Per- and polyfluoroalkyl substances (PFAS)

are manmade chemicals used in many industries to make things waterproof, non-stick, and stain resistant. Some examples of materials that may contain PFAS include firefighting foam, carpet, furniture, waterproof clothing, and certain types of food packaging. Because they are used in so many materials and products, these chemicals are found throughout the environment. In addition, PFAS are often described as "forever chemicals" because they do not breakdown over time and can build up in the environment and our bodies.

The Hawai'i Department of Health (HDOH) has a number of projects in progress to better understand the presence of PFAS contamination in Hawai'i and the associated risks. Work is on-going and further information about project updates and data can be found on HDOH's PFAS website

Hawai'i DOH Environmental Action Levels (EALs) for PFAS

HDOH's Environmental Action Levels (EALs) are designed as a threshold level below which no adverse health effects are anticipated. The EALs incorporate uncertainty factors to ensure they are human and environmental health protective. There are different EALs calculated for soil, groundwater that is a source of drinking water, groundwater that is not a source of drinking water, and soil vapor. HDOH's Hazard Evaluation and Emergency Response (HEER) Office initially published EALs for 18 PFAS chemicals in April 2021. The technical memorandum outlining the EAL process and calculations was revised in August 2021 and December 2022 with the addition of an EAL for 6:2 FTS bringing the total EALs to 19 PFAS chemicals. This is the most comprehensive set of PFAS screening levels available. To read the most recent version of the PFAS Screening Level Memorandum, please click here or visit the HDOH PFAS website for more information.

HDOH projects to further evaluate PFAS contamination in the Environment (2019 - Present)

Fish and the Near Shore Environment

An investigation of PFAS in fish and sea water was conducted in the near-shore environment at 11 high-risk sites around O'ahu. Sample collection and laboratory analyses complete. Data evaluation and publication in progress.

Market Fish

Testing for PFAS in frequently eaten, locally caught fish purchased from Oahu markets. Species tested include pelagic (ocean-going) fish like 'ahi, ono, and marlin. Sample collection and laboratory analyses complete. Data evaluation and publication in progress.

Wastewater, biosolids and landfill leachate

Evaluating PFAS concentrations statewide in wastewater and biosolids from wastewater treatment plants and landfill leachate. Sample collection in progress.

Drinking Water

The Third Unregulated Contaminant Monitoring Rule (UCMR 3) conducted by EPA in calendar years 2013-2015 looked for 6 PFAS chemicals in public drinking water systems serving 10,000 people or more. UCMR 3 did not identify any large drinking water systems in Hawaii with PFAS contamination. For more information about UCMR-3 including the data, please visit EPA's UCMR 3 website.

PFAS in high-risk drinking water wells: Monitoring for PFAS in groundwater at 20 county and military drinking water wells on 0'ahu, Kaua'i, Hawai'i, and Maui. Sample collection is complete with data analysis in progress.

Red Hill GW monitoring

10 Groundwater monitoring wells around the Red Hill Bulk Fuel Storage Facility are currently being monitored for the presence of PFAS.

Planned Upcoming Projects

- The Fifth Unregulated Contaminant Monitoring Rule (UCMR 5) will
 evaluate public drinking water systems across the country for 29
 PFAS chemicals. All public drinking water systems in Hawai'i that
 serve over 3,300 people will be tested in calendar years 20232025. For more information on UCMR 5, visit <u>EPA's UCMR</u>
- Additional drinking water systems that are not tested in UCMR 5 will be tested for PFAS in a drinking water project funded by the Bipartisan Infrastructure Law.
- A study looking at PFAS in compost and food crops grown in compost will be conducted by HDOH.
- Continued evaluation and updates to the PFAS EALs are anticipated when EPA releases its planned draft Maximum Contaminant Level (MCL) for PFOA and PFOS, expected in January 2023.

Environmental Emergency Response to PFAS Releases

The HEER Office responds to environmental releases of chemicals containing PFAS such as the release of firefighting foam near Adit 6 at the Red Hill Bulk Fuel Storage Facility in November 2022. Oversight of the Navy's sampling and remediation actions continue to ensure full characterization of the contamination and remediation of this risk.

Long-term oversight of PFAS Contaminated Sites

The HEER Office oversees the evaluation and remediation of chemically contaminated sites. Identified sites in Hawai'i that have potential PFAS contamination include firefighting training sites, airports, and military sites. Sites with potential PFAS contamination have been specially labeled in the HEER Office's public database of sites called <a href="https://example.com/internation-n

Please note that some contaminated sites have restrictions on public viewing of documents in iHEER. These sites can be viewed on a map under "Instructions for Use-Map of Sites that are Marked "Not for Public" in iHEER" on the iHEER information website. More information about these sites can be obtained via a public records request submitted to the HEER Office.

