UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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STATE OF HAWAIʻI
DEPARTMENT OF HEALTH
KA ʻOIHANA OLAKINO
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HONOLULU, HI 96801-3378

October 17, 2024

Ernest Y.W. Lau, P.E.
Manager and Chief Engineer
Honolulu Board of Water Supply
630 South Beretania Street
Honolulu, Hawaiʻi 96843
[via email only: elau@hbws.org]

SUBJECT: **Response to Letters to US Environmental Protection Agency, Region 9 and Hawaiʻi Department of Health**

Dear Ernest Lau:

The United States Environmental Protection Agency (EPA) and Hawaiʻi Department of Health (DOH) are aware of the following seven (7) letters sent by the Honolulu Board of Water Supply (BWS) between July 8 and September 24, 2024 on a range of topics related to the U.S. Department of the Navy's (Navy's) closure of the Red Hill Bulk Fuel Storage Facility (RHBFSF) and operation of the Navy Joint Base Pearl Harbor-Hickam (JBPHH) drinking water system:

- Polycyclic Aromatic Hydrocarbons (PAHs) Detected at BWS ʻAiea Wells, dated July 8, 2024
- BWS Comments on the Navy's RHBFSF Tank Closure Plan – Supplement 3, dated July 16, 2024
- BWS Comments on the Navy's Draft Remedial Investigation Work Plan Per- and Polyfluoroalkyl Substances (PFAS) Release, dated August 7, 2024

- BWS Request – Weekly Sampling and Analysis of Navy Monitoring Wells (RHBFSF Monitoring Well Network) and Navy Production Wells, dated August 21, 2024
- BWS forwarding Lead Detections in the JBPHH Water System, dated August 29, 2024
- BWS Response to the August 9, 2024 EPA and DOH Request for Information regarding PAH detection at Aiea Wells, dated September 23, 2024
- Resident Testimony Concerning Lead in Water Samples from JBPHH Received at September 23, 2024 BWS Board of Directors Meeting, dated September 24, 2024

We are providing the responses below to the concerns described in these letters.

As regulators, the EPA and DOH seek to ensure that all water suppliers provide safe drinking water and are responsible stewards of our resources, so that safe drinking water is available to residents now and for future generations. We understand that the decisions we make affect people's everyday lives and choices. We evaluate all available data to reach the most scientifically accurate conclusions. We all owe the public this level of due diligence and have a collective responsibility to contextualize facts about the safety of our drinking water and environment.

We continue to provide oversight of the Navy and the U.S. Defense Logistics Agency (DLA), to protect O'ahu's drinking water supply, specifically by requiring them to: 1) safely and efficiently close the RHBFSF, 2) ensure the JBPHH Public Water System (PWS) serves safe drinking water, 3) characterize the nature and extent of the RHBFSF's impacts to soil and groundwater, and 4) take appropriate corrective and remedial actions. The Navy is required to complete these tasks under the DOH's 2022 Emergency Order (EO) and EPA's 2023 Administrative Consent Order (ACO). Our oversight of Navy and DLA and communication to the public on our efforts is a top priority.

PAH Detections in BWS 'Aiea Wells

We received the BWS' response, dated September 23, 2024, to our August 9, 2024 letter requesting information about the May and June 2024 PAH detections in the BWS 'Aiea Wells. The response left many of our questions unresolved and raised new concerns, so we will provide a detailed response under separate cover. As the owner of the BWS 'Aiea Wells, the BWS is expected to diligently investigate all potential sources of these detections and consult with DOH on the investigation and the public communication of the investigation. While EPA and DOH have concluded based on scientific evidence that the source of the PAH was not Red Hill, the basis for the PAH detection remains unclear and it is premature to make and communicate conclusions about what the source is or may be.

Navy's Tank Closure Plan – Supplement 3

As EPA and DOH have stated since our responses to the original Tank Closure Plan sent to the Navy in early 2023, it is unacceptable for the Red Hill underground storage tank (UST) systems to remain as-is after closure. Under the DOH's 2022 EO and EPA's 2023 ACO, the options for permanent UST closure are removal, fill with inert material, or close in-place in a manner approved by the DOH. The Navy's current proposal is closure in-place, due to the structural and environmental risks associated with removing or filling the tanks. EPA and DOH have not approved this proposal because it has not been made clear to us what infrastructure would be altered or removed so that the tank systems can never be used to store hazardous substances again. In 2023, the DOH and EPA already concurred in concept with the Navy's proposal to remove the three fuel pipelines leading from the underground pumphouse to the 20 Red Hill fuel tanks.

