165th Airlift Wing – AFFF (PFOS/PFOA) Factsheet

Current as of: March 3, 2020

In May 2016, the Environmental Protection Agency issued a health advisory under the Safe Drinking Water Act, recommending a 70 ppt (parts per trillion) level of Perfluorooctanesulfonic acid (PFOS) and/or Perfluorooctanoic acid (PFOA) in drinking water. In 2019 groundwater was added to the advisory and a level of 1.26 ppm (parts per million) was established for soil. These chemicals have been identified as emerging contaminants due to the inconclusive human health risks and evolving regulatory standards.

PFOS / PFOA is part of a larger class of chemicals called per and polyfluoroalkyl substances (PFAS) which are found in everyday items such as nonstick cookware, microwave popcorn bags, fast-food wrappers, water-resistant clothing, shampoo, dental floss, nail polish, and eye makeup. In Defense applications, PFOS / PFOA are found in firefighting foam known as aqueous film-forming foam, or AFFF. The foam is used nationwide by firefighting organizations and other entities to rapidly extinguish fuel fires and protect against catastrophic loss of life and property. Likewise, it has been used on military bases for many years due to its exceptional fire extinguishing capability.

Current Day: Air Force

Since the health advisory was issued, the following DOD actions have taken place:

- Defense Secretary Dr. Mark T. Esper announced a task force in 2019 to address PFAS.
    - According to Deputy Asst. Secretary of Defense for Environment, Maureen Sullivan, the DOD's first priority is to address drinking water with PFOS and PFOA from DOD activities
    - The task force has identified 401 active and former DOD installations with at least one area where there is a known or suspected release of PFOS and/or PFOA.
        - The Air Force has identified approximately 200 installations where firefighting foam may have been released and is conducting investigations to confirm whether releases actually occurred.
            - The Air Force is prioritizing investigations for firefighting foam releases which could potentially impact human health through drinking water, by considering such factors as potential pathways to drinking water, depth to groundwater and potential for contamination to mitigate off-base.
    - DOD has tested all of the 524 water systems worldwide for which the department is the water purveyor and has worked with water suppliers to test systems where it buys water.
        - The department identified 24 DOD drinking water systems and 12 other systems containing PFOS and PFOA levels above the health advisory level of 70 ppt.
- DOD has been investigating alternatives to AFFF even prior to the advisory and while the Air Force has changed to an environmentally safer version of AFFF, the advisory has prompted DOD to investigate alternatives that would eliminate the use of AFFF that contains either PFOS or PFOA.
    - The Naval Sea Command has added AFFF formulas containing no PFOS or PFOA to their product inventory

    - The Air Force is currently taking steps to replace it PFOS / PFOA containing AFFF one or more of the AFFF formulas used by the Navy

For more information regarding DoD and PFOS/PFOA please check out:

- https://www.defense.gov/explore/story/Article/1930618/dod-moving-forward-with-task-force-to-address-pfas/
- https://www.cdc.gov/biomonitoring/PFAS_FactSheet.html
- https://www.epa.gov/pfas

Current Day: 165th Airlift Wing

The Savannah Air National Guard base is comprised of 165th Airlift Wing (165AW) and the Air Dominance Center (ADC) located at the Savannah International Airport. The 165AW supports a squadron of C-130 cargo aircraft while the ADC supports units from around the country that utilize our airport as a training site. The 165AW provides firefighting support through a fully functional fire department to all tenants of the airport which include commercial airlines, Gulfstream, 165AW aircraft and visiting unit aircraft. The 165AW Fire Department has used AFFF for many years and continues to do so.

As a result of the Health Advisory published by the Environmental Protection Agency in May 2016, the following actions and changes have taken place with regard to AFFF and its ongoing usage.

- The Air Force contracted out an initial study (Site Investigation) of AFFF (PFOS/PFOA) levels in groundwater and soil of 165AW leased space at the Savannah Airport spaces leased by 165AW in 2017
    - Soil
        - 35 soil samples taken; no samples contained levels of PFOS / PFOA at or above the EPA advisory level of 1.26 ppm
    - Ground Water
        - 18 groundwater samples taken; 10 samples exceeded the EPA Advisory Level of 70 ppt for PFOS / PFOA
    - Public access record of study can be found at http://afcec.publicadmin-record.us.af.mil/
- 165AW has been in communication with Savannah Water and Sewer, provider of drinking water for the base and surrounding community, concerning the presence of PFOS / PFOA in drinking water
    - Savannah Water and Sewer completed testing for PFOS / PFOA in 2014
        - Levels found were below the EPA Health Advisory Level of 70 ppt
- As a first step to moving away from AFFF containing PFOS / PFOA, the Air Force required a change to an environmentally safer AFFF (still containing PFOS / PFOA).
    - 165AW changed to this newer form of AFFF in 2017
- High expansion foam (containing NO PFOS / PFOA) is available and has been recently installed in two operational hangers of the 165AW.
- Per Air Force Guidance

- 165AW discontinued use of AFFF (containing PFOS / PFOA) for training or another land release (flushing/testing equipment) use
    - Water used to flush equipment that uses AFFF (containing PFOS / PFOA) is now captured and disposed of instead of releasing the water into the environment
- AFFF (containing PFOS / PFOA) is still used in mobile firefighting equipment until modifications to equipment can be completed that allows use of non-PFOS / PFOA containing foam.
    - Only where the potential for loss of life and/or aircraft exists is AFFF used to combat a fire**.**