U.S. AIR FORCE

Fact Sheet

Department of the Air Force Response to PFAS

February 2024

Background: What are PFAS?

Per- and polyfluoroalkyl substances, or PFAS, are a group of synthetic fluorinated chemicals. Perfluorooctane Sulfonate, or PFOS, and Perfluorooctanoic Acid, or PFOA, are two organic chemicals within the PFAS group that were used in industrial and consumer products such as nonstick cookware, stain-resistant fabric and carpet, some food packaging and specialized foam.

- In 1970, the Department of the Air Force began using the firefighting agent Aqueous Film Forming Foam which contained PFOS and PFOA. AFFF was widely used across the firefighting industry to protect people and property. The Air Force is currently phasing AFFF out of firefighting operations.

- The Air Force Civil Engineer Center began a comprehensive assessment process in 2010 to identify locations where PFOS/PFOA may have been released across the Air Force at active, Reserve, Air National Guard and closed installations.

CERCLA

The Air Force's investigation work and response actions are guided by the Comprehensive Environmental Response, Compensation and Liability Act. The Air Force is moving forward aggressively in accordance with the CERCLA process to fully investigate releases, prioritize responses and determine appropriate response actions based on risk. Following the CERCLA process ensures thorough investigative work is done; the process also promotes accountability, community involvement and long-term protectiveness.

Air Force Response

AFCEC is taking a three-step approach – identify, respond, prevent – to assess and respond to potential PFOS/ PFOA in drinking water.

- In 2017, the Air Force completed enterprise-wide sampling of drinking water at all installations — stateside and overseas — to ensure drinking water supplies meet EPA guidelines.
- To-date, the Air Force continues to meet PFAS monitoring requirements as mandated in the 2020 Assistant Secretary of Defense and Deputy Assistant Secretary of the Air Force for Environment, Safety, and Infrastructure memoranda.
- In the United States, AFCEC is conducting additional sampling to identify potential AFFF releases, determine the extent of the PFOS/PFOA and map possible pathways to drinking sources.
- The Department of the Air Force continues to address PFAS in drinking water, reviewing current data, and conducting additional sampling where necessary.

IDENTIFYING PFAS in the Environment

Preliminary Assessment

In the United States, the Air Force conducted base-wide records reviews to identify fire training areas, crash sites and areas at 204 installations where AFFF may have been used. AFCEC has completed 100 percent of PAs.

Site Inspection

Once the PA identifies potential AFFF release areas, AFCEC conducts a site inspection - groundwater, surface water, soil and sediment sampling - to verify releases and map possible pathways to drinking water sources.
If SI sampling indicates potential pathways to off-base drinking water supplies, AFCEC may test public water systems and private wells. Once the SI is complete, AFCEC determines if more investigation work is needed.
AFCEC has completed site inspections at all 191 active duty, Air National Guard and closed installations identified by the preliminary assessments.

Remedial Investigation

The RI is a more detailed investigation into PFOS and PFOA to determine the nature and extent of PFAS exposure in the environment. The investigation collects data about site conditions, conducts risk assessments to determine whether PFOS and PFOA present unacceptable risks, and further identifies what is needed for a comprehensive cleanup at current and former installations.
AFCEC is conducting or planning remedial investigations at 191 installations.

RESPOND to PFOS/PFOA in Drinking Water

Response Action

When AFCEC determines levels exceed 70 parts per trillion (ppt) for PFOS or PFOA, individually or combined, in drinking water due to the Air Force mission, the Air Force will provide an alternate drinking water source where needed until longer-term measures are in place. Permanent solutions may include installation of a filtration system or connecting private well owners with PFOS/PFOA above 70 ppt to a public drinking water supply. If sample results are detectable but below 70 ppt, the Air Force may conduct additional sampling as needed to track concentration changes and determine if further action is necessary.

PREVENT and PROTECT

AFFF Replacement

On September 12, 2023, the Department of Defense qualified the first fluorine-free foam product for procurement. Additional F3 products that meet the specification requirements are in the process of being qualified and approved for use by the Military Departments. The Air Force has begun this transition process. In early 2023, the Air Force switched from foam-based to water-based hangar fire suppression systems and disconnected and locked the AFFF tanks at most U.S. and overseas facilities.

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