The 20 Red Hill fuel tanks have been physically disconnected from the JP-5, F-24, and F-76 pipelines since March 2024, and will remain disconnected moving forward. The process used, known as air gapping, physically isolates the tanks by removing sections of pipe, dismantling them from the active pipelines containing fuel. This means, the Navy and DLA can no longer pump fuel into any of the 20 fuel storage tanks. This is like the concept of air gapping due to cross-connection control requirements of the Safe Drinking Water Act and Hawai‘i Administrative Rules Chapter 11-21. In addition, the Navy is also scheduled to complete air gapping of the four (4) surge tanks by the end of 2024. Having shortened the defueling timeline, we continue to push the Navy to identify ways to safely expedite the closure timeline.

Draft Remedial Investigation Work Plan PFAS Release

EPA and DOH have commented on the Navy's work plan in letters dated August 7, 2024 (EPA), and August 12, 2024 (DOH). EPA and DOH have sought and continue to seek greater information sharing by the Navy with the public via fewer redactions and more community engagement activities. We are awaiting a revised submission from the Navy and will further evaluate Navy's efforts to address PFAS. To further this work, we have directed the Navy to monitor drinking water and Red Hill monitoring wells. The PFAS sampling of drinking water is ongoing and the Navy began sampling select groundwater wells in September and expect results in December.

Weekly Sampling and Analysis Request

The DOH requires the Navy to test 38 groundwater monitoring wells for a suite of analytes, including PAHs, two times per month. Additional analytes, including PFAS, are tested in select monitoring wells on a quarterly basis. These sampling frequencies and locations are based on

historical data, including weekly sampling following the 2021 release. The extensive dataset demonstrates that groundwater conditions are relatively stable, and fluctuations are gradual. Therefore, more frequent sampling is unlikely to provide additional insights, and more likely to increase opportunities for laboratory errors and false positives while taking away resources that could go towards remediation. In addition to a request for the Navy to conduct weekly testing, the BWS requests the Navy to conduct testing by an independent third party. We do not require the Navy to conduct independent third-party testing because of our extensive oversight, which has included the collection of split samples, as well as independent samples.

EPA and DOH believe that the sharing of all available data, including that from both the Navy and BWS, would provide the most complete information for understanding the aquifer, its flow and potential contamination. DOH and EPA have acknowledged the security implications of the sensitive or protected information we were being allowed access to, and the applicable federal laws that governed that protected information. We continue to comply with the federal laws as we receive data used in the groundwater flow model. It's our understanding that BWS could also access the data if it signed a similar acknowledgement document. As a matter of policy, EPA does not believe a non-disclosure agreement (NDA) is necessary for this information and is now questioning whether an NDA should be required by the Navy. Under HRS Chapter 92F, DOH recently sent BWS a letter requesting monitoring data and other sampling information.

Lead detections, School Notifications, and Mass Spectrometer Analyses

The concerns focused on lead detection in the Navy and Army residences were discussed and explained in an hour-long joint presentation by EPA and DOH at the Red Hill Community Representation Initiative (CRI) Meeting #12 on September 26, 2024 that you attended (https://www.youtube.com/watch?v=RUh9tO1rS0w). This presentation provided an explanation of the regulatory and investigative sampling of lead in the Navy and Army systems and satisfied the resident who brought the subject testimony to the BWS at their September 24, 2024 board meeting. A summary of the main points are as follows:

1. The lead sampling under the Navy's Drinking Water Long-Term Monitoring (LTM) and Extended Drinking Water Monitoring (EDWM) Plans is considered a "special sample" following the November 2021 release at the RHBFSF and not a compliance sample consistent with the Lead and Copper Rule (LCR). Sampling protocols in LTM and EDWM were established as appropriate for this investigation, and they differ from the lead and copper tap sampling protocol established in the LCR pursuant to Title 40, Code of Federal Regulations Section 141.86(b) (40 CFR 141.86(b)) and Hawai'i Administrative Rules (HAR) Section 11-20-48. Because sampling completed under LTM and EDWM is for a different purpose, the results have no bearing on the LCR regulatory

requirements under a National Primacy Drinking Water Regulation of which a lead action level exceedance (ALE) occurs when the 90th percentile concentration of lead is greater than 15 micrograms per liter (ug/L). The Navy's LTM and EDWM Plans established a lead screening level of 15 ug/L. A temporary supply of water was provided to consumers until the Navy or Army addressed the exceedance of the lead screening level. In addition, early lead screening level exceedances during the response under the advisory followed Tier 1 Public Notification (PN) rules. However, over time under LTM, notice was provided to the customers, but not to the level of the compliance PN and formal certification required under LCR.

