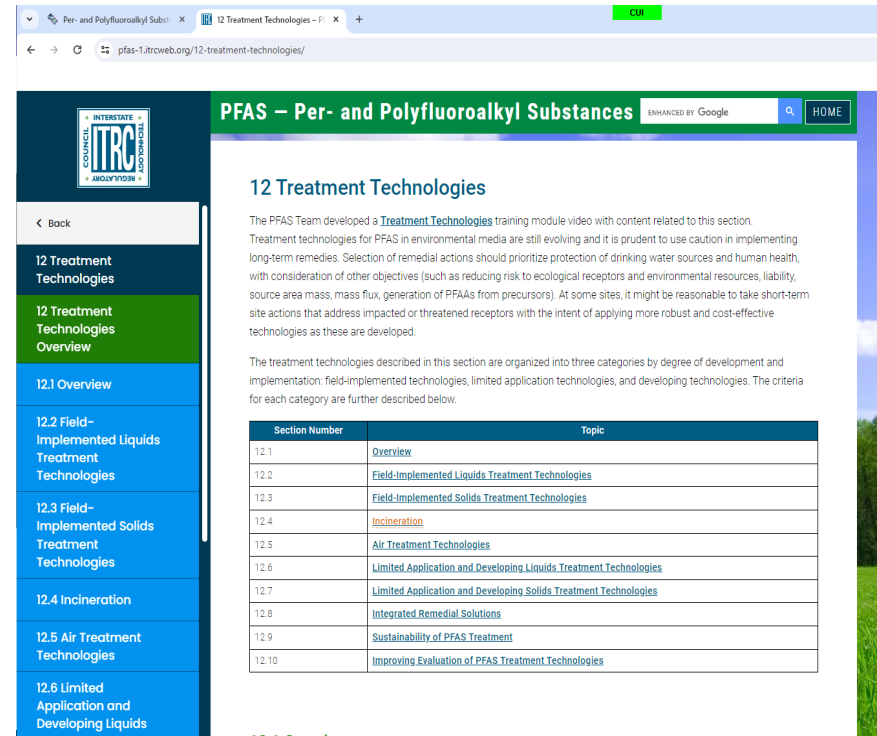
<https://serdp-estcp.org/focusareas/e18ec5da-d0de-47da-99f9-a07328558149>

NEW PFAS PODCAST SERIES: <https://serdp-estcp.org/projects/details/d8fdde05-10b6-43d4-a4d3-2a1a60329392/pfas-podcast-series-serdp-and-estcp-research-and-demonstrations>

# PFAS Remediation Technology Technical Guidance Documents/Tools

## Interstate Technology Regulatory Council: PFAS Guidance

- <https://pfas-1.itrcweb.org/>
- Chapter 12 –Treatment technologies
- Treatment Technology Training video on YouTube:  
<https://www.youtube.com/watch?v=0dQqKM4AdNQ>
- Updated September 2023



The screenshot shows a web browser displaying the PFAS – Per- and Polyfluoroalkyl Substances website. The page title is "12 Treatment Technologies". The left sidebar contains a navigation menu with the following items: "12 Treatment Technologies", "12 Treatment Technologies Overview", "12.1 Overview", "12.2 Field-Implemented Liquids Treatment Technologies", "12.3 Field-Implemented Solids Treatment Technologies", "12.4 Incineration", "12.5 Air Treatment Technologies", and "12.6 Limited Application and Developing Liquids Treatment Technologies". The main content area includes an introduction paragraph, a paragraph about the organization of technologies, and a table with the following data:

Section Number	Topic
12.1	<a href="#">Overview</a>
12.2	<a href="#">Field-Implemented Liquids Treatment Technologies</a>
12.3	<a href="#">Field-Implemented Solids Treatment Technologies</a>
12.4	<a href="#">Incineration</a>
12.5	<a href="#">Air Treatment Technologies</a>
12.6	<a href="#">Limited Application and Developing Liquids Treatment Technologies</a>
12.7	<a href="#">Limited Application and Developing Solids Treatment Technologies</a>
12.8	<a href="#">Integrated Remedial Solutions</a>
12.9	<a href="#">Sustainability of PFAS Treatment</a>
12.10	<a href="#">Improving Evaluation of PFAS Treatment Technologies</a>

# DoD PFAS Policy/Guidance

Policy and Guidance that includes PFAS treatment options



ENERGY, INSTALLATIONS,  
AND ENVIRONMENT

ASSISTANT SECRETARY OF DEFENSE  
3400 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3400

