

2023 Administrative Consent Order for Defueling,
Closure, and Drinking Water Protection

for the

Red Hill Bulk Fuel Storage Facility and Joint Base Pearl
Harbor-Hickam Water System

Response to Comments

June 2023

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1. Background

On December 19, 2022, the U.S. Environmental Protection Agency Region 9 (“EPA”) proposed an *Administrative Consent Order for Defueling, Closure, and Drinking Water Protection for the Red Hill Bulk Fuel Storage Facility and Joint Base Pearl Harbor-Hickam (“JBPHH”) Water System* (“2023 Consent Order”). The 2023 Consent Order requires the United States Navy and the Defense Logistics Agency (DLA) to take steps to safely defuel and close the Red Hill facility (“Red Hill”) at Joint Base Pearl Harbor-Hickam and requires the Navy to properly operate and maintain the JBPHH drinking water system to protect the health and safety of its consumers.

2. Public Notification

The 2023 Consent Order was initially proposed on December 19, 2022, through Regulations.gov ([regulations.gov/docket/EPA-R09-RCRA-2022-0970](https://www.regulations.gov/docket/EPA-R09-RCRA-2022-0970)), posted on EPA’s website, and announced through a press release, EPA’s social media accounts, and EPA’s Red Hill email list serve. EPA accepted comments through February 6, 2023.

During the public notification period, EPA conducted virtual meetings with stakeholder community representatives, including the Honolulu Board of Water Supply (“BWS”), O’ahu Water Protectors, Sierra Club, and Earthjustice.

On January 18, 2023, EPA hosted a Town Hall with principals from the Navy and DLA to answer questions from the members of the public on the proposed 2023 Consent Order. The event had over 200 participants in-person and many more who viewed through a local broadcast.

On January 19, 2023, EPA hosted an Open House with representatives from the Navy, DLA, Joint Task Force Red Hill, the Hawai‘i Department of Health (“HDOH”), and the Agency for Toxic Substances and Disease Registry (“ATSDR”) to answer questions on the proposed 2023 Consent Order, defueling, tank closure, drinking water, remediation, and public health impacts. The event had nearly 100 in-person participants.

In order to disseminate information and solicit comments on the proposed 2023 Consent Order, EPA developed a fact sheet to post on its website and distribute via email and in-person at the Town Hall and Open House. The fact sheet was available in English, Japanese, Tagalog, Korean, and Ilocano. EPA also produced a video that was posted on its website, distributed via email, and screened during the Open House.

In order to allow for a full exchange and discussion between the federal agencies and the community, EPA informed participants that oral comments and questions conveyed during the Town Hall, Open House, and other meetings during the comment period would not be part of the record and that only written comments would be included in the record and addressed in this Response to Comments. Laptops and comment forms were available at the Open House and Town Hall to submit written comments.

3. Comment Overview

EPA received over 1,700 formal comments, including 1,681 submitted through regulations.gov, 18 submitted over email, four written and submitted during public meetings and seven submitted via mail. EPA reviewed all comments and then separated out and categorized portions of each comment by subject matter to provide comprehensive responses. Due to the volume of comments received, EPA has paraphrased and merged comments as appropriate. EPA sets forth its responses to comments and any associated changes to the proposed 2023 Consent Order under the subject-matter categories below.

3.1. Increased Accountability (Sections 4-7)

- **Specific Defueling Deadlines.** The proposed 2023 Consent Order outlines tasks that need to be completed prior to defueling but does not require the Navy to defuel by a certain date. Without a date certain for defueling, commenters viewed the Navy’s proposed “two-year” timeline for completing defueling by June 2024 as too long.
- **Penalties.** Many commenters thought that the proposed 2023 Consent Order should include penalties for the Navy and that the stipulated penalty provisions were not high enough. There were also calls for criminal charges.
- **Distrust of the Navy and the Federal Government.** Many commenters expressed widespread distrust of the Navy, EPA, and the federal government more generally, often citing specific examples of why they believed that the Navy and EPA are not trustworthy. They also expressed little confidence in EPA’s ability to hold the Navy accountable.
- **Permanent Closure of the Red Hill Tanks.** Commenters had suggestions on the process, timing, and reclamation of the Red Hill tanks, with many commenters expressing a desire for the tanks to be closed in a way that would ensure they can never be used to store fuel again.

3.2. Addressing Environmental Impacts and Remediation (Sections 8-12)

- **Aqueous Film Forming Foam (“AFFF”) Spill and Potential PFAS Contamination.** Commenters requested that the proposed 2023 Consent Order be amended to include PFAS remediation from the November 2022 AFFF release, with some suggesting that PFAS be banned completely anywhere above the aquifer. This would include prohibiting the Navy from using AFFF that contains PFAS.
- **Transparency on Groundwater Monitoring.** Commenters expressed interest in better access to existing data, more rigorous groundwater monitoring, and opportunities for third-party verification, including providing BWS access to groundwater wells for

testing. Many commenters supported enhanced PFAS monitoring as a result of the November 2022 AFFF spill at Red Hill.

- **Public Spill Notification.** Commenters requested immediate notification to drinking water consumers of any spill/release which might impact drinking water and that such notification occur well before necessary testing is conducted to confirm possible contaminant levels.
- **Human Health Impacts.** Many commenters cited specific examples of health impacts from contaminated drinking water and expressed the desire for the Navy to be accountable by providing treatment and addressing health impacts from past spills.
- **Emphasis on Remediation.** Commenters reiterated the need for complete remediation of all contamination caused by the Navy as a result of spills from Red Hill.

3.3. *Respecting Local Perspectives (Sections 13-15)*

- **Public Participation.** Many commenters criticized EPA for not consulting with community members or addressing community concerns prior to proposing the 2023 Consent Order. In particular, they said that EPA should have consulted with those families directly impacted by the drinking water contamination, local community groups, and BWS. Moving forward, commenters were concerned that community leaders' input is not being meaningfully incorporated into the decision-making process.
- **Acknowledgement to the Significance of Water to Native Hawaiians and Hawai'i Residents.** Commenters felt that the proposed 2023 Consent Order should incorporate acknowledgements of the cultural and environmental significance of O'ahu's aquifer to Native Hawaiians and Hawai'i residents and stated that EPA has not consulted with Native Hawaiians consistent with the White House Council on Environmental Quality's December 1, 2022 Indigenous Knowledge Guidance.
- **Consistency with State.** Many opposed the proposed 2023 Consent Order due to concerns that EPA's involvement would undermine Hawai'i's Emergency Order. They fear that EPA will legitimize any resistance from the Navy to current or future Hawai'i mandates on defueling. Commenters expressly requested that EPA state that Hawai'i's May 6, 2022 Emergency Order ("HDOH May 2022 Emergency Order") takes precedence over EPA's proposed 2023 Consent Order in the event of a conflict.

Comments summarized above are discussed in further detail in the below sections along with EPA's responses.

4. Defueling Requirements and Timeline

4.1 Summary of Comments

EPA received many comments specific to the timeline for defueling the Red Hill tanks, mentioning specific actions EPA should take to compel faster defueling, or identifying ways in which the proposed 2023 Consent Order may slow the defueling process.

Many comments urged that specific dates should be set by which defueling must start and/or be completed. One commenter suggested that without deadlines, the public won't know whether any delays are due to inefficiencies, purposeful delays, or legitimate extenuating circumstances. Multiple comments stated that removing fuel must be done at a pace that protects the aquifer from more catastrophic leaks, and that speed is an important factor in protection of the environment, since the Red Hill tanks could still be leaking or could begin to leak before all fuel is removed.

Many commenters suggested that defueling commence immediately. One commenter stated that defueling should happen no later than December 31, 2023. Another commenter said that defueling, decontamination, and restoration should happen by 2024. A third commenter asserted that defueling be completed within 120 days.

Multiple comments requested that specific penalties be levied against the Navy should it not meet deadlines to compel more expedient defueling of Red Hill.

Commenters were concerned that EPA's actions could unintentionally slow down defueling. Commenters asserted that if EPA were to establish a long timeline, officials may be led to believe the project is more complex than it is, resulting in "bloated" schedules and over-preparation. Commenters also asserted that existing deadlines/due dates within the proposed 2023 Consent Order should be shortened (e.g., instead of providing 60 days for response, EPA should only require 15 days to provide a response).

Other comments expressed concerns over environmental regulators slowing down the defueling process. Comments suggested EPA should not delay defueling to collect data and that environmental investigations are causing delays. One commenter was concerned that the Navy will need to conduct an Environmental Impact Statement under the National Environmental Policy Act ("NEPA"), which could delay the defueling process unnecessarily.

Some comments requested EPA to take actions to speed up the defueling approval process. One comment stated that the Navy should not be able to extend the deadline, and that EPA should not incorporate flexibility for a deadline extension in the proposed 2023 Consent Order. Another stated that approvals should happen alongside work, rather than saving the entire approval process for the period between defueling preparation work and the start of defueling.

Multiple comments stated that EPA needs to be more specific about defueling requirements that would result in safer work and more sharing of information with the public, for example:

- The proposed 2023 Consent Order should require the Navy to consult with experts who can identify additional and safer methods for defueling and closure at a faster pace.
- EPA should require ample and transparent reporting on how the Navy plans to remove the fuel.
- EPA should require monthly tank tightness testing, rather than semi-annual tightness testing.
- EPA should consider alternative ideas for defueling that would not require the repair of the pipelines.
- Standards for tests and repairs should be improved to avoid previous mistakes.
- The proposed 2023 Consent Order should require a sufficient workforce to remove fuel 24 hours a day.
- The proposed 2023 Consent Order lacks a clear work order for the Navy to follow.

Some comments suggested alternative means of defueling, including pumping the fuel out using a different route or selling it to another country. Some commenters expressed a specific desire for an aboveground pipeline to be constructed for the Navy to use during the defueling mission, and that Red Hill be defueled as soon as possible.

4.2 EPA Response

EPA agrees it is important to defuel and close Red Hill as quickly and as safely as possible given the risk that a future release of fuel poses to the aquifer. EPA also recognizes that mandating the movement of fuel without proper structural and process improvements to Red Hill presents a considerable risk to the aquifer.

The 2023 Consent Order includes a clear process to move forward with defueling while minimizing the risk of additional leaks while fuel is being removed from Red Hill. In response to public comments, EPA has added to the Consent Order a requirement that the Navy and DLA submit a defueling schedule as part of Defueling Plan Supplement 2 no later than May 31, 2023. The Navy and DLA submitted Defueling Plan Supplement 2 to EPA on May 16, 2023. Upon approval, the schedule submitted as part of Defueling Plan Supplement 2 will be a requirement of the 2023 Consent Order. This will create accountability for the Navy and DLA to defuel within a timeframe contained in the 2023 Consent Order. EPA will coordinate its review and approval of Defueling Plan Supplement 2 pursuant to the 2023 Consent Order with HDOH's review pursuant to HDOH's May 2022 Emergency Order.

Consistent with HDOH's May 2022 Emergency Order and the March 7, 2022 Statement by Secretary of Defense Austin, the 2023 Consent Order requires permanent closure of the tanks pursuant to HDOH regulations. The Navy and DLA, under EPA and HDOH oversight, have already undertaken many infrastructure repairs, operational changes, and safety drills to ensure that the defueling of the tanks will occur without incident. In October 2022, the Navy successfully and safely "unpacked" (removed) over a million gallons of fuel located in the pipes of Red Hill so that repairs could occur prior to defueling.

