

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 9

IN THE MATTER OF:

THE UNITED STATES DEPARTMENT OF THE NAVY	)	EPA DKT NO. RCRA 7003-R9-2023-001
AND	)	EPA DKT NO. PWS-AO-2023-001
DEFENSE LOGISTICS AGENCY	)	
RESPONDENTS	)	
RED HILL BULK FUEL STORAGE FACILITY, O'AHU, HAWAI'I	)	
JOINT BASE PEARL HARBOR-HICKAM WATER SYSTEM PWS ID No. HI00003650	)	

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1. INTRODUCTION

(a) This defueling, closure, and Joint Base Pearl Harbor-Hickam (“JBPHH”) drinking water system administrative consent order (“2023 Consent Order”) is entered into voluntarily by the UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (“EPA”) Region 9; the UNITED STATES DEPARTMENT OF THE NAVY (“Navy”), acting by and through the COMMANDER, NAVY REGION HAWAI‘I (“CNRH”); and the DEFENSE LOGISTICS AGENCY (“DLA”). EPA, Navy, and DLA are collectively referred to as the “Parties.” This 2023 Consent Order is an administrative action taken by EPA pursuant to its federal authorities to address and prevent releases of solid and hazardous wastes and protect drinking water, natural resources, human health, and the environment.

(b) This 2023 Consent Order provides for the performance by Navy and DLA of activities related to the safe “Defueling” and “Closure,” as those terms are defined below, of the Red Hill Bulk Fuel Storage Facility and for performance by the Navy of activities related to the delivery of a safe and resilient supply of drinking water to the Navy-owned water system on O‘ahu (“JBPHH System”).

(c) The EPA, Navy, and DLA acknowledge that Native Hawaiian culture and many of the people 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 Parties recognize the importance of community engagement throughout the implementation of this 2023 Consent Order to ensure that perspectives of Native Hawaiians and Kama‘āina are taken into account and that the cultural values of water are heard, considered, and recognized. EPA, 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.

(d) **DEFINITIONS.** For purposes of this 2023 Consent Order, the following definitions shall apply:

“**2023 Consent Order**” shall mean this administrative consent order, any amendments thereto, and any documents incorporated by reference into this administrative consent order.

“**Close**” or “**Closure**” shall mean the process defined in Hawai‘i Administrative Rules (“HAR”) Chapter 11-280.1, Subchapter 7, including associated underground storage tank (“UST”) defueling, UST cleaning, site assessment/release response, and permanent closure requirements as referenced therein. Site assessment/release response includes the soil, groundwater, and soil vapor that may have been contaminated by the Facility Subject to Closure as provided in HAR at Chapter 11-280.1, Subchapter 6. This 2023 Consent Order bifurcates Closure into two phases, which are separately defined below as Phase 1 Closure and Phase 2 Closure.

“**Day**” or “**Days**” shall mean calendar day(s). The first day of the event that triggers this period is not counted and where the last day is not a working day, the period runs until the close of business of the next working day. “Working day” means any day other than Saturday or Sunday, or a federal or state of Hawai‘i holiday.

“**Defueling**” shall mean the physical and mechanical process of removing all fuel from the Facility Subject to Closure using the identified infrastructure but does not include any continued use of pipelines and associated infrastructure downstream of the pumphouse once all of the fuel has been removed from the Facility Subject to Closure.

“**Effective Date**” shall mean the date that the last Party signs this 2023 Consent Order as described in Section 25 (“Effective Date”).

“**Facility**” includes both the Facility Subject to Defueling and the Facility Subject to Closure.

“**Facility Subject to Closure**” shall mean the 20 field-constructed bulk fuel USTs (“20 USTs”), surge tanks, and the pumps, infrastructure, and associated piping between the 20 USTs and the pumphouse at the Red Hill Bulk Fuel Storage Facility.

“**Facility Subject to Defueling**” shall mean the Facility Subject to Closure as well as all of the pipelines and related infrastructure that will be used for defueling the 20 USTs downstream of the pumphouse. Facility Subject to Defueling infrastructure includes the pipelines and associated infrastructure between the pumphouse and the piers, as well as

any pipelines and associated infrastructure that will be used to transfer fuel from the 20 USTs to above-ground tanks at the Red Hill Bulk Fuel Storage Facility.

“**Parties**” shall mean EPA, Navy, and DLA.

“**Phase 1 Closure**” shall mean the following, consistent with HAR § 11-280.1-71: (1) emptying and cleaning the Facility Subject to Closure by removing all liquids and accumulated sludges; and (2) (a) removing the Facility Subject to Closure, (b) filling the Facility Subject to Closure with an inert solid material, or (c) closing in place the Facility Subject to Closure in another manner approved by EPA.

“**Phase 2 Closure**” shall mean the following, consistent with HAR §§ 11-280.1-71 and -72, as well as HAR Chapter 11-280.1, Subchapter 6: conducting a site assessment of and any necessary release response for the soil, groundwater, and soil vapor that may have been contaminated by the Facility Subject to Closure.

“**SOW**” shall mean Statement of Work provided as Attachment A to this 2023 Consent Order.

“**Work**” shall mean all the activities and requirements specified in this 2023 Consent Order, including, but not limited to, the SOW provided as Attachment A to this 2023 Consent Order and Section 6 (Work To Be Performed) of this 2023 Consent Order.

(e) The primary objectives of this 2023 Consent Order are to: 1) ensure the JBPHH System serves safe drinking water during the Facility’s Defueling and Closure and provide a plan for source water protection post-closure; 2) safely defuel the Facility Subject to Defueling; and 3) Close the Facility Subject to Closure.

(f) The Navy’s and DLA’s participation in this 2023 Consent Order shall not constitute or be construed as an admission of liability. Navy and DLA neither admit nor deny the factual allegations and legal conclusions set forth in this 2023 Consent Order (Section 4 (Findings of Fact) and Section 5 (Conclusions of Law)).

(g) The Parties acknowledge that this 2023 Consent Order has been negotiated in good faith and that this 2023 Consent Order is fair, reasonable, protective of human health and the environment, and in the public interest.

2. JURISDICTION

(a) EPA Region 9 enters into this 2023 Consent Order pursuant to the authority vested in the Administrator of EPA by Section 7003 of the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. § 6973, which has been delegated to the Regional Administrators of EPA by Delegation 8-22 (January 18, 2017), and redelegated to the Director of the Enforcement Division (now the Enforcement and Compliance Assurance Division) of EPA Region 9 by Delegation R9-8-22 (March 8, 2017).

(b) EPA Region 9 also enters into and issues this 2023 Consent Order under the authority vested in the EPA Administrator by Section 1431 of the Safe Drinking Water Act (“SDWA”), 42 U.S.C. § 300(i), which has been delegated to the Regional Administrators of EPA by Delegation 9-17 (Imminent and Substantial Endangerment) (January 18, 2017), and redelegated to the Director, Deputy Director and Branch Chiefs of EPA Region 9’s Enforcement and Compliance Assurance Division pursuant to Regional Directive R9-9-17 (May 9, 2018).

3. PARTIES BOUND

(a) This 2023 Consent Order shall apply to and be binding upon the Parties and their successors and assigns. Navy and DLA agree to undertake and complete all actions required by the terms and conditions of this 2023 Consent Order.

(b) Navy and/or DLA, as applicable, shall notify EPA in writing as soon as any decision to transfer or sell any real property related to the Facility or JBPHH System covered by this 2023 Consent Order is known by Navy or DLA but no later than six (6) months prior to the sale or transfer. In addition, Navy and DLA shall provide a copy of this 2023 Consent Order to any successor to the Facility prior to the effective date of such change in ownership and the Navy shall provide a copy of this 2023 Consent Order to any successor to the JBPHH System prior to the effective date of such change in ownership. No change in ownership or operation of any property covered by this 2023 Consent Order or in the status of Navy and DLA shall in any way alter, diminish, or otherwise affect Navy’s and

DLA's obligations and responsibilities under this 2023 Consent Order, except by agreement of the Parties in accordance with Section 8 (Modification of the SOW and this 2023 Consent Order and Additional Work) or as required by subsequently enacted legislation pertaining to transfer of the Facility or the JBPHH System.

(c) Navy and DLA shall provide a copy of this 2023 Consent Order, or a website address for accessing this 2023 Consent Order, to all of its supervisory personnel who work on actions related to this 2023 Consent Order and prime contractors or prime consultants retained to conduct or monitor any portion of work performed pursuant to this 2023 Consent Order, within seven (7) days of the Effective Date. Navy and DLA shall condition all contracts with the aforementioned on compliance with the terms and conditions of this 2023 Consent Order. Navy and DLA shall instruct all supervisory personnel who work on actions related to this 2023 Consent Order and prime contractors or prime consultants retained to conduct or monitor any portion of work to perform such work in accordance with the requirements of this 2023 Consent Order.

#### 4. FINDINGS OF FACT

(a) CNRH is a Navy command. CNRH is the command responsible for providing, maintaining, and improving shore infrastructure, service, support, and training to enable fleet operations; CNRH oversees all Navy supporting commands involved in the operation, maintenance and Closure of the Facility and the operation and maintenance of the JBPHH System.

(b) DLA is a combat logistics support agency of the United States Department of Defense (“DoD”) providing the five military services with the full spectrum of logistics, acquisition, and technical services. DLA executes the integrated materiel management responsibility for bulk petroleum owned by the DoD and is responsible for bulk petroleum supply management from source of supply to the point of customer acceptance, with emphasis on improving efficiency. In accordance with DoD policy, DLA plans, programs, budgets, and provides funding for the operation, maintenance, and repair of the Facility.



(c) Navy is the owner and operator of the Facility and the JBPHH System.

(d) The 20 USTs are constructed of steel, encased by an estimated minimum of 2.5 to 4 feet of concrete, and surrounded and supported by basalt bedrock. Each of the 20 USTs has a potential fuel storage capacity ranging from approximately 12 to 12.7 million gallons for a total of approximately 250 million gallons of fuel. However, two of the 20 USTs (Tank 1 and Tank 19) are not currently in use; four of the 20 USTs are temporarily out of service for cleaning, inspection, and repairs; and all of the 20 USTs in use are only certified to contain fuel up to the bottom of the upper dome. The Facility was constructed and became operational in the 1940s. The Facility is unique.

(e) The 20 USTs have been used at various times to store the following fuels: diesel marine fuel, diesel oil, Navy Special Fuel Oil, Navy distillate, aviation gasoline, motor gas, Jet Propulsion Fuel No. 5 (“JP-5”) and Jet Propulsion Fuel No. 8 (“JP-8”). In more recent years, Navy stored three types of fuel at the Facility: JP-5, F-24 jet fuel, and F-76 marine diesel.

(f) The Waimalu and Moanalua Aquifers (“Aquifer identification and classification for Oahu: Groundwater protection strategy for Hawaii,” February 1990), which are underground sources of drinking water, are located near the Facility. The Waimalu Aquifer covers an area of 15,193 acres and the Moanalua Aquifer covers an area of 4,442 acres. The JBPHH System sources drinking water from these aquifers.

(g) Navy Well 2254-01 (“Red Hill Shaft”) is generally located west and hydraulically downgradient from the 20 USTs. This well feeds into the JBPHH System.

(h) The Red Hill Shaft provides 15-20% of the water to the JBPHH System under normal conditions. Navy pumps groundwater via one of four vertical turbine pumps, where sodium hypochlorite (disinfection) and sodium fluoride (fluoridation) are injected before the water enters the 30-inch transmission line to the distribution system, filling two 250,000-gallon Red Hill ground storage tanks (Upper and Lower) and two 6-million-gallon Halawa ground storage tanks (Tanks S1 and S2).

(i) Navy Well 2558-10 (“Waiawa Shaft”) feeds into the JBPHH System.

(j) The Waiawa Shaft provides 80-85% of the total water supply for the JBPHH

System.

(k) Under normal conditions, the Navy pumps groundwater from the well via two of four vertical turbine pumps, where sodium hypochlorite (disinfection) and sodium fluoride (fluoridation) are injected before the water enters the JBPHH System's distribution system via a 42-inch transmission line.

(l) Navy Well 2255-32 ("Aiea Halawa Shaft") feeds into the JBPHH System.

(m) The Aiea Halawa Shaft serves as an alternate water source for the JBPHH System. Under normal conditions, each of the two vertical shaft pumps is operated for four hours on alternating weeks to maintain operational readiness and to prevent water stagnation. Under normal conditions groundwater is pumped from the well via one of two vertical shaft pumps, where sodium hypochlorite (for disinfection) and sodium fluoride (for fluoridation) are injected before the water enters the JBPHH Potable Water Distribution System (PWS-360). Marine Corps Camp H. M. Smith ("Camp Smith") is a separate pressure zone, fed by two booster pumps located adjacent to the Aiea Halawa Shaft, which takes its water supply from the PWS-360 distribution system regardless of water source. The water is pumped from the distribution system up to the two 200,000-gallon and one 140,000-gallon Camp Smith above-ground storage tanks (S-325, S-326, and 684 (S-327)) to provide water to the Camp Smith installation.

(n) The JBPHH System serves drinking water to approximately 7,619 service connections and 65,000 persons.

(o) The U.S. Army's Aliamanu Military Reservation is a consecutive drinking water system that receives its finished drinking water from the JBPHH System. Navy also provides drinking water to two public/private venture military housing companies, and to the company that owns the properties known as Kapalina Homes on Iroquois Point. In addition, Navy has multiple water conveyance customers, including several schools operated by the Hawai'i Department of Education, a Montessori school, a U.S. Post Office, retail facilities under contract with Navy Exchange, and churches with licenses to occupy and operate on Navy land.

(p) The Honolulu Board of Water Supply sources drinking water from the

Moanalua and Waimalu Aquifers.

(q) The JBPHH System collectively uses at least seven above-ground storage tanks for water storage, which include three Camp Smith above-ground storage tanks (two 200,000-gallon tanks and one 140,000-gallon tank); two Red Hill Storage Tanks; and two Halawa Storage Tanks.

(r) The first report by Navy to the Hawai'i Department of Health ("DOH") of a release from the Facility occurred on November 10, 1998, when petroleum-stained basalt cores were discovered beneath the 20 USTs.

(s) In the early 2000s, Navy performed transverse cores beneath each of the 20 USTs and discovered evidence of staining beneath 19 of the 20 USTs.

(t) On January 13, 2014, Navy discovered a loss of fuel from Tank #5. Navy estimates the fuel loss at approximately 27,000 gallons.

(u) Following the January 2014 release, in September 2015, Navy, DLA, EPA, and DOH entered into an administrative order on consent in which Navy and DLA agreed to take steps to ensure that the groundwater resource in the vicinity of the Facility is protected and to ensure that the Facility is operated and maintained in an environmentally protective manner.

(v) On March 17, 2020, and June 2, 2020, releases at Hotel Pier occurred.

(w) On May 6, 2021, fuel was released from a pipeline at the Facility.

(x) On July 23, 2021, approximately 150 gallons of fuel were released at Kilo Pier.

(y) An accidental release of undetermined amount of JP-5 from the Facility, on November 20, 2021, reached the Red Hill Shaft and was introduced into the JBPHH System's distribution system that serves the JBPHH System's customers.

(z) On December 6, 2021, DOH issued an Emergency Order, which became a final order on January 3, 2022, to Navy requiring Navy to suspend operations, install a drinking water treatment system, perform an independent third-party assessment on operations/system integrity to safely defuel the USTs (workplan and implementation schedule for DOH approval), defuel the USTs, and have the third-party determine design

and operational deficiencies that may impact the environment and develop recommendations for release response actions.

(aa) On December 17, 2021, DOH, Navy, Army, and EPA established an interagency drinking water system team (“IDWST”) to restore safe drinking water to affected JBPHH housing communities. The IDWST (1) coordinated sampling and testing of groundwater and drinking water supplied to residences, schools, and businesses, (2) addressed concerns of the impacted customers, (3) implemented flushing activities, and (4) established/implemented a Long-Term Monitoring Program.

