Black text – Community member questions
Blue text – Hawai‘i Department of Health responses

Acronyms:
AFFF – aqueous film forming foam
DOH – Hawai‘i Department of Health
EDB – ethylene dibromide
EPA – U.S. Environmental Protection Agency
GAC – granular activated carbon
HIDOH – Hawai‘i Department of Health
IX – ion exchange
JBPHH – Joint Base Pearl Harbor-Hickam
MCL – maximum contaminant level
NAHS – Navy Aiea-Halawa Shaft
PFAS – per- and polyfluoroalkyl substances
PFOS – perfluorooctane sulfonic acid
SDWB – Hawai‘i Department of Health, Safe Drinking Water Branch
SOP – standard operating procedure
TPH – total petroleum hydrocarbons
TPH-d – total petroleum hydrocarbons – diesel range
UST – underground storage tank

Question Section I related to the Navy Aiea Halawa Shaft (NAHS) Reactivation

The Navy Aiea Halawa Shaft Reactivation Plan states, on page 14, *”*”The GAC/IX system shall be disconnected from the service upon achieving nine consecutive quarters of compliant NAHS source water and DOH approves that additional treatment is no longer warranted.”*

1. Question for **HIDOH**: Please explain

    a. What specific scientific parameters will be measured

To ensure the water is safe to drink, the DOH issued a "conditional approval" letter on February 7, 2025. This letter lists the exact requirements the Navy must meet before the DOH can officially approve the use of the NAHS. DOH will evaluate the water based on all regulated drinking water standards, which include the six newly established federal standards for per- and polyfluoroalkyl substances (PFAS). From a scientific standpoint, the Navy must demonstrate that the water flowing into the community—after it has passed through all treatment but before it reaches the first customer (also known as the “entry point to the distribution system”) — fully complies with the Safe Drinking Water Act.

The “conditional approval” letter, dated February 7, 2025, may be found on the Navy's Closure Task Force website at the following link: https://www.navyclosuretaskforce.navy.mil/Portals/101/360_NAHCondApproval_DOH_20250207%20Redacted.pdf

b. Define “compliant” in the context of compliant NAHS source water

When the Navy uses the term "compliant" in their proposal, they are referring to a specific "passing grade" for the water. From the DOH perspective, this means the water must meet every single safety requirement set by the Safe Drinking Water Act.

To be considered "compliant," the NAHS source water must show that every water quality test result for the 90+ regulated contaminants (including the 6 PFAS standards) is at or below the legal safety limits at the entry point to the distribution system.

The list of contaminants to be tested may be found on the SDWB website at the following link: https://health.hawaii.gov/sdwb/files/2026/01/ContaminantsTestReactivateSources2024_FINAL.pdf

Please note that DOH treats this well the same as every other public water source in Hawai‘i. "Compliant" means the water quality is evaluated with the same rigor and must meet the same health-protective standards as the water in every other neighborhood. In short, "compliant" is DOH’s way of saying the water has been scientifically proven to be safe for public consumption according to federal and state law.

c. Using those specific scientific parameters what will indicate “achieving nine consecutive quarters of compliant NAHS source water”.

While the Navy’s reactivation plan mentions a goal of nine consecutive quarters of clean water to justify removing the extra filters, DOH does not use a "timer" to approve a well.

From a regulatory and scientific standpoint, here is how that milestone is handled:

The Navy’s Goal vs. DOH Rules: The "nine quarters" is a target the Navy set for themselves to prove the water is stable. However, DOH does not grant "permanent" approval based on a calendar. A well is only allowed to operate as long as it continues to meet all Safe Drinking Water Act standards.

Continuous Proof: Even if the Navy hits the nine-quarter mark, they must continue to monitor the well and the treatment system indefinitely. There is no "graduation date" where testing stops.

The 24-Hour Safety Rule: A critical condition of the DOH's approval is transparency. If any condition arises—or any test result is revealed—that could potentially contaminate the water or threaten human health, the Navy is legally required to notify the DOH within 24 hours.

Data-Driven Decisions: The DOH will only consider a request to change or reduce treatment (like disconnecting the GAC/IX units) if the scientific data proves that the source water itself is consistently clean and the risk has been fully removed.