In order to ensure that the Navy and DLA are ready to safely defuel, the 2023 Consent Order requires that prior to defueling, EPA must approve that: 1) the Navy and DLA have

implemented repairs, operational changes, and training required in the Defueling Plan; 2) all repairs have been completed and certified by a third party; 3) Spill Prevention, Control and Countermeasure (“SPCC”) Plans are in place and there is an approved Facility Response Plan; and 4) the Navy and DLA have performed tank tightness testing on the Zone 7 Sump for Fuel Oil Recovery and the Main Containment Sump for Fuel Oil Recovery and any concerns associated with such tank tightness testing have been addressed. Although the Defueling Preparedness Report requires that the Navy and DLA submit a report to EPA after all of these items are completed and prior to defueling, as suggested by commenters, EPA will approve these actions as they are completed by the Navy and DLA.

Commenters provided specific suggestions to improve the defueling operation. The details of what will be required leading up to and during defueling are specified in the Defueling Plan and Defueling Plan Supplement 2, the latter of which was submitted to EPA on May 16, 2023. EPA will review, comment on, and approve Defueling Plan Supplement 2 prior to defueling. It is anticipated that an additional Defueling Plan supplement will be needed to remove any fuel remaining after implementation of the work required by Defueling Plan Supplement 2. Defueling Plan Supplement 2 estimates that approximately 100,000 to 400,000 gallons of fuel will have to be addressed by another supplement, which EPA will comment on and approve pursuant to the 2023 Consent Order. EPA will convey appropriate comments from its technical experts on defueling to the Navy and DLA and will utilize its technical expertise in reviewing Defueling Plan Supplement 2 and any future Defueling Plan supplements.

In response to specific suggestions on alternative means of defueling, EPA has completed many reviews and proposals and it is evident that use of existing pipeline infrastructure presents a clear advantage to other means of fuel extraction. For instance, a new pipeline system at the surface would present numerous challenges to both the defueling timeline and the safety of fuel movement. Moving fuel from the subsurface to the surface would require installation, use, training, and spill risk associated with hydraulic pump systems.

Existing infrastructure has recently been analyzed to identify potential stress and surge risks and is under active repair and enhancement to address the last significant pipeline failure (i.e., the May 6, 2021, event). Approximately 250 repair items have been proposed, and each repair will go through a multi-layered quality approval step. EPA continues to review the Defueling Plan and EPA must review and approve Defueling Plan Supplement 2 (which will incorporate and address all EPA comments on the Defueling Plan and prior supplements) prior to defueling. EPA must also review and approve any future supplements after Supplement 2.

The Navy and DLA have demonstrated their commitment to moving forward safely and expeditiously on defueling throughout the past year as reflected by the proposed expedited defueling schedule in Defueling Plan Supplement 2. Senior leadership at Joint Task Force Red Hill has been meeting with EPA and HDOH senior leadership twice per month, which is even more than is required by the 2023 Consent Order, to provide EPA and HDOH regular updates on defueling and to ensure we can clear any hurdles and meet or exceed the timelines set forth in the Defueling Plan and its supplements. EPA believes that the Navy and DLA are attempting to defuel the Red Hill facility expeditiously and in good faith.

EPA is committed to improving transparency on many issues, including defueling. In response to public comment, EPA, the Navy, and DLA have added to the 2023 Consent Order a requirement to create a Community Representation Initiative, which is discussed below in the Section 13 on Public Involvement. NEPA is also discussed in Section 13.

5. Penalties and Accountability for DoD

5.1 Summary of Comments

Many commenters expressed concern that the Navy and Department of Defense (“DoD”) are not being held sufficiently accountable for the releases at Red Hill in the proposed 2023 Consent Order. One commenter suggested that the proposed consent order violates the “public trust doctrine” in which the public has the right to clean air and water. Some suggested that the Navy provide compensation to the population of O‘ahu for damages and that the Navy’s officials be charged criminally. One commenter suggested that the proposed 2023 Consent Order address expanding “fuel facilities on land and at sea.”

Many comments suggested that the proposed 2023 Consent Order include significant and meaningful penalties for failure to meet the requirements and deadlines of the Order for any reason to further incentivize the Navy to remove fuel without delay. The comments also suggested more enforceable deadlines with clearer consequences. Commenters believe that the matter is not being taken seriously and that the contamination has had a clear role in the health decline of affected persons.

Many commenters’ statements expressed a concern that penalties were not included in the proposed 2023 Consent Order for the releases. While other commenters acknowledged that stipulated penalties were included, many stated that the amounts needed to be increased. Many commenters wanted a specific dollar amount as opposed to a range of “up to \$5,000 for the first week and up to \$10,000 for each week thereafter.” One commenter suggested that EPA define what “good faith” means from the proposed 2023 Consent Order. Some commenters were under the impression that any penalties collected go into EPA’s budget. A commenter suggested including reprimands and other tangible actions to ensure timely defueling. Some commenters suggested that, rather than monetary penalties, EPA pursue injunctive action when there is a violation such as cessation of the work and immediate implementation of an alternate plan or outsourcing the work away from the Navy. Other comments suggested that any penalties paid go back to the community or towards remediation instead of to the U.S. Treasury.

Some commenters asserted that the proposed 2023 Consent Order provided an opportunity for “foot dragging” as has occurred in the implementation of the 2015 Administrative Order on Consent, and specifically that the dispute resolution provision offered an opportunity for slowing the work. There was a comment that, had a private company been responsible for the Red Hill releases, federal and state consequences would have been more severe. Some commenters urged EPA to take more aggressive action such as unilaterally ordering the Navy to conduct the work more quickly and pay a penalty with interest if payment is late. One comment encouraged EPA to exercise its authority to take unilateral action in instances where consent order negotiations are not proceeding at an acceptable pace.

Commenters also suggested that EPA should ensure the Navy commits to the long-term remediation of the aquifer and reimburse EPA and other government agencies for their efforts in securing the Navy's compliance. A commenter supported EPA's plan for Red Hill, but indicated that the plan was not strong enough and that there needed to be more repercussions in the event requirements were not followed. Commenters also wanted more financial transparency from the Navy, including specific funding plans to make necessary repairs and actions to defuel and close Red Hill. Finally, commenters referred to the recent AFFF concentrate spill and asserted that EPA failed to penalize the Navy due to bias in favor of another government entity, and that any release of forever chemicals at Red Hill should be subject to a penalty of \$25 million per day.

One commenter requested that "to ensure that the Navy does not seek to preclude participation, oversight, and enforcement by HDOH, the Honolulu Board of Water Supply, or the affected public, the 2023 Consent Order must state clearly that it has no preclusive effect as to anyone beyond the signatories."

5.2 EPA Response

The 2023 Consent Order includes penalties if the Navy or DLA violates any requirement. EPA included a range of stipulated penalties consistent with its practice for decades in its Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") Federal Facility Agreements (which are enforceable cleanup agreements at National Priority List sites). In EPA's experience, these penalties have a deterrent effect and hold the federal agencies accountable for violations of the agreements. The penalties in the 2023 Consent Order provide meaningful accountability and are a significant deterrent to noncompliance. Any penalties collected would go into the U.S. Treasury as required by law. Neither the Safe Drinking Water Act ("SDWA") nor the Resource Conservation and Recovery Act ("RCRA"), the two statutes underpinning the 2023 Consent Order, provide the authority for many of the requested actions in the public comments. For example, these statutes do not provide EPA the authority to issue reprimands or require compensation for any harms caused by prior releases. Although EPA cannot require injunctive relief as penalties, the 2023 Consent Order already requires the necessary injunctive relief to timely and safely defuel and close Red Hill while requiring the Navy to properly operate and maintain the JBPHH drinking water system.

To the extent that SDWA or RCRA have any preclusive effect on actions by other parties, EPA cannot modify these provisions through the 2023 Consent Order. EPA notes that Paragraph 16.a. of the 2023 Consent Order includes the following provision regarding citizen suits: "Failure to diligently conduct the Work may subject Navy and DLA to an action under Section 7002 of RCRA, 42 U.S.C. § 6972, and/or, where applicable, civil administrative penalties pursuant to Section 1447 of the SDWA, 42 U.S.C. §300j-6."

Although a commenter expressed skepticism that a private party would be treated in the same manner as the Navy and DLA, EPA disagrees. EPA holds federal agencies to the same standards as private companies. Both RCRA and SDWA include explicit direction from Congress to hold federal agencies to the same standards as private parties. EPA typically tries to reach an agreement on consent rather than proceeding unilaterally with both private and non-

private parties. EPA’s experience is that work done cooperatively pursuant to settlements is quicker and more effective than work done pursuant to unilateral orders with noncooperative parties. The Navy and DLA have been cooperative parties in negotiating the 2023 Consent Order and proceeding with preparations for defueling during negotiations. EPA believes that the 2023 Consent Order is the most effective enforcement instrument to require the safe and expeditious defueling of Red Hill.

As part of proceeding on consent, EPA includes stipulated penalties and dispute resolution with EPA being the ultimate arbiter to ensure accountability and resolve disagreements. The dispute time frames in the 2023 Consent Order are shorter than typical and should not delay the work.

Consistent with EPA imminent and substantial endangerment orders at other sites, the 2023 Consent Order is focused on the future work necessary to protect human health and the environment. The 2023 Consent Order is not the mechanism to seek penalties for prior releases or criminal violations, but it does not preclude EPA from doing so. EPA cannot comment on whether there are ongoing investigations to address prior releases outside of the 2023 Consent Order.

The 2023 Consent Order is focused on the more immediate defueling, drinking water requirements, and the cleaning and disposition of the tanks while the ongoing investigation and any necessary cleanup of Red Hill releases are being addressed pursuant to the 2015 Administrative Order on Consent. Although EPA is currently overseeing the investigation and any cleanup of Red Hill releases pursuant to the 2015 Administrative Order on Consent, the 2023 Consent Order also requires an investigation and cleanup of Red Hill as part of the closure of Red Hill pursuant to HDOH regulations. Either way, EPA will ensure that the Navy and DLA perform whatever response actions are necessary to ensure that the investigation and remediation of Red Hill is protective of public health and the environment.

With respect to funding, EPA included language in the 2023 Consent Order that the Navy and DLA shall seek sufficient funding to meet their obligations under the Order. This language is consistent with other settlements with federal agencies. EPA does not anticipate that sufficient funding will be an obstacle to implementing the requirements in the 2023 Consent Order.

Regarding the 2022 AFFF release, an EPA investigation is ongoing and discussed further in Section 8, below.

6. Distrust of the Navy, EPA, and Federal Government

6.1 Summary of Comments

Commenters expressed distrust of the Navy in very blunt terms, among other things stating that the Navy is not acting in the interest of the public and that it is “thereby failing to do its job.” Commenters were also concerned about the Navy’s “lack of organization as it related to being able to respond to national security threats.” Conversely, the commenters were also confused about why the Navy was “unable to apply the same level of responsiveness to environmental threats as they would to a national security threat.” Commenters questioned the

Navy's short rotation period of personnel stationed on-island and requested that the Navy have longer tours on-island to allow for better training and experience of military staff. Speculation from several commenters suggested that the Navy is "incentivized to move slowly on defueling and closure in the hopes that a future administration or political climate would reverse course."

Several commenters compared this incident to other drinking water contamination incidents including "Camp Lejeune, a Marine Corps Base in North Carolina." Other cited incidents included "Flint, Michigan;" "Jackson, Mississippi;" "Anniston, Alabama;" and "Bucks County, Pennsylvania."

