



**DEPARTMENT OF THE NAVY**

COMMANDER  
NAVY REGION HAWAII  
850 TICONDEROGA ST STE 110  
JBPHH, HAWAII 96860-5101

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Ser N4/ 241  
July 27, 2022

Mr. Richard Takaba  
Hawaii State Department of Health  
Solid and Hazardous Waste Branch  
Underground Storage Tank Section  
2827 Waimano Home Road #100  
Pearl City, HI 96782

Dear Mr. Takaba:

SUBJECT: FOURTH QUARTER 2021  
QUARTERLY GROUNDWATER MONITORING REPORT  
RED HILL BULK FUEL STORAGE FACILITY  
DOH FACILITY ID NO. 9-102271  
DOH RELEASE ID NOS. 990051, 010011, 020028, 140010, AND 210012

As part of the Red Hill groundwater long-term monitoring (LTM) program, groundwater sampling was conducted from October 12 through November 22, 2021 at 22 monitoring locations within the Red Hill groundwater monitoring network. Monitoring locations include the sampling point at Red Hill Shaft (RHMW2254-01), 17 monitoring wells within the Facility boundary (RHMW01 and RHMW01R to RHMW10, RHMW13, RHMW15, RHMW16, RHMW16A, RHMW19, and OWDFMW01), and 4 monitoring wells located outside the Facility (RHMW11, RHMW12A, RHMW14 and the Halawa Deep Monitor Well, HDMW2253-03).

Analytical results were compared to current LTM screening criteria. The LTM screening criteria were agreed upon by the Parties to the Administrative Order on Consent (AOC) and are presented in the February 4, 2016, AOC Statement of Work Sections 6 and 7 scoping completion letter. The LTM screening criteria were updated with the Fall 2017 DOH Tier 1 Groundwater Environmental Action Levels for sites where groundwater is a potential or current drinking water resource and the nearest surface water body is greater than 150 meters from the release site. Analytical results for wells RHMW01, RHMW01R, RHMW02, and RHMW03 were also compared to site specific risk based levels (SSRBLs) for total petroleum hydrocarbons as diesel fuel (TPH-d) (4,500 micrograms per liter [ $\mu\text{g/L}$ ]) and benzene (750  $\mu\text{g/L}$ ).

The Fourth Quarter 2021 Quarterly Groundwater Monitoring Report summarizes sampling activities and laboratory analytical results. This report was originally scheduled for release in early 2022; however, it was delayed to prioritize validation of laboratory analysis data to support the emergency response sampling effort. The report will be submitted via DoD SAFE and is saved and available for download from the JBPHH Red Hill Bulk Fuel Storage Facility environmental data management system (EDMS) at <https://synectics.net>.

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If there are any questions regarding this report, or if more information is needed on EDMS, please contact Ms. Susan Lohr at [susan.c.lohr.civ@us.navy.mil](mailto:susan.c.lohr.civ@us.navy.mil) or Ms. Caroline Rossi at [caroline.e.rossi.civ@us.navy.mil](mailto:caroline.e.rossi.civ@us.navy.mil).

Sincerely,



C. J. GEERTSEMA  
Captain, CEC, U.S. Navy  
Regional Engineer  
By direction of the  
Commander

Copy to (electronic via DoD SAFE):

Ms. Gabriela Carvalho, U.S. EPA Region 9, Red Hill Program Coordinator  
Mr. Delwyn Oki, United States Geological Survey (USGS)