(bb) On March 7, 2022, Secretary of Defense Lloyd J. Austin III issued a memorandum directing “the Secretary of the Navy, in coordination with the Commander of the United States INDO-PACIFIC Command, to take all steps necessary to defuel and permanently close the Red Hill Bulk Fuel Storage Facility[.]”

(cc) On April 1, 2022, there was a release of approximately 30 gallons of a fuel and water mixture from a maintenance line connected to Tank # 15 at the Facility. This release was contained and remediated quickly.

(dd) On May 6, 2022, DOH issued an Emergency Order to Navy, Docket Number 22-UST-EA-01, superseding the December 6, 2021, Emergency Order, and requiring Navy to, among other things, maintain the suspension of operations, maintain the groundwater treatment system at the Red Hill Shaft and take steps to recover the Red Hill Shaft as a drinking water source, submit an independent third-party assessment on operations/system integrity to safely defuel, and submit a phased plan for the Defueling and Closure of the Facility.

(ee) The total amount released to the environment attributable to historical releases, including the January 2014, March 2020, June 2020, May 2021, July 2021 November 2021, and April 1, 2022 releases, is unknown.

(ff) Marine diesel and jet fuels in general, and JP-5 and JP-8 in particular, are composed of a broad, dynamic and heterogeneous mixture of chemical constituents. Chronic exposure to these constituents can be harmful to human health. The rates at which these constituents naturally degrade in the environment are highly variable.

(gg) From February 28, 2022, to March 4, 2022, EPA performed compliance evaluation inspections at JBPHH to evaluate compliance with Oil Pollution Prevention regulations, including Spill Prevention Control and Countermeasures requirements under Section 311 of the Clean Water Act, 33 U.S.C. § 1321, and Hawai‘i’s approved UST regulations pursuant to Subtitle I of RCRA, 42 U.S.C. §§ 6991-6991m. EPA provided the inspection reports on August 17, 2022.

(hh) On April 4-8, 2022, inspectors from EPA’s National Enforcement Investigations Center, accompanied by EPA Region 9 credentialed inspectors, conducted an inspection of the JBPHH System. DOH also participated in the inspection. During this inspection, inspectors identified significant concerns, including concerns related to inadequate system maintenance, inadequate operations, maintenance and recordkeeping program, no operator safety training program, incorrect chemical storage, no written valve exercise program, no written flushing plan, no written cross connection control program, failure to issue a Tier 1 public notification of the fuel leak contamination of the Red Hill Shaft, insufficient coverage by qualified operators, an inadequate Emergency Response Plan, and an inadequate System Risk and Resilience Assessment. EPA provided the inspection report on May 27, 2022.

(ii) Navy took steps immediately following the inspection to address many of the preliminary observations. These steps were documented in Navy’s letter dated April 29, 2022. In addition, Navy provided additional documentation, on June 10, 2022, which provided a detailed tracker list and photographs for corrected deficiencies identified during the inspection as well as corrections that are in progress.

(jj) On June 30, 2022, at the direction of the Secretary of Defense, the United States INDO-PACIFIC Command announced the establishment of the Joint Task Force – Red Hill, the sole responsibility of which was the safe and expeditious defueling of the Facility.

5. CONCLUSIONS OF LAW AND DETERMINATIONS

(a) RCRA

- (i) Navy and DLA are departments, agencies, or instrumentalities of the Executive Branch of the federal government, and as such, are persons subject to the requirements of Sections 6001 and 9007 of RCRA, 42 U.S.C. §§ 6961, 6991f.
- (ii) Navy and DLA are “persons” as defined in Section 1004(15) and Section 9001(5) of RCRA, 42 U.S.C. §§ 6903(15), 6991(5).
- (iii) EPA has determined that any fuel released from the Facility would be “solid waste” within the meaning of Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).
- (iv) EPA has determined that Navy and DLA have contributed to or are contributing to the handling or disposal of solid waste at the Facility.
- (v) EPA has determined that Navy’s and DLA’s handling or disposal of solid waste may present an imminent and substantial endangerment to health or the environment.
- (vi) The actions required by this 2023 Consent Order may be necessary to protect health and the environment.

(b) SDWA

- (i) Each department, agency, and instrumentality of the federal government that owns or operates a public water system is subject to and must comply with all federal and state requirements respecting public water systems pursuant to Section 1447(a) of the SDWA, 42 U.S.C. § 300j-6(a).
- (ii) Any volatile hydrocarbons associated with fuel found in the JBPHH System are “contaminants,” as that term is defined in Section 1401(6) of the SDWA, 42 U.S.C. § 300f(6).
- (iii) The JBPHH System provides water for human consumption through pipes and has at least 15 service connections and therefore meets the definition of a

“public water system” in Section 1401(4)(A) of the SDWA, 42 U.S.C. § 300f(4)(A).

- (iv) The JBPHH System serves at least 25 year-round residents and thus qualifies as a “community water system,” as that term is defined in Section 1401(15) of the SDWA, 42 U.S.C. § 300f(15), and 40 C.F.R. § 141.2.
- (v) The source of drinking water for the JBPHH System is groundwater, specifically the Waimalu and Moanalua Aquifers, both of which constitute “underground source[s] of drinking water,” as that term is defined at 40 C.F.R. § 144.3.
- (vi) Volatile hydrocarbons associated with fuel in drinking water may endanger the health of persons by causing acute and chronic health effects such as cough, difficulty breathing, abdominal pain and vomiting, drowsiness, restlessness, convulsions, dermatitis, and skin damage. These contaminants present in or likely to enter underground sources of drinking water near the Facility that are the source of water for the JBPHH System may present an imminent and substantial endangerment to the health of persons, within the meaning of Section 1431(a) of the SDWA, 42 U.S.C. § 300i(a).
- (vii) In accordance with the requirements of Section 1431 of the SDWA, 42 U.S.C. § 300i, EPA has determined, after consultation with DOH, that this action is necessary to protect the health of persons whose source of drinking water is the groundwater near the Facility.
- (viii) EPA has determined that state and local authorities have not acted sufficiently to address all measures covered under this 2023 Consent Order that are necessary to protect the health of such persons.

## 6. WORK TO BE PERFORMED

(a) Based upon the Findings of Fact (Section 4) and Conclusions of Law and Determinations (Section 5) set forth above, and in consideration of the promises set forth

herein, it is hereby agreed to and ordered that Navy and DLA comply with all provisions of this 2023 Consent Order, including the SOW, which is incorporated into and made an enforceable part of this 2023 Consent Order.

(b) The Work undertaken pursuant to this 2023 Consent Order shall be conducted in accordance with all applicable EPA guidance, policies and procedures, and this 2023 Consent Order, and is subject to approval by EPA as provided in the SOW and Section 7 (EPA’s Approval of Deliverables) of this 2023 Consent Order.

(c) Navy and DLA shall commence performing their obligations under this 2023 Consent Order upon its Effective Date.

(d) EPA has designated a Project Coordinator, a Senior Executive Service (“SES”) representative, and a Senior Leader for overseeing this 2023 Consent Order. As of the Effective Date of this 2023 Consent Order, the following representatives have been designated:

EPA Project Coordinator shall be:

Jamie Marincola  
Enforcement and Compliance Assurance Division  
[Marincola.JamesPaul@epa.gov](mailto:Marincola.JamesPaul@epa.gov)

EPA’s SES Representative shall be:

Amy Miller-Bowen, Director  
Enforcement and Compliance Assurance Division  
[Miller.Amy@epa.gov](mailto:Miller.Amy@epa.gov)

EPA’s Senior Leader shall be:

Martha Guzman, Regional Administrator  
[Guzman.martha@epa.gov](mailto:Guzman.martha@epa.gov)

Navy and DLA each has designated a Project Coordinator, SES representative, and Senior Leader for implementing this 2023 Consent Order. As of the Effective Date of this 2023 Consent Order, the following representatives have been designated:

Navy’s Project Coordinator shall be:



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The Deputy Chief of Staff, Commander, Navy Region Hawai'i.

DLA's Project Coordinator shall be:

The Director, DLA Energy Facility Support Division.

Navy's SES Representative shall be:

Stephen Barnett, Commander  
Navy Region Hawai'i  
stephen.d.barnett.mil@navy.mil

DLA's SES Representative shall be:

David Kless, Deputy Commander  
DLA Energy  
David.Kless@DLA.mil

Navy's Senior Leader shall be:

Karnig Ohannessian, Deputy Assistant Secretary of the Navy  
Environment and Mission Readiness  
karnig.h.ohannessian.civ@us.navy.mil

DLA's Senior Leader shall be:

Brad Bunn, Vice Director  
DLA  
Brad.Bunn@DLA.mil

(e) Upon signature, the Navy and DLA will provide the names and contact information for their POCs referenced above. Any Party may change its Project Coordinator, SES representative, or Senior Leader at any time provided the level of appointment remains the same. Any of the Parties making such change(s) will provide the other Parties with written notice within fourteen (14) days of such a change.

(f) Unless otherwise provided in this 2023 Consent Order or SOW, all reports, correspondence, notices, or other submittals required under this 2023 Consent Order shall

be in writing and shall be sent to the “Project Coordinators” at the email addresses specified above using email or other secure electronic file transfer system approved by EPA. All such submittals shall meet technical standards in Section 508 of the Rehabilitation Act, 29 U.S.C. § 794d. All correspondence or submittals shall include a reference to the “Red Hill Bulk Fuel Storage Facility Defueling, Closure and Joint Base Pearl Harbor-Hickam Drinking Water System Consent Order.”

(g) In the event requirements under the DOH Emergency Order are determined by EPA to conflict with the Work to be performed under this 2023 Consent Order, such that Navy and DLA could not comply with both this 2023 Consent Order and the requirements of the Emergency Order, the Parties will make good faith efforts to promptly resolve such conflict, including promptly elevating to the SES Representatives or the Senior Leaders to endeavor to promptly resolve the conflict.

#### 7. EPA’s APPROVAL OF DELIVERABLES

(a) Deliverables required by this 2023 Consent Order shall be submitted to EPA for approval or modification pursuant to Subparagraph (b). EPA must receive all deliverables and submittals by the due date specified in this 2023 Consent Order or by schedules developed pursuant to this 2023 Consent Order.

(b) After review of any deliverable that requires EPA approval pursuant to this 2023 Consent Order, EPA will: (i) approve, in whole or in part, the submission; (ii) approve the submission upon specified conditions; (iii) modify the submission to cure the deficiencies; (iv) disapprove, in whole or in part, the submission, directing that Navy and/or DLA modify the submission; or (v) any combination of the above. However, EPA will not modify a submission under Subparagraph (b)(iii) without first providing Navy and/or DLA at least one notice of deficiency and an opportunity to cure within thirty (30) days, except where (A) to do so would cause serious disruption to the Work; or (B) EPA has disapproved previous submission(s) due to material defects pursuant to Subparagraph (b)(iv) and EPA

determines that the deficiencies in the submission under consideration indicate a bad faith lack of effort to submit an acceptable deliverable.

(c) In the event of approval, approval upon conditions, or modification by EPA, pursuant to Subparagraphs (b)(i)-(iii), Navy and/or DLA shall proceed to take any action required by the deliverable, as approved or modified by EPA subject only to Navy's and DLA's right to invoke the dispute resolution procedures set forth in Section 14 (Dispute Resolution) with respect to the modifications or conditions made by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Subparagraph (b)(iii) and EPA determines the submission has a material defect, EPA retains its right to seek stipulated penalties, as provided in Section 15 (Penalties).

(d) Upon receipt of a notice of disapproval, in whole or in part, pursuant to Subparagraph (b)(iv), Navy and/or DLA shall, within thirty (30) days or such longer time as specified by EPA in such notice, correct the deficiencies with respect to any disapproved part and resubmit the deliverable for approval. Any stipulated penalties applicable to the submission, as provided in the stipulated penalty provisions of Section 15 (Penalties), shall be stayed during the thirty (30) day opportunity to cure period or other specified period. A written explanation will accompany any disapproval, in whole or in part, by EPA, including the identification of a material defect.

(e) Notwithstanding the receipt of a notice of disapproval pursuant to Subparagraph (b)(iv), Navy and/or DLA shall proceed, at the direction of EPA, to take any action required by any non-deficient portion of the submission. Implementation of any non-deficient portion of a submission shall not relieve Navy and/or DLA of any liability for stipulated penalties for the deficient portion under Section 15 (Penalties).

(f) In the event that a resubmitted deliverable, or portion thereof, is disapproved by EPA, EPA may again require Navy and/or DLA to correct the deficiencies, in accordance with the preceding Subparagraphs, except there shall be no additional opportunity to cure unless EPA in its discretion grants such an additional opportunity to cure. EPA also retains the right to modify or develop the plan, report or other item, consistent with Subparagraph

(b)(iii), except there shall be no additional opportunity to cure unless EPA, in its discretion, grants such an additional opportunity to cure. Navy and DLA shall implement any action as required in a deliverable which has been modified or developed by EPA, subject only to Navy's and DLA's right to invoke the procedures set forth in Section 14 (Dispute Resolution).

(g) If, upon resubmission, a deliverable is disapproved or modified by EPA due to a material defect previously identified by EPA in accordance with Subparagraph (d) and EPA has not, in its discretion, granted an additional opportunity to cure under Subparagraph (f), Navy and DLA shall be deemed to have failed to submit such deliverable timely and adequately unless Navy and/or DLA invoke the dispute resolution procedures set forth in Section 14 (Dispute Resolution) and EPA's action to disapprove or modify a deliverable is overturned pursuant to that Section. The provisions of Section 14 (Dispute Resolution) and Section 15 (Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during dispute resolution. If EPA's disapproval or modification is upheld, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section 15 (Penalties).

(h) All deliverables required to be submitted to EPA under this 2023 Consent Order, shall, upon approval or modification by EPA, be incorporated into and made enforceable under this 2023 Consent Order. In the event EPA approves or modifies a portion of a deliverable required to be submitted to EPA under this 2023 Consent Order, the approved or modified portions shall be enforceable under this 2023 Consent Order. Navy and/or DLA shall implement all deliverables in accordance with the schedule and provisions approved by EPA.

8. MODIFICATION OF THE SOW AND THIS 2023 CONSENT ORDER AND ADDITIONAL WORK

(a) Modification of the Work in the SOW

If at any time during the implementation of the SOW, Navy and DLA identify

a need for a compliance date modification or modification of the Work in the SOW, Navy and/or DLA shall submit a memorandum documenting the need for the modification to EPA's Project Coordinator within seven (7) days of such identification and prior to the applicable deadline for the Work. EPA's Project Coordinator will determine if the modification is warranted and will provide written approval or disapproval. If Navy and/or DLA request a modification of a compliance date, the compliance date will be extended by ten (10) days or the number of days EPA takes to respond to the request, whichever is shorter. If disapproved, EPA will provide a written explanation of the reason for the disapproval. Any approved, written modification of a compliance date or modification of Work required by this 2023 Consent Order shall be incorporated by reference into this 2023 Consent Order.

(b) Additional Work

EPA may determine, or Navy and/or DLA may propose, that certain tasks or activities are necessary in addition to or in lieu of the Work when such additional performance is necessary to meet the objectives of this 2023 Consent Order as specified in Section 1 (Introduction). EPA may determine that Navy and/or DLA shall perform additional Work and EPA will specify, in writing, the basis for the determination that additional Work is necessary. Within twenty-one (21) days after the receipt of such determination, Navy and/or DLA shall have the opportunity to meet or confer with EPA to discuss any additional Work. Upon meeting or conferring, the Parties shall agree on a schedule for submitting a work plan for additional Work; Navy and/or DLA shall either invoke dispute resolution or submit the schedule for approval within thirty (30) days from Navy's and/or DLA's meeting or conferring on the additional Work, unless otherwise agreed to by the Parties. Upon Navy's and/or DLA's submission of a work plan, and EPA's approval of that work plan, Navy and/or DLA shall implement the work plan in accordance with the schedule and provisions contained therein. The work plan shall be incorporated by reference into and made a part of this 2023 Consent Order and be enforceable as such.