Commenters cited the existing 2015 Administrative Order on Consent as "insufficient as evident by the spills that followed" and stated that a new order would not produce better results. One commenter suggested that EPA officials be held personally liable for damages to the aquifer.

Several commenters expressed skepticism that comments will actually be considered or even read at all.

Several commenters expressed frustration over EPA's entering into a consent order with the Navy and imposing conditions they viewed as favorable to the Navy and speculated that EPA is complicit and improperly colluding with the Navy. Many questioned EPA's strength in establishing and enforcing a consent order with another federal agency. Others suggested that EPA take over management and administration of Red Hill from the military.

Some commenters suggested that compliance with the proposed 2023 Consent Order be evaluated and overseen by a committee of community members because EPA has shown that it is unable to hold the Navy properly accountable. Other commenters suggested co-location of EPA, military, and local leadership to facilitate smoother communication among parties.

One commenter questioned the good faith of the Navy to comply and suggested the proposed 2023 Consent Order limit any vague requirements and make commitments and reporting as specific as possible to limit any wiggle room or misinterpretation.

Another commenter suggested that the Navy be required to update and replace its camera system and that EPA be allowed access to all videos recorded by Red Hill equipment.

Additional commenters requested audits of the Navy and military bases across the island in addition to Red Hill.

6.2 EPA Response

EPA is committed to holding the Navy and DLA accountable for meeting commitments under the 2023 Consent Order and to work to restore trust between the people of Hawai'i and the U.S. government. The final 2023 Consent Order also includes acknowledgements of the significance of water resources to the people of Hawai'i.

EPA is committed to establishing regular communication and transparency with members of the public throughout the implementation of the 2023 Consent Order and through defueling and closure of the Red Hill tanks and remediation of all past spills. The final Consent Order adds

a Community Representation Initiative discussed further in Section 13, below. Since the 2021 spill, EPA has relocated and hired additional staff in its Honolulu Field Office to better coordinate and oversee work by the Navy and DLA at Red Hill.

Addressing Red Hill releases and overseeing the defueling and closure of the tanks as quickly as is safely possible is a national priority for EPA. EPA works with states like Hawai‘i to ensure that routine inspections of regulated facilities, including federal facilities, occur; in addition, EPA has performed numerous inspections of Red Hill pursuant to various programs since the November 2021 release. EPA looks forward to working collaboratively with HDOH to require the safe and expeditious defueling and closure of the tanks while the investigation and remediation of past releases continues.

EPA read and considered every comment submitted through the public notice process. Each comment was read by at least two EPA reviewers prior to being summarized and compiled into a comment summary and this Response to Comment document. As noted in Section 16 below, EPA, Navy, and DLA made several changes to the 2023 Consent Order to address concerns raised by commenters.

In response to comments questioning EPA’s ability and effectiveness in overseeing the decontamination and closure of Red Hill, EPA’s Office of Inspector General (“OIG”) conducted an evaluation to determine whether EPA’s oversight of relevant authorized state programs had effectively addressed the potential for contamination at Red Hill. On April 25, 2023, the OIG issued a report concluding that EPA’s regulatory oversight of authorized state programs for underground tanks or drinking water quality would not reasonably have identified the sequence of events that led to the drinking water contamination incident. EPA remains committed to enhancing its oversight of Red Hill to mitigate for past incidents and prevent any future releases.

7. Red Hill Closure and Reuse

7.1 Summary of Comments

Many commenters stated their desire for the tanks at Red Hill to no longer be available for the storage of fuel at any point in the future and suggested that the tanks be permanently destroyed to prevent any opportunity for future reuse or a change in direction by policymakers. Conversely, some commenters suggested that the Red Hill tanks be put to beneficial reuse. Specific proposals included converting Red Hill tanks to:

- A solar energy storage battery.
- Environmental remediation and drinking water treatment, such as a desalination facility.
- Zeolite treatment units.
- Research facility testing impacts of jet fuels on plants and microorganisms.
- Museum on military history in Hawai‘i.

Commenters pointed to the Navy’s resources to say there should be no reason for delay or inability to secure alternative locations to send fuel.

One commenter requested more specific deadlines for closure, including a date by which a Closure Plan would be submitted and finalized. Another commenter also suggested that the Navy not build any future underground storage tanks.

One comment expressed concern over national security should Red Hill be forced to shut down and the military not be prepared to mobilize without access to the fuel in the tanks.

One comment suggested that Section 6.1.2.2. of the proposed 2023 Consent Order dictate that the Closure Plan be implemented within 30 days of approval.

One commenter requested that the Space Force base on Haleakala also be shut down.

7.2 EPA Response

EPA acknowledges the concerns over the timely closure and potential reclamation of Red Hill. The 2023 Consent Order requires closure of the Red Hill tanks and sets forward a process for the Navy and DLA to submit a Closure Plan for EPA review and approval, including a schedule for closure. The 2023 Consent Order requires the Navy and DLA to permanently close the tanks in accordance with HDOH regulations which require emptying and cleaning of the tanks and permanently closing the tanks by either 1) removing the Underground Storage Tank (“UST”) or tank system from the ground, 2) filling the UST or tank system with an inert solid material, or 3) closing the tank in place in a manner approved by EPA.

EPA must approve the Closure Plan pursuant to the 2023 Consent Order. EPA, in coordination with HDOH, is currently reviewing initial submissions related to closure of the Red Hill tanks. Due to the unique nature of these tanks, traditional, small-scale UST closure methods are not directly applicable. EPA has informed the Navy and DLA that final approval of a chosen closure method should incorporate input from local stakeholders. The Navy has initiated a process of gathering input from the public on closing the tanks and whether and how they could be beneficially reused. This process is currently being carried out by a third-party contractor and will generate a report summarizing public input on closure and beneficial reuse options for the tanks. An initial survey is gathering qualitative information on ideas for non-fuel reuse, and a second survey will seek input from neighboring Red Hill residents.

EPA cannot say whether potential reuses will meet the closure criteria until the Navy and DLA submit the closure plan for approval, but EPA will evaluate it pursuant to HDOH regulations as required by the 2023 Consent Order and ensure that any potential future use of the tanks comply with any applicable environmental regulations. If commenters would like to have input into the closure method, EPA encourages commenters to submit comments on the Navy and DLA proposals.

Space Force on Haleakala and other facilities outside of Red Hill and JBPHH are outside of the scope of the 2023 Consent Order. With respect to concerns about national security, EPA notes that on March 7, 2022, Secretary of Defense Austin issued a Statement requiring the Red Hill tanks to be defueled and closed.

8. Aqueous Film Forming Foam and Per- and Polyfluorinated Substances

8.1 Summary of Comments

Many commenters expressed concern regarding potential impacts to human health and the environment stemming from the release of AFFF concentrate that occurred at Red Hill on November 29, 2022 (“AFFF release”). AFFF is a fire-fighting agent that contains per- and polyfluoroalkyl substances and is used to combat flammable fuel fires, such as those that could occur at locations that use and store diesel, gasoline, jet fuel, or other liquid hydrocarbon fuels. Commenters took issue with the fact that the 2023 Consent Order did not mention or address the AFFF release. Additionally, commenters expressed concern regarding the detection of PFAS in water quality samples, the potential human health effects of exposure to PFAS, the continued use by the Navy of AFFF at Red Hill, and lack of transparency on the part of the Navy regarding the AFFF release.

Several commenters expressed concerns about the detection of PFAS in O‘ahu’s sole source aquifer and the potential for PFAS contamination of local drinking water sources. Commenters noted that the release of PFAS at concentrations as high as 100 times above EPA’s 2022 interim health advisory levels could adversely impact local drinking water systems. Commenters claimed the amount of AFFF released from Red Hill and the extent and magnitude of aquifer contamination remains unknown despite the availability of PFAS sampling data on the Navy’s website (<https://jbphh-safewaters.org>). Some comments asked that any detection of PFAS in drinking water should result in public notification because PFAS are increasingly understood to be persistent and toxic at extremely low levels with potential harmful human health effects such as cancer.

Considering these effects, commenters objected to the Navy’s ongoing use of PFAS-containing fire-fighting agents such as AFFF at Red Hill and close to the island’s main drinking water aquifer. Commenters called for EPA to prohibit the use of PFAS-containing products at Red Hill and for the Navy to use an alternate fire-fighting agent that does not contain PFAS. Commenters provided information on the availability of PFAS-free fire-fighting agents as safer alternatives to AFFF and expressed their view that arguments in favor of the continued use chemicals such as AFFF despite their potential for significant harm to human health and the environment reflected a short-sighted and “possibly greedy attitude.”

In addition, commenters expressed a desire for greater transparency and timeliness on the part of the Navy with respect to information surrounding the AFFF release, including its magnitude, cleanup actions, potential human health impacts to the community, and any sampling results associated with the release, as well as measures to prevent future AFFF releases. Commenters asserted that the Navy has not been timely in its reporting of the AFFF release, including making public any video footage of the AFFF release incident. Commenters requested that the 2023 Consent Order require the Navy to take responsibility for the AFFF release and provide all PFAS sampling data and any videos from the AFFF release to the public. Commenters also said that many photos of AFFF releases at DoD facilities depict billowing snowlike mounds of foam.

Commenters also called for the Navy to fund an independent, certified laboratory on O‘ahu to provide water testing results in a timely manner. Commenters noted that it was unacceptable to wait weeks for water sampling results issued by mainland laboratories that could indicate whether drinking water is impacted with contaminants, including PFAS, migrating from Red Hill.

Several comments asked when EPA was going to release a new PFAS Health Advisory and recommended blood and urine testing for contaminants including PFAS, noting that the ATSDR recommends such testing.

8.2 EPA Response

8.2.1. Investigating AFFF Release and PFAS

EPA acknowledges concerns surrounding releases of AFFF and PFAS to the environment at Red Hill and is committed to ensuring that the 2022 AFFF release is properly investigated, characterized, and remediated.

In response to the 2022 AFFF release, EPA has required the following from the Navy:

- On January 6, 2023, EPA sent a letter requiring the Navy to submit information about the clean-up, monitoring and remediation of the November 29, 2022 release and other releases of AFFF concentrate at Red Hill and in the surrounding environment under Section 3007(a) of RCRA. On March 15, 2023, the Navy provided a partial response to EPA’s information request. On May 5, 2023, additional information was provided when the Joint Task Force Red Hill released its AFFF report regarding the November 29, 2022 release and the video of the release.
- On January 31, 2023, HDOH and EPA also issued a joint letter requiring PFAS sampling and testing of all sources for the JBPHH drinking water system. In an April 10, 2023 letter to EPA, the Navy committed to sampling the active Waiawa Shaft and currently-inactive Navy Aiea-Halawa Shaft for PFAS by April 30, 2023, and to sample the inactive Red Hill Shaft for PFAS by June 30, 2023. The Navy also requested and EPA has approved early sampling of the Waiawa Shaft, originally scheduled for 2024, pursuant to EPA’s Unregulated Contaminant Monitoring Rule, 86 Fed. Reg 73131 (Dec. 27, 2021). The Navy also committed to using EPA drinking water sampling methods for these PFAS sampling efforts. On April 18, 2023, the Navy conducted sampling of the Waiawa and Navy Aiea-Halawa Shafts for PFAS.
- On January 31, 2023, EPA issued a request for information under the Clean Water Act requiring the Navy to conduct PFAS sampling of influent and effluent at the granular activated carbon (GAC) water treatment system of remediated groundwater being discharged into Halawa Stream. In response, on March 15, 2023, the Navy sampled the water from its GAC water treatment system at the discharge point to the Halawa Stream, the results of which it shared with EPA. The results show levels of PFAS in effluent at levels lower than the Environmental Action Levels established by HDOH.