In short, while the Navy is aiming to operate the treatment system for nine quarters, the DOH's priority is permanent compliance. The well stays under strict oversight for as long as it is in use, with an immediate "alarm" system in place to protect the public.

2. Question for **HIDOH**: Please explain how, if the sources of the PFAS have not been identified, a “compliant NAHS source water” will achieve a level of PFAS below the EPA maximum containment level, both today and in future years when the MCL will become more stringent, since PFAS do not biodegrade, thus the name “forever chemicals.”

DOH recognizes the community's concerns regarding the persistence of PFAS in the area. Under the Safe Drinking Water Act, the regulation allows for the use of a source that contains contaminants as long as effective treatment systems are in place. The GAC/IX treatment planned for the NAHS are specifically designed to remove PFAS to levels well below federal and state standards.

DOH's primary responsibility is to ensure that the water is safe at the entry point to the distribution system—the last stop before water reaches your home. As long as the treatment system is working as designed and the water quality at this point meets all federal and state standards, the well can safely continue to operate.

In addition, in areas where alternative water sources are limited or unavailable, using treated groundwater is often a necessary solution to ensure a reliable water supply. It is important to note that finding the source of PFAS is not a legal requirement to reactivate a well. Instead, the focus is on ensuring adequate treatment and continuous monitoring to minimize health risks.

In short, the safety of the water depends on the performance of the treatment technology, not the identification of the source. The DOH will continue to provide strict oversight to ensure that the water served to the community remains safe.

3. Question for the **HIDOH**: please explain what the logic/rationale/reason for including this *statement in this document referenced above in italics right above question #1.

The statement referenced above—regarding the "nine consecutive quarters" and the potential disconnection of the treatment system—is a proposal made by the Navy in their specific reactivation plan. However, DOH's priority remains the Safe Drinking Water Act. DOH will only allow changes to the treatment system based on proven water quality, regardless of how much time has passed on the Navy's schedule.

4. Question for **HIDOH**: In Appendix E, Hawai’i Department of Health Contaminants to be Tested Prior to Reactivating Sources of Drinking Water” the list of contaminants does not include TPH.

    a. Was this list specifically created for the reactivation of the Navy Aiea Halawa shaft or is it the SDWB HIDOH’s generic list for reactivating any sources of drinking water?

The list of contaminants in Appendix E ("Contaminants to be Tested Prior to Reactivating Sources of Drinking Water") is the standard, generic list used by the DOH Safe Drinking Water Branch for the reactivation of any drinking water source in the State of Hawai‘i. DOH treats every well the same, regardless of whether it is owned by the Navy, the Honolulu Board of Water Supply, or any other water purveyor. The requirements in Appendix E ensure that every well returning to service meets the same rigorous health-protective standards.

The list of contaminants referenced in Appendix E may be found on the SDWB website at the following link:
https://health.hawaii.gov/sdwb/files/2026/01/ContaminantsTestReactivateSources2024_FINAL.pdf

    b. At the bottom of the contaminant list it states *“The SDWB reserves the right to require additional testing for specific contaminants due to potential contaminating activities near the source or due to past history of contamination o [stet] the source or nearby sources.”*
    Why hasn’t the SDWB added TPH to this list of contaminants to be tested since the reactivation of Aiea/Halawa shaft is a unique reactivation, and not a standard one?

In 2024, the DOH conducted an independent investigation using advanced forensic techniques and confirmed that no petroleum fuel contaminants or metabolites were detected at the NAHS (https://health.hawaii.gov/news/files/2024/05/JBPHH-HIDOH-DW-Report-20240510.pdf). These forensic tests are more precise than standard laboratory methods and proved that the source water remains unaffected by the Red Hill fuel release. Because these high-level forensic tests showed no evidence of impact from the Red Hill fuel release, the DOH does not require TPH as a regular "compliance" parameter for this well source. The science demonstrates that the current risk at this location is related to other regulated chemicals, such as PFAS, rather than fuel.

    c. If the reason for *not* including TPH in this list to be tested for is that the Navy contends that TPH has not been detected in the water prior to now, then, following this logic, can the same be said for the entire list of contaminants on Appendix E?