(c) In the event that during the performance of this 2023 Consent Order, Navy

and/or DLA encounters any condition or situation at the Facility or at the JBPHH System, such as a spill or release from the Facility, that constitutes an emergency or may present an immediate threat to human health or the environment, Navy and/or DLA shall immediately take all appropriate actions to prevent and/or minimize such emergency or threat, and shall immediately notify EPA's Project Coordinator (or, if unavailable, the EPA Regional Duty Officer at (800) 300-2193). Navy and/or DLA shall also notify all appropriate state, federal and local agencies, potentially affected persons and officials in accordance with applicable regulations. In addition to the regulatory notification requirements, Navy and/or DLA shall also notify the Community Representation Initiative (CRI) established under the SOW and post any notification of an emergency or immediate threat to human health or the environment under this paragraph on Navy's and DLA's website within twenty-four (24) hours of Navy's or DLA's encountering such a situation. Navy and/or DLA shall take such immediate and appropriate actions in consultation with the EPA Project Coordinator. Navy and/or DLA shall then submit to EPA written notification of such emergency or threat within twenty-four (24) hours of such discovery and, if further action is required, submit a plan to further mitigate the threat within seven (7) days of sending the written notification of the emergency. After approval or approval with modification of the plan by EPA, Navy and/or DLA shall implement the plan as approved or modified and the plan shall be incorporated by reference into and made part of this 2023 Consent Order and be enforceable as such. In the event that Navy and/or DLA fail to take appropriate response action as required by this Subparagraph, EPA may take a response action consistent with its statutory and regulatory authorities and may request Navy and/or DLA to reimburse EPA for its response costs pursuant to those authorities. For any event covered by this Subparagraph, Navy and DLA shall, within thirty (30) days after the conclusion of such event, submit a report to EPA describing all actions taken in response to such event.

(d) Modification of this 2023 Consent Order

- (i) This 2023 Consent Order may be modified only by the mutual agreement of the Parties. Any agreed modifications shall be in writing; be signed by all the Parties; have as their effective date the date on

which the last Party signs the modification; and be incorporated into and be enforceable under this 2023 Consent Order.

(ii) No informal advice, guidance, suggestion, or comment by EPA regarding deliverables submitted by Navy and DLA shall relieve Navy and DLA of their obligation to obtain such formal approval as may be required by this 2023 Consent Order, and to comply with all requirements of this 2023 Consent Order unless it is modified as provided under this 2023 Consent Order. Any deliverables required by this 2023 Consent Order are, upon approval by EPA, incorporated into and enforceable under this 2023 Consent Order.

9. DOCUMENT CERTIFICATION

(a) Any deliverable specifically listed in the SOW and submitted by Navy and DLA pursuant to this 2023 Consent Order shall be certified by the CNRH, or the Regional Engineer for CNRH or designee, but no lower than the Deputy Regional Engineer. Certification of additional deliverables may be required, if specified as a requirement in an approved implementation plan.

(b) The certification required by Subparagraph (a) above shall be in the following form:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to be the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fines and imprisonment for knowing violation.

Signature:

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Name:

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Title:

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Date:

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10. SAMPLING, ACCESS AND DOCUMENT AVAILABILITY

(a) Sampling and Analysis

(i) All results of sampling, testing, modeling or other data generated (including raw or unvalidated data, which shall be made available if requested) by Navy and DLA, or on Navy's and DLA's behalf, during implementation of this 2023 Consent Order, shall be submitted to EPA within seven (7) days of Navy's and DLA's receipt of the data. Data shall be provided in the same format that it was provided to Navy and DLA unless a different format is otherwise agreed to by EPA. Upon request and within seven (7) days, EPA will make available to Navy and DLA data generated by EPA for the purposes of oversight of the Work unless it is exempt from disclosure by any federal or state law or regulation. All sampling and analysis shall be subject to a quality assurance and control process as specified in the SOW.

(ii) Navy and DLA shall provide written notice to EPA at least seven (7) days prior to conducting field sampling, or as otherwise agreed to by the Parties. At EPA's request, Navy and DLA shall allow split or duplicate samples to be taken by EPA.

(b) Access to Areas Controlled by Navy

(i) EPA has the authority to enter the Facility and the JBPHH System



under federal environmental law.

(ii) Navy shall provide EPA and/or its representatives with access to the Facility and the JBPHH System at all reasonable times for the purposes consistent with the provisions of this 2023 Consent Order. Such access shall include, but not be limited to: inspecting records, logs, contracts, and other documents relevant to implementation of this 2023 Consent Order; reviewing and monitoring the progress of Navy and DLA, their contractors, and lessees in carrying out the activities under this 2023 Consent Order; conducting tests that EPA deems necessary; assessing the need for planning additional response actions at the Facility and the JBPHH System; and verifying data or information submitted to EPA.

(iii) Navy shall honor all requests for access to the Facility and JBPHH System made by EPA subject to the requirements in Subparagraph (v). Navy and DLA may require presentation of credentials showing the bearer's identification and that he/she is an employee or agent of EPA, including a contractor of EPA. Navy's Project Coordinator or his/her designee shall provide information, coordinate access and provide an escort to restricted or controlled-access areas, arrange for base passes, and coordinate any other access requests that arise. Navy shall use its best efforts to ensure that conformance with the requirements of this Subparagraph (b) does not delay access.

(iv) The rights granted in this Subparagraph (b) to EPA regarding access shall be subject to regulations and statutes, as may be necessary to protect national security information ("classified information") as defined in Executive Order 13526. Such requirement shall not be applied so as to unreasonably hinder EPA from carrying out its responsibilities and authority pursuant to this 2023 Consent Order.

(v) Parts of the Facility and the JBPHH System are controlled-or restricted-access areas and subject to safety and security requirements.

Navy shall provide an escort whenever EPA requires access to controlled-or restricted-access areas for purposes consistent with the provisions of this 2023 Consent Order. EPA shall provide reasonable notice to the Navy Project Coordinator, or his or her designee, to request any necessary escorts for such areas. Navy shall not require an escort to any area of the Facility and the JBPHH System unless it is a controlled-or restricted-access area. Upon request of EPA, Navy shall promptly provide a written list of current controlled-or-restricted-access areas of the Facility and the JBPHH System.

(vi) Upon a denial of any aspect of a request for access, Navy shall provide an immediate explanation of the reason for the denial, including reference to any applicable regulations, and upon request, a copy of such regulations. Within two (2) working days, Navy shall provide a written explanation for the denial. To the extent possible, Navy shall expeditiously provide a recommendation for accommodating the requested access in an alternate manner.

(vii) Pursuant to this Subparagraph (b), any denial of access contrary to the terms of this 2023 Consent Order at reasonable times to any portion of the Facility and JBPHH System, where a request for access was made for the purposes of enforcing the requirements of federal or state law, or implementing or enforcing this 2023 Consent Order, shall be construed as a violation of the terms of this 2023 Consent Order subject to the penalty provisions outlined in Section 15 (Penalties) of this 2023 Consent Order.

(c) Access to Areas Not Controlled by Navy and/or DLA

(i) Where action under this 2023 Consent Order is to be performed in areas owned by, or in possession of, someone other than Navy or DLA, Navy and DLA shall use their best efforts to obtain all necessary access agreements in a timely manner. Navy and DLA shall commence efforts to obtain such agreements within thirty (30) days of approval of any Work for which access

is necessary. Any such access agreement shall provide for access by EPA and its representatives to move freely in order to conduct actions that EPA determines to be necessary. The access agreement shall specify that Navy and DLA are not EPA's representative(s) with respect to any liabilities associated with activities to be performed. Navy and DLA shall provide EPA's Project Coordinator with copies of any access agreements. Navy and DLA shall immediately notify EPA if, after using Navy's and DLA's best efforts, they are unable to obtain such agreements within the time required. Best efforts, as used in this Subparagraph (c), shall include, at a minimum, a certified letter from Navy and DLA to the present owner of such property requesting access agreements to permit Navy and DLA, EPA, and EPA's authorized representatives to enter such property, and the offer of payment of reasonable sums of money in consideration of granting access. Navy and DLA shall, within ten (10) working days of receipt of a denial of access, submit in writing, a description of their efforts to obtain access. EPA may, at its discretion, assist Navy and DLA in obtaining access.

(d) Document Availability

(i) For any document, record, or information submitted to EPA, Navy and DLA may assert generally or specifically a claim that the document, record, or information, or portions thereof, is protected from public disclosure under federal law or judicially recognized privilege (e.g., documents exempt from disclosure under applicable laws such as the Freedom of Information Act, Procurement Integrity Act, Privacy Act, etc.). When Navy or DLA asserts that a document, record, or information, or portion thereof, is protected from public disclosure or otherwise privileged, Navy and DLA agree to make best efforts to make redactions and provide a version suitable for public release within fourteen (14) days, but no later than thirty (30) days. EPA shall not make such document, record, or information available to the public until the earlier

of receiving redactions from Navy or DLA or thirty (30) days from original submission to EPA, unless the Navy or DLA requests an extension of time to make redactions. If Navy and DLA do not assert that a document, record, or information contains protected or privileged information, EPA may make that document or record available to the public without further notice to Navy and DLA.

(ii) Notwithstanding any claim of protection from public disclosure, all documents, records, or information created or maintained for purposes of implementation of this 2023 Consent Order, and all records relating to Facility and JBPHH System operations and maintenance, or their condition, shall be made available to EPA upon request unless Navy or DLA asserts a claim that such documents are legally privileged from disclosure to EPA and meets the burden of demonstrating to EPA that such a privilege exists.

(iii) If Navy and DLA assert such a privilege in lieu of providing a specific document, record, or information to EPA, Navy and DLA shall provide EPA with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the author's name and title; (4) the name and title of each addressee and recipient; (5) a description of the contents; and (6) the privilege asserted by Navy and DLA. However, no submittals or deliverables related to Work required under this 2023 Consent Order and SOW shall be withheld from EPA on the grounds that they are privileged. Additionally, Navy and DLA shall not assert such claims with respect to any sampling, analytical, monitoring, hydrogeologic, scientific, chemical or engineering data, required under this 2023 Consent Order.

(iv) Navy and DLA shall clearly redact material, or portions thereof, that Navy or DLA asserts is protected from disclosure to EPA (e.g., documents shall be marked on each page and shall be reasonably

segregated) and cite to the legal authority allowing withholding from EPA. Absent such a claim or any other assertion under Subparagraph (a)(i) of this Section, EPA may assume that a document, record, or information submitted to EPA may be made available to the public by EPA without further notice to Navy and DLA.

(v) Clawback. For purposes of this Subparagraph (d), an “Inadvertently Produced Document” is a document, record, or information produced by Navy or DLA and provided to EPA pursuant to this 2023 Consent Order, that Navy or DLA determines should have been withheld, in whole or in part, based on a legitimate claim of attorney-client privilege, work-product protection, or other applicable privilege or restriction on distribution.

A. Inclusion of any Inadvertently Produced Document in a submittal or deliverable under this 2023 Consent Order shall not result in the waiver of any privilege or protection associated with such document or result in a subject matter waiver of any kind.

B. Navy or DLA may request the return of any Inadvertently Produced Document, and the Parties shall work in good faith to ensure that no documents or portions thereof that are privileged or otherwise subject to legitimate protections from public disclosure are disclosed to the public.

(vi) For documents created by EPA, Navy and/or DLA shall make best efforts to review and make redactions and provide a version suitable for public release within fourteen (14) days, but no later than thirty (30) days, of EPA’s request to review a document for privilege.

(vii) The Parties will take steps to ensure that their consultants, contractors, or any other third parties with access to information that is privileged, confidential, or otherwise exempt from public release take all

necessary precautions to protect such information from disclosure.

(viii) Nothing in this 2023 Consent Order shall be construed to limit EPA's right of access, entry, inspection, and information gathering pursuant to applicable law.

11. COMPLIANCE WITH OTHER LAWS

Navy and DLA shall perform all actions required pursuant to this 2023 Consent Order in accordance with all applicable local, state, and federal laws and regulations. Navy and DLA shall use best efforts to obtain, or cause their representatives to obtain, all permits and approvals necessary under such laws and regulations in a timely manner so as not to delay the Work required by this 2023 Consent Order.

12. FUNDING OF THE WORK

(a) It is further agreed to and ordered that Navy and DLA shall timely seek sufficient funding through their budgetary processes to finance and perform all the Work required by this 2023 Consent Order. Navy and DLA recognize the requirements of this 2023 Consent Order as necessary actions. It is the expectation of the Parties to this 2023 Consent Order that all obligations of Navy and DLA arising under this 2023 Consent Order will be fully funded.

(b) Any requirement for the payment or obligation of funds, including stipulated penalties, by Navy or DLA, established by the terms of this 2023 Consent Order may be subject to the availability of appropriated funds. No provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. § 1341.

(c) If Navy and DLA determine that there are insufficient funds to carry out the Work in accordance with the 2023 Consent Order, Navy and DLA shall notify EPA within thirty (30) days thereafter and request a meeting to work with EPA to explore cost-savings or

re-scoping measures to offset the shortfall. The meeting shall be held within thirty (30) days of the request for the meeting, unless otherwise agreed to by the Parties. If re-scoping or cost-savings measures are not sufficient to offset the shortfall, such that schedules developed pursuant to this 2023 Consent Order should be modified, then Navy and DLA shall submit a modified schedule to EPA for approval within the time frame agreed to in the meeting. The time frame agreed to in the meeting shall be in writing, signed by the Parties and enforceable under this 2023 Consent Order. If funds are not available in any year to fulfill Navy and DLA's obligations under this 2023 Consent Order and the Parties are unable to agree on cost-savings or re-scoping measures to offset the shortfall or a modified schedule, EPA reserves its rights to initiate any action against any person(s) or to take any response action which would be appropriate absent this 2023 Consent Order.

13. REIMBURSEMENT OF EPA COSTS

Navy and DLA shall consider in good faith any prospective interagency agreement pursuant to the Economy Act with EPA to provide funding for EPA's actual costs.

14. DISPUTE RESOLUTION

(a) The Parties intend to work cooperatively to avoid disputes in the implementation of this 2023 Consent Order. The Parties shall make reasonable efforts to quickly resolve disputes informally at the lowest level. The Parties' Project Coordinators, SES Representatives, and Senior Leaders shall meet at regular intervals as further described in the SOW to provide the current schedule and discuss any problems or challenges encountered in implementing this 2023 Consent Order and discuss any anticipated problems or challenges.

(b) The process for dispute resolution set forth in this Section shall be the exclusive remedy through which the Parties resolve any and all disputes arising from this

2023 Consent Order and the implementation and execution of the Work. At any point during the dispute resolution process, Navy and DLA may withdraw their dispute and commence or resume the previously disputed Work in accordance with direction from EPA.

(c) A dispute resolution committee (“DRC”) shall serve as the initial forum to resolve disputes for which agreement has not been reached through informal dispute resolution among the Parties. Each Party shall designate one individual and an alternate to serve on the DRC, and may change those designations at will, with written notice to be provided to the other Parties but shall at all times have persons so designated and available to participate in the dispute resolution process as needed. The persons designated to serve on the DRC shall be employed at the senior management level (e.g., SES or equivalent) or be delegated the authority in writing to participate on the DRC by an SES or equivalent-level official, or higher, for the purposes of dispute resolution under this 2023 Consent Order.

(d) Within thirty (30) days after any action which leads to or generates a dispute, the disputing Party shall submit to the DRC a written statement of dispute setting forth the nature of the dispute, the disputing Party’s position with respect to the dispute and the technical, legal and factual information the disputing Party is relying upon to support its position.