- On February 17, 2023, EPA and HDOH sent a letter directing the Navy and DLA to address the investigation and remediation of the November 2022 release of AFFF concentrate pursuant to the 2015 Administrative Order on Consent. On March 6, 2023, the Navy responded and requested to meet to discuss the EPA and HDOH letter. On May 15, 2023, the Navy sent a letter to EPA and HDOH agreeing to address the investigation and remediation of PFAS at Red Hill pursuant to a combination of the 2015 Administrative Order on Consent and the Federal Facility Agreement for the Pearl Harbor National Priorities List Site.
- Based on available tabulated data as of March 31, 2023, which covers sampling through January 2023, groundwater testing of PFAS has shown no exceedances of Hawai‘i’s Environmental Action Levels.

On May 5, 2023, approximately seven weeks after the Navy’s initial response to EPA’s January 6, 2023 information request, the Joint Task Force-Red Hill announced the findings from its investigation of the November 29, 2022 AFFF release at Red Hill and provided a link to video footage of the incident at <https://www.dvidshub.net/video/882317/red-hill-bfsf-afff-incident-29-november-2022> and <https://www.dvidshub.net/video/882318/key-events-red-hill-bfsf-afff-incident-29-november-2022>.

EPA will continue to actively investigate AFFF releases and PFAS in the aquifer and will keep the public informed once any findings are finalized.

8.2.2. Addressing AFFF Release and PFAS

The 2023 Consent Order addresses the safe and expeditious defueling of the Red Hill bulk storage tanks, the protection of drinking water during the defueling process, and the closure of the tanks after defueling. The ongoing investigation and any necessary cleanup of releases from Red Hill are being addressed pursuant to the 2015 Administrative Order on Consent. *See* EPA Response 15.2 below for a discussion of the overlap between the 2023 Consent Order and the 2015 Administrative Order on Consent. The Navy is also addressing PFAS from JBPHH pursuant to the Federal Facility Agreement for the Pearl Harbor National Priorities List Site. Although the Navy is not addressing the petroleum releases at Red Hill pursuant to the Federal Facility Agreement because of the petroleum exclusion under CERCLA, the Red Hill area is included in the Federal Facility Agreement.

Consistent with this approach, on May 15, 2023, the Navy agreed that the Navy and DLA would perform the PFAS investigation at Red Hill pursuant to a combination of the 2015 Administrative Order on Consent and the Navy’s Pearl Harbor Federal Facility Agreement. EPA and HDOH have the authority to oversee the PFAS investigation pursuant to both the 2015 Administrative Order on Consent and the Federal Facility Agreement and both documents have stipulated penalties for noncompliance and dispute resolution.

Since the Navy is addressing PFAS at Red Hill pursuant to both the 2015 Administrative Order on Consent and the Federal Facility Agreement, EPA did not include the PFAS response

in the 2023 Consent Order as requested by commenters. EPA also notes that the 2023 Consent Order does not preclude EPA from requiring the Navy and DLA to address PFAS releases from Red Hill pursuant to a separate enforcement order in the future if the Navy and DLA do not address the investigation and remediation of PFAS to EPA's satisfaction pursuant to the 2015 Administrative Order on Consent and the Pearl Harbor Federal Facility Agreement.

The comments recommending that EPA initiate blood and urine testing of residents for PFAS and other contaminants are beyond the scope of the 2023 Consent Order. *See* Section 12 below for EPA's response to comments regarding health impacts.

In response to observations about billowing foam, EPA is not aware of foaming at the 2022 AFFF release.

In response to comments about PFAS water quality testing, Section 9.2.1 below discusses groundwater and drinking water monitoring.

8.2.3. Use of PFAS in Fire-fighting Agents

Many comments called for the ban of PFAS-containing fire-fighting agents, including AFFF, at Red Hill. This comment is beyond the scope of the 2023 Consent Order and EPA's authority. However, EPA is providing additional information on anticipated fire suppression methods at Red Hill during defueling in response to these comments. On May 16, 2023, the Navy and DLA submitted Supplement 2 to the Defueling Plan, which included information on the Defueling Fire Suppression Plan. The submitted Defueling Fire Suppression Plan uses dry chemical (sodium bicarbonate) fire extinguishers, the existing water sprinkling system and the Federal Fire Department (FedFire) to respond to a fire event in the vicinity of the Underground Storage Tanks during defueling. The Defueling Fire Suppression Plan does not rely on the AFFF system, but Joint Task Force Red Hill is conducting repairs to the AFFF pipe from the pump house to the Adit 6 Tunnel in case it is determined it is needed. Although EPA is not going to approve or disapprove the Defueling Fire Suppression Plan pursuant to Supplement 2 or the 2023 Consent Order, EPA supports elimination of PFAS containing fire-fighting agents at Red Hill if other protective fire suppression methods are available and EPA will work with Joint Task Force Red Hill and the Community Representation Initiative to keep the public updated regarding whether the Defueling Fire Suppression Plan will utilize PFAS.

In addressing commenters who requested the use of fluorine-free foams, EPA is providing additional information on the DoD's process for approving fire-fighting agents for general use. DoD is currently completing research and development on fluorine-free alternatives to AFFF, though, these efforts will not be complete by the time defueling is expected to commence. Additional information on this approval process, which designates certain products as meeting Military Specifications (MILSPEC), can be found here:

<https://www.acq.osd.mil/eie/ee/ecc/pfas/oe/afff/index.html>. For more information about AFFF and PFAS at DoD facilities, see the National Defense Authorization Act of 2020, Section 322-324, which contains provisions dealing with the transition from the use of AFFF and other PFAS-containing fire-fighting agents at military facilities:

<https://www.acq.osd.mil/eie/Downloads/IE/NDAA%2020%20PLAW-116publ92.pdf>, pdf pages 111-114.

EPA is committed to working with the Navy and DLA to address releases of PFAS at Red Hill through the 2015 Administrative Order on Consent and the Pearl Harbor Federal Facility Agreement as described above.

8.2.4. PFAS Levels and National Rulemaking

On August 26, 2022, EPA proposed to designate two of the most widely used PFAS, perfluorooctanoic acid (“PFOA”) and perfluorooctane sulfonic acid (“PFOS”), as hazardous substances under CERCLA.

On March 14, 2023, following the release of the proposed 2023 Consent Order, EPA released a draft PFAS National Primary Drinking Water Regulation under SDWA that proposes establishing Maximum Contaminant Levels for PFOA and PFOS individually at 4.0 parts per trillion. The proposed PFAS National Primary Drinking Water Regulation would also set a hazard index for a mixture of four additional PFAS.¹

As EPA’s regulations and statutes are updated to address PFAS, EPA will evaluate these changes to ensure that EPA’s Red Hill response is in compliance with applicable requirements.

9. Drinking Water Monitoring

9.1 Summary of Comments

Many comments expressed concerns that the use of mainland laboratories results in the untimely release of analytical results of water sampling to the public. They also observed that it is unacceptable to wait weeks for laboratory results to know whether contaminants such as jet fuel and PFAS have been released from Red Hill and/or have made their way into drinking water wells and drinking water systems. As a solution, some commenters requested that EPA require the Navy to fund an independent, EPA-certified water testing laboratory on O‘ahu to facilitate more timely notification of water sampling results. One commenter suggested that EPA could quickly certify an analytical laboratory in Hawai‘i by expediting the process of allowing certified personnel and equipment located elsewhere to relocate to Hawai‘i.

Many commenters want continual and consistent testing, to include regular weekly testing, to determine the safety of the drinking water.

Multiple commenters want the granting of access to BWS for testing of all of the Navy’s wells. Another commenter would like to enable BWS to require testing and immediate evaluation. One commenter further requested that all public water suppliers have access to neighboring shafts and wells for testing purposes and that the tests performed are specific tests and follow exact guidelines.

¹ Perfluorononanoic acid (“PFNA”), perfluorohexane sulfonic acid (“PFHxS”), perfluorobutane sulfonic acid (“PFBS”), and hexafluoropropylene oxide dimer acid (“HFPO-DA”, commonly referred to as “Gen-X” chemicals).

Concerns were raised about the need for operating surveillance cameras between the underground storage tanks (“USTs”) and pumphouse and of all points where contamination of the water system could occur, including contamination by fire suppressants. It was also suggested that there be required timelines for repair/replacement of inoperable cameras, including immediately to within 5 days of finalizing the 2023 Consent Order, and that all camera recordings be turned over to EPA and the public within 24 hours and 48 hours of an incident, respectively.

In addition to timely water testing results, commenters want the Navy to post analytical sampling results as required under Section 6 of the proposed 2023 Consent Order’s Statement of Work in EPA’s Environmental Data Management System within 24 hours rather than 7 days, as well as to notify EPA and HDOH within 24 hours of receipt of a laboratory report showing exceedances of the HDOH Maximum Contaminant Levels for drinking water contaminants and the HDOH Incident Specific Parameter for total petroleum hydrocarbons (“TPH”) when levels are above 100 parts per billion.

One commenter specifically seeks the Navy investment in a water facility to filter the water from Red Hill.

One commenter requested that all radionuclides be monitored.

One comment suggested that Section 6.1.2.2. of the proposed 2023 Consent Order’s Statement of Work dictate that the Navy have 30 days instead of 60 days to revise and resubmit Phase II of their Source Water Protection Plan.

Another comment on deadlines associated with the Source Water Protection Plan requests that EPA make clear that the Navy must submit the Source Water Protection Plan to EPA within 45 days of signing the 2023 Consent Order instead of “within 30 days after the Navy accepts the contractor’s work product” as is currently required at Section 6.1.2.3 of the Statement of Work which is part of the proposed 2023 Consent Order. The comment reflects a concern that if the Navy decides not to accept the Source Water Protection Plan developed by its contractor, then the Navy is not required to submit the Source Water Protection Plan to EPA.

One commenter requested two specific changes related to water quality monitoring: first, to Section 7.0 of the Statement of Work to change the due date for “Sampling of Finished Water Tanks (Section 6.3.1)” from “within 7 calendar days” to “within 7 calendar days after tanks are cleaned” for clarity. Second, the commenter noted that Appendix B to the Statement of Work, which is the *Course of Action 5 - Tank Cleaning & Sampling Plan of Action and Milestones*, references a “Table 6” in Appendix A of the Statement of Work, which is the Drinking Water Long-Term Monitoring Plan. However, as the commenter notes, there is no Table 6 in the Drinking Water Long-Term Monitoring Plan. The commenter recommended inserting its own version of Table 6 into section 5.2 of the Course of Action 5.

Several comments requested revisions to the Drinking Water Long-Term Monitoring Plan attached as Exhibit A to the proposed 2023 Consent Order’s Statement of Work, including requests for maps, faster reporting of sampling results to HDOH and homeowners where

sampling occurred. One comment regarding the Drinking Water Long-Term Monitoring Plan recommended EPA require the Navy to compare its drinking water sampling results not only to the Environmental Action Levels, as currently required, but also to the EPA Regional Screening Levels for the analytes and the “Incident Specific Parameters,” where an exceedance requires remedial action be set at either the EPA Maximum Contaminant Level for drinking water contaminants or the EPA Regional Screening Levels, whichever is lower. The commenter also requested that EPA add the contaminant Regional Screening Levels to Table 5 of the Drinking Water Long-Term Monitoring Plan, require a comparison of all PAHs to their Regional Screening Levels, lower the TPH screening level to the lowest possible detection limit, expand the list of contaminants to be monitored under the Drinking Water Long-Term Monitoring Plan, and jointly provide a report with HDOH on whether the percentage of homes and buildings tested under the Drinking Water Long-Term Monitoring Plan is sufficient to protect human health.

