

Non-Stick Cookware



Containers



**Building &** Construction





Sealants &



Equipment

Adhesives



Electrical Insulation



Pharmaceuticals





Camping Equipment



Laboratory



Printing

Personal

Care Products

Cleaning Products

Plastics &

Rubber



Semiconductors & Circuit Boards



Cement Additives





Firefighting Foam



Medical & Food Tubing



Breathable & Waterproof Apparel



**Paints** 



Resistant

Treatments

Windshield

Washer







Stain- & Water-

Photographic Film & Processing



Oil & Gas

Drilling



Paper & **Packaging** 

# PER-AND POLYFLUOROALKYL SUBSTANCES (PFAS)

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DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR ENVIRONMENT AND ENERGY RESILIENCE



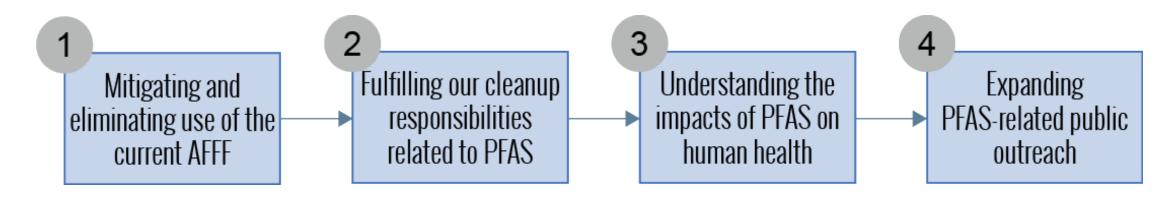




## PFAS TASK FORCE: OVERVIEW

# IN JULY 2019, THE SECRETARY OF DEFENSE CREATED THE DOD PFAS TASK FORCE

- Includes Senior representatives from each Military Department, the National Guard Bureau, and DoD Health Affairs.
- Develops and issues policies related to PFAS to assist DoD in addressing PFAS in a consistent and holistic manner across the Department.
- Activities of the PFAS TF are tracked closely by our current Departmental leadership.

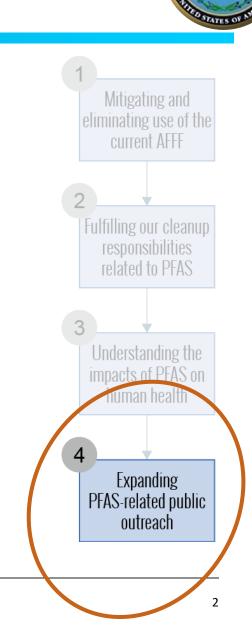


## PFAS TASK FORCE: EXPANDING PFAS-RELATED PUBLIC

#### **OUTREACH**

# THE DEPARTMENT IS COMMITTED TO INCREASING TRANSPARENCY AS WE CONTINUE TO ADDRESS PFAS

- Providing Quarterly PFAS Outreach Sessions
  - Actions taken based on feedback from July 14<sup>th</sup> event
    - Posted slides, transcript, and written responses to questions at www.Defense.gov/PFAS
    - Shifted the timing of future events
    - Expanded the invite list
    - Taking questions during the presentation
    - Planning future listening sessions with the Deputy Assistant Secretaries of the Military Departments
- Updated DOD website to include PFAS drinking water and groundwater testing data. (<a href="https://denix.osd.mil/dod-pfas/">https://denix.osd.mil/dod-pfas/</a>)

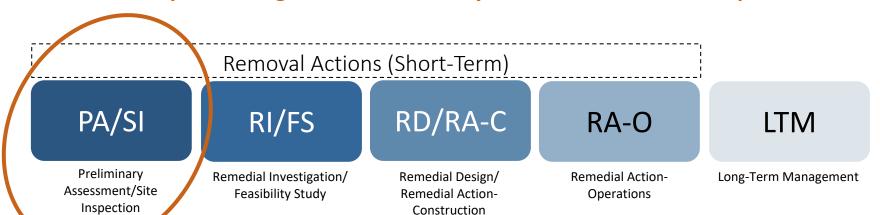


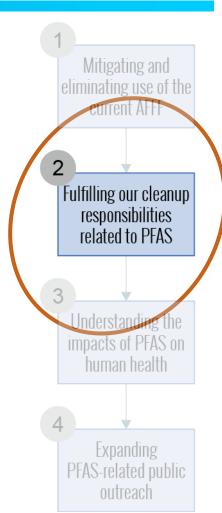
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RESPONSIBILITIES RELATED TO PFAS

# DOD FOLLOWS THE COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA)

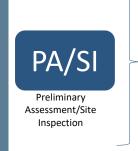
- CERCLA is a Federal environmental cleanup law that involves many steps.
  - The CERCLA process allows DOD to take quick, short-term actions.
  - The CERCLA process begins with Preliminary Assessments and Site Inspections.





