



FACT SHEET

Per- and Polyfluoroalkyl Substances (PFAS)



Remedial Investigation at Waiawa Gulch Training Site (TS) and Unit Training and Equipment Site (UTES)

96-1176 Waihona Street · Pearl City, HI · 96782

The Army National Guard's (ARNG) #1 priority is to ensure the health and well-being of our Soldiers, their families, and our communities. The ARNG is conducting environmental investigations for certain per- and polyfluoroalkyl substances, commonly known as PFAS, at our facilities throughout the nation. PFAS refers to a large class of manmade chemicals that are used in many household and industrial products, including a specialized firefighting foam, known as aqueous film forming foam (AFFF). PFAS were detected in the soil and groundwater sampled at the Waiawa Gulch TS and UTES. ARNG is working with the Hawai'i State Department of Health (HDOH) to address PFAS at the facility.

What are PFAS?

- PFAS refers to thousands of man-made chemicals used in commerce including, but not limited to, perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA); two of the most extensively studied chemicals 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 non-stick cookware.
- In the 1970s, military and civilian firefighters began using and training with PFAS-containing AFFF, the quickest extinguishing agent to protect people and property during petroleum-based fires such as aircraft crashes.
- 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.
- PFAS do not break down easily and persist in our environment. Some chemicals stay in the human body for long periods of time after eating food or drinking water containing PFAS. Scientists are actively researching PFAS, and our understanding of these substances is changing rapidly.

What is the PFAS Investigation Process?

- The Department of Defense (DoD) follows the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 (also known as "Superfund"), as well as long-standing US Environmental Protection Agency (USEPA) regulations to evaluate chemical release sites in its cleanup program, including PFAS. ARNG follows the CERCLA process to fully investigate releases, prioritize responses, and determine appropriate cleanup actions based on risk.
- The CERCLA process includes the following phases: Preliminary Assessment, Site Inspection, Remedial Investigation, Feasibility Study, Remedial Action (including Design, Construction, and Operations), and Long-Term Management. Each of these phases can take several years to complete. The first three phases at Waiawa Gulch TS and UTES are described below.
- **Preliminary Assessment (PA):** Completed in 2020, the Waiawa Gulch TS and UTES PA is an initial review and analysis of readily available information to determine if a release may have occurred that require additional investigation or action.
- **Site Inspection (SI):** Completed in 2023, the SI involves sampling the site groundwater and/or soil to determine if a release may have occurred, and, if so, what additional action, if any, is appropriate.