One commenter requested that EPA require hydrocarbon sampling to the JBPHH drinking water system’s flushing requirement at Section 6.5.5.2 of the 2023 Consent Order’s Statement of Work, noting that the current requirements, *e.g.*, more frequent flushing based on the reoccurrence of air, sediment, and chlorine residuals in the drinking water system’s distributions lines, are not relevant to petroleum contamination.

One comment suggested the use of a bailer was inadequate to collect surface water samples pursuant to the *Course of Action (COA) 5 for Tank Cleaning & Sampling Plan of Action and Milestones* attached as Appendix B to the Statement of Work because it would collect subsurface water.

Beyond drinking water, several commenters called for enhanced monitoring of surface water potentially impacted by tank leaks.

One comment requested that EPA expand its source water protection requirements contained in the proposed 2023 Consent Order’s Statement of Work to require the Navy to install additional monitoring wells to provide an early warning to other water users that source their water from the sole source aquifer underlying Red Hill. The commenter further characterized the existing sentinel monitoring well network as “woefully inadequate.”

One comment requested that the map which the JBPHH operator is required to develop pursuant to the Minimum Requirements for Public Water System Operations and Maintenance, attached as Appendix C to the 2023 Consent Order’s Statement of Work should be made publicly available.

9.2. EPA Response

9.2.1. Use of On-Island Laboratories

EPA acknowledges that using mainland laboratories to analyze drinking water samples may result in a longer period of time to report results and make them available to the public, relative to using a laboratory located in Hawai‘i. EPA must stress, however, that the results

received from the mainland laboratories are timely and provide EPA and other entities with adequate time to act when necessary to protect human health and the environment.

As to comments concerning EPA's ability to quickly certify laboratories, EPA takes this opportunity to emphasize the rigorous EPA laboratory certification process. EPA develops laboratory analytical methods (test procedures) to be used by industries and municipalities for measuring the concentration of a substance or contaminant in the environment. The capability of commercial/private Environmental Testing Laboratories vary from routine to complex environmental analyses. Under the Safe Drinking Water Act (Section 1401(1)(D) and its implementing regulations (40 CFR 141.28)), Environmental Testing Laboratories must be certified and use EPA-approved methods for the analysis of drinking water samples. Environmental Testing Laboratories must rely on adequate sample throughput to address the high fixed costs (administrative, quality assurance/quality control, customer service, data management) associated with establishing and operating a laboratory.

EPA currently regulates over 90 contaminants in drinking water, and it is not unusual for a state to lack in-state analytical capability for a number of SDWA-regulated contaminants in drinking water, as well as unregulated contaminants. For example, total petroleum hydrocarbons ("TPH") are not regulated under SDWA and there are no laboratories in Hawai'i that have TPH analytical capability. Jet fuel contamination of the JBPHH drinking water system was measured as TPH. TPH is a measured, gross quantity of hydrocarbons without speciating its constituents and therefore represents a mixture.² Similarly, PFAS are also not currently regulated under SDWA and there are also no laboratories in Hawai'i that have PFAS analytical capability.

EPA acknowledges that establishment of laboratory capability in Hawai'i for TPH and PFAS could result in quicker response actions and also reduce the turnaround time for sample results. EPA, however, does not have the authority to require any entity to fund or establish a laboratory. That said, EPA may provide guidance and technical assistance to develop in-state laboratory capability. EPA notes that the lead time and costs for planning, design, and buildout of new laboratory facilities with the capabilities to analyze water samples for contaminants such as PFAS will be considerable. Additional time and funds will be required for the procurement of analytical instruments, sample preparation equipment, supplies, expendables, and standards. Concurrently, the laboratory will have to hire new staff, develop a complete quality system, train staff on both the instruments/methods and the quality system. The implementation of the quality system will require development of a laboratory quality assurance manual, initial demonstrations of capability, successful analyses of proficiency testing samples and certification of the laboratory by the State or another accreditation body.

In response to the comment that EPA might reduce the process for certifying a laboratory, EPA notes that if new laboratory capability is to be added to an existing lab, one that is already a certified laboratory with an existing quality system and experienced staff, then the lead time for certification may be considerably shorter.

² See [ATSDR Tox Profile](#).

9.2.2. Enhanced Monitoring and Drinking Water Quality Testing.

EPA notes at the outset that SDWA has rigorous sampling requirements in place (*see* SDWA’s implementing regulations at 40 C.F.R. Part 141) that specify the location (i.e., at the entry point to distribution systems and at residential/non-residential structures) and the number and frequency of sampling events and tests for regulated contaminants in drinking water. Depending on the size and configuration of the public water system and the results of prior monitoring, sampling frequencies can vary, i.e., daily sampling for operational parameters (e.g., chlorine residuals, turbidity), weekly (e.g., coliforms), monthly/quarterly (e.g., disinfection byproducts), or annually (e.g., antimony, arsenic, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium and thallium). Failure to sample at a specified frequency is a violation of federal and state requirements and requires the water system to notify users of the water system. The JBPHH drinking water system is subject to the full suite of SDWA monitoring requirements, as well as additional requirements established in the Drinking Water Long-Term Monitoring Plan developed by HDOH, EPA and the Navy which is incorporated into the 2023 Consent Order and attached as Appendix A to the Statement of Work.

As requested by HDOH in its February 6, 2023 comment letter, EPA revised the due date for “Sampling of Finished Water Tanks (Section 6.3.1)” in Section 7.0 of the Statement of Work from “within 7 calendar days” to “within 7 calendar days after tanks are cleaned.” The revision states that sampling occurs after tanks are cleaned under Course of Action 5 (Appendix B).

In response to HDOH’s February 6, 2023 request that EPA include HDOH’s proposed Table 6 (for Distribution System Sampling) into Course of Action 5.2 (which is used for post tank cleaning sampling), EPA acknowledges there is no Table 6 in the Drinking Water Long Term Monitoring Plan. Except for pH, alkalinity, conductivity, calcium, and temperature, the contaminants listed in HDOH’s proposed Table 6 are already included in Drinking Water Long-Term Monitoring Plan Table 5 (providing the contaminants for all sampling including distribution system sampling). In addition, Drinking Water Long-Term Monitoring Plan Table 5 currently requires analyzing for pH, alkalinity, conductivity, calcium, and temperature when analyzing for lead and copper. Thus, we do not include Table 6 in Course of Action 5.2.

EPA notes that it changed the enforceable deadline for Tank Inspection and Cleaning from the proposed 2023 Consent Order’s Statement of Work at Section 6.2 in the final 2023 Consent Order. The Drinking Water Long-Term Monitoring Plan deadline of February 28, 2023, in the proposed 2023 Consent Order’s Statement of Work at Section 6.2 (Table) has passed, which requires inclusion of a new deadline for JBPHH tank inspection and cleaning. The JBPHH drinking water system has seven finished water tanks. Of these seven tanks, the Navy will inspect and clean five finished water tanks by December 31, 2023. The five tanks include Camp Smith Tanks S325, S326, and S327 and Red Hill Tanks 316 and 685. The remaining two tanks, Halawa S1 and S2, are not subject to the December 31, 2023 deadline because the Navy has already inspected Halawa S2 and determined it must be replaced due to structural concerns and because Halawa S1 must remain online until the Navy completes replacement of Halawa S2. Although Halawa S1 and S2 are not subject to the December 31, 2023 deadline, EPA understands that the Navy remains committed to inspecting and cleaning Halawa S2, after

completion of the new tank construction, and Halawa S1, within 6 months of placing Halawa S2 into service. Unless otherwise modified in the Drinking Water Long-Term Monitoring Plan, Halawa S2 inspection and cleaning must be completed prior to obtaining certification of completion of the drinking water protection requirements under the 2023 Consent Order's Statement of Work at Section 6.13.

In response to the comment that suggested that Section 6.1.2.2. of the proposed 2023 Consent Order's Statement of Work dictate that the Navy have 30 days instead of 60 days to revise and resubmit Phase II of their Source Water Protection Plan, EPA left the requirement at 60 days to provide the Navy the opportunity to submit a comprehensive Phase II Source Water Protection Plan.

In response to the comment that EPA require the Navy to submit its Source Water Protection Plan to EPA within 45 days of signing the 2023 Consent Order instead of "within 30 days after the Navy accepts the contractor's work product," EPA notes that this comment is directed at EPA's approval of Phase II of the Source Water Protection Plan and that Section 6.1.2.2 of the Statement of Work is clear that "[a]ny contract entered into by Navy shall ensure that Phase II of the Source Water Protection Plan shall be developed and submitted to the EPA ... at least prior to completion of Phase I Closure [of Red Hill]." This requirement should address the concern that if the Navy decides not to accept the Source Water Protection Plan developed by its contractor, then the Navy is not required to submit the Source Water Protection Plan to EPA. In addition, Sections 6.1.2.2 and 6.1.2.3 do not require that the Navy contract for development of Phase II of the Source Water Protection Plan. The Navy's obligation to submit the Phase II Source Water Protection Plan is thus not dependent on its development by a contractor. Section 6.1 makes clear that it is the Navy's obligation to "develop and begin implementation" of the Phase II Source Water Protection Plan "[p]rior to Certification of Phase I Closure [of Red Hill]."

In addition to the Navy's obligation to conduct the Phase II Source Water Protection Plan, the Navy is also obligated under Section 6.1.1 of the 2023 Consent Order's Statement of Work to provide its Phase I Source Water Protection Plan to EPA "[n]o later than sixty (60) days prior to initiating Defueling." The Phase I Source Water Protection Plan will describe the protective measures the Navy will have in place specifically at the Red Hill Shaft prior to and through Defueling activities.

In response to the comment that all radionuclides be monitored, EPA notes that the Navy is already obligated to monitor for radionuclides under SDWA's implementing regulations at 40 C.F.R. Part 141, e.g., 40 C.F.R. §§ 141.26 and 141.55, which set forth the monitoring requirements and Maximum Contaminant Level for radionuclides.

In response to the comment that EPA should add hydrocarbon sampling to the JBPHH drinking water system flushing requirement at Section 6.5.5.2 of the Statement of Work, EPA's intent is for Section 6.5.5.2 to require the Navy to develop and implement a comprehensive flushing program for general operation and maintenance of the JBPHH drinking water system.

EPA notes that post-flushing sampling for hydrocarbons, as part of the response and recovery, is already currently being conducted under Drinking Water Long-Term Monitoring Plan for two years. EPA also notes that aside from field measurements as indicators of flushing effectiveness (for example, for chlorine residual, turbidity, pH) it is not a standard practice to sample for analytes (hydrocarbons, for example) post flushing, unless there is a specific event that triggers the need for targeted flushing.

9.2.3. Third-Party Validation of Data

EPA does not have authority to require the Navy to give BWS access to the Navy's wells or provide for BWS oversight of the 2023 Consent Order as requested by commenters. However, the final 2023 Consent Order was modified to explicitly acknowledge that BWS is a "subject matter expert" in Section 2.2 of the Statement of Work which requires the Navy and DLA to seek technical input from BWS. In addition, EPA does not agree that BWS's access to the Navy's wells for water quality testing would result in any change to the analytical results of water quality sampling at the JBPHH drinking water system. Further, such action would likely delay sampling and analysis due to the logistical complexity associated with obtaining BWS access to the Navy's assets for daily, weekly, monthly, quarterly, and annual sampling events. As to the comment requesting that EPA move to have all public water suppliers receive access to neighboring shafts and wells for testing purposes, this request is beyond the scope of the 2023 Consent Order. EPA refers the commenter to the response made in 9.2.2 above as to the adequacy of contaminant sampling already required by SDWA and its implementing regulations at 40 C.F.R. Part 141.