RESPONSIBILITIES RELATED TO PFAS

DOD HAS COMPLETED 171 PA/SI ASSESSMENTS, AND 528 PA/SI ASSESSMENTS ARE UNDERWAY. OF THE 171 COMPLETED PA/SI, 73 REQUIRE NO FURTHER ACTION, AND 98 ARE PROCEEDING TO RI/FS.



#### DETERMINE: DID A RELEASE OCCUR?

- Evaluate historic records
- Conduct a site visit
- Take samples of:
  - Drinking water
  - Groundwater
  - Soil



Preliminary Assessment & Site Inspection complete, moving onto the next CERCLA step

RI/FS

Remedial Investigation/ Feasibility Study

Preliminary Assessment & Site Inspection complete, no further action required

DOD HAS OBLIGATED OVER \$1.1 BILLION FOR PFAS CLEANUP, AND EXPECTS TO SPEND AT LEAST \$2 BILLION IN THE FUTURE.

<sup>1</sup> As of June 30, 2021.



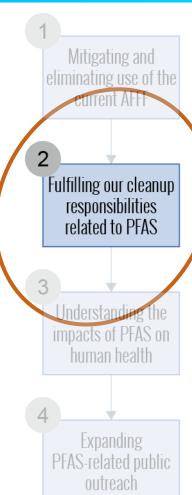


# COORDINATING WITH STATE AND FEDERAL REGULATORS

■ DoD works closely with EPA and State regulators throughout the CERCLA process.

#### **INCORPORATION OF STATE STANDARDS**

- DoD incorporates state standards as part of the CERCLA process.
  - Once a need for cleanup action has been determined based on CERCLA's nationwide risk assessment process, DoD evaluates Federal and State cleanup standards as required by CERCLA and its regulations, through the Applicable or Relevant and Appropriate Requirements (ARARs) process. This ARARs process applies to both State drinking water and groundwater cleanup standards to see if they will be incorporated as final cleanup levels at the specific site.
- All public drinking water systems in the U.S., including DoD where it supplies drinking water on its military installations, must comply with State and/or federal drinking water standards under the Safe Drinking Water Act.







#### DOD RESEARCH AND DEVELOPMENT

**S90M** 

Through Fiscal Year

2021

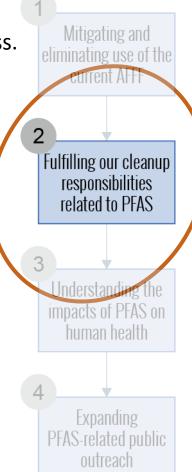
DOD invests in research and development to advance technologies to expedite the cleanup process.

DOD has invested over \$90M through Fiscal Year 2021 with another \$70M planned through FY2025.

- DOD supports over 150 technology development and demonstration projects including:
  - Development of analytical methods for PFAS in media other than drinking water
    - Draft method published by EPA in early September (<a href="https://www.epa.gov/newsreleases/epa-">https://www.epa.gov/newsreleases/epa-</a> announces-first-validated-laboratory-method-test-pfas-wastewater-surface-water)
  - Rapid, in-field analysis methods for mapping of impacted areas
  - Determination of pathways for PFAS migration in soil
  - Destruction methods for PFAS that do not involve incineration

#### DOD R&D INVESTMENT Supporting Through Fiscal Year Development & 2025 Demonstration

**Projects** 



PFAS TASK FORCE: MITIGATING AND ELIMINATING USE OF

THE CURRENT AFFF

# FINDING AN EFFECTIVE PFAS-FREE FIREFIGHTING SOLUTION

- DOD and others use a certain kind of firefighting foam known as *aqueous* film-forming foam, or "AFFF", to rapidly extinguish petroleum-based fires and protect against catastrophic loss of life and property.
- DOD no longer uses AFFF on land for any testing or training if it cannot be fully contained and appropriately disposed of.
- DOD is actively testing and evaluating the capabilities of commercially available PFAS-free firefighting agents and evaluating available technologies, aside from alternative foams, to replace current AFFF systems in its facilities.