While it may seem that the reason for excluding TPH is based on its absence in recent tests, there is a fundamental regulatory difference between TPH and the contaminants listed in Appendix E. The contaminants on the Appendix E list are mandated for all wells because they are part of the Safe Drinking Water Act, meaning they have established safety limits that the DOH must legally enforce for every public water source, regardless of whether they have been

detected in the past. In contrast, TPH is not a federally regulated drinking water contaminant with a set legal limit, and its exclusion from the generic list is a matter of standard state-wide policy rather than a specific decision for this well.

d. For each contaminant listed on Appendix E, please provide evidence of where and when each has been detected in the Aiea/Halawa shaft before now and its reason for inclusion on this list.

As noted above, Appendix E is a generic list.

e. Can the SDWB please add TPH to the contaminants on Appendix E that will be tested for prior to reactivating the Aiea/Halawa shaft?

To maintain regulatory consistency across the state, Appendix E is reserved for contaminants with established federal and state legal limits under the Safe Drinking Water Act. Because TPH does not have a legally enforceable MCL, it is not included on this generic list. However, the DOH has the authority to issue conditional approval letters for any well reactivation. This allows the DOH to mandate site-specific requirements, such as additional monitoring or specialized testing, to address the unique environmental conditions of a specific location without needing to change the standard requirements for the rest of the state.

Questions Section II, related to the Navy Aiea Halawa Shaft Reactivation Pilot Study Technical Memorandum Hawaii State Well Number 3-2252-32 Joint Base Pearl Harbor-Hickam Public Water System (#HI0000360) dated July 2025

5. For the **HIDOH** in Section 3.11 TPH Detections, there is a discussion regarding the ion exchange resins and TPH-d detections are the result of initial contact of the water with the IX resin.

    a. If the TPH-d detections would be flagged through protocol would this prevent a unit from being certified?

The detection of TPH-d resulting from IX (ion exchange) resin "break-in" or leaching would not necessarily prevent a unit from being certified, provided that the finished water is effectively treated and that any detections are either eliminated or proven to be non-toxic artifacts of the resin media. To address this, the Navy plans to reroute the treatment sequence into a GAC-IX-GAC configuration. This "polishing" step adds a critical final layer of protection to ensure that any traces released by the resin are captured before the water enters the distribution system. The DOH will require a new technical memorandum and sustained sampling results to verify this sequence is effective before moving forward with the approval.

b. Please provide evidence that all devises tested as part of this pilot study are all certified to NSF 61.

DOH recognizes the community's desire for documented proof that the treatment equipment used in the pilot study meets NSF/ANSI/CAN 61 industry standards. While these certifications are a standard best practice for ensuring materials are safe for drinking water contact, they are not a formal regulatory requirement for submission to the DOH under current state or federal law. Consequently, the DOH does not maintain a repository of these specific manufacturer certificates. Because the Navy, as the water purveyor, is responsible for the procurement and installation of these devices, the DOH recommends that the public contact the Navy directly to request the specific third-party verification documents cited in the technical memorandum.

6. In Section 1.2 Background, it states, *“Although not affected by the red Hill fuel release, the NAHS was isolated from the JBPHH public water supply on December 3, 2021, after the Red Hill Shaft was disconnected as an additional measure of caution by the Navy.”*

   However, Appendix H of this Pilot Study shows TPH-d (C9-C25) detections up to 920U. See Attachment 1

   Question HIDOH: If the Navy Aiea Halawa Shaft was not affected by the Red Hill Release, then what is the source of the TPH contamination in the Shaft in December 2021?

NAHS was inactivated during the Red Hill Response, thus the water at the sampling location had been stagnant for some time. In December 2021, the Shaft was not in operation, the samplers drew stagnant water. The biogenic material in the line likely caused the TPH detection because TPH is a non-discrete detection of carbon.

In 2024, HDOH conducted a forensic analysis of the NAHS source water and determined that it was naturally-occurring trace organic material (https://health.hawaii.gov/news/files/2024/05/JBPHH-HIDOH-DW-Report-20240510.pdf). The pilot study detection of TPH occurred after the 2nd train (the IX part of the treatment), not before (the raw source water) nor after the GAC. The TPH was determined to be an artifact of the IX resin material and not from the Shaft itself.