2. Separate and apart from LTM and EDWM, the JBPHH PWS #HI0000360 and Aliamanu Military Reservation (AMR) PWS #HI0000337 are required to comply with the LCR (40 CFR Part 141, subpart I), as specified in the HAR. As the primacy agency having lead oversight and enforcement responsibility of drinking water regulations, the DOH confirms that the JBPHH PWS #HI0000360 and AMR PWS #HI0000337 are currently in compliance with the LCR regulations.

3. The Navy's LTM and EDWM Plans established a lead screening level of 15 ug/L. Under LTM, the Navy already notified the Hawai‘i Department of Education (DOE) that sampling would be taking place at a school under DOE's jurisdiction prior to contacting the individual school. For lead testing completed in schools under LTM and EDWM, if there was a detection of lead at or above the screening level, the Navy already notifies the school principal upon receipt of the testing results. In addition, on September 6, 2024, the Navy provided EPA and DOH a response letter (Attachment). In this letter, the Navy confirms that over the course of LTM and EDWM they have provided notification to the school principal and DOE when there was a detection of lead at a concentration of 15 ug/L or greater. DOH has confirmed with DOE that these notifications were received. In instances of lead detection above 15 ug/L, the Navy has removed premise plumbing fixtures to remediate the lead and retested to confirm no further lead detection.

Samples analyzed during LTM and EDWM follow EPA Method 525.2 which includes the use of mass spectrometry which is required as part of this approved drinking water method. In addition, the June 2024 version of the Navy's EDWM (available publicly in the https://jbphh-safewaters.org/ webpage), includes Section 5.2.3 which describes a two-tiered approach to perform additional, detailed analyses following detections of Total Petroleum Hydrocarbon (TPH) via EPA Method 8015/8260. Tier 1, as described in the EDWM Section 5.2.3, does already include a confirmation with mass spectrometry. Furthermore, the Navy's EDWM Plan incorporates lessons learned from LTM, including the removal of residual chlorine with sodium thiosulfate in samples collected for Total Petroleum Hydrocarbon-Diesel (TPH- D) and TPH-Oil (TPH-O) analysis via EPA Method 8015. Since the June 2024 version of the Navy's EDWM Plan, EPA and DOH have provided additional comments and we are aiming to provide final

approval to the Navy's EDWM Plan in the near future following our requested revisions to the plan.

We are concerned that BWS letters and subsequent public presentations of incomplete or incorrect information has created significant public confusion about the overall safety of O'ahu's drinking water. We request BWS to seek EPA and DOH input into the BWS analysis prior to public presentations in order to prevent further confusion. We look forward to continuing our work together to ensure all residents of O'ahu have safe drinking water by ensuring that all public water providers or other responsible parties identify, investigate and treat/remediate all sources of potential contamination.

If you have any questions regarding this letter, please contact Matthew Cohen, EPA Red Hill Project Coordinator, at Cohen.Matthew@epa.gov or (415) 972-3691; or Kelly Ann Lee, DOH Red Hill Project Coordinator, at KellyAnn.Lee@doh.hawaii.gov or (808) 586-4226.

Sincerely,

Aceves, Martha

Digitally signed by Aceves, Martha
Date: 2024.10.18 14:15:51 -07'00'

Kenneth Fink

Martha Guzman
Regional Administrator
U.S. Environmental Protection Agency, Region 9

Kenneth S. Fink, MD, MGA, MPH
Director
State of Hawai'i, Department of Health

c: RADM Stephen Barnett, Navy Closure Task Force – Red Hill [via email only]
Na'alehu Anthony, BWS Board Chair [via email only]
Susan Pcola-Davis [via email only]

Attachment: Navy September 6, 2024 Letter Response to Lead Detections

DEPARTMENT OF THE NAVY
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5090
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September 6, 2024