(e) Prior to any Party’s issuance of a written statement of dispute, the disputing Party shall engage the other Parties in informal dispute resolution among the Project Coordinators and/or their immediate supervisors. During this informal dispute resolution period, the Parties shall meet and/or confer as many times as are necessary to discuss and attempt resolution of the dispute.

(f) Within ten (10) days of receipt by the DRC of the disputing Party’s written request for formal dispute resolution, unless additional time is provided by the DRC, the other Parties may submit their own statements of position with respect to the dispute to the DRC for its consideration.

(g) The DRC shall have twenty-one (21) days, from the date it receives a timely written request from the disputing Party for formal dispute resolution, to unanimously



resolve the dispute and issue a written decision signed by the designee of each Party then serving on the DRC, except that such designees may agree unanimously to extend the period of time to reach decision if necessary. This decision may include any necessary findings and instructions, as appropriate, to proceed with Work interrupted or delayed by the dispute.

(h) In the event the DRC is unable to unanimously resolve the dispute within the twenty-one (21) day period, the written statement of dispute, and any statements of position, shall be forwarded, within three (3) days after the close of the twenty-one (21) day period, to the Senior Executive Committee (SEC) for resolution. EPA's representative on the SEC is the Regional Administrator of EPA Region 9. Navy's representative on the SEC is the Deputy Assistant Secretary of the Navy (Environment and Mission Readiness). DLA's representative on the SEC is the Commander, DLA Energy. The SEC members shall, as appropriate, confer, meet, and exert their best efforts to resolve the dispute and issue a unanimous written decision signed by all Parties. If unanimous SEC resolution of the dispute is not reached within twenty-one (21) days of elevation to the SEC, the Regional Administrator of EPA Region 9 shall issue a final written position on the dispute within twenty-one (21) days from the expiration of the twenty-one-day period for unanimous SEC resolution.

(i) The Under Secretary of the Navy or the Director, DLA, within fourteen (14) days after the EPA Regional Administrator's issuance of EPA's position, may issue a written notice elevating the dispute to EPA's Deputy Administrator for resolution. In the event that Navy or DLA elects not to elevate the dispute to the EPA Deputy Administrator within the designated fourteen (14) day escalation period, the other Parties shall be deemed to have agreed with the EPA Regional Administrator's written position with respect to the dispute.

(j) Upon elevation of the dispute to the EPA Deputy Administrator pursuant to Subparagraph (i) above, the EPA Deputy Administrator will review and resolve the dispute. Upon request, and prior to resolving the dispute, the EPA Deputy Administrator will meet and confer with the Under Secretary of the Navy and the Director, DLA, to discuss the issue(s) under dispute. The EPA Deputy Administrator will resolve the dispute within thirty

(30) days of receipt of the dispute, unless the Under Secretary of the Navy or the Director, DLA requests a meeting with the EPA Deputy Administrator prior to resolving the dispute, in which case the dispute will be resolved following the meeting. Upon resolution, the EPA Deputy Administrator will provide the other Parties with a written final decision setting forth resolution of the dispute.

(k) The existence of a dispute and EPA's consideration of matters placed in dispute shall not excuse, toll, or suspend any compliance obligation or deadline required pursuant to this 2023 Consent Order during the pendency of the dispute resolution process, except as agreed by EPA in writing pursuant to Section 8 (Modification of the SOW and this 2023 Consent Order and Additional Work) of this 2023 Consent Order or determined by the Deputy Administrator or his or her designee. In the event that a dispute is resolved in favor of Navy and DLA pursuant to this Section, stipulated penalties incurred with respect to the specific subject of that dispute will not be due and owing.

(l) Within twenty-one (21) days of receipt of any final decision and instructions with respect to any dispute resolved pursuant to the procedures specified in this Section, unless otherwise specified in the decision, Navy and DLA shall incorporate the final decision and instructions into the appropriate plan, schedule or procedures and implement this 2023 Consent Order in accordance with such plan, schedule or procedures.

(m) Resolution of a dispute pursuant to this Section constitutes a final resolution of any dispute arising under this 2023 Consent Order. All Parties shall abide by all terms and conditions of any final resolution of dispute obtained pursuant to this Section of the 2023 Consent Order.

## 15. PENALTIES

(a) In the event that Navy and/or DLA fails to comply with any requirement, including completion of any Work, in this 2023 Consent Order, and/or within the specified time schedules approved under this 2023 Consent Order, EPA, subject to the terms of this

Section, may assess, and Navy and DLA shall be liable for, stipulated penalties, in amounts set forth in this Section unless a Force Majeure event has occurred as defined in Section 17 (Force Majeure) and EPA approves the extension of a deadline as required by that Section. EPA may assess a stipulated penalty against Navy, DLA, or, where both are responsible, collectively against the Navy and DLA, in an amount not to exceed \$5,000 for the first week (or part thereof) and \$10,000 for each additional week (or part thereof) for which a failure set forth in this Subparagraph (a) occurs. Except as otherwise provided in Subparagraph (b), stipulated penalties begin to accrue on the day after complete performance is due or the day the violation occurs and shall continue to accrue until the violation is corrected to the satisfaction of EPA.

(b) Stipulated penalties, incurred for Navy's and/or DLA's failure to submit a satisfactory submittal or deliverable required by this 2023 Consent Order and the accompanying SOW schedule of submittals and deliverables, are subject to the 30-day cure periods in accordance with Section 7 (EPA's Approval of Deliverables) of this 2023 Consent Order. Any stipulated penalty associated with submittals or deliverables shall begin to accrue on the day after the expiration of the relevant cure period, where applicable in Section 7 (EPA's Approval of Deliverables), or the expiration of any applicable stay of a deadline under Subparagraph 14(k) and shall continue to accrue until the violation is corrected to the satisfaction of EPA.

(c) Stipulated penalties incurred for the Navy's and/or DLA's failure to comply with a requirement of this 2023 Consent Order that is not a submittal or deliverable shall not be subject to a cure period, unless EPA, in its sole discretion, determines that such a cure period is appropriate.

(d) Upon determining that Navy and DLA have failed in a manner set forth in this Section, EPA will notify Navy and DLA. Any such notification shall be in writing. If the failure in question is not already subject to dispute resolution at the time such notice is received, Navy and DLA may invoke dispute resolution pursuant to Section 14 (Dispute Resolution). Where dispute resolution is invoked, no assessment of a stipulated penalty shall be final until the conclusion of dispute resolution procedures related to the assessment of the

stipulated penalty. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this 2023 Consent Order.

(e) No later than sixty (60) days after receipt of a written demand for payment from EPA, unless the dispute resolution provisions of Section 14 (Dispute Resolution) are invoked, Navy and DLA shall pay the penalty. They shall pay the total penalty amount by certified or cashier's check payable to the United States Treasury and delivered to the U.S. Environmental Protection Agency, Fines and Penalties, Cincinnati Finance Center, Box 979077, St. Louis, MO, 63197-9000 or other agreed-to method. All payments by Navy and DLA shall reference Navy's and DLA's name and address, and the docket number for this action.

(f) This Section shall not affect Navy's or DLA's ability to obtain an extension of a timetable, deadline, or schedule pursuant to Section 8 (Modification of the SOW and this 2023 Consent Order and Additional Work) of this 2023 Consent Order, including as a result of a Force Majeure event as defined in Section 17 (Force Majeure).

(g) Nothing in this 2023 Consent Order shall be construed to render any officer or employee of Navy or DLA personally liable for the payment of any stipulated penalty assessed pursuant to this Section.

## 16. ENFORCEABILITY

(a) 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.

(b) The issuance of this 2023 Consent Order is final and Navy and DLA waive their opportunity to confer with the Administrator of EPA pursuant to 42 U.S.C. § 6961(b)(2).

(c) In any action to enforce the terms of this 2023 Consent Order, all Parties agree

to be bound by the terms of this 2023 Consent Order and agree not to contest the validity of this 2023 Consent Order, its terms or conditions, or the procedures underlying or relating to them in any action brought by EPA to enforce its terms.

17. FORCE MAJEURE

(a) Navy and DLA agree to perform all requirements under this 2023 Consent Order within the time limits established under this 2023 Consent Order, unless the performance is delayed by a force majeure. For purposes of this 2023 Consent Order, a force majeure is defined as any event arising from causes beyond the control of Navy and DLA, or Navy or DLA contractors, that delays or prevents performance of any obligation under this 2023 Consent Order despite Navy's and DLA's best efforts to fulfill the obligation. The requirement that Navy and DLA exercise "best efforts to fulfill the obligation" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event: (1) as it is occurring, and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent possible. Force majeure does not include financial inability to complete the Work, increased cost of performance, or changes in Navy's and DLA's business or economic circumstances.

(b) If any event occurs or has occurred that may delay the performance of any obligation under this 2023 Consent Order, whether or not caused by a force majeure event, Navy and DLA shall orally and by e-mail notify EPA within forty-eight (48) hours of when Navy or DLA knew or should have known that the event might cause a delay. Such notice shall: (1) identify the event causing the delay, or anticipated to cause delay, and the anticipated duration of the delay; (2) provide Navy's and DLA's rationale for attributing such delay to a force majeure event; (3) state the measures taken or to be taken to prevent or minimize the delay; (4) estimate the timetable for implementation of those measures; and (5) state whether, in the opinion of Navy and DLA, such event may cause or contribute to an endangerment to public health or the environment. Navy and DLA shall undertake best efforts to avoid and minimize the delay. Failure to comply with the notice provision of this

Subparagraph (b) and to undertake best efforts to avoid and minimize the delay shall waive any claim of force majeure by Navy and DLA. Navy and DLA shall be deemed to have notice of any circumstances of which their contractors had or should have had notice.

(c) If EPA determines that a delay in performance or anticipated delay in fulfilling a requirement of this 2023 Consent Order is or was attributable to a force majeure, then the time period for performance of that requirement will be extended as deemed necessary by EPA. If EPA determines that the delay or anticipated delay has been or will be caused by a force majeure, then EPA will notify Navy and DLA, in writing, of the length of the extension, if any, for performance of such obligations affected by the force majeure. Any such extensions shall not alter Navy's and DLA's obligation to perform or complete other tasks required by this 2023 Consent Order which are not directly affected by the force majeure.

(d) If EPA disagrees with Navy's and DLA's assertion of a force majeure, then Navy and DLA may elect to invoke dispute resolution and shall follow the procedures set forth in Section 14 (Dispute Resolution). In any such proceeding, Navy and DLA shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure, that the duration of the delay or the extension sought was or will be warranted under the circumstances, that Navy and DLA's best efforts were exercised to avoid and mitigate the effects of the delay, and that Navy and DLA complied with the requirements of this Section. If Navy and DLA satisfy this burden, then EPA will extend the time for performance as EPA determines is necessary.

## 18. RESERVATION OF RIGHTS

(a) Notwithstanding any other provisions of this 2023 Consent Order, EPA retains its authority to take, direct, or order any and all actions necessary to protect public health, any source of drinking water, or the environment, or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants, or contaminants, or hazardous or solid waste or constituents of such wastes, on, at, or from the Facility,

including, but not limited to, the right to bring enforcement actions under RCRA, the Comprehensive Environmental Response, Compensation, and Liability Act, the Clean Water Act, the SDWA, and any other applicable statutes or regulations. However, unless required due to an imminent and substantial endangerment, no such action shall be taken in relation to any activity within the scope of this 2023 Consent Order unless EPA has first made good faith efforts to address the issue through a modification to this 2023 Consent Order and, if necessary, through the dispute resolution process set forth in Section 14 (Dispute Resolution).

(b) EPA reserves all of its statutory and regulatory powers, authorities, rights, and remedies, both legal and equitable, which may pertain to Navy's and DLA's failure to comply with any of the requirements of this 2023 Consent Order.

(c) Navy and DLA reserve all of their statutory and regulatory rights and defenses, both legal and equitable, including, but not limited to, rights and defenses against third parties. Nothing in this 2023 Consent Order shall be taken as an admission of fact or law in any dispute with a third party or in any dispute outside the context of enforcement of this 2023 Consent Order.

(d) This 2023 Consent Order is not intended to be, nor shall it be construed to be, a permit. Navy and DLA acknowledge and agree that EPA's review and approval of the Work does not constitute a warranty or representation that the Work will achieve the required cleanup or performance standards. Compliance by Navy and DLA with the terms of this 2023 Consent Order shall not relieve Navy and DLA of their obligations to comply with applicable local, state, or federal laws and regulations.

#### 19. EPA COVENANTS

Except as provided in Section 18 (Reservation of Rights), EPA covenants not to take administrative action against Navy or DLA pursuant to Section 7003 of RCRA, 42 U.S.C. § 6973, and Section 1431 of the SDWA, 42 U.S.C. § 300i, for the Work. EPA's covenants shall take effect upon the Effective Date of this 2023 Consent Order. EPA's covenants are conditioned upon the satisfactory performance by Navy and DLA of their obligations under

this 2023 Consent Order. EPA's covenants extend only to Navy and DLA and do not extend to any other person.

20. OTHER CLAIMS

By issuance of this 2023 Consent Order, EPA assumes no liability for injuries or damages to persons or property resulting from any acts or omissions of Navy and DLA. EPA shall not be deemed a party to any contract, agreement or other arrangement entered into by Navy and DLA or its officers, directors, employees, agents, successors, assigns, receivers, contractors, or consultants in carrying out actions pursuant to this 2023 Consent Order.

21. RECORD RETENTION

(a) Navy and DLA shall preserve all records related to the Facility and the JBPHH System in accordance with the appropriate federal records retention schedule.

(b) All submittals and deliverables and related data under this 2023 Consent Order shall be stored by Navy and DLA in a centralized location at JBPHH, or an alternative location approved by the EPA Project Coordinator to promote easy access by EPA or its representatives.

22. PUBLIC COMMENT

(a) Upon signature by Navy and DLA, EPA shall provide public notice, a public meeting, which could be in-person or virtual, and a reasonable opportunity for public comment on the proposed settlement. After consideration of any comments submitted during a public comment period of not less than thirty (30) days (which EPA may extend), EPA may sign this 2023 Consent Order, or withhold consent, or seek to amend all or part of this 2023 Consent Order if EPA determines that comments received disclose facts or considerations which indicate that this 2023 Consent Order is inappropriate, improper, or inadequate.

(b) If EPA determines a modification is necessary, EPA shall transmit a modified copy of this 2023 Consent Order to Navy and DLA for review and signature, or further



negotiations, as appropriate. If the modification is determined by EPA to be significant, the process for public comment, described in Subparagraph (a), will repeat.

23. SEVERABILITY

If any provision of this 2023 Consent Order or the application of this 2023 Consent Order to any Party or circumstances is held by any judicial authority to be invalid, the remainder of the 2023 Consent Order shall remain in full force and effect.

24. EFFECTIVE DATE

After this 2023 Consent Order is signed by each of the Parties and after the public comment period and review as described in Section 22 (Public Comment), this 2023 Consent Order shall become effective. The undersigned representatives certify that they are fully authorized to enter into the terms and conditions of this 2023 Consent Order and to bind the Party they represent to this document.

25. TERMINATION AND SATISFACTION

Navy and DLA may request termination of this 2023 Consent Order after:

- (1) EPA's Certification of Completion of Defueling; and
- (2) EPA's Certification of Completion of Phase 1 Closure; and
- (3) EPA's Certification of Completion for the Drinking Water Protection Requirements; and
- (4a) EPA's acknowledgement that no Certification of Phase 2 Closure is required pursuant to the 2023 Consent Order, if, at the time EPA issues the Certification of Completion of Phase 1 Closure, Phase 2 Closure is still being addressed pursuant to the 2015 Red Hill Bulk Fuel Storage Facility RCRA Section 7003 Administrative Order on Consent signed by EPA, DOH, the Navy and DLA or is being addressed pursuant to another EPA approved enforcement

Red Hill Bulk Fuel Storage Facility  
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instrument; or

(4b) EPA's Certification of Phase 2 Closure, if, at the time EPA issues the Certification of Completion of Phase 1 Closure, Phase 2 Closure is being performed pursuant to this 2023 Consent Order.