7/11/23

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS,  
ENERGY AND ENVIRONMENT)  
ASSISTANT SECRETARY OF THE NAVY (ENERGY,  
INSTALLATIONS AND ENVIRONMENT)  
ASSISTANT SECRETARY OF THE AIR FORCE  
(INSTALLATIONS, ENVIRONMENT AND ENERGY)  
DIRECTOR, NATIONAL GUARD BUREAU (JOINT STAFF, J8)  
DIRECTOR, DEFENSE LOGISTICS AGENCY (INSTALLATION  
MANAGEMENT)

SUBJECT: Memorandum for Taking Interim Actions to Address Per- and Polyfluoroalkyl  
Substances Migration from DoD Installations and National Guard Facilities

The Department of Defense (DoD) follows the federal cleanup law, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, and long-standing Environmental Protection Agency regulations to evaluate all our military installations nationwide for potential releases of hazardous substances, pollutants, and contaminants. This process includes identifying, investigating, and cleaning up releases caused by DoD activities and includes federal and state environmental regulator review and public participation. The CERCLA process has many steps that may take several years, sometimes decades, to complete.

In the interest of protecting human health and the environment, in support of the Secretary of Defense's commitment to taking care of Service members and their families, and in recognition of and commitment to the critical role defense communities play in national security, the Department is committed to addressing its PFAS releases as quickly as possible. In support of these goals, the DoD Components are directed to evaluate the data gathered during Preliminary Assessments/Site Inspections and Remedial Investigations and assess where an interim action can be taken to mitigate further PFAS plume migration or ongoing impacts to groundwater, surface water, and/or sediment, from an on-base PFAS source area. The DoD Components are further directed to prioritize implementation of interim actions as expeditiously as possible to address PFAS under CERCLA, such as removal of soil or sediment "hot spots" and installation of groundwater extraction systems, where supported by site-specific information.

If a DoD Component is not certain whether the site-specific information supports taking an interim action, the Office of the Assistant Secretary of Defense for Energy, Installations and Environment (OASD(EI&E)) will assist in the final evaluation of information.



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MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS,  
ENERGY AND ENVIRONMENT)  
ASSISTANT SECRETARY OF THE NAVY (ENERGY,  
INSTALLATIONS AND ENVIRONMENT)  
ASSISTANT SECRETARY OF THE AIR FORCE  
(INSTALLATIONS, ENVIRONMENT AND ENERGY)  
DIRECTOR, DEFENSE LOGISTICS AGENCY (LOGISTICS  
OPERATIONS)

SUBJECT: Interim Guidance on Destruction or Disposal of Materials Containing Per- and  
Polyfluoroalkyl Substances in the United States

The DoD Per- and Polyfluoroalkyl Substances (PFAS) Task Force issues this interim guidance to help DoD make informed decisions in the evaluation of existing destruction and disposal options, and to comply with section 343 of the FY 2022 National Defense Authorization Act (NDAA). Section 343 requires DoD to prohibit the incineration of covered DoD PFAS-containing materials<sup>1</sup> until DoD issues guidance implementing the U.S. Environmental Protection Agency (EPA) "Interim Guidance on the Destruction and Disposal of Perfluoroalkyl and Polyfluoroalkyl Substances and Materials Containing Perfluoroalkyl and Polyfluoroalkyl Substances," December 18, 2020 (hereinafter referred to as the EPA guidance), and section 330 of the FY 2020 NDAA.

Concurrent with its compliance with these requirements on PFAS destruction and disposal, DoD is transitioning to a PFAS-free firefighting agent for land-based applications over the next few years. DoD has determined that this transition, which requires the removal of PFAS-containing firefighting foam (i.e., Aqueous Film Forming Foam (AFFF)) from installation fire protection inventories, will generate large quantities of PFAS-containing concentrate and rinseate for which DoD must find a safe disposal solution. In addition, quantities of PFAS-containing material are generated from DoD's nationwide cleanup program, and recovery of emergency use discharges or spills of AFFF. Given these combined quantities, DoD's long-term storage capabilities will be exceeded and thus DoD requires a comprehensive destruction and disposal strategy.

In choosing among disposal options, one of the most significant factors for DoD was the additional oversight and controls provided at disposal and destruction facilities with

<sup>1</sup> PFAS-containing materials covered under this guidance includes all "covered material" under Section 343 of the FY 2022 NDAA, which means "any [Aqueous Film Forming Foam] AFFF formulation containing PFAS, material contaminated by AFFF release, or spent filter or other PFAS-contaminated material resulting from site remediation or water filtration that—

(A) has been used by the Department of Defense or a military department;  
(B) is being discarded for disposal by the Department of Defense or a military department; or  
(C) is being removed from sites or facilities owned or operated by the Department of Defense."

<https://www.acq.osd.mil/eie/eer/ecc/pfas/tf/policies.html>

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