9.2.4. Data Transparency

In response to the comments requesting EPA require the Navy to post analytical sampling results as required under Section 6 of the proposed 2023 Consent Order's Statement of Work in EPA's Environmental Data Management System within 24 hours (rather than 7 days) and notify EPA and HDOH within 24 hours of receipt of a laboratory report showing exceedances of HDOH-established Maximum Contaminant Levels for drinking water contaminants and the HDOH Incident Specific Parameters for TPH when levels are above 100 parts per billion, EPA finds that posting and providing notification of such data within 24 hours does not allow for validation of the data's quality, thus posing a risk that inaccurate data could be disseminated to the public and cause confusion. The existing timelines in the Statement of Work for reporting data are reasonable while allowing adequate time for the Navy to validate the data's accuracy.

In response to the comment requesting that the map which the JBPHH operator is required to develop pursuant to the Minimum Requirements for Public Water System Operations and Maintenance attached as Appendix C to the 2023 Consent Order's Statement of Work should be made publicly available, EPA must recognize the Navy's determination that the public release of this information may pose a threat to national security.

9.2.5. Advanced Treatment and Monitoring Practices

EPA does not have the authority to require the Navy to fund or establish advanced treatment facilities beyond what is required by statute. Specifically, the JBPHH drinking water

system is not a surface water system and therefore, is not required to filter or disinfect its aquifer water source under SDWA. Nevertheless, we note that the Navy is monitoring its source water, and voluntarily treating this water (i.e., applying appropriate disinfection) pursuant to all SDWA requirements and is also monitoring under the Drinking Water Long-Term Monitoring Plan that EPA has attached as Appendix A to the 2023 Consent Order. Also, we note that the Navy is currently using its GAC water treatment facility to filter water discharged from the Red Hill Shaft to Halawa Stream.

In response to the comments requesting specific revisions to the Drinking Water Long-Term Monitoring Plan, EPA notes that the Plan was developed in coordination with the Navy and HDOH to continuously ensure that the water delivered by the JBPHH water system to consumers is safe to drink, meets all State and Federal drinking water standards, and is free of petroleum and response by-product contamination. The Drinking Water Long-Term Monitoring Plan is a stand-alone document and was finalized in June 2022. EPA is not considering revisions to the Plan as part of this action, but EPA incorporated the final Drinking Water Long-Term Monitoring Plan into the 2023 Consent Order, so it is enforceable.

In response to the comment that bailers are not an effective way to collect surface samples, EPA does not agree and considers bailers as the most flexible method to collect a representative composite of both at-water surface and just below-water surface samples for analysis. Given the tendency for petroleum contamination to occur at or near the surface, EPA expects such a sample will represent the worst-case condition amongst the different tank water column samples, and thus inform EPA of what steps to take to address contamination in the water tanks.

EPA also lacks the authority to require the Navy to install and maintain surveillance equipment and believes the existing requirements are sufficient to ensure an adequate response by appropriate authorities to incidents involving contamination of the System.

In response to the comment requesting that EPA expand its Source Water Protection Plan requirements to require the Navy to install additional monitoring wells to provide an early warning to water users outside the JBPHH, EPA notes that Navy agreed to install a minimum of 22 new wells in 2022 and 2023 in accordance with the September 2, 2022 Work Plan conditionally approved by the Regulatory Agencies on September 29, 2022, that include "sentinel wells" intended to better evaluate the threat to regional water supply sources. According to the Navy, sentinel wells are monitoring wells installed between Red Hill and neighboring drinking water sources in order to provide a warning if any contamination in the aquifer were to migrate. EPA expects that the Navy's sentinel wells will serve to provide adequate warning to water users outside of JPBHH that source their water downgradient from the aquifer underlying Red Hill.

10. Drinking Water and Spill Notification

10.1 Summary of Comments

Numerous commenters ask that the Navy be truthful regarding the status of the safety of the drinking water and when their water is unsafe to drink or contaminated. One commenter requested that free alternative water be provided to any persons potentially continuing to remain at risk or who may become at risk.

Many commenters requested that the Navy meaningfully inform users, specifically child development centers, schools, businesses, and residents, when drinking water delivered by the JBPHH drinking water system is not in compliance with SDWA's and/or Hawai'i's safe drinking water requirements. Some commenters requested that the Navy warn system users as soon as it becomes aware of violations (e.g., "clearly and immediately") or within 2 hours of any known violations.

Concerns were also raised about the need for the Navy to timely respond to public complaints made to the Navy's call center and/or HDOH complaint line. Commenters requested that EPA require the Navy to respond within 24 hours of receiving a complaint rather than 3 days as the 2023 Consent Order requires. One commenter specifically sought timely notification of any water-related health issues brought to the Navy's attention.

10.2 EPA Response

Under SDWA, EPA sets national standards for drinking water to protect against health effects from exposure to naturally occurring and man-made contaminants that may pose health risks and are likely to be present in water supplies. Standards are set to control the amount of the contaminants that are permissible in drinking water which, if exceeded, may have adverse health effects. Exceedance of these standards is a violation of federal requirements.

SDWA also requires public water systems to notify users of the water system when they fail to comply with, or are in violation of, federal drinking water requirements. The regulations prescribe the minimum requirements that a public water system must follow regarding the form, manner, frequency, and content of a public notice. In particular, SDWA requires public water systems such as the Navy's JPBHH drinking water system to provide a "Tier 1" public notice pursuant to SDWA regulations at 40 C.F.R. § 141.202(a) in response to situations with a significant potential to have serious adverse effects on human health as a result of exposure to contaminants in drinking water. When a Tier 1 public notice is required, the Navy must use media outlets such as television, radio, and newspapers, post their notice in public places, personally deliver a notice to their customers, and/or use an alternative method approved by HDOH. If a situation arises at the JBPHH drinking water system requiring a Tier 1 public notice, then the Navy must provide the Tier 1 notification to all persons served by the JBPHH drinking water system as soon as practical but no later than 24 hours after the Navy learns of the violation, as required by SDWA regulations at 40 C.F.R. § 141.202(b).

In response to the public comments received on the proposed 2023 Consent Order, the Navy is also now required to notify the new Community Representation Initiative within twenty-

four hours of emergencies or immediate threats to human health or the environment resulting from the release of contaminants at Red Hill, including those with potential impact to the JBPHH drinking water system, and to post any such notification on the Navy's website within 24 hours of the Navy encountering such a situation. In addition, under Section 6.12 of the 2023 Consent Order's Statement of Work, EPA obtained a commitment from the Navy to submit (unless otherwise agreed to between the Navy and HDOH) a proposal for the establishment of a surveillance and response system to address potential future fuel contamination to the aquifer. EPA also worked with the Navy to reaffirm it will comply with SDWA's public notification requirements. For example, the Navy will comply with regulatory notifications such as the Tier 1 public notice regulation discussed above.

In addition, SDWA requires the Navy to provide consumer confidence reports (CCRs) to all JBPHH drinking water system customers on an annual basis. EPA also makes these CCRs available at the following EPA website: <https://www.epa.gov/ccr/ccr-information-consumers>. The intent of these CCRs is to provide information about the quality of drinking water delivered by public water systems to consumers in clear and plain terms.

As to the concerns raised about the need for quicker responses to complaints to the Navy call center or HDOH complaint line, the Navy's obligation under Section 6.11 of the 2023 Consent Order's Statement of Work to respond to the complaint within 3 days and initiate appropriate actions (e.g., flushing, testing, or other action) reflects a reasonable amount of time for the Navy to develop and implement a response to a complaint. EPA notes that the JBPHH drinking water system is large and dispersed and the Navy may need 3 days in some instances to obtain a proper understanding of the basis for the complaint.

11. Calls for Remediation

11.1 Summary of Comments

Commenters called for remediation of impacts from fuel spills at Red Hill. Specifically, commenters would like a full and complete cleaning of the Waimalu and Moanalua aquifers, and for the Governor of Hawai'i to establish a "Certification of Rehabilitation" for all impacted areas within Kapukaki, which includes the Waimalu and Moanalua aquifers.

Commenters expressed a desire for excavation, remediation and removal of contaminated soil and equipment at Red Hill. Commenters also expressed a desire for fire retardant or other toxic materials to be cleaned up.

Commenters expressed that the Navy should pay for remediation and for potential restitution to affected parties.

One commenter questioned why CERCLA was not being invoked to designate Red Hill as a Superfund site.

11.2 EPA Response

EPA entered into the 2015 Administrative Order on Consent with HDOH, the Navy, and DLA pursuant to its RCRA imminent and substantial endangerment authorities. The 2015

Administrative Order on Consent requires the Navy and DLA to investigate and remediate past and future releases from Red Hill. EPA will continue to implement the 2015 Administrative Order on Consent as the primary means to oversee the remediation at the site. The relationship between the 2023 Consent Order and the 2015 Administrative Order on Consent is explained in Section 15.2 below.

EPA and HDOH are actively overseeing the investigation and remediation of contamination from Red Hill that may impact the Waimalu and Moanalua aquifers. Since the 2015 Administrative Order on Consent, EPA and HDOH have been working together to require the Navy and DLA to investigate releases from Red Hill and address contamination from Red Hill. The investigation and any remediation of Red Hill releases will continue through defueling and after defueling is completed in order to protect the Waimalu and Moanalua aquifers.

EPA does not have authority to require the Navy and DLA to pay restitution to those affected by the releases. Although the Navy and DLA are not paying EPA's costs pursuant to the 2023 Consent Order, the Navy and DLA are funding all the work required by both the 2023 Consent Order and the 2015 Administrative Order on Consent. The Navy also pays for the equipment, laboratory analyses, contractors, and waste disposal associated with the investigation and clean-up of its contamination.

Pearl Harbor Naval Complex is listed on the National Priority List. Thus, Pearl Harbor is a Superfund Site and EPA, HDOH, and the Navy have a Federal Facility Agreement which includes Red Hill in the Site definition that requires the Navy to investigate and remediate releases of hazardous substances from Pearl Harbor Naval Complex pursuant to the Federal Facility Agreement. However, responses to petroleum are not addressed pursuant to the Federal Facility Agreement unless the Parties (EPA, HDOH, and the Navy) agree to do so as provided in Section 17.4 of the Federal Facility Agreement. Since the Parties have not agreed to address petroleum releases at Pearl Harbor Naval Complex pursuant to the Federal Facility Agreement, petroleum releases from Red Hill are not being addressed pursuant to CERCLA or the Federal Facility Agreement.

12. Human Health Impacts

12.1 Summary of Comments

Commenters expressed concern over the human health impacts of past and potential contamination from Red Hill, including potential increased risk of cancer, degradation of water supply for growing food, and other unknown long-term consequences of spills.

Several commenters said that the Navy had an obligation to provide medical treatment to anyone negatively impacted by spills, beyond what is already covered by those enrolled under the Defense Enrollment Eligibility Reporting System. Others stated the Navy needs to compensate families for negative impacts resulting from contamination in the form of reparations.