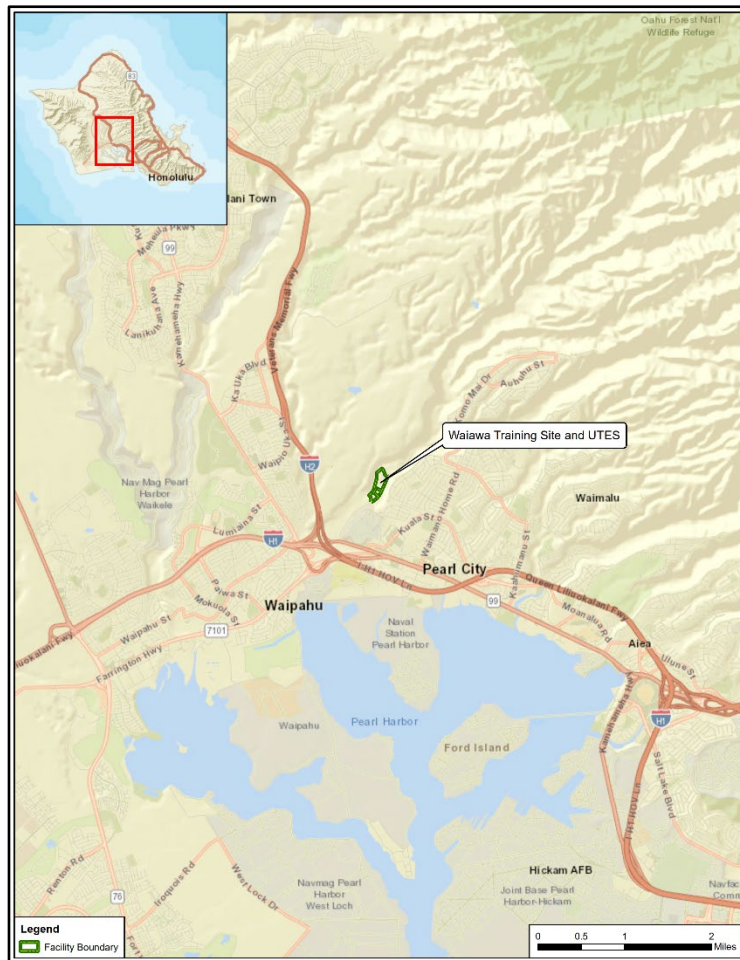
CONTACTS

Army National Guard G-9
Jennifer Solomon
PFAS Program Manager
(520) 671-6594
armyguardcleanup@army.mil

Hawai'i Army National Guard
Leslie Chau
Installation Restoration Program Manager
(808) 672-1276
leslie.t.chau.nfg@army.mil

Hawai'i Department of Health
Sven Lindstrom
Voluntary Cleanup Program
Specialist
(808) 586-4249
sven.lindstrom@doh.hawaii.gov

- **Remedial Investigation (RI):** The RI, which is currently underway at Waiawa Gulch TS and UTES, characterizes the nature and extent (how much, how far, how deep) of the contamination that was identified during the SI. An assessment of site-specific risks to human health and the environment is also performed. This phase can take several years to complete and determines the appropriate cleanup actions for a site.
- Throughout the process, the ARNG collaborates with regulatory agencies, communities, and facilities to ensure open and transparent information sharing.
- Public interest in establishing a Restoration Advisory Board (RAB) will be solicited during the RI, giving local community members the opportunity to have their voices heard and to provide valuable community insight.
- Two sites, or Areas of Interest (AOI), were identified at Waiawa Gulch TS and UTES, AOI 1 – Firetruck Pump Test Area and AOI 2 – Vehicle Maintenance Area, Firetruck Parking Area, and Storage Buildings.
- More information is available at: <https://www.nationalguard.mil/Environmental/PFAS/>



SI Groundwater Testing Results for PFAS at Waiawa Gulch TS and UTES, HI		
Highest Detection (parts per trillion [ppt])	CERCLA Phase	Status
PFBA: 113; PFBS: 125; PFHxA: 236; PFHxS: 1,110; PFNA: 5.44 J; PFOA: 57; PFOS: 271	Site Inspection	Sampling revealed multiple locations at Waiawa Gulch TS and UTES where PFAS was above USEPA Regional Screening Levels. The DoD is following the CERCLA process to investigate PFAS releases on the facility and determined an RI is required. The RI is scheduled to begin in 2024. Based on available data, there are no known PFAS impacts to drinking water at the Waiawa Gulch TS and UTES; however, potential impacts will be reevaluated throughout the RI as additional data is collected.
J = estimated concentration PFBA = perfluorobutanoic acid PFBS = perfluorobutanesulfonic acid PFHxA = perfluorohexanoic acid		PFHxS = perfluorohexanesulfonic acid PFNA = perfluorononanoic acid PFOA = perfluorooctanoic acid PFOS = perfluorooctanesulfonic acid

Army National Guard Next Steps:

The ARNG continues to ensure the health and well-being of our Soldiers, their families, and our communities by identifying and addressing PFAS, nationwide. ARNG has completed the PA and SI phases at this site. The RI phase will be completed to characterize the nature and extent of PFAS contamination and assess risk to human health and the environment.



Additional Information is Available at These Websites:
<https://www.nationalguard.mil/Environmental/PFAS/>
<https://www.denix.osd.mil/army-pfas/home/>
<https://health.hawaii.gov/heer/environmental-health/highlighted-projects/pfas/>