Upon request by Navy and DLA, the provisions of this 2023 Consent Order shall be terminated upon EPA's execution of a written acknowledgement ("Acknowledgement") specifying that Navy and DLA have demonstrated to the satisfaction of EPA that the terms and conditions of this 2023 Consent Order have been fully and satisfactorily completed. In the event EPA does not provide the requested Acknowledgement within ninety (90) days of Navy's and DLA's request, any Party may invoke the dispute resolution provisions set forth in this 2023 Consent Order.

Termination of this 2023 Consent Order shall not terminate Navy's and DLA's obligation to comply with Sections 10 (Sampling and Access), 18 (Reservations of Rights) and 21 (Record Retention) of this 2023 Consent Order.

IN WITNESS WHEREOF, the Parties have duly executed this presents as of the day and year subscribed below.

Agreed this 2nd day of June 2023.

By:



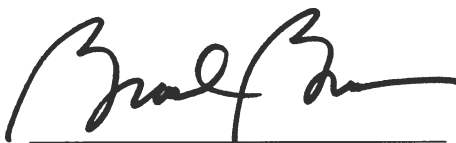
Karnig Ohannessian

Deputy Assistant Secretary of the Navy (Environment and Mission Readiness)

Department of the Navy

Red Hill Bulk Fuel Storage Facility  
Defueling, Closure, and Joint Base  
Pearl Harbor-Hickam Drinking Water System  
2023 Consent Order

Agreed this 2nd day of June 2023.

A handwritten signature in black ink, appearing to read "Brad Bunn", written over a horizontal line.

Brad Bunn  
Vice Director  
Defense Logistics Agency

Red Hill Bulk Fuel Storage Facility  
Defueling, Closure, and Joint Base  
Pearl Harbor-Hickam Drinking Water System  
2023 Consent Order

Agreed this 2 day of June 023.

By:

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Amy C. Miller-Bowen, Director  
Enforcement and Compliance Assurance Division  
Region 9, U.S. Environmental Protection Agency

**ATTACHMENT A**

**STATEMENT OF WORK FOR THE  
2023 ADMINISTRATIVE CONSENT ORDER  
FOR DEFUELING, CLOSURE, AND DRINKING WATER PROTECTION  
FOR THE RED HILL BULK FUEL STORAGE FACILITY AND  
THE JOINT BASE PEARL HARBOR-HICKAM WATER SYSTEM**

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## **1.0 INTRODUCTION**

This Statement of Work (“SOW”) sets forth the tasks and requirements to be undertaken by (1) the United States Department of Navy (“Navy”), as owner and operator of the Red Hill Bulk Fuel Storage Facility and Joint Base Pearl Harbor – Hickam Water System (“JBPHH System”); and (2) the Defense Logistics Agency (“DLA”), as the Department of Defense (“DoD”) component responsible for the fuel commodity; with oversight by the United States Environmental Protection Agency (“EPA”), in compliance with the Administrative Consent Order for Defueling, Closure, and Drinking Water Protection for the Red Hill Bulk Fuel Storage Facility and the Joint Base Pearl Harbor-Hickam Water System (“2023 Consent Order”). All terms used in this SOW shall have the same meaning as defined in the 2023 Consent Order.

## **2.0 PROJECT COORDINATION**

### **2.1 COORDINATION WITH HAWAI‘I DEPARTMENT OF HEALTH**

EPA and the Hawai‘i Department of Health (“DOH”) are overseeing defueling and closure of the Facility pursuant to the 2023 Consent Order and the May 6, 2022 DOH Superseding Emergency Order (“DOH Emergency Order”), respectively. The Parties will coordinate with DOH to avoid conflicts with the DOH Emergency Order. Navy and DLA shall provide EPA and DOH simultaneously all submittals and deliverables pursuant to both the 2023 Consent Order and the DOH Emergency Order. The Parties will engage with DOH to coordinate the work regarding defueling and closure under the 2023 Consent Order and the DOH Emergency Order to minimize duplication of work and to avoid conflicting requirements.

In addition, Navy shall provide DOH with all submittals and deliverables related to drinking water protection pursuant to the 2023 Consent Order and this SOW unless the submittal or deliverable to EPA requires redaction, in which case Navy shall provide the redacted version of the submittal or deliverable to DOH at the same time it provides the redacted submittal or deliverable to EPA. EPA will coordinate with DOH on implementation of the drinking water protection requirements.

### **2.2 EXTERNAL SUBJECT MATTER EXPERT INVOLVEMENT**

It is the intent of the Parties to seek technical input from individual subject matter experts (e.g., the Honolulu Board of Water Supply, the Hawaii Department of Land and Natural Resources including its Commission on Water Resources Management, and the United States Geological Survey).

### **2.3 COMMUNITY OUTREACH AND COMMUNITY INVOLVEMENT**

**2.3.1** Within thirty (30) days of the Effective Date of this 2023 Consent Order, Navy and DLA will institute a Community Representation Initiative (CRI). The CRI responds to the need expressed by the community in public comments on the proposed 2023 Consent Order for an interactive relationship between the Parties and interested Hawaiian and community stakeholders, both on and off JBPHH, regarding defueling, closure and drinking water requirements conducted by Navy and, as applicable, DLA, pursuant to this 2023 Consent Order and this SOW.

**2.3.1.2** The CRI shall consist of ten (10) designated slots filled by community representatives selected by consensus of the community. CRI participants shall include Hawaiian and Kama‘ina community leaders and community members that reflect a representative section of interested members and stakeholders of the



community who wish to voluntarily participate. The CRI shall also include interested federal, state, and local agencies.

**2.3.1.3** Within twenty-one (21) days of the Effective date of this 2023 Consent Order, Navy and DLA, with EPA support, shall invite interested community members to an informational meeting on CRI formation in English, Ilocano, Japanese, Tagalog, and Korean via local newspapers, Navy's and DLA's social media accounts, and the Navy and DLA website. The invitation shall be issued at least two weeks prior to the meeting. During the meeting, community members, with EPA facilitation, shall select their representatives to serve on the CRI.

**2.3.1.4** CRI participants will develop operating procedures and ground rules and meet twice a quarter. If Navy and DLA request modifying the CRI meeting frequency, Navy or DLA shall notify EPA. The Parties, in consultation with the CRI, will determine whether to modify the frequency. The CRI meetings will help inform the quarterly public updates.

**2.3.1.5** Meetings of the CRI shall be for the purposes of: reviewing progress in defueling, closure, and implementation of the drinking water requirements; and facilitating early discussion and continued flow of information among community members and stakeholders, Navy, DLA, EPA, and DOH (if DOH chooses to participate) in relation to defueling, closure, and drinking water actions taken by Navy and DLA at JBPHH.

**2.3.1.6** Navy and DLA shall: attend CRI meetings and planning sessions identified in Section 2.3.1.4 of this SOW, present regular updates to the CRI, provide CRI participants with opportunities to provide individual comments on key aspects of the projects' progress, and provide presentations on topics of interest, as requested.

**2.3.1.7** Navy and DLA shall produce a summary of the CRI within a week of a CRI meeting, and post the summary on the Navy and DLA website. If requested by the CRI, the summary shall be translated into other languages for posting on the Navy and DLA website.

## **2.3.2 PUBLIC UPDATES**

Navy and DLA shall provide quarterly public updates on the Work to be performed pursuant to the 2023 Consent Order and this SOW. Navy and DLA shall announce the quarterly public updates in English, and any other languages requested by the CRI, via a variety of methods two weeks prior to the meeting. Navy and DLA shall also the post public announcements to Navy's and DLA's social media accounts and Navy and DLA website in English and any other languages requested by the CRI. EPA intends to participate in the quarterly updates and Navy and DLA shall invite DOH. The public updates shall provide the public with the opportunity to ask questions about or comment on the Work and may be in-person, by telephone, and/or by videoconference. At a minimum, Navy and DLA shall host public updates before the following key milestones: defueling, closure, and the completion of the implementation of the Drinking Water Long Term Monitoring Plan. At the request of EPA, Navy and DLA shall provide additional public updates.

## **2.3.3 WEBSITE**

Navy and DLA shall maintain a website, accessible to the public, dedicated to the Facility and the Work performed pursuant to the 2023 Consent Order and this SOW. Navy and DLA shall update the website every two weeks. Redacted versions of all submittals and deliverables to EPA under the 2023 Consent Order and this SOW shall be made available on the website within fourteen (14) days of providing the redacted deliverable or submittal to EPA. Navy and DLA shall ensure that the website includes a brief description of the content of all documents uploaded to the website. The website shall include an email address and phone

number where the public may provide comments or questions to Navy and DLA for consideration regarding the 2023 Consent Order and this SOW. Within sixty (60) days of the Effective Date, and every thirty (30) days thereafter, Navy and DLA shall publish on the website responses to frequently asked public comments or questions. No later than thirty (30) days after Navy and DLA receive validated sampling data generated pursuant to this 2023 Consent Order and this SOW, Navy and DLA shall make such data available, in an electronic form approved by EPA, directly to the public on the Navy and DLA website.

## **2.4 COMMUNICATIONS AND MEETINGS BETWEEN THE PARTIES**

The Parties shall make best efforts to maintain effective and timely communications with each other and meet regularly.

Unless EPA agrees to a reduced frequency, Navy and DLA shall provide oral weekly updates to EPA up to and through defueling, describing progress made on Work under the 2023 Consent Order and this SOW, including plans for safe and complete defueling of the Facility. During the updates, Navy and DLA shall describe activities undertaken during the previous week to prepare for or conduct defueling, including infrastructure repairs and training exercises, activities scheduled for the upcoming two weeks, and any deviations from approved plans. Unless EPA agrees to a reduced frequency, after defueling, Navy and DLA shall provide updates every fourteen (14) days describing activities undertaken during the previous fourteen (14) days, activities scheduled for the upcoming fourteen (14) days, and any deviations from approved plans.

Meetings between the Parties may be in-person, by telephone, and/or by video-conference. Unless otherwise requested by EPA, Navy and DLA shall provide EPA with an agenda at least three (3) working days in advance of any meeting. The Parties shall provide any meeting materials as far in advance of the meeting as possible and at least one (1) working day in advance of the meeting. When requested by EPA in advance of the meeting, Navy and DLA shall submit to EPA a brief summary of the meeting (generally no more than two (2) pages) within seven (7) days of the meeting.

At a Party's request, DOH or subject matter experts shall be invited to meetings between the Parties.

## **2.5 QUALITY ASSURANCE**

Navy and DLA shall include a discussion of quality assurance and quality control ("QA/QC") procedures in each deliverable submitted to EPA for approval. QA/QC procedures are intended to ensure that engineered repairs, defueling, and decommissioning are performed as designed following appropriate standards and engineering practices, and that environmental sampling and analysis meet relevant guidance.

Navy and DLA environmental sampling shall be documented in sampling and analysis plans requiring approval in accordance with Section 7 (EPA's Approval of Deliverables) of the 2023 Consent Order. Navy and DLA shall submit a sampling and analysis plan at least 60 days before any planned environmental sampling, unless the Parties agree to a shorter period in a particular instance. A sampling and analysis plan consists of a Field Sampling Plan ("FSP") and a Quality Assurance Project Plan ("QAPP").

Navy and DLA shall use QA/QC, and other technical activities and chain of custody procedures for all samples consistent with applicable guidance, including "Guidance for Quality Assurance Project Plans (QA/G-5)," EPA/240/R-02/009 (December 2002), "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" EPA/240/B-01/003 (March 2001, reissued May 2006), and "Uniform Federal Policy for Quality Assurance Project Plans," Parts 1-3, EPA/505/B-04/900A-900C (March 2005).

Navy and DLA shall ensure that the laboratories they utilize for the analysis of samples taken pursuant to this 2023 Consent Order meet the competency requirements set forth in EPA’s “Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency-Funded Acquisitions,” available at <https://www.epa.gov/measurements/documents-about-measurement-competency-under-acquisition-agreements>, and that the laboratories perform all analyses using EPA-accepted methods. Accepted EPA methods consist of, but are not limited to, methods that are documented in the EPA’s Contract Laboratory Program (<https://www.epa.gov/clp>), SW 846 “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods” (<https://www.epa.gov/hw-sw846>), “Standard Methods for the Examination of Water and Wastewater” (<http://www.standardmethods.org/>), 40 CFR Part 141, and 40 C.F.R. Part 136, “Air Toxics - Monitoring Methods” (<https://www.epa.gov/amtic/compendium-methods-determination-toxic-organic-compounds-ambient-air>).

Upon approval by EPA, Navy and DLA may use other appropriate analytical methods, as long as (i) QA/QC criteria are contained in the methods and the methods are included in the QAPP, (ii) the analytical methods are at least as stringent as the methods listed above, and (iii) the methods have been approved for use by a nationally recognized organization responsible for verification and publication of analytical methods, e.g., EPA, American Society for Testing and Materials, National Institute for Occupational Safety and Health, or Occupational Safety and Health Administration.

Upon request, Navy and DLA shall provide split or duplicate samples to EPA or its authorized representatives. Navy and DLA shall notify EPA not less than seven (7) days in advance of any sample collection activity unless shorter notice is agreed to by EPA. In addition, EPA shall have the right to take any additional samples EPA deems necessary. Upon request, EPA shall provide to Navy and DLA split or duplicate samples of any samples it takes as part of its oversight of Navy and DLA implementation of the Work, and any such samples shall be analyzed in accordance with the approved QAPP.

## **2.6 PROGRESS REPORTS**

Unless the Parties agree to a reduced frequency, Navy and DLA shall submit to EPA monthly progress reports by the fifteenth (15<sup>th</sup>) day of each month. At a minimum, with respect to the preceding month, these written progress reports shall: (a) list and provide the status of all deliverables required by the 2023 Consent Order and this SOW; (b) describe the actions (including plans for contractor procurement) taken to comply with the 2023 Consent Order and this SOW, including any significant deviations from approved plans; (c) describe all Work planned for the next two (2) months; (d) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays; (e) describe any public and stakeholder relations activities, including a summary of public inquiries and Navy and DLA responses; and (f) include a summary of all results of sampling and testing (including field measurements) generated or received by Navy and DLA and indicate where the results of sampling and testing can be found. If not previously provided to EPA or available on its website, the monthly report should also include electronic files containing the sampling and testing results in a format approved by EPA.

## **2.7 NAVY AND DLA CONTRACTING**

Upon request by EPA, Navy and DLA shall provide any scopes of work for Navy and DLA contract actions for deliverables required by the 2023 Consent Order and this SOW to EPA for review and comment before any contract action is finalized.

## **2.8 SENIOR LEVEL MEETINGS**

### **2.8.1 SENIOR LEADER MEETINGS**

Unless otherwise agreed to by the Parties, the Parties shall have quarterly meetings with Senior Leader representatives identified in Section 6 (Work to be Performed), Paragraph 6(d) of the 2023 Consent Order beginning ninety (90) days after the Effective Date of the 2023 Consent Order. The purpose of the quarterly meetings is to ensure senior leadership is informed of the latest developments including the current schedule and Work progress, and also to provide an opportunity to discuss any current or anticipated issues or challenges in implementing the 2023 Consent Order and this SOW. DOH will be invited to participate.

### **2.8.2 SENIOR EXECUTIVE SERVICE (“SES”) LEVEL MEETINGS**

Unless otherwise agreed to by the Parties, the Parties shall have monthly meetings with SES level (or equivalent) representatives identified in Section 6 (Work to be Performed), Paragraph 6(d) of the 2023 Consent Order beginning forty-five (45) days after the Effective Date of the 2023 Consent Order. The purpose of the monthly meetings is to discuss the latest developments including the current schedule and Work progress, and to provide an opportunity to discuss any problems or challenges encountered in implementing the 2023 Consent Order and this SOW during the previous month and discuss any anticipated problems or challenges. DOH will be invited to participate.