One commenter questioned why Red Hill was sited over, and in close proximity to such a critical source of groundwater. Another expressed a fear that local hospitals may be negatively

impacted by contaminated water. There were also indications that residents felt misled by the Navy who assured them drinking water was safe to drink when it was not, compounding health risks. Commenters suggested that decision-makers should be people who reside on-island and are directly impacted by contamination.

Commenters wanted an acknowledgement in the proposed 2023 Consent Order of the significance of the water under Red Hill as the sole source of drinking water for residents in O‘ahu and that spills and leaks have affected thousands of people, including children, indigenous populations, and military service members. They want the proposed 2023 Consent Order to clearly reflect the intrinsic connections between spills that impact wells feeding into the aquifer and the overall health and safety of O‘ahu.

One comment requested that EPA revise the requirement at 6.5.9 of the proposed 2023 Consent Order’s Statement of Work that requires the Navy to provide photo documentation to EPA to demonstrate that it has properly stored all chemicals used in the JBPHH water treatment process to also include "operational chemicals" such as fire retardant and suppression chemicals.

One commenter stated that Hawai‘i and other Pacific Islands do not have equipment or laboratory/analytical facilities necessary to adequately assess and protect human health and the environment from military fueling operations.

Overall, commenters wanted assurances that residents, including families and children, will be safe from past and future contamination.

12.2 EPA Response

EPA acknowledges residents’ reports of health impacted by contamination as a result of leaks from Red Hill. The purpose of the 2023 Consent Order is to prevent and minimize the risk of future spills or contamination from Red Hill during the defueling and closure of the tanks. The 2023 Consent Order also requires upgrades to the JBPHH drinking water system to further improve the water treatment and delivery on-base to prevent future incidents.

The final Consent Order was revised to include an acknowledgement recognizing the connection that Native Hawaiians have with their land and water and that their culture is strongly rooted in “wai” (water) and depends on their freshwater resources.

As to the comment requesting the Navy provide photo documentation of its proper storage of fire retardant and suppression chemicals in addition to the chemicals used in the JBPHH water treatment process, EPA notes that the Navy is already required to provide evidence of the proper storage of fire retardant and suppression chemicals. As part of EPA’s oversight of JBPHH, there will be frequent inspections of Red Hill to assess compliance including spill prevention.

Outside of the 2023 Consent Order, EPA is committed to monitoring and enforcing levels of contaminants in drinking water sources consistent with national guidelines. EPA is also overseeing the investigation and remediation of historical releases from the Red Hill tanks to protect the aquifer through the existing 2015 Administrative Order on Consent.

In the environmental statutes that EPA administers, Congress did not authorize EPA to provide medical treatment for people harmed by contamination, including any impacted families near Red Hill. The Agency for Toxic Substances and Disease Registry, which focuses on health impacts from contamination, attended EPA's Open House in January 2023 and is aware of the health concerns associated with Red Hill releases. For comments or questions associated with impacts to human health as a result of exposure to petroleum or other substances, members of the public may contact ATSDR's public help line at 1-800-CDC-INFO (232-4636). Members of the public and military families may also visit the Navy's JBPHH Water Updates website for information on medical care resources: <https://www.cpf.navy.mil/JBPHH-Water-Updates/#medical>.

13. Public Involvement

13.1 Summary of Comments

Many commenters expressed concern that the proposed 2023 Consent Order was drafted without consultation with the community. In particular, they were concerned that entities such as BWS and Sierra Club were not consulted as part of its development.

Commenters also asked that EPA create opportunities for local community experts and BWS to review and comment on the Navy's plans and documents that are submitted to regulators. Many asked if these groups could also participate in defueling observation work.

Many commenters shared that the Native Hawaiian perspective was missing from the proposed 2023 Consent Order. A few commenters called on EPA to include the people of Hawai'i (Hawai'i residents) in decision making, with one commenter stating that EPA should listen to indigenous voices and reconsider the current approach.

A recurring comment was for EPA to require the Navy to increase transparency in its work. The comments suggested sharing information and videos associated with spills, and the need for general transparency. In general, the comments observed that timely transparency was important to create public trust. Commenters asked for the Navy to host more frequent meetings to share status updates with the public, with a majority calling for monthly, if not weekly, public meetings as opposed to quarterly. Some suggested that these meetings be hybrid for accessibility.

Some commenters suggested that the Navy should develop a comprehensive analysis in the event of a potential catastrophic events such as massive earthquakes, facility attacks, and disastrous releases, and that the Navy should share this analysis with the community and develop emergency procedures based on the analysis that are also shared with the community.

Some commenters suggest that the Navy should analyze its proposed plan under NEPA and collaborate with the Council on Environmental Quality on a public review process.

13.2 EPA Response

EPA followed its RCRA process and sought public comment on the proposed 2023 Consent Order after EPA negotiated it with the Navy and DLA, but before it was finalized. While EPA's process requires confidential negotiations with the responding parties, EPA sought

input from the community and interested stakeholders on the proposed 2023 Consent Order before finalizing it.

In addition to seeking public comment as required by RCRA on the proposed 2023 Consent Order, EPA invested significant effort to meet with individual groups (including BWS and Sierra Club) and the public at large through stakeholder meetings, including the Town Hall and Open House meeting. EPA widely solicited comment on the proposed 2023 Consent Order and received over 1,700 formal comments, which it then methodically reviewed. EPA fully considered the comments and made changes to the proposed 2023 Consent Order with the Navy and DLA that are incorporated into the final 2023 Consent Order.

Although EPA's enforcement process limits third-party consultation and interaction as part of the negotiation process, EPA acknowledges that enhanced engagement with community leaders prior to proposing the order may have been beneficial to increase transparency around EPA's intended role in overseeing the defueling and closure of Red Hill.

EPA understands that community members are concerned that local leaders have not received regular updates and have not had the ability to provide input and feedback on the defueling, closure, drinking water, and remediation processes. As a result, the final 2023 Consent Order now includes a Community Representation Initiative that creates the opportunity for ten community leaders, selected by the community, to meet twice a quarter with representatives from DoD, EPA, and other regulators, to be briefed on details and progress under the 2023 Consent Order, and to engage in discussions and provide feedback. The proposed 2023 Consent Order originally provided for quarterly update meetings. With the addition of the Community Representation Initiative meetings to the final Order, there are increased opportunities for dialogue and individual community leaders will have more direct access to the DoD and EPA. This will provide the public an opportunity through these community leaders to be engaged on the progress of the work. The Community Representation Initiative also provides additional opportunities to gain the perspectives of individual Hawai'i residents.

In response to calls for increasing public participation, the final 2023 Consent Order now requires the Navy and DLA to announce the quarterly update meetings two weeks in advance to ensure an open and accessible quarterly meeting during which the Navy and DLA will provide updates and receive comments from the public. The Navy will also post public announcements on the Navy's websites and other social media accounts in English and any other languages requested pursuant to the Community Representation Initiative.

With respect to NEPA, since the Consent Order was proposed, the Joint Task Force Red Hill announced it would be developing a NEPA Environmental Assessment concerning the movement of fuel from JBPHH in consultation with stakeholders and regulators. EPA is committed to working with the Joint Task Force Red Hill on any review under NEPA to ensure environmental requirements are met and public concerns are addressed in a timely fashion as part of the defueling and closure of Red Hill.

14. Perspectives on Cultural Significance

14.1 Summary of Comments

14.1.1. Protect our Aina/Water is Precious

Many commenters spoke of the importance of water in Native Hawaiian culture. For example, people used the phrase “Ola i ka Wai” (“Water is Life”) to underscore that water is a precious resource. They pointed to the spiritual traditions of the Native Hawaiian people that are connected to water and EPA’s responsibility to protect this resource. A few stated that the quality of water in Hawai‘i is equivalent to “a life and death situation,” cautioning that future generations and the entire ecosystem of O‘ahu depend on the health of the freshwater that sustains life. One commenter asserted that the closure of the Red Hill and remediation of damage to the aquifer is necessary for the preservation of both the environment and indigenous self-determination.

A few commenters raised concerns about the timeline to close Red Hill. Some of these commenters shared their belief that every day that there is fuel at Red Hill, EPA is not fulfilling its charge of ensuring every Hawai‘i resident has access to clean drinking water. Others stated that the lack of urgency is a threat to the human right to clean water.

Several commenters asked that EPA consider the entirety of the sole-source aquifer and noted that Red Hill was built 100 feet above O‘ahu’s largest fresh water aquifer. One mentioned “lo‘i kalo” (taro fields) at Ka‘onohi that are spring fed and expressed fear that contamination of the aquifer could result in spring water carrying pollutants to food sources.

Many commenters stated that O‘ahu was previously known for having excellent water quality and the releases could ultimately compromise the water quality. Two commenters warned that the threat to the aquifer could result in economic impacts to the island, stating that tourists would avoid visiting Hawai‘i if the drinking water is contaminated.

14.1.2. Military impact on Hawaiian Resources

Commenters referred to the military’s history of colonization in Hawai‘i and the negative impact that presence has had on the environment and the “Kama‘āina” (local population). Several commenters noted that they have lost trust in the Navy’s operation of the JBPHH drinking water system due to past actions that included putting military service people and their families at risk. A few commenters stated that the Navy has benefited from operating in Hawai‘i at the expense of the residents that live with the consequences of their actions, while military staff are able to transfer off island. According to one commenter, the Navy had over eight decades to put the Hawai‘i residents’ safety first. Some commenters deemed the military actions as perpetuating colonialism.

A commenter stated that the very act of “Kānaka” (Native Hawaiians) submitting public testimony to defend their land and culture is proof that the military does not have Native Hawaiians’ best interests in mind. The commenter pointed to another Hawaiian island, Kaho‘olawe, as an example of military actions harming Hawaiian waters.

14.1.3. Environmental Justice and Inclusion of Native Hawaiians

Some commenters stated that the indigenous Hawaiian communities affected by Red Hill releases are an environmental justice issue. These commenters pointed out that Native Hawaiians deserve acknowledgment of past wrongdoings, including the “wrongful overthrow of the Hawaiian Kingdom.” Several commenters described the actions of the U.S. Government as in violation of the environmental laws established by the Hawaiian Kingdom Constitution; one commenter noted that this violation is considered an “international war crime”.

Some of the commenters asserted that the releases of harmful contaminants in the water supply of indigenous peoples is “genocide.” A few stated that exposures could result in negative health outcomes, such as an increase in cancers. One commenter called for the Navy to undergo a public process of accountability and investigation into potential “environmental injustice” and “environmental racism against the citizens of Hawai‘i.”

Other comments discussed the burden that the releases have put on community members. A commenter shared the experience of smelling fuel at a school and how families close to the tanks were subsequently displaced in hotels during the emergency response. They point out that their lives were disrupted, and people continue to be affected by having to purchase bottled water.

Some commenters mentioned that indigenous practices in environmental preservation were being forgotten and ignored. One commenter asked how EPA is implementing the White House Council on Environmental Quality’s *Indigenous Knowledge Guidance for Federal Agencies* in the context of Red Hill. Another asked if President Biden’s Executive Order on environmental justice applied to this situation.

14.2 EPA Response

Consistent with EPA’s authority under RCRA and SDWA, the Consent Order was negotiated to ensure the safe and timely defueling and closure of Red Hill and requires the Navy to properly operate and maintain the JBPHH drinking water system to protect the health and safety of its consumers. EPA acknowledges that many commenters expressed concerns about the U.S. government’s impacts and the military’s impacts on the residents of Hawai‘i and Native Hawaiians in particular. The Consent Order is not the mechanism to address these grievances, but it is the best mechanism that EPA has to protect the water supply going forward which will help ensure that this critical resource is available for current and future generations.