7. The Technical Memo summary of the Navy Aiea Halawa Shaft Pilot Study Report States*,” There was one additional low-level TPH-d detection reported in an EPA sample collected form the raw water in June 2024. …Other than this sample no TPH has been found in the NAHS raw water since Navy began collection”*

   Question for **HI DOH**:“The Navy doesn’t know what was in the finished water” Please see attached pages showing detections of 2,3 7,8-Tetrachlorodibenzo-p-dioxin, chlordane(pesticide), dieldrin (pesticide), heptachlor(pesticide), bromoform and EDB which is a fuel additive. The identity of these toxins is shown in the Navy’s own tables attached. For each toxin, please provide how HIDOH is regulating each from a human health perspective and a cautionary approach.

2,3 7,8-Tetrachlorodibenzo-p-dioxin (aka Dioxin), chlordane, heptachlor, bromoform (as part of total trihalomethanes), and EDB are all regulated under Hawai‘i Administrative Rules Chapter 11-20 and have MCLs associated with each contaminant. Dieldrin is not currently regulated as a drinking water contaminant by the EPA or the State of Hawai‘i. However, DOH believes that it is currently being evaluated for regulation by the EPA. DOH Hazard Evaluation and Emergency Response Office provides guidance through Environmental Action Levels (EAL), which DOH can use to determine risk and need for treatment. The EALs for Dieldrin in groundwater in different environmental scenarios may be found in of the following linked document:
https://health.hawaii.gov/heer/files/2024/07/EALsVol2Appendix1HDOHSpring2024Rev071024.pdf

8. Question for **HIDOH**: In the Tank Closure Plan in supplement #4 USTC Red Hill Operating record document legacy fuel storage, coating system application, and provide a definitive history of all materials that have ever been inside of the tanks. EPA's comments to the plan back in August requests that they be provided this inventory. Have these records been provided to the regulators and can they be shared with Board of Water Supply?

Tank Closure Plan Supplement 4, Enclosure 8, “Summary of UST Coating and Clean Inspect Repair History”, provides a history of coatings applied inside the Red Hill tanks: https://health.hawaii.gov/about/files/2026/04/Enclosure-8-Historical-Coating-System-Evolution-and-Clean-Inspect-Repair-Summary_REDACTED.pdf

The inventory of fuels stored in the tanks that EPA requested in its Supplement 4 comments is available here: https://health.hawaii.gov/about/files/2026/04/Enclosure-2-REDACTED-RHBFSF-Historical-Fuel-Storage-Chart_Redacted-1.pdf

9. Question for **HIDOH** :Turning to the PFAS remedial investigation plan for Red Hill it mentions PFOS exceedances in the Red Hill shaft for Dec 20 and 27, 2021. EPA comments that there are no further discussion on the detection or the Sept 2023 detection of multiple PFAS contaminants in waste characterization samples from AFFF retention lines. Why was the PFOS in our drinking water wells in Dec 2021 and has the Navy provided an explanation for these PFOS detects?

In samples collected by the Navy from Red Hill Shaft on December 20 and 27, 2021, PFAS was detected but did not exceed environmental action levels. The results may have also been invalid because Navy divers did not use the proper sampling procedures, sampling bottles were glass, and divers were wearing suits and gloves which likely contained PFAS.

10. Question for **HIDOH:** Inspector General Report April 2023 states although HI DOH website includes Red Hill monitoring data, "the lack of clearly Communicated data may cause the public to be unaware or confused about existing or potential groundwater contamination at the Red Hill Facility." Does the EPA think that now the HI DOH is clearly communicating potential health effects and drinking water contamination risk to the public?

This question is for EPA.

11. Questions for **HIDOH:** In October, EPA said the Navy had only completed 4 out of 14 required SOPs to property operate and maintain the Navy Public Water System (NPWS).

    a. How are they currently running the NPWS without these basic standards in place?

The SOPs referenced in this question are required by EPA in response to the Red Hill Incident as part of their enforcement order. These SOPs are above and beyond what is required for the normal operating procedures of most public water systems and are intended to supplement what is required by regulation. The key point is that they are not required for the normal operation of the system and are a supplement to the normal day-to-day system operations SOPs.

    b. Why has Navy been granted years of extensions on these fundamental operating procedures?

This question is for EPA.