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PROTECTION AGENCY
REGION IX
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DEPARTMENT OF HEALTH
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DEC 08 2016

Captain Richard D. Hayes III
Regional Engineer, Navy Region Hawaii
Naval Facilities Hawaii
400 Marshall Road
Joint Base Pearl Harbor Hickam, Hawaii 96860

**Re: Conditional Approval of Red Hill AOC SOW Deliverable- 3.2 Tank Upgrade
Alternatives Scope of Work**

Dear Captain Hayes:

The U.S. Environmental Protection Agency ("EPA") and Hawaii Department of Health ("DOH"), collectively the "Regulatory Agencies", have reviewed the *Tank Upgrade Alternatives Scope of Work Outline Final Submission* ("Scope of Work") submitted by U.S. Navy ("Navy") and Defense Logistics Agency ("DLA") on September 8, 2016. The Scope of Work generally satisfies the requirements of Section 3.2 in the Red Hill Administrative Order on Consent ("AOC"), Attachment A- Statement of Work ("SOW"). The AOC requires the tank upgrade alternatives ("TUA") report to identify and evaluate the various alternatives that can be applied to Tanks at the Red Hill facility. Six specific alternatives described in Scope of Work will undergo a comprehensive evaluation.

The purpose of the TUA report is to present information collected and organized for various tank upgrade alternatives proposed for implementation to the large bulk fuel underground storage tanks at the Red Hill facility. An initial screening of available tank upgrade alternatives was performed during the scoping process to determine six specific options for focused study in the TUA report. The report will also document the broad range of TUA for stakeholders who were not involved in the scoping process described in Section 3.1 of the AOC SOW.

Although the TUA report will present data regarding various upgrade alternatives, it will not describe the process for utilizing this information to make the TUA decision described in Section 3.5 of the AOC SOW. In order to prepare for a successful decision meeting and decision process, the Regulatory Agencies have determined that additional activities related to section 3 of the AOC SOW are needed. Therefore, the Regulatory Agencies are approving the Scope of Work under specified conditions pursuant to 7(b)(b) of the AOC.

As conditions of approval for this Scope of Work, the Regulatory Agencies require at least two interim progress updates be provided to the Regulatory Agencies prior to completion of the TUA

report under section 3.3 of AOC SOW. Additionally, as a further condition, the Regulatory Agencies require the Navy and DLA to develop a decision process for selecting the best available practicable technology (BAPT). The development of the decision process shall include a presentation on the incorporation of work from other sections of the AOC SOW and a supplemental document describing the decision process that will be utilized in the selection of BAPT. Further details on the conditions of this approval are provided below.

Interim TUA Report Progress Updates

In scoping meetings and conference calls to discuss the development of the Scope of Work, EPA, DOH, Navy and DLA collectively agreed that interim updates and presentations would help to ensure that the TUA report reflects the expectation of all AOC parties and appropriately prepares the parties for TUA decision meetings. In discussions with Navy and DLA personnel, two interim progress meetings were proposed. At this time, the Regulatory Agencies require these two meetings as a condition of the Scope of Work approval.

The initial progress update meeting should occur no later than six months from the date of this approval letter. External subject matter experts shall be invited to participate in this update. During this update, Navy and DLA will provide a presentation on the progress of the TUA report being prepared by Enterprise Engineering, Inc. ("EEI"). For the six alternatives considered for BAPT (options 1A, 1B, 1D, 2A, 2B and 3A) the presentation should, at a minimum, clarify the following:

- 1) the level of detail to be included in the TUA report;
- 2) the primary sources of uncertainty;
- 3) the underlying assumptions made during evaluation; and
- 4) any data sources consulted

The second progress update should occur no later than ten months after the date of this approval letter. During this meeting Navy and DLA should inform the Regulatory Agencies and external subject matter experts on the progress of the TUA report being prepared by EEI. External subject matter experts shall be invited to participate in this progress update as well.

TUA Decision Process

The Scope of Work describes the detailed information and attributes that will be collected for the six viable TUA agreed upon during scoping. However, the Scope of Work does not describe the process for comparing and contrasting alternatives that will be utilized to recommend a BAPT. Section 3 of the AOC SOW describes an initial list of factors for the selection and approval of BAPT.

As discussed with Navy and DLA personnel during TUA meetings as well as meetings to discuss other sections of the AOC SOW, information collected and analyses performed for other AOC SOW tasks will likely influence the selection of the optimal TUA. For example, work being conducted to quantify risk and vulnerability as part of Section 8 of the AOC SOW will generate key information to improve TUA decisions, such as the likelihood of initiating events that could cause a release into the environment or a potential tank vessel failure. Therefore, Navy and DLA should provide additional detail on how information from other AOC SOW sections, particularly section 8 and possibly section 5, will be used to inform selection of the BAPT, and/ or the TUA report.

Per prior discussions between the Regulatory Agencies and the Navy, the Navy identified the need for further developing the decision process in parallel with the work being done by their contractors to flesh out the attributes of the six tank upgrade alternatives. As a condition of approval of this Scope of Work, the Regulatory Agencies require the Navy and DLA to submit a decision process document and provide a presentation explaining the TUA decision process. The decision process document shall be submitted to the Regulatory Agencies for review no later than nine months from the date of this letter. The presentation shall be provided to the Regulatory Agencies no later than ten months from the date of this letter and external subject matter experts shall be invited to participate. The presentation should describe how work from other sections of the AOC SOW will be incorporated into the selection of BAPT and provide an overview of the Navy and DLA's process to propose a BAPT.

The decision process document should include the criteria that Navy and DLA plan to use when proposing a BAPT. The document should also include a description of how Navy and DLA expect to utilize the various criteria to arrive at a proposed BAPT. Although the Regulatory Agencies recognize that the issues influencing this decision are unique, one example of decision making criteria and evaluation methods can be found in 40 Code of Federal Regulations 300.430(e)(9).

General comments

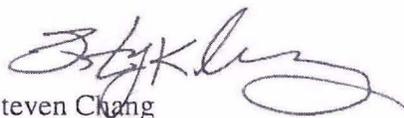
The Regulatory Agencies would like to see sufficient detail in the report regarding successful implementation of tank retrofits at other Navy and/or DLA large fuel storage facilities. Attribute 11 in Table 5-1 of the Scope of Work describes whether a particular tank alternative has "been put into place at other large fuel depots and is successful at preventing leaks." For those alternatives that have already been successfully implemented, excluding option 1A, the TUA Report should describe the significant physical characteristics of the other large fuel depots. For example, Attribute 11 of Table 5-2.2A states that the concept has been used on Tanks 112 and 113 at NAVSUP FLC in Yokosuka, Japan. Section 5.3.4 should contain a description of the physical characteristics, such as dimensions and orientation, of the installation in Japan and any studies or data collected for assessing performance of these tank systems in relation to release prevention.

Per Section 3.3 of the Red Hill AOC SOW, "[w]ithin twelve (12) months from the Regulatory Agencies' approval of the Scope of Work, Navy and DLA shall submit a Tank Upgrade Alternatives Report to the Regulatory Agencies for approval." The Regulatory Agencies look forward to continuing the process of implementing the work outlined in the Red Hill AOC. Please let us know if you have comments or questions.

Sincerely,



Bob Pallarino
Project Coordinator
EPA Region 9 Land Division



Steven Chang
Project Coordinator
DOH Solid and Hazardous Waste Branch

cc:

John Montgomery, Navy
Marc Wong, Navy