EPA considered the environmental justice impacts of the proposed Consent Order and respects the great reverence Native Hawaiians have for their natural resources. Accordingly, in response to public comments, EPA is including in the final 2023 Consent Order an acknowledgement recognizing the connection that the Native Hawaiians have with their land and water and that their culture is strongly rooted in “wai” (water) and depends on their freshwater resources.

The final 2023 Consent Order now also includes stronger community engagement provisions to ensure the perspective of Native Hawaiians and Hawai‘i residents are taken into account, heard, and recognized. The formation and implementation of the Community

Representation Initiative will serve as a specific linkage between local perspectives and decision-makers, and reflects a commitment from the Navy, DLA, and EPA to seek out individual perspectives on the protection of the waters of Hawai‘i to inform implementation of the 2023 Consent Order.

Out of respect to the people of Hawai‘i and reverence for the value of O‘ahu’s sole-source aquifer, EPA is firmly committed to working with HDOH, the Navy, and DLA to defuel and close Red Hill as safely and expeditiously as possible. Defueling and closure timelines are discussed in further detail in Sections 4 and 7, above.

The Federal Agency Guidance for Indigenous Knowledge mirrors EPA’s priority to consult with the Indigenous community on actions taken around Red Hill (or Kapūkakāī). EPA acknowledges the spiritual connections many Native Hawaiians may have to the ‘aina and wai, and through the creation of the Community Representation Initiative, and will look to these voices to inform decision making.

15. Interference with Department of Health Emergency Order

15.1 Summary of Comments

Many commenters expressed the concern that the proposed 2023 Consent Order will interfere or conflict with HDOH’s May 2022 Emergency Order that requires the Navy to defuel and close Red Hill. In fact, there was a suggestion that “the Department of Health must be able to specify the terms of each step, review applicants for contracts, require prompt and open reporting, assist in decisive judgment, and vet third-party inspections.” One commenter stated that the proposed 2023 Consent Order “undoes” the requirement in HDOH’s May 2022 Emergency Order that Red Hill be shut down. In fact, some commenters indicated that, if there is a conflict, HDOH’s May 2022 Emergency Order should take precedence. It appears that the rationale for the comment is the view that HDOH could ensure that the Navy defuels and closes Red Hill much more quickly and that the proposed 2023 Consent Order might conflict with HDOH’s May 2022 Emergency Order, slowing down the process. Another commenter saw the proposed 2023 Consent Order as an attempt to “hijack” Hawai‘i’s process for shutting down Red Hill and holding DoD accountable.

Along these lines, commenters identified that, with two orders, it was possible there could be inconsistency between them and that it was not satisfactory that EPA would try to avoid a conflict. They expressed a perception that defueling could occur much more quickly with HDOH’s May 2022 Emergency Order than reflected in the Navy’s current Defueling Plan. One commenter suggested that the two orders be aligned since they were not currently. Similarly, commenters were concerned that the proposed 2023 Consent Order could conflict with the existing 2015 Administrative Order on Consent and that, where there is such a conflict, the 2015 Administrative Order on Consent should take precedence.

Many commenters expressed disappointment that Hawai‘i was not a party to the proposed 2023 Consent Order and recommended that both HDOH and BWS play a larger role in the oversight of the proposed 2023 Consent Order. Some commenters suggested that EPA defer to BWS and HDOH because the proposed 2023 Consent Order “is clearly insufficient.” In

contrast, a commenter encouraged EPA to use its authorities to protect the people of Hawai‘i because Hawai‘i and BWS lack the resources or capacity to prevent a disaster.

Other comments expressed a slightly different view suggesting that the situation at Red Hill is best handled by state and local officials: “let the people and state’s ordinances be followed.” Similarly, there was a suggestion that the U.S. government need not oversee a matter “related to the minutiae of Hawai‘i’s water.” Finally, commenters observed that HDOH’s order was termed an Emergency Order and that the proposed 2023 Consent Order was “inadequate to address the emergency nature of this threat.”

15.2 EPA Response

EPA agrees that the need for consistency between HDOH’s May 2022 Emergency Order and EPA’s 2023 Consent Order is vital. EPA invited HDOH to be a party to the proposed 2023 Consent Order, but HDOH determined that it could best serve Hawai‘i by proceeding under its own Emergency Order. The 2023 Consent Order was structured to parallel and supplement the requirements in HDOH’s May 2022 Emergency Order. EPA is committed to continuing to work closely with HDOH on all aspects of the defueling, closure, remediation, and drinking water work at Red Hill to avoid any conflicts between the two orders.

The 2023 Consent Order does not limit HDOH’s May 2022 Emergency Order as suggested by commenters. The 2023 Consent Order provides additional detail and requirements that serve to bolster HDOH’s May 2022 Emergency Order. For instance, the deadlines contained within the Drinking Water Long-Term Monitoring Plan, which HDOH and the Navy developed in coordination with EPA, are now enforceable under the 2023 Consent Order. The 2023 Consent Order complements HDOH’s May 2022 Emergency Order by including more specific requirements including tank tightness testing, soil vapor monitoring, a Source Water Protection Plan, and additional improvements to the Navy’s operation and maintenance of the JBPHH drinking water system, including water quality sampling at the finished drinking water tanks.

It is worth noting that Section 6(g) of the 2023 Consent Order clarifies that there is only a conflict if the Navy and DLA cannot comply with both orders. If there is a conflict such that the Navy and DLA cannot comply with both orders, then the Parties to the 2023 Consent Order are required to make good faith efforts to promptly resolve such conflict by elevating it to senior leaders. The 2023 Consent Order also includes a requirement that HDOH be invited to meetings which occur on monthly and quarterly basis at different levels of senior management during which HDOH and/or EPA may raise any potential conflict directly with senior leadership to achieve quick and effective resolution. In instances where the requirements of EPA’s and HDOH’s respective orders may differ, EPA remains confident that its cooperative working relationship with HDOH will result in expeditious resolution of any inconsistencies to the benefit of public health and the environment.

With respect to the 2015 Administrative Order on Consent, EPA does not anticipate any inconsistencies between the 2023 Consent Order and the 2015 Administrative Order on Consent. The 2023 Consent Order addresses the safe and expeditious defueling of the Red Hill bulk storage tanks, the protection of drinking water during the defueling process, and the closure of

Red Hill after defueling. The 2023 Consent Order bifurcates closure into two phases. Phase 1 Closure includes emptying and cleaning the tanks by removing all liquids and accumulated sludges and permanently closing the tanks by one of the following methods: 1) removing the tanks, 2) filling the tanks with an inert solid material, or 3) closing in the tanks in place in another manner approved by EPA. Phase 2 Closure addresses the long-term cleanup of releases from Red Hill and requires conducting a site assessment of and any necessary release response for the soil, groundwater, and soil vapor that may have been contaminated by Red Hill.

The requirements for Phase 2 Closure, i.e, the investigation and remediation of releases from Red Hill, are duplicative of the investigation and remediation requirements of the 2015 Administrative Order on Consent. Thus, the 2023 Consent Order provides that if all of the Defueling, Drinking Water, and Phase 1 Closure requirements are met and if the Navy and DLA are still performing the investigation and cleanup of Red Hill pursuant to the 2015 Administrative Order on Consent, then the Navy and DLA may request to terminate the 2023 Administrative Order on Consent and complete the investigation and remediation pursuant to the 2015 Administrative Order on Consent or other EPA approved enforcement instrument. Since EPA will be overseeing both the 2023 Consent Order and the 2015 Administrative Order on Consent, EPA does not anticipate any inconsistencies between the two orders.

With respect to BWS, EPA acknowledges that BWS is a valuable subject matter expert and will continue consulting with BWS throughout implementation of the 2023 Consent Order. As EPA noted previously above in response to public comment, the parties added language to Section 2.2 of the 2023 Consent Order's Statement of Work listing BWS as a "subject matter expert" that the Parties intend to consult for technical input.

Finally, EPA acknowledges the concerns expressed by some commenters that the proximity and location of the Red Hill tanks so close to the sole source drinking water aquifer should be viewed as a local issue best addressed by local and state authorities. EPA, however, views protection of the sole source drinking water aquifer as a national priority and is confident that dual regulation by HDOH and EPA will provide maximum protection of this local resource. Thus, EPA determined that it is vital that it directly oversee the defueling and closure of Red Hill pursuant to a federally enforceable order to ensure that all the efforts associated with Red Hill are timely and protective while continuing to work closely with state and local entities who share this common goal.

16. Summary of Changes to the Final 2023 Consent Order

As a result of public comment, EPA incorporated the following major revisions to the final Consent Order.

16.1 Defueling Timeline

The final 2023 Consent Order requires the Navy and DLA to submit a defueling schedule as part of their Defueling Plan no later than May 31, 2023. Defueling Plan Supplement 2 was submitted on May 16, 2023. Upon approval by EPA, the schedule submitted as part of Defueling Plan Supplement 2 will be a requirement of the Consent Order. This change will create

accountability for the Navy and DLA to complete defueling within a timeframe approved by EPA and HDOH.

16.2 Cultural Acknowledgement (2023 Consent Order Section 1(c))

The final 2023 Consent Order incorporates an acknowledgement from EPA, the Navy, and DLA that Native Hawaiian culture and many of the residents of Hawai‘i have a connection to the land and waters of Hawai‘i. Native Hawaiian culture is strongly rooted in water, “wai,” watersheds, and freshwater resources.

The final 2023 Consent Order also recognizes the importance of community engagement throughout its implementation to ensure that perspectives of Native Hawaiians and Hawai‘i residents are taken into account and that the cultural values of water are heard, considered, and recognized.

Lastly, it recognizes a commitment that EPA, the Navy, and DLA will seek out individual perspectives on the protection of the waters of Hawai‘i to inform this work from Native Hawaiians, community members, traditional and customary cultural practitioners, local government, representatives of the State of Hawai‘i, and others.

16.3 Spill Notification (2023 Consent Order Section 8(c))

The final 2023 Consent Order was broadened to ensure any spill that may present an immediate threat to human health or the environment is reported directly to the community through the Community Representation Initiative as well as posted on the Navy’s website no later than 24 hours after the Navy encounters the event.

16.4 External Technical Experts (Statement of Work Section 2.2)

The final 2023 Consent Order acknowledges the intent to seek input from technical experts, including expressly identifying BWS, the Hawai‘i Department of Land and Natural Resources including its Commission on Water Resources Management, and the United States Geological Survey as potential technical experts.

16.5 Enhanced Public Involvement (Statement of Work Section 2.3)

The final 2023 Consent Order requires the Navy and DLA to establish a Community Representation Initiative with support from EPA. The Community Representation Initiative will be comprised of ten community representatives who will be selected by their peers to participate in the group. The purpose of the Community Representation Initiative is to better facilitate communication flow with a consistent and focused group of individuals to talk through any challenges and provide input on planning decisions in a productive setting. Topics covered by the Community Representation Initiative include all content covered under the final 2023 Consent Order, including reviewing progress on defueling, closure, and drinking water.

The final 2023 Consent Order specifies that meeting summaries of the Community Representation Initiative will be made publicly available and that translated versions will be provided if requested by the Community Representation Initiative.

The Community Representation Initiative meetings, which will occur twice a quarter, will be in addition to quarterly public updates required under the proposed 2023 Consent Order. Enhanced announcement requirements for the meeting were incorporated into the final 2023 Consent Order.