



FACT SHEET

Per- and Poly-Fluoroalkyl Substances (PFAS)

Preliminary Assessment and Site Inspection at Fort Riley, Kansas

CONTACT

Army Installation
Restoration Manager
DPW-Environmental
Division
Fort Riley, KS 66442

PHONE: (785) 239-3194

The Army is investigating potential releases of certain per- and poly-fluoroalkyl substances, commonly known as PFAS. These substances may be present in soil and/or groundwater at Army installations from PFAS-containing aqueous film forming foam (AFFF) or from other sources. Military use of AFFF began in the 1970s and was most widely used at installations with airfields. The primary potential sources of Army PFAS releases are firefighting training areas where AFFF was used to train firefighters to respond to petroleum fires. Other potential Army uses of PFAS were in industrial processes, such as metal plating. However, there are also many potential non-DoD sources of PFAS. These chemicals may enter the environment through landfills and wastewater due to their presence in consumer products or as runoff to soil and water from other uses.

Background

- PFAS refers to a class of approximately 600 man-made chemicals in commerce, including Perfluorooctane sulfonate (PFOS), Perfluorooctanoic acid (PFOA), and Perfluorobutanesulfonic acid (PFBS).
- PFOA and PFOS are the most extensively studied and historically, the most widely-used throughout the U.S.
- Beginning in the 1950s, common uses of these substances included numerous heat-, stain-, grease- and water-resistant products, such as carpets, clothing, upholstery fabrics, paper packaging for food, and cookware.
- In May 2016, the EPA established lifetime health advisory levels for PFOS and PFOA in drinking water. Health advisory levels are concentrations that should offer a margin of protection for all Americans throughout their life from adverse health effects resulting from exposure to PFOS and PFOA.
- the CERCLA process to fully investigate releases, prioritize responses, and determine appropriate cleanup actions based on risk.
- The CERCLA process as provided in 42 United States Code Chapter 103 includes multiple phases: Preliminary Assessment, Site Inspection, Remedial Investigation, Feasibility Study, Remedial Design/Remedial Action, Remedial Action-Construction/Remedial Action-Operations, and Long Term Management. Each of these phases can take several years to complete. The first three phases are described below.
- **Preliminary Assessment (PA).** The PA is an initial review and analysis of available information to determine whether a release may have occurred and the potential sources and type of release(s).
- **Site Inspection (SI).** The SI characterizes the site and sources; determines likelihood of release and measures various media (e.g. groundwater or soil) for PFAS; and identifies the receptors actually or potentially exposed.
- **Remedial Investigation (RI).** The RI is a study to gather data delineating nature and extent of PFAS, establishes cleanup criteria, identifies alternatives for remedial action, and analyzes cost and feasibility of alternatives.

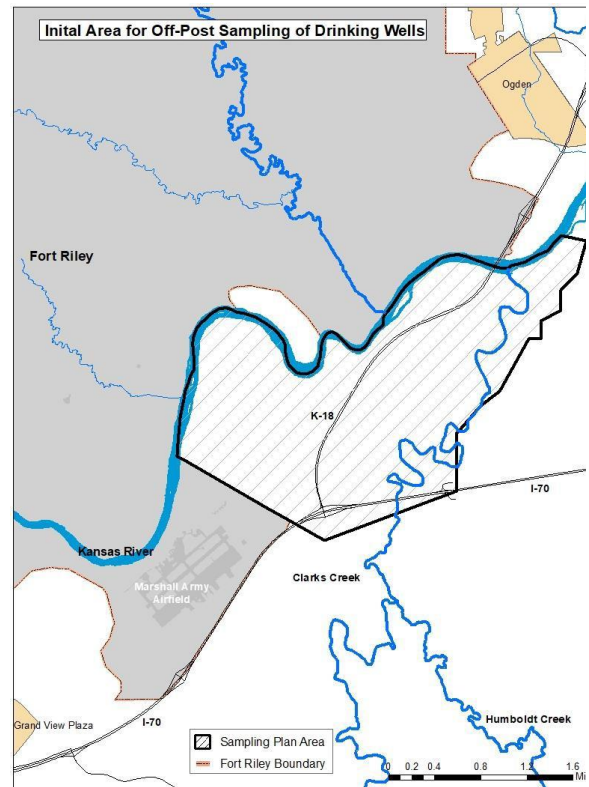
PROCESS:

- Army's priority is to quickly address PFOS and PFOA in drinking water from Army activities and to address releases of PFOS and PFOA under the federal cleanup law (i.e., the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)). Army follows

Army Activities at Fort Riley, Kansas – updated Jan. 2022

- The Army conducted a PA and SI at Fort Riley to determine whether a release of PFAS may have occurred and to identify potential sources and types of release.
- The PA identified 28 sites at Fort Riley where PFAS releases occurred or are suspected to have occurred. This includes areas at Marshall Army Airfield, Camp Funston, Camp Whitside, Camp Forsyth and Custer Hill.
- PFOA/PFOS was found in the groundwater at 9 of those 28 sites in concentrations above 70 parts per trillion (ppt), and the Army concluded that there was the potential for off-post drinking water wells near 6 of those sites (all at Marshall Army Airfield) to contain PFOA/PFOS in concentrations above 70 ppt due to Army operations.
- The Army contacted owners of properties located near Marshall Army Airfield to ask permission to test quality of drinking water from wells on their properties. A total of 23 wells were sampled and analyzed in 2020. Nineteen of the wells were non-detect for PFOA/PFOS compounds. Three wells had detections of PFOA/PFOS compounds below 70 ppt. One well had a detection above 70 ppt.
- The Army has notified all property owners of their results and is providing alternate drinking

- water to the property owner with the detection above 70 ppt.
- The SI concluded that 15 of the 28 sites listed in the PA should be further investigated during the RI.
- An RI is being planned for 2022. Future potential remedy actions will be determined following the CERCLA process, in coordination with the EPA, KDHE and public participation.



Other PFAS Actions

- The Army has tested Fort Riley's drinking water systems multiple times since 2013 to determine whether drinking water contained PFOS/PFOA above the EPA lifetime Health Advisory level. Based on sampling and actions taken to date, no one is drinking water with levels of PFOS/PFOA above the lifetime Health Advisory level at the installation. The Army will continue to regularly test its drinking water systems.
- The Army continues to identify and dispose of old formulations of AFFF containing PFOA/PFOS at Army installations, and no longer uses AFFF for maintenance, testing, or training. AFFF is now only used for fire emergencies.

WHERE TO GO FOR MORE INFORMATION

Installation website: <https://home.army.mil/riley>
Army PFAS website: <https://www.denix.osd.mil/army-pfas/home/>