Amy Miller Bowen
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Kathleen Ho
State of Hawaii, Department of Health
Deputy Director of Environmental Health
P.O. Box 3378
Honolulu, HI 96801-3378

Dear Ms. Miller and Ms. Ho:

SUBJECT: BOARD OF WATER SUPPLY LETTER REGARDING LEAD IN JOINT BASE PEARL HARBOR-HICKAM WATER SYSTEM

The Navy received the Honolulu Board of Water Supply (BWS) letter addressed to the U.S. Environmental Protection Agency (EPA) and Hawaii Department of Health (DOH) regarding apparent lead detections in the Joint Base Pearl Harbor-Hickam (JBPHH) water system, dated August 29, 2024. As you are aware, the Navy executes a robust, layered, and comprehensive lead sampling program, performed in compliance with EPA-approved methodology, including the following:

- Compliance Lead and Copper Rule (LCR) monitoring
- Lead in Priority Areas (LIPA) program
- Safe Drinking Water Act (SDWA) compliance sampling
- Supplemental, enhanced Drinking Water Long Term Monitoring (LTM) - completed
- Voluntary, investigatory Extended Drinking Water Monitoring (EDWM)
- Water Quality Action Team response sampling

The Navy's lead sampling is substantially more comprehensive than that of the traditional water purveyor. During the Navy's LTM program, over 9,200 drinking water samples were collected by an independent contractor for analysis of numerous analytes, including screening for lead. The Navy's LTM and EDWM programs are extensive, exceeding typical monitoring standards, analytes, and frequency. LTM and EDWM samples are collected daily across the breadth of infrastructure served by the water system, the majority of samples were and are collected within a premise (residence, school, clinic or facility), which is significantly more frequent than normal water purveyors. Throughout the three years of the Navy's LTM and EDWM enhanced monitoring programs, 100% of residences served by the JBPHH water system are planned to be sampled for lead, while each school and child development center will have been sampled for lead at least 20 times. The Navy and Department of Defense have been at the forefront of protecting children from lead exposure in water

by mandating Lead Sampling in Priority Areas (LIPA) for decades. Navy lead monitoring results for schools are considerably lower than many lead samples collected in schools on the BWS system.

Over the course of LTM, 99% of lead detections were below 5 µg/L, the FDA standard for bottled water; while nearly 95% of these were below 1 µg/L. Only 26 of over 12,000 samples (0.2%) collected through LTM and EDWM exceeded the Maximum Contaminant Level (MCL) of 15 µg/L for lead. In each of these 26 lead exceedances, the Navy immediately took action, following established protocols approved by EPA and DOH, including: immediate notice to Navy leadership; notification to DOH and affected tenants (e.g. residents and school principals) within twenty-four hours; securing the affected fixture/faucet until further notice, and thereafter flushing and resampling. Alternate water was provided by the Navy until receipt of validated results that demonstrated the sample cleared the MCL for lead. In multiple instances, it was necessary to replace the fixtures. Any time a lead exceedance was found in a school, the Hawaii Department of Education, as well as the school principal was immediately notified.

Additionally, the Navy has collected numerous samples over the last few years from our source, Waiawa Shaft – the sole source of drinking water for the Navy since December 2021, which is located over six miles from Red Hill. Lead results for Waiawa shaft from March 2022 through September 2024 have all been within regulatory limits, with the highest detection under 0.4 µl/L; zero exceedances.

With respect to monitoring for lead in its drinking water, the Navy will continue to exceed regulatory monitoring requirements, ensuring JBPHH water remains safe to consume. Despite BWS's continuing misinformation, the Navy has always been and remains committed to the safety of the consumers served by the JBPHH drinking water system. Many of the recent BWS statements are grossly inaccurate and are counterproductive – they continue to unnecessarily create public confusion and concern, and the Navy looks to the regulators to help counter this misinformation by educating the public about EPA standards and the Navy's data that shows JBPHH water remains safe for our users.

If there are any questions regarding this matter, please contact CDR Benjamin Dunn, Deputy for Environment and Remediation, Navy Closure Task Force – Red Hill by phone at (808) 366-9590 or by email at benjamin.r.dunn1.mil@us.navy.mil.

Sincerely,

M. F. WILLIAMS
Rear Admiral, U.S. Navy
Deputy Commander
Navy Closure Task Force – Red Hill

5090
Ser N4/106
September 6, 2024

Copy to: (email only)
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