## **3.0 FACILITY MAINTENANCE AND RELEASE DETECTION**

### **3.1 MAINTENANCE**

The Joint Task Force – Red Hill (JTF-RH), at the direction of the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall continue to perform maintenance to support Defueling and prevent additional releases from the Facility.

### **3.2 RELEASE DETECTION**

#### **3.2.1 BULK FUEL STORAGE TANK TIGHTNESS TESTING**

JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall conduct semi-annual tank tightness testing on each UST that contains fuel until the UST is defueled. JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall submit results to EPA within twenty-one (21) days after completion of the testing. Testing requirements are described in Hawai‘i Administrative Rules (“HAR”) 11-280.1-41(a)(3)(A) and 11.280.1-43(10). If the testing results indicate a release may have occurred, JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall submit to EPA for approval within twenty-one (21) days an analysis of the cause of the concern and a proposal to address the concern (“Tank Tightness Evaluation and Proposal”). JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall address the concern in accordance with the approved proposal. For purposes of this subsection, “semi-annual” means twice within a 365-day period. JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the

2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall make good faith efforts to schedule tank tightness testing so that it occurs every six months until the USTs are defueled. If JTF-RH, Navy and/or DLA determine that a regularly scheduled tank tightness test could interfere with or delay infrastructure repairs or safety measures--including training--required for Defueling, JTF-RH may delay the tank tightness test for a reasonable time to allow those Defueling Plan activities, as further described in Section 4 (Facility Defueling) of this SOW below, to occur. If JTF-RH delays a scheduled semi-annual tank tightness test to accommodate Defueling Plan activities, JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall inform EPA of the reason for the delay and its expected duration and shall make all reasonable efforts to reschedule the testing as soon as it no longer conflicts with the relevant Defueling Plan activities.

### **3.2.2 SOIL VAPOR MONITORING**

Navy and DLA shall conduct soil vapor monitoring weekly for the 20 USTs until the Facility Subject to Closure is closed and submit results to EPA within seven (7) days after sample collection. Sample collection and analysis methods are described in the “Work Plan/Sampling and Analysis Plan, Long-Term Soil Vapor and Fuel Product Monitoring” for the Red Hill Bulk Fuel Storage Facility, dated August 2021.

### **3.2.3 VISUAL INSPECTIONS**

JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall conduct visual inspections of the pipelines between the 20 USTs and the pump house, maintain documentation of the inspections, and report to EPA any leaks or concerns to EPA in accordance with Section 8 (Modification of the SOW and this 2023 Consent Order and Additional Work), Paragraph 8(c) of the 2023 Consent Order.

### **3.2.4 FUEL OIL RECLAMATION SUMP TANK TIGHTNESS TESTING**

At least ninety (90) days prior to initiating Defueling and no later than May 31, 2023, JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall submit a Fuel Oil Reclamation (“FOR”) Tank Tightness Testing Plan to EPA for review and approval for performing tank tightness testing on the Zone 7 Sump for FOR and the Main Containment Sump for FOR in accordance with HAR § 11-280.1-43(3). Upon approval of the FOR Tank Tightness Plan, JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall perform tank tightness testing in accordance with the FOR Tank Tightness Plan. If the testing results indicate leakage per the HAR, then within twenty-one (21) days of receiving such results, JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall submit to EPA for approval an analysis of the cause of the concern and a proposal to address the concern prior to Defueling.

## **4.0 FACILITY DEFUELING**

JTF-RH, at the direction of the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall not begin defueling until EPA provides the approvals

of the deliverables required by subsections 4.1-4.4 below. In response to the DOH Emergency Order, Navy and DLA prepared the DoD plan, dated June 30, 2022, for the defueling of the Facility (“Defueling Plan”). The Defueling Plan describes Work to be completed before Defueling is accomplished. The Defueling Plan describes an assessment of the Facility, contracting, repairs, and final preparedness actions necessary to safely defuel. DOH commented on and disapproved the Defueling Plan in a letter dated July 22, 2022. EPA provided comments on the Defueling Plan in a letter dated August 11, 2022. Navy provided DoD’s supplement 1A to the Defueling Plan on September 7, 2022, and provided DoD’s supplement 1B to the Defueling Plan on September 28, 2022.

#### **4.1 DEFUELING PLAN**

DoD submitted to EPA its Defueling Plan and supplements thereto on June 30, 2022, September 7, 2022, and September 28, 2022. JTF-RH, at the direction of the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, submitted an additional Defueling Plan supplement (“Supplement 2”) on May 16, 2023. Supplement 2 included an updated schedule that represents JTF-RH’s projection, as of the date of Supplement 2, of timelines to achieve gravity-based fuel removal from the USTs, removal of fuel from the four surge tanks, and the unpacking of fuel from the pipelines between the 20 USTs and the pumphouse “at the earliest date consistent with the safe defueling of the Facility Subject to Closure.” Upon approval of Supplement 2 by EPA pursuant to this 2023 Consent Order, and by DOH pursuant to the DOH Emergency Order, the Supplement 2 defueling schedule will be a requirement pursuant to this 2023 Consent Order. JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall address all EPA comments on the Supplement 2 and shall submit to EPA written responses within 30 days of receipt. If necessary, JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall provide additional supplements to ensure complete Defueling.

#### **4.2 THIRD-PARTY QUALITY ASSURANCE PLAN FOR EVALUATING REPAIRS FOR DEFUELING**

JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, submitted an Independent Third-Party Quality Validation Plan to EPA on November 1, 2022. The plan provides an eight-step process and defines roles and responsibilities for evaluation of the adequacy of repairs made to the Facility in preparation for Defueling. If EPA determines that a revision to that plan is necessary, JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall submit a revised plan for EPA’s approval within 60 days of EPA’s request.

#### **4.3 DEFUELING PREPAREDNESS REPORT**

JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall submit to EPA for approval a report that documents that all actions identified in the approved Defueling Plan, needed to begin Defueling safely and expeditiously, have been completed (“Defueling Preparedness Report”) in

accordance with the schedule in the EPA-approved May 2023 Defueling Plan Supplement 2. JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall certify in the Defueling Preparedness Report that: (a) JTF-RH has implemented repairs, operational changes, training, and other actions described in the approved Defueling Plan; (b) third-party quality assurance documenting the adequacy of repairs has been completed; (c) Navy and JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to this Consent Order, have addressed the findings from EPA’s August 17, 2021 Spill Prevention, Control and Countermeasure (“SPCC”) Plan Inspection Report for the Facility Subject to Defueling; (d) EPA has approved the Facility Response Plan (“FRP”) that covers the Facility Subject to Defueling; and (e) JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, have performed tank tightness testing on the Zone 7 Sump for FOR and the Main Containment Sump for FOR and any concerns associated with such tank tightness testing have been addressed.

#### **4.4 DEFUELING**

Within 15 days of EPA and DOH approval of the Defueling Preparedness Report, JTF-RH, at the direction of the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall begin Defueling in accordance with the Defueling Plan and supplements thereto. If unforeseen circumstances make starting defueling not safe within those 15 days or a force majeure event as defined in Subsection 17(a) of the 2023 Consent Order occurs, JTF-RH, within the scope of its defueling mission as directed by the Secretary of Defense and, for purposes of the 2023 Consent Order, on behalf of Navy and DLA as parties to the Consent Order, shall provide notice to EPA and identify the event causing the delay, or anticipated to cause delay, and the anticipated duration of the delay all within 48 hours of such determination.

#### **4.5 DEFUELING COMPLETION INSPECTION AND REPORT**

After Defueling is complete, Navy and DLA shall schedule a Defueling Completion Inspection for the purpose of demonstrating that the Facility Subject to Defueling has completed Defueling under the 2023 Consent Order. The Defueling Completion Inspection must be attended by representatives of Navy, DLA and EPA. DOH representatives will be invited to participate.

Within 60 days of the Defueling Completion Inspection, Navy and DLA shall submit a Final Defueling Report to EPA for approval, documenting that all activities necessary for Defueling have been completed.

If EPA concludes that Defueling is not complete, EPA shall so notify Navy and DLA. EPA’s notice will include a description of any deficiencies and either a schedule for addressing such deficiencies or a requirement that Navy and DLA submit a schedule to EPA for approval. Navy and DLA shall perform all activities described in the notice in accordance with the approved schedule.

Once EPA concludes that Defueling is complete, EPA shall so certify to Navy and DLA. This will constitute the Certification of Completion of Defueling for purposes of the 2023 Consent Order.

## **5.0 FACILITY CLOSURE**

### **5.1 CLOSURE PLAN**

Within 60 days of EPA's request, if any, Navy and DLA shall submit to EPA for approval a revised plan, including schedule, for the permanent closure of the Facility Subject to Closure ("Closure Plan"). The Closure Plan shall include a description of the sequence and process in which the 20 USTs, and the rest of the Facility Subject to Closure, will be emptied and cleaned; the infrastructure and procedures needed to perform the Work; the method of permanent Closure (e.g., remove, fill, or close in place); management and disposition of any accumulated sludge or waste material in accordance with federal and state regulations; site assessment and release response action activities to be completed as part of Closure; a schedule for performing each activity, and any other requirements for Closure in HAR Subchapter 6 (Release Response Action) (HAR §§ 11-280.1-60 — 11-280.1-67) and Subchapter 7 (Out-of-Service UST Systems and Closure) (HAR §§ 11-280.1-70 — 11-280.1-75).

In the Closure Plan, Navy and DLA shall identify any industry standards and codes of practice that they will follow to empty and clean the Facility Subject to Closure by removing all liquids and accumulated sludges (HAR § 11-280.1-75).

Upon approval by EPA, Navy and DLA shall implement the Closure Plan in accordance with the approved schedule.

### **5.2 PHASE 1 CLOSURE**

#### **5.2.1 INTERIM PHASE 1 CLOSURE REPORT(S)**

Navy and DLA shall submit Interim Phase 1 Closure Report(s) to EPA within thirty (30) days after one or more of the 20 USTs, pipelines or surge tanks achieve Phase 1 Closure in accordance with HAR § 11-280.1-71(c)(1) & (2), the 2023 Consent Order and this SOW. Each Interim Phase 1 Closure Report(s) must: (1) include certifications by the Navy and DLA Project Coordinator that Phase 1 Closure is complete for the portion of the Facility Subject to Closure included in the Phase 1 Closure Report (e.g., the tank(s), pipeline(s) and infrastructure included are defueled, cleaned, and permanently closed by removal, fill, or closure in place); and (2) contain any data needed to demonstrate that Phase 1 Closure is complete. Navy and DLA shall submit Interim Phase 1 Closure Report(s) to EPA until all of the Facility Subject to Closure is Closed.

#### **5.2.2 INTERIM PHASE 1 CLOSURE INSPECTION**

Upon submittal of the first Interim Phase 1 Closure Report(s), Navy and DLA shall, at the request of EPA, schedule an Interim Phase 1 Closure Inspection(s) with EPA for the purpose of demonstrating that the portion of the Facility Subject to Closure included in the Interim Phase 1 Closure Report has been permanently Closed and obtaining EPA's approval pursuant to the 2023 Consent Order. The Interim Phase 1 Closure Inspection must be attended by representatives of Navy, DLA and EPA. DOH representatives will be invited to participate. At the request of EPA, Navy and DLA shall schedule additional inspections after additional Interim Phase 1 Closure Report(s) are completed.



### **5.2.3 FINAL PHASE 1 CLOSURE INSPECTION**

Navy and DLA shall schedule a Final Phase 1 Closure Inspection with EPA for the purpose of demonstrating that the Facility Subject to Closure has completed Phase 1 Closure under the 2023 Consent Order. The Final Phase 1 Closure Inspection must be attended by representatives of Navy, DLA and EPA. DOH representatives will be invited to participate.

### **5.2.4 FINAL PHASE 1 CLOSURE REPORT**

Within 180 days of the Final Phase 1 Closure Inspection, Navy and DLA shall submit a Final Phase 1 Closure Report to EPA for approval, documenting that all activities necessary for Phase 1 Closure are completed. The Phase 1 Closure Report must be prepared in accordance with the Closure Plan.

If EPA concludes the Phase 1 Closure is not complete, EPA shall so notify Navy and DLA. EPA's notice will include a description of any deficiencies and either a schedule for addressing such deficiencies or a requirement that Navy and DLA submit a schedule for approval to EPA. Navy and DLA shall perform all activities described in the notice in accordance with the approved schedule.

Once EPA concludes that Phase 1 Closure is Complete, EPA shall so certify to Navy and DLA. This will constitute the Certification of Phase 1 Closure for purposes of the 2023 Consent Order.

### **5.3 PHASE 2 CLOSURE**

If, at the time EPA issues the Certification of Completion of Phase 1 Closure, Phase 2 Closure is still being addressed pursuant to the 2015 AOC or is being addressed pursuant to another EPA-approved enforcement instrument, then Navy and DLA may request termination of the 2023 Consent Order and this SOW pursuant to Section 25 (Termination and Satisfaction) of the 2023 Consent Order. Otherwise, Navy and DLA shall perform Phase 2 Closure pursuant to the 2023 Consent Order and this SOW.

If Navy and DLA perform Phase 2 Closure pursuant to the 2023 Consent Order and this SOW, then within 180 days of completion of Phase 2 Closure Navy and DLA shall submit to EPA for approval a Phase 2 Closure Report, documenting that all activities necessary for Phase 2 Closure have been completed. If EPA concludes that Phase 2 Closure is not complete, EPA shall so notify Navy and DLA. EPA's notice will include a description of any deficiencies and either a schedule for addressing such deficiencies or a requirement that Navy and DLA submit a schedule for approval to EPA. Navy and DLA shall perform all activities described in the notice in accordance with the approved schedule.

Once EPA concludes that Phase 2 Closure is complete, EPA shall so certify to Navy and DLA. This will constitute the Certification of Completion of Phase 2 Closure for purposes of the 2023 Consent Order and this SOW.

## **6.0 DRINKING WATER PROTECTION**

### **6.1 SOURCE WATER PROTECTION PLAN ("SWPP")**

Prior to Certification of Phase I Closure addressed in Section 5 of this SOW, Navy shall develop and begin implementation of a phased Source Water Protection Plan ("SWPP") pursuant to the requirements and

schedules for each Phase described in Sections 6.1.1 (Phase I: Efforts to Safeguard Drinking Water Quality in the Red Hill Shaft During Facility Defueling and Closure) and 6.1.2 (Phase II: Efforts to Safeguard Drinking Water Quality at All JBPHH System Well Sites) of this SOW below.

### **6.1.1 PHASE I: EFFORTS TO SAFEGUARD DRINKING WATER QUALITY IN THE RED HILL SHAFT DURING FACILITY DEFUELING AND CLOSURE**

No later than sixty (60) days prior to initiating Defueling, Navy shall provide to EPA Phase I of the SWPP, which shall consist solely of a description of the protective measures to be in place for Red Hill Shaft through Defueling, as identified in existing plans or plans to be developed prior to Defueling. These protective measures shall include those identified in the Defueling Plan submitted to EPA under Section 4.1 (Defueling Plan) of this SOW, any corresponding addenda to other plans (e.g., the FRP), and any exercises that have been or will be conducted prior to Defueling. EPA will review and may comment on Phase I of the SWPP; however, EPA's review and comment on Phase I of the SWPP will have no impact on Navy's ability to Defuel under Section 4 (Defueling Plan) of this SOW if Navy has otherwise received the necessary approval under that Section.

