



**DEPARTMENT OF THE NAVY**  
COMMANDER  
NAVY REGION HAWAII  
850 TICONDEROGA ST STE 110  
JBPBH, HAWAII 96860-5101

5090  
Ser N4/205  
July 7, 2022

**CERTIFIED NO: 9489 0090 0027 6232 9789 84**

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: SOIL VAPOR SAMPLING RESULTS FOR APRIL 2022**  
**RED HILL TANK COMPLEX**  
**DOH FACILITY ID NO. 9-102271**  
**DOH RELEASE ID NO. 990051, 010011, 020028, 140010, AND 210012**

Monthly soil vapor samples were collected on April 22, 2022 from beneath all accessible Red Hill tanks, with the exception of Tanks 1 and 19, which are inactive and not included in the sampling network. The 18 tanks in the sampling network have two or three soil vapor monitoring points (SVMPs) screened within designated areas beneath the tanks. These SVMPs are each designated as shallow (S), middle (M), deep (D), or M/D.

To assess the integrity of the associated tank system, an action threshold or level was established as 50 percent of the calculated vapor concentration from fuel-saturated water. This conservative approach generated action thresholds of 280,000 ppbv for SVMPs beneath tanks containing jet fuels (F-24 or JP-5) and 14,000 ppbv for SVMPs beneath tanks containing marine diesel fuel (F-76).

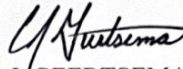
Soil vapor VOC concentrations measured with a photo-ionization detector (PID) in the field are presented with the appropriate action level graphically in the enclosure. At Tank 5, the concentrations of VOCs detected in the SVMPs were 212 ppbv (SV05S), 285 ppbv (SV05M), and 1582 ppbv (SV05D). VOC concentrations measured in all down-gradient tank SVMPs were between 42 and 134 ppbv.

All VOC concentrations measured in April were below the action levels, with no consistent trends observed over time. Additional monitoring in accordance with the May 6, 2021 and November 20, 2021 Release Groundwater Sampling Plan is ongoing. These results are reported under separate cover. Regular monthly soil vapor VOC concentrations will continue to be sampled and reported. The May 19, 2022 event results will be submitted under separate cover.

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If there are any questions regarding the April soil vapor sampling results, or if more information is needed, 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 (808) 471-4881.

Sincerely,



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

Enclosure: Graphical Summary of Soil Vapor Sampling Results for Tanks 2 - 18 and 20  
Data represented through April 2022 (18 pages)

Copy to:  
Mr. John Floyd, NAVSUP FLC Pearl Harbor

Electronic Copies to:  
Ms. Gabriela Carvalho, U.S. EPA Region 9, Red Hill Program Coordinator  
Mr. John Reed, DLA Energy Pacific  
Mr. William Potter, DLA Energy - Engineering, Environmental, Property Directorate