



**UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105**



**STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378**

November 2, 2022

Captain Cameron J. Geertsema
NAVFAC Hawai'i
850 Ticonderoga Street, Suite 110
Joint Base Pearl Harbor Hickam, Hawai'i 96860-5101
(Sent via Electronic Mail)

Subject: Preliminary Investigation of PFAS

Dear Captain Geertsema:

The U.S. Environmental Protection Agency (EPA) and Hawai'i Department of Health (DOH), collectively the "Regulatory Agencies," have reviewed the per-and polyfluoroalkyl substances (PFAS) sampling results in the final laboratory report DPWG79713 dated January 17, 2022, that was submitted on March 31, 2022 to the Regulatory Agencies by the U.S. Department of the Navy (Navy) and the Defense Logistics Agency (DLA). The referenced laboratory report was required under the Red Hill Shaft Recovery and Monitoring Plan Appendix E Groundwater Sampling Plan associated with evaluating groundwater impacts as a result of the May 6 and November 20, 2021, release events at and from the Red Hill Bulk Fuel Storage Facility (Facility).

The DPWG79713 final laboratory report indicated PFAS were detected in groundwater samples collected from RHMW2254-01 on December 20 and 27, 2021, at low parts per trillion (ppt) concentrations that are below Hawai'i State Environmental Action Levels (EALs) but above EPA's interim health advisory levels. Specifically, perfluorooctanoic acid (PFOA) was detected at 2.76 ppt and 3.49 ppt, and perfluorooctanesulfonic acid (PFOS) was detected at 6.72 ppt and 4.35 ppt on the two sampling dates respectively. DOH collected two additional groundwater samples from RHMW2254-01 on December 20 and 27, 2021, and these samples did not detect PFAS.

Pursuant to Section 6 of the Statement of Work to the 2015 Administrative Order on Consent (USEPA Docket No. RCRA 7003-R9-2015-01) and to determine whether these PFAS detections were attributed to the November 20, 2021 release, the Navy and DLA shall perform a

preliminary investigation for PFAS as described below. The Navy and DLA shall test recovered LNAPL (light non-aqueous phase liquids, either freshly recovered or a previously frozen sample) from within Red Hill Shaft for PFAS. Additionally, the Navy and DLA shall conduct PFAS groundwater sampling from a subset of groundwater monitoring wells (RHMW2254-01, RHMW-1, RHMW-2, and RHMW-3) at the Facility. Samples shall be analyzed for a broad suite of PFAS analytes, including perfluorobutane sulfonic acid (PFBS) and GenX. Our research indicates commercial labs are capable of analyzing for the presence of more than 40 PFAS.

Additional groundwater sampling may be required based on the results of this preliminary investigation. The Navy and DLA shall submit tabulated results and laboratory reports, whether or not validated, within 30 calendar days after receipt of analytical results from the lab.

Within 45 days of receipt of this letter, the Navy and DLA shall submit a PFAS-specific sampling plan or an addendum to the Sampling and Analysis Plan Addendum 01 dated September 1, 2017 providing PFAS-specific information on planned sample collection and analysis, including the analytical laboratory standard operating procedure (SOP) for a fuel or oil matrix detection limits, validation results for a fuel or oil matrix, reporting limits, accuracy and precision goals, sample containers, sampling procedures designed to prevent environmental cross contamination of PFAS, equipment blanks, preservation and holding time, and planned matrix spike or other method quality control samples. In addition, please specify a plan for obtaining follow-up confirmatory samples with replicates if detections are found. On behalf of the Regulatory Agencies, EPA may submit one or more split samples to an EPA laboratory for analysis.

If you have any questions, please contact Gabriela Carvalho, EPA Red Hill Project Coordinator at (808) 541-2723 or Fenix Grange, Supervisor, DOH Site Discovery, Assessment and Remediation Section at (808) 586-4248.

Sincerely,

**GABRIELA
CARVALHO**

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Red Hill Project Coordinator
US Environmental Protection Agency Region 9

Kelly Ann Lee
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State of Hawai'i, Department of Health

cc: Sherri Eng, Environmental Director, Navy Region Hawai'i
Donald Panthen, Red Hill Program Management Office Director, Navy Region Hawai'i
CDR James Sullivan, Red Hill Officer in Charge, NAVFAC Hawai'i
LCDR Travis Myers, Aquifer Recovery Team Lead