### **6.1.2 PHASE II: EFFORTS TO SAFEGUARD DRINKING WATER QUALITY AT ALL JBPHH SYSTEM WELL SITES**

#### **6.1.2.1 SCOPING MEETING**

Within thirty (30) days after the Effective Date, Navy shall schedule and hold an initial Scoping Meeting between Navy and EPA to outline the components of Phase II of the SWPP that may be guided by relevant aspects of EPA policy related to source water quality planning provisions in Section 1453 of the SDWA, 42 U.S.C. § 300j-13, and wellhead protection provisions in Section 1428 of the SDWA, 42 U.S.C. § 300h-7 (EPA provides additional resources regarding source water protection at the following website: <https://www.epa.gov/sourcewaterprotection/basic-information-about-source-water-protection>). The scope of Phase II of the SWPP shall among other things require consideration of:

- Delineation of a wellhead protection area(s) ("WHPAs") encompassing the area(s) located within JBPHH contributing to the recharge of the groundwater sources used by the JBPHH System.
- Identification of potential sources of significant contamination ("PSSC") within that portion of the WHPA located within JBPHH, e.g., above ground storage tanks, landfills, livestock confinement areas, roadways, sewage treatment facilities, cesspools, underground tanks, French drains, dry wells, or old dumps and mines. A facility or activity is listed as a PSSC if it has the potential to release a contaminant that could potentially impact a nearby public water supply, and the presence of the PSSC does not necessarily indicate that any release has occurred.
- Prioritization of potential threats and management strategies, after the PSSCs located within JBPHH are identified, and development of a management plan that identifies specific activities that Navy may pursue in cooperation and concert with DOH and other agencies or organizations, as necessary, to protect JBPHH's source water from contamination.
- Schedule of activities Navy intends to perform to effectuate the SWPP through termination of the 2023 Consent Order.

**6.1.2.2 CONTRACT TO DEVELOP PHASE II OF THE SWPP**

If Navy intends to contract for Phase II of the SWPP, it shall initiate the contract action within a reasonable time after Navy and EPA agree on the scope of Phase II of the SWPP, and include a scope of work in the solicitation that aligns with the agreed-upon scope. Any contract entered into by Navy shall ensure that Phase II of the SWPP shall be developed and submitted to EPA in accordance with Section 6.1.2.3 (Approval and Implementation of Phase II of the SWPP) of this SOW at least prior to completion of Phase I Closure.

**6.1.2.3 APPROVAL AND IMPLEMENTATION OF PHASE II OF THE SWPP**

Navy shall submit Phase II of the SWPP to EPA for approval within thirty (30) days after Navy accepts the contractor’s work product, if any, for Phase II of the SWPP. EPA may disapprove Phase II of the SWPP in whole or in part and/or require revisions to it. If EPA disapproves Phase II of the SWPP, Navy shall address all deficiencies identified by EPA and resubmit the draft Phase II of the SWPP for EPA’s approval within the timeframe specified in EPA’s disapproval, which timeframe shall allow at least sixty (60) days for Navy to revise and resubmit Phase II of the SWPP. Upon full approval of Phase II of the SWPP by EPA, Navy shall begin implementing Phase II of the SWPP according to the schedule of Phase II of the SWPP, as approved by EPA.

**6.2 DRINKING WATER LONG-TERM MONITORING PLAN**

Navy shall implement the Drinking Water Long-Term Monitoring Plan (“DW LTMP”) (Appendix A of this SOW), the requirements of which are incorporated by reference, in accordance with the schedule identified therein as modified by the schedule below:

<b>DW LTMP PAGE</b>	<b>SECTION/ SUBSECTION</b>	<b>DELIVERABLE / MILESTONE DESCRIPTION</b>	<b>DEADLINE</b>	<b>NOTES</b>
16	6.2	Tank Inspection and Cleaning Complete	EPA agrees that the enforceable deadline for Tank Inspection and Cleaning of the Camp Smith finished water tanks S325, S326, and S327 and Red Hill finished water tanks 316 and 685 for purposes of the 2023 Consent Order is December 31, 2023.	Originally noted in the DW LTMP as December 31, 2022.  Halawa finished water tanks S1 and S2 are not subject to a deadline, but must be completed prior to receiving certification of completion of the drinking water protection requirements pursuant to Section 6.13 of this SOW

<b>DW LTMP PAGE</b>	<b>SECTION/ SUBSECTION</b>	<b>DELIVERABLE / MILESTONE DESCRIPTION</b>	<b>DEADLINE</b>	<b>NOTES</b>
16	6.2	Cross Connection Control Survey	EPA agrees that the enforceable deadline is within thirty (30) days after the Effective Date of the 2023 Consent Order.	Originally noted in the DW LTMP as September 30, 2022
17	6.3.2	Closed Inactive Underwater Distribution Lines – Reactivation of the Broken Line	Within thirty (30) days after the 2023 Consent Order’s Effective Date, Navy shall notify EPA of its intent to either repair the broken main, replace it or abandon it in place.	Repair of this line is prohibited without prior review and approval of construction plans by HDOH under HAR § 11-20-30.

### **6.3 TANK INSPECTIONS, CLEANING AND SAMPLING**

#### **6.3.1 SAMPLING OF FINISHED WATER TANKS**

Navy shall conduct water quality sampling at its finished water tanks pursuant to the attached Tank Cleaning and Sampling Course of Action (“COA”) 5 (*see* Appendix B of this SOW). Navy shall provide the analytical results of sampling to EPA within seven (7) days after tank cleaning in a format consistent with Section 10 (Sampling, Access and Document Availability) of the 2023 Consent Order.

##### **6.3.1.1 FINISHED WATER TANK SAMPLING REQUIREMENTS AND GUIDANCE**

Navy shall use EPA test methods referenced in Appendix A to Subpart C of 40 C.F.R. Part 141, as well as those provided in Table 5 of the DW LTMP. Navy shall also implement a sampling approach for total petroleum hydrocarbons described in the Tank Cleaning and Sampling COA 5 (Appendix B of this SOW) that allows for the use of polyvinyl chloride weighted disposable bailers for sampling from the tank’s water surface. *See* Appendix B of this SOW. The sampling requirements of the Tank Cleaning and Sampling COA 5 shall apply for the same duration as the other sampling requirements of the DW LTMP.

#### **6.3.2 COURSE OF ACTION FOR EXCEEDANCES**

For the duration for which sampling of the finished water tanks is required, Navy shall implement the Tank Cleaning and Sampling COA 5 (Appendix B of this SOW) to be undertaken for any finished water tank sampling results showing exceedances of DOH Maximum Contaminant Levels (“MCLs”) and Project Screening Levels identified in Table 5 of the DW LTMP.

### **6.4 ACCESS TO ANALYTICAL RESULTS**

Notwithstanding Section 10 (Sampling, Access and Document Availability) of the 2023 Consent Order, Navy shall post the analytical results of sampling conducted pursuant to Section 6 of this SOW in the Environmental Data Management System for access by EPA within seven (7) days after receipt from a state-certified laboratory, and provide this information in the monthly progress report required under Section 2.6

(Progress Reports) of this SOW. Also, Navy shall submit the monthly DW LTMP Summary Report to EPA by the 15<sup>th</sup> day of the month following the month that monitoring or any remedial action occurs. *See* DW LTMP section 10.1.

Navy shall also notify EPA via electronic communication, e.g., email, within twenty-four (24) hours of receipt of a lab report showing an exceedance of DOH MCLs, Project Screening Levels and detections of benzene, toluene, ethylbenzene and xylene (“BTEX”) and other analytes as identified in Table 5 of the DW LTMP.

## **6.5 OPERATIONS AND MAINTENANCE OF THE PUBLIC WATER SYSTEM**

### **6.5.1 STANDARD OPERATING PROCEDURES FOR SYSTEM OPERATORS**

#### **6.5.1.1 SCOPING MEETING**

Within thirty (30) days of the Effective Date, Navy and EPA shall meet to discuss and agree upon the scope of Navy’s proposed Standard Operating Procedures for System Operators (“Operator SOPs”). Navy’s proposed Operator SOPs shall include step-by-step procedures that describe how operators carry out daily, weekly, monthly, annual, or other regular and non-regular tasks, in accordance with the list of minimum requirements provided by EPA in Appendix C of this SOW. Procedures shall include process flow schematics identifying critical sources, treatment storage tanks, booster pump stations, valves, monitoring locations, daily inspections (including a checklist), start-up and shutdown procedures, chemical addition and handling, troubleshooting procedures, safety procedures, emergency response procedures (including water system staff and first responder contact numbers (updated annually on October 1<sup>st</sup>) and associated notification protocols), and operator daily log requirements.

#### **6.5.1.2 SUBMITTAL OF OPERATOR SOPs**

Within three-hundred-and-sixty (360) days after the Effective Date, Navy shall submit its Operator SOPs to EPA for approval. The Operator SOPs shall reflect the agreed-upon scope from the scoping meeting described in Section 6.5.1.1 (Scoping Meeting), above.

### **6.5.2 ASSET MANAGEMENT PROGRAM**

Within one-hundred-and-twenty (120) days after the Effective Date, Navy shall submit to EPA for review the five components, described in Subsections 6.5.2.1 through 6.5.2.5 below, of Navy’s Asset Management Program as it exists. (For more details on the five core components of an Asset Management Plan, see the EPA Guidance Document located at: <https://nepis.epa.gov/Exe/ZyPdf.cgi?Dockey=P1000LP0.txt>. Additional detailed guidance, developed by the Southwest Environmental Finance Center as part of a partnership with EPA, is available at the Southwest Environmental Finance Center Asset Management Switchboard at: <https://swefcamswitchboard.unm.edu/am/>.) Within sixty (60) days after Navy’s submittal of the Asset Management Program, Navy and EPA shall meet to discuss whether the Program ensures the long-term and effective operation of the JBPHH System.

## **6.5.2.1 CURRENT STATE OF ASSETS (ASSET INVENTORY AND CONDITION ASSESSMENT)**

### **6.5.2.1.1 ASSET INVENTORY**

Navy shall identify its Asset Inventory to EPA and provide a summary of the information it contains.

### **6.5.2.1.2 CONDITION ASSESSMENT (EVALUATING AND ASSESSING RISK OF ASSETS)**

Navy shall provide a description of the JBPHH System Condition Assessment Program performed under Navy's Utility Infrastructure Condition Assessment Program, which may include the following: (a) a condition assessment and rating system and evaluation of the condition of assets, including remaining useful life, asset values, and replacement costs; and (b) identification of risk-mitigation options, including incorporation into a capital improvement plan ("CIP") for infrastructure needs.

### **6.5.2.2 PROVIDE REQUIRED SUSTAINABLE LEVELS OF SERVICE ("LOS")**

Navy shall provide any existing LOSs to understand which assets are needed to provide the LOSs identified to customers ensuring adequate system capacity for all service areas. Quality, quantity, reliability, and environmental standards are typical elements that can define LOSs and associated system performance goals.

### **6.5.2.3 IDENTIFY AND PRIORITIZE CRITICAL ASSETS**

Navy shall provide information as to how it defines those parameters necessary to determine those assets which are critical to the JBPHH System's sustainable operations and ability to meet required LOS. Critical assets are those determined to have a higher risk of failure (i.e., probability of failure); and/or major consequences (i.e., greater impact on LOS) if failure were to occur.

### **6.5.2.4 LIFE CYCLE COST ANALYSIS**

Navy shall identify whether it has a life-cycle cost analysis, and, if so, describe its methodologies used to balance and determine the best mix of the costs of operation and maintenance (which includes routine maintenance, repair, and rehabilitation) and costs of capital replacement, for all assets determined to be critical to maintain LOS.

### **6.5.2.5 LONG-TERM FUNDING PLAN**

Navy shall provide information as to how it develops a Long-Term Funding Plan for both its CIP and operation and maintenance costs, to maintain assets. The information should include, if available, a schedule for the long-term implementation of the Asset Management Program, including operations, maintenance, repair, and replacement of assets, to the extent that such information already is part of Navy's Long-Term Funding Plan.

## **6.5.3 HYDRAULIC MODEL**

Within thirty (30) days of the Effective Date, Navy shall submit to EPA for approval the Hydraulic Model it has developed for the JBPHH System. Within thirty (30) days of the Effective Date, Navy shall provide a demonstration of the Hydraulic Model to EPA. Navy shall update the Hydraulic Model as necessary to reflect

modifications to the JBPHH System and submit and present those updates to EPA.

#### **6.5.4 UNIDIRECTIONAL FLUSHING PLAN**

Within one-hundred-and-eighty (180) days after EPA’s approval of the Hydraulic Model, Navy shall submit, for EPA approval, a Unidirectional Flushing (“UDF”) Plan. The UDF Plan shall include:

- A contaminant slug study from each active source or potential location of the contaminant within the distribution system, identifying early valve closure response to contain the spread of contamination;
- A UDF Computer Model Study incorporating the completed Hydraulic Model and a velocity or sheer-stress based flushing target to remove sediments and solids from the line;
- The results of a series of UDF event runs, under the model, for each area or hydraulic flushing zone (established in the *December 2021 Drinking Water Distribution System Recovery Plan*, <https://health.hawaii.gov/about/files/2021/12/Drinking-Water-Distribution-System-Recovery-Plan.pdf>); and
- A computer-model-generated flushing report for each hydraulic zone showing all parameters needed to sequence and perform UDF flushing in sections for each zone.

Any updates, additions or changes to the JBPHH System should be reflected in a revision to the Hydraulic Model in subsection 6.5.3, and flushing report for each area (zone) contingent to any construction.

#### **6.5.5 MAINTENANCE FLUSHING PROGRAM**

##### **6.5.5.1 INTERIM FLUSHING**

Within thirty (30) days after the Effective Date, and until approval of the Maintenance Flushing Program required under this subsection, Navy shall continue to perform any ongoing interim flushing of Navy-owned and/or -operated distribution lines to ensure safe drinking water is served to its consumers.

##### **6.5.5.2 DEVELOPMENT OF MAINTENANCE FLUSHING PROGRAM**

Within two-hundred-and-seventy (270) days after EPA’s approval of the Hydraulic Model, Navy shall submit to EPA for approval a Maintenance Flushing Program, designed to improve water quality served to customers. The Maintenance Flushing Program shall be developed in accordance with American Water Works Association (“AWWA”) Standard G200-15 Distribution Systems Operation and Management, subsection 4.1.8 System Flushing, effective May 1, 2015 (available at AWWA’s website at: <https://www.awwa.org/Portals/0/Awwa/Publishing/Standards/G200-15LookInside.pdf?ver=2020-03-09-114002-377>). UDF shall be incorporated wherever possible, particularly, among other circumstances, where the Hydraulic Model required under 6.5.3 indicates it is necessary. The entire system, including dead-ends and blow-off locations, shall be flushed at least annually, with the possible need for more frequent flushing based on the reoccurrence of the following: air and sediment in the lines; issues with maintaining free chlorine residual; and issues (customer complaints) with taste, odor or color. Records of all Maintenance Flushing Program flushing events shall include the following: date, time, locations, persons responsible, duration of flushing, notations of any taste, odor, color or other unexpected conditions, chlorine residual before and after flushing, and the amount of water used for flushing. Additionally, public notification shall be made to advise the consumers when and where maintenance flushing, fire flow testing, or emergency flushing

is taking place.

### **6.5.5.3 IMPLEMENTATION OF A MAINTENANCE FLUSHING PROGRAM**

Within thirty (30) days after EPA's approval of the Maintenance Flushing Program, Navy shall implement the Maintenance Flushing Program.

### **6.5.6 VALVE EXERCISING AND REPLACEMENT PROGRAM**

#### **6.5.6.1 VALVE INVENTORY UPDATE**

Within one-hundred-and-twenty (120) days after the Effective Date, Navy shall update its valve inventory.

#### **6.5.6.2 VALVE EXERCISING AND REPLACEMENT PROGRAM**

##### **6.5.6.2.1. VALVE EXERCISING**

Within one-hundred-and-twenty (120) days after updating its valve inventory required under Section 6.5.6.1 above, Navy shall submit to EPA for approval a Valve Exercising Program. All valves four inches or greater in size in the JBPHH System shall be exercised annually in accordance with AWWA Standard G200-15 Distribution Systems Operation and Management, effective May 1, 2015 (available at AWWA's website at: <https://www.awwa.org/Portals/0/Awwa/Publishing/Standards/G200-15LookInside.pdf?ver=2020-03-09-114002-377>).

