Enclosure (1) - Conditional Approval of the Site Characterization Plan Addendum CHT overflow

1) (Section 2.3b) Cleaning Products- The RAs appreciate that the Navy acknowledged the potential for bathroom cleaners to be in the materials released from the CHT tank. Ensure the analyte list for each media is comprehensive enough to detect residual chemicals from these cleaners, or any cleaners historically used during the life cycle of the Facility, if those chemicals may have been released from the CHT tank.

NCTF – RH Response –

The Navy has used Simple Green in the past, but the exact product information related to historic cleaning products throughout the Facility's life is unknown. As such, the Navy evaluated three cleaning agents (Simple Green All Purpose Cleaner, Simple Green Bathroom Cleaner, and Alconox) to identify which compounds have the potential:

- To be risk drivers and require quantitation for primary risk;
- To impact fate and transport of petroleum related compounds; as well as
- For analytical methods that would meet data quality objectives for these compounds.

In general, these chemicals have been evaluated by the EPA under their "Safer Chemical Ingredients List"

https://www.epa.gov/saferchoice/safer-ingredients#:~:text=Green%20circle%20%2D%20The%20chemical%20has,in%20the%20chemical's%20safer%20status.

18 ingredients listed on the cleaning agent Safety Data Sheets were compared to the EPA "Safer Chemical Ingredients List":

- Seven were listed as proprietary ingredients. These have likely been reviewed and determined safe but proprietary by the reviewing agencies
- Four were given a Green Circle classification as "The chemical has been verified to be of low concern based on experimental and modeled data."
- Six were given a Yellow Triangle - The chemical has met Safer Choice Criteria for its functional ingredient-class but has some hazard profile issues. Specifically, a chemical with this code is not associated with a low level of hazard concern for all human health and environmental endpoints.
- One chemical, (Anethole, 104-46-1), was not listed, and may have acute or chronic toxicity.

These chemicals have been used for their functional purpose and are not expected to be risk drivers for the CHT Tank overflow site characterization. In addition, the Navy has determined that there are not standardized SW846 methods for determining concentrations of these constituents in soil environmental matrix that is the main medium to be sampled to characterize the CHT Tank Overflow area of concern, or in wastewater or sludge. In addition, there are no well-defined screening levels, such as DOH EALs or EPA RSLs that can be used to assess their

threat to human health and the environment. For these reasons, Navy has not identified a necessity or robust capability to test for known and unknown chemicals related to cleaning agents at the CHT Tank Overflow area.

The work plan has been revised to include a summary of this evaluation in Section 2.3.

2) (Section 5.2.1(a)) Per- and polyfluoroalkyl substances (PFAS)-The RAs agree that CHT work can begin while upper management discuss PFAS. While discussions are underway, collect and have the Navy lab hold extra media from each matrix. Collect and hold sufficient aliquot volume for future PFAS analysis via EPA Method 1633.

NCTF -RH Response –

The CHT Tank Overflow Characterization is being conducted in accordance with the federal Resource Conservation and Recovery Act (RCRA) and the State of Hawai‘i Department of Health (DOH) Technical Guidance Manual for the Implementation of the Hawaii State Contingency Plan (DOH 2023) in order to address the JP-5 petroleum release in November 2021. The November 2021 release, in conjunction with subsequent rain events in early January 2022, caused the CHT Tank to overflow. This characterization is not being conducted under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as it falls within CERCLA's petroleum exclusion.

At active military installations, Base Realignment and Closure (BRAC) locations, and National Guard facilities where there are known or suspected DoD PFAS releases, the Department of Defense (DoD) conducts PFAS investigations and takes action under the federal cleanup law, CERCLA. Following CERCLA, DoD plans and investigates releases, and determines the appropriate cleanup actions based on risk. These investigations include assessing potential off-installation migration and potential impacts of these releases. At Red Hill, the Navy is currently in the planning stages of a CERCLA remedial investigation to evaluate known or suspected PFAS releases at the Red Hill Bulk Fuel Storage Facility. Potential PFAS impacts will be investigated under the CERCLA remedial investigation. Please refer to the DoD's website for more information on DoD's PFAS investigation and remediation policies for PFAS: https://www.acq.osd.mil/eie/eer/ecc/pfas/index.html

Similar to PFAS sample collection for the Aqueous Fire Fighting Foam retention line under JTF – Red Hill, samples have been collected and held for PFAS analysis. However, based on the CERCLA designation and DoD requirements for PFAS investigations (as stated above), the samples will not be analyzed as part of the CHT Tank site characterization. If the Regulatory Agencies would like to analyze the held samples for PFAS, the Navy respectfully requests that information regarding transportation to their selected laboratory is provided.

The work plan has been revised to include the collection of samples for PFAS analysis, but not conducting the laboratory analysis. The samples will be held at the laboratory, pending direction from the Regulatory Agencies. Revisions to the Work Plan related to PFAS are in Section 5.1.1 and Section 5.1.4.

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