Records of each valve exercise shall include the following: valve size and type, function, manufacturer, type of access, normal position (open or closed), valve opening direction (right or left), a count of the full turns required to isolate the valve, date of installation (if known), and valve maintenance/repair/replacement events.

Navy shall update its valve exercising records on an annual basis and an electronic PDF summary of the record shall be made available for inspection during EPA inspections or sanitary surveys.

##### **6.5.6.2.2 VALVE REPLACEMENT**

In addition to valve replacement performed during implementation of Navy's Asset Management Program, valves identified for replacement during regular implementation of the Valve Exercise Program shall be replaced within a reasonable amount of time, but no later than sixty (60) days after identification for replacement unless EPA and Navy agree an additional amount of time is necessary.

### **6.5.7 CROSS-CONNECTION CONTROL PROGRAM**

Within one-hundred-and-twenty (120) days after the cross-connection survey required under Section 6.2 (Drinking Water Long-Term Monitoring Plan) of this SOW, Navy shall submit to EPA its System's Cross-Connection and Backflow Control Program, which shall conform with the requirements in the *NAVFAC Business Process Management System B-24.10 Cross-Connection Control and Backflow Prevention*. Within thirty (30) days of this submittal, Navy shall commence implementation of the Program.

Navy shall submit to EPA any updates to its Cross-Connection and Backflow Control Program.



### **6.5.8 CAPITAL IMPROVEMENT PLAN (“CIP”) FOR PUBLIC WATER SYSTEM(S)**

Within one-hundred-and-twenty (120) days after the Effective Date, Navy shall submit its current or projected CIP for JBPHH System projects to maintain compliance with the SDWA, and shall address the need for, among other things, asset improvements, infrastructure repairs, and infrastructure replacements.

Within thirty (30) days after the submittal of the CIP, Navy shall submit to EPA the list of specific projects related to the JBPHH System which have been officially submitted for Military Construction and/or other funding, subject to restrictions on the release, outside the Department of Defense, of budgetary information.

### **6.5.9 CHEMICAL USE, STORAGE, AND HANDLING**

Within thirty (30) days after the Effective Date, Navy shall provide photo documentation to EPA to demonstrate that it has properly stored all chemicals used in the water treatment process. Chemical use, storage and handling shall conform to the manufacturer’s instruction and an inventory of chemicals used for treatment and reagents used for water quality testing shall be developed to avoid expiration or loss of potency.

### **6.6 PUBLIC NOTICE REQUIREMENTS**

Within ten (10) days after the Effective Date, Navy shall submit to EPA a copy of the June 30, 2022 Public Notice with the certification and information required by 40 C.F.R. § 141.31(d).

### **6.7 DESIGNATED CERTIFIED OPERATORS**

#### **6.7.1 CERTIFIED OPERATORS**

Within ten (10) days after the Effective Date, Navy shall submit to EPA a list of all JBPHH System operators certified at the appropriate level to ensure that the JBPHH System has designated a sufficient number of certified operators at all levels as well as an Operator(s) in Responsible Charge (“ORCs”) certified at the classification of the distribution system as defined in HAR § 11-25-2.50(a)(1).

#### **6.7.2 OPERATOR LOGS/SCHEDULES**

Navy shall maintain a work schedule showing who the ORC is for every available shift on-site, i.e., twenty-four (24) hours per day, seven (7) days a week, available to all operators and EPA inspectors, as well as operator logs that show when the distribution system ORCs are responsive to the on-site operator(s) of the JBPHH System.

#### **6.7.3 OPERATOR ACCESS**

Navy shall ensure that all operators have access to all JBPHH System assets twenty-four (24) hours per day and seven (7) days per week, e.g., water tanks, that are operated and maintained by Navy.

### **6.8 RISK AND RESILIENCE ASSESSMENT**

Within forty-five (45) days after the Effective Date, Navy shall submit a certification to EPA that Navy has

revised its previously certified Risk and Resilience Assessment to include all required elements in 42 U.S.C. § 300i-2(a)(1)(A). The Revised Risk and Resilience Assessment shall include the assessment of: (i) risk to the JBPHH System from malevolent acts and natural hazards, (ii) resilience of the system, including pipes, water treatment and storage facilities, automated systems, and security, (iii) monitoring practices of the system, (iv) the financial infrastructure of the system, (v) use, storage, or handling of chemicals, and (vi) the operations and maintenance of the system. Incomplete portions of the previously certified Risk and Resilience Assessment, which were identified by EPA in its May 27, 2022, inspection report, shall be included. EPA does not wish for Navy to submit the Revised Risk and Resilience Assessment to EPA. EPA's May 27, 2022 SDWA Inspection Report is available on EPA's website at: <https://www.epa.gov/red-hill/drinking-water-incident-response-joint-base-pearl-harbor-hickam-honolulu-hawaii-november>. Navy shall, however, provide access to EPA-credentialed inspectors on site to review the contents of the revised Risk and Resilience Assessment.

## **6.9 EMERGENCY RESPONSE PLAN**

Within sixty (60) days after the Effective Date, Navy shall submit a certification to EPA that Navy has revised the previously certified Emergency Response Plan to include all required elements in 42 U.S.C. § 300i-2(b), including those identified by EPA in its May 27, 2022, inspection report. EPA does not wish for Navy to submit the Emergency Response Plan to EPA. Navy, however, shall provide access to EPA-credentialed inspectors on-site to review the contents of the revised Emergency Response Plan. Any findings in the Risk and Resilience Assessment should inform the revised Emergency Response Plan and be appropriately addressed.

## **6.10 RECORDS**

Navy shall separate and organize all Navy-operated public water system records, Roving Operator Daily Logs, Supervisory Control and Data Acquisition ("SCADA") system operator logs, and other applicable records, by public water system identification number.

## **6.11 COMPLAINT INVESTIGATION PROCEDURES**

Upon receipt of a complaint from the Navy call center or the DOH complaint line, Navy shall: (a) respond to the complaint within three (3) days and initiate appropriate actions (e.g., flushing, testing, or other action); (b) post a written monthly investigation report of the previous month's complaint(s) to the [jbphh-safewaters.org](http://jbphh-safewaters.org) website (after removal of all personal identifying information and associated health information) within five (5) days after the end of the month; (c) provide the direct URL for the report (subject to privacy concerns); and (d) provide Environmental Data Management System access to EPA of the full report with response actions. Navy shall provide Complaint Investigation Program Procedures to EPA that include the previously listed requirements.

## **6.12 PLAN FOR ESTABLISHMENT OF A SURVEILLANCE AND RESPONSE SYSTEM**

Unless otherwise agreed to between Navy and DOH pursuant to the DW LTMP, within ninety (90) days of the Effective Date, Navy shall submit for EPA's approval a proposal for the establishment of a surveillance and response system to address potential future fuel contamination that follows the guidance for developing such a proposal in EPA's *Online Source Water Quality Monitoring*, which may be found at EPA's Online

Water Quality Monitoring Resources webpage at: [https://www.epa.gov/sites/default/files/2016-09/documents/online\\_source\\_water\\_monitoring\\_guidance.pdf](https://www.epa.gov/sites/default/files/2016-09/documents/online_source_water_monitoring_guidance.pdf).

**6.13 CERTIFICATION OF COMPLETION**

After Navy has completed all of the requirements of Section 6 of this SOW, Navy shall submit a Final Drinking Water SOW Report to EPA for approval, documenting that all such requirements have been met.

If EPA concludes that the drinking water requirements in this Section have not been met, EPA shall so notify Navy. EPA’s notice will include a description of any deficiencies and either a schedule for addressing such deficiencies or a requirement that Navy submit a schedule for approval to EPA. Navy shall perform all activities described in the notice in accordance with the approved schedule.

If EPA concludes that the drinking water protection requirements of this Section 6 have been met, and EPA has issued a certification of Phase 1 Closure, then EPA shall certify to Navy completion of the drinking water protection requirements. Navy may seek earlier certification of completion of the drinking water protection requirements; however, no such request shall be made prior to one (1) year after the Facility Subject to Closure is completely Defueled and cleaned in accordance with Navy’s approved Closure Plan.

**6.14 APPENDICES**

Appendix A – Drinking Water Long-Term Monitoring Plan, Joint Base Pearl Harbor-Hickam Public Water System #HI0000360 and Aliamanu Military Reservation PWS #HI0000337, O’ahu, Hawai‘i (June 2022).

Appendix B – Course of Action (COA) 5 – Tank Cleaning & Sampling Plan of Action and Milestones.

Appendix C – Operations and Maintenance of the Public Water System, Minimum Requirements for Public Water System Operation & Maintenance.

**7.0 SCHEDULE OF SUBMITTALS AND DELIVERABLES**

Unless otherwise provided in this SOW, all submissions to EPA shall be in writing. Deliverables are subject to Section 7 (EPA’s Approval of Deliverables) of the 2023 Consent Order.

<b>Subject</b>	<b>Submittal or Deliverable</b>	<b>Due Date</b>
<b>Section 2 Project Management</b>	Sampling and Analysis Plan (Section 2.5)	At least 60 days before any planned environmental sampling
	Progress reports (Section 2.6)	15th day of every month
<b>Section 3 Facility Maintenance and Release Detection</b>	Results of semi-annual tank tightness testing (Section 3.2.1)	45 days after completion of the semi-annual testing
	Tank Tightness Evaluation and Proposal (Section 3.2.1)	21 days after test results, if the results indicate a release may have occurred

	Results of soil vapor monitoring (Section 3.2.2)	7 days after sample collection which occurs every week
	FOR Tank Tightness Testing Plan (Section 3.2.4)	At least 90 days prior to initiating Defueling and no later than May 31, 2023
	FOR Tank Tightness Analysis of the Cause of Concern and a Proposal to Address the Concern (Section 3.2.4)	21 days after receiving results indicating leakage per the HAR
<b>Section 4 Facility Defueling</b>	Updated Defueling Plan/Supplement 2 (Section 4.1)	No later than May 31, 2023. Should it be determined that an additional supplement to the Defueling Plan is necessary, JTF-RH, on behalf of Navy and DLA as parties to the 2023 Consent Order, will submit the supplement within 60 days, concurrent with its submission to DOH.
	Revised Third-Party QA Plan for Evaluating Repairs for Defueling (Section 4.2)	Existing plan submitted to EPA on November 1, 2022. If EPA determines that a revised plan is necessary, JTF-RH, on behalf of Navy and DLA as parties to the 2023 Consent Order, are to submit that plan for EPA's approval within 60 days of EPA's request.
	Defueling Preparedness Report (Section 4.3)	Submission to EPA in accordance with the schedule in the EPA-approved Defueling Plan/Supplement 2.
	Final Defueling Report (Section 4.5)	Within 60 days of the Defueling Completion Inspection
<b>Section 5 Facility Closure</b>	Revised Closure Plan (Section 5.1)	Within 60 days of EPA's request
	Interim Phase 1 Closure Report(s) (Section 5.2.1)	Within 30 days after one or more of the 20 USTs, pipelines or surge tanks complete Phase 1 Closure
	Final Phase 1 Closure Report (Section 5.2.4)	Within 180 days of final Phase 1 Closure Inspection
	Phase 2 Closure Report (Section 5.3)	Within 180 days of Phase 2 Closure

<b>Section 6 Drinking Water Protection</b>	Source Water Protection Plan Phase I (Red Hill Shaft) (Section 6.1.1)	No later than 60 days prior to initiating Defueling
	Source Water Protection Plans Phase II – Submit Phase II SWPP to EPA for approval (Section 6.1.2.3)	Within 30 Days After Navy Accepts Navy Contractor’s Work Product
	Complete Tank Inspection and Cleaning (Section 6.2)	December 31, 2023 for cleaning of Camp Smith finished water tanks S325, S326, and S327 and Red Hill finished water tanks 316 and 685.
	Cross Connection Control Survey (Section 6.2)	30 days from Effective Date
	Closed Inactive Underwater Distribution Lines – Notice of Status of Intent to repair, replace or abandon the Broken Line (Section 6.2)	30 days from Effective Date
	Sampling of Finished Water Tanks (Section 6.3.1)	Provide analytical results of sampling within 7 calendar days after tanks are cleaned
	Access to Analytical Results (Section 6.4)	Post analytical results of sampling conducted pursuant to SOW Section 6 in Environmental Data Management System within 7 days of receipt from laboratory
	Operations and Maintenance – Submission of Operator SOPs (Section 6.5.1.2)	360 days from Effective Date
	Operations and Maintenance – Asset Management Program Review Submission (Section 6.5.2)	120 days from Effective Date
	Operations and Maintenance – Hydraulic Model Submission and Demonstration (Section 6.5.3)	30 days from Effective Date
	Operations and Maintenance – Submission of Unidirectional Flushing Plan (Section 6.5.4)	180 days of approval of Hydraulic Model
	Operations and Maintenance – Interim Flushing (Section 6.5.5.1)	30 days from Effective Date until approval of Maintenance Flushing Program
	Operations and Maintenance – Submission of Maintenance Flushing Program (Section 6.5.5.2)	270 days of approval of Hydraulic Model

Operations and Maintenance Implement Maintenance Flushing Program Plan (Section 6.5.5.3)	30 days after approval of Maintenance Flushing Program
Operations and Maintenance – Update Valve Inventory (Section 6.5.6.1)	120 days from Effective Date
Operations and Maintenance – Valve Exercising Program Submission (Section 6.5.6.2.1)	120 days after Valve Inventory Update
Operations and Maintenance – Valve Replacement (Section 6.5.6.2.2)	60 days after identified during Valve Exercise Program
Operations and Maintenance – Cross Connection Control Program Update (Section 6.5.7)	120 days after Cross-Connection Survey
Operations and Maintenance – Capital Improvement Plan (Section 6.5.8) – Submittal of Capital Improvement Plan	120 days from Effective Date
Operations and Maintenance – Capital Improvement Plan (Section 6.5.8) – Submittal of List of Specific Projects	30 days after Submittal of Capital Improvement Plan
Operations and Maintenance – Chemical Use, Storage, and Handling (Section 6.5.9)	30 days from Effective Date
Submission of Certified Public Notice (Section 6.6)	10 days from Effective Date
Designation of Operator – All System operators (Section 6.7.1)	10 days from Effective Date
Revise Previously Submitted Risk and Resilience Assessment and Certify to EPA (Section 6.8)	45 days from Effective Date
Revise Previously Submitted Emergency Response Plan and Certify to EPA (Section 6.9)	60 days from Effective Date
Complaint Investigation Procedures (Section 6.11)	Respond to Complaints within 3 days
Surveillance and Response System - Submit Plan (Section 6.12)	Later of 90 days from Effective Date or per LTMP deadline

## 8.0 ACRONYMS AND ABBREVIATIONS

DCCOAMR	Aliamanu Military Reservation
API	American Petroleum Institute
AWWA	American Water Works Association
BAPT	Best Available Practicable Technology
2023 Consent Order	Defueling, Closure, and Drinking Water Consent Order
DLA	Defense Logistics Agency
DW LTMP	Drinking Water Long-Term Monitoring Plan
DOH	State of Hawai'i, Department of Health
EDMS	Environmental Data Management System
EPA	United States Environmental Protection Agency
JBPHH	Joint Base Pearl Harbor-Hickam
NAVFAC	Naval Facilities Engineering Systems Command
Navy	United States Department of the Navy
PWS	Public Water System
QA/QC	Quality Assurance and Quality Control
RAR	Removal Action Report
SDWA	Safe Drinking Water Act
SDWB	Safe Drinking Water Branch, Hawai'i Department of Health
SHWB	Solid and Hazardous Waste Branch, Hawai'i Department of Health
SOW	Statement of Work
TPH	Total Petroleum Hydrocarbons
USTs	Underground Storage Tanks