



UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY  
REGION IX  
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STATE OF HAWAII  
DEPARTMENT OF HEALTH  
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MAY 16 2017

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 Administrative Order on Consent Statement of Work ("AOC-SOW") Section 8.2 Scope of Work – Risk/Vulnerability Assessment**

Dear Captain Hayes:

The U.S. Environmental Protection Agency ("EPA") and Hawaii Department of Health ("DOH"), collectively the "Regulatory Agencies", have reviewed the *Risk/Vulnerability Assessment Scope of Work* ("Risk Scope") submitted by the U.S. Navy ("Navy") and Defense Logistics Agency ("DLA") and dated April 13, 2017.

The Risk Scope generally satisfies the requirements of section 8.2 of the Red Hill AOC-SOW. The Regulatory Agencies approve the Risk Scope under the following conditions:

- 1. The Navy and DLA will produce a risk and vulnerability assessment that simulates consequences of potential uncontrolled releases, like those described in the results of this Risk Scope, to the groundwater and drinking water aquifers.** The Risk Scope primarily describes how the Quantitative Risk and Vulnerability Assessment ("QRVA") will be developed. However, section 8 of the AOC-SOW states that "the purpose of the deliverables and work to be performed under this Section is to assess the level of risk the Facility may pose to the groundwater and drinking water aquifers..." The groundwater model required in section 7 of the AOC-SOW should be utilized to conduct this simulation. Along with submittal of the QRVA report, the Navy and DLA should provide a plan for how and when the work performed in Section 7 will be used to simulate consequences to groundwater quality and drinking water sources.
- 2. The Navy and DLA shall provide a comparison of risks and benefits between the current Facility and alternative fuel storage facilities.** During our scoping discussions, the Navy and DLA stated that a report exploring alternative fuel storage facilities was going to be developed separately from the QRVA and submitted to the Regulatory Agencies for review within 18 months of approval of the Risk Scope. The Navy should provide a plan and schedule for how this requirement is going to be satisfied.

3. **The Navy and DLA shall offer the Regulatory Agencies similar opportunities, where practicable, to comment on the contractor's technical assumptions, decisions, and recommendations during the development of the QRVA.** The Regulatory Agencies understand that there will be one formal opportunity to comment on the input and data parameters used to develop the QRVA, but during discussions with the Navy and DLA and your contractors, we understand that there will likely be other opportunities for informal feedback.
4. **The Navy and DLA shall make available to the Regulatory Agencies, on an ongoing basis, a description of data provided to the contractor performing the QRVA.** Upon request of the Regulatory Agencies, the Navy and DLA will make available, in accordance with Navy security guidelines, data used to support the development of the QRVA.
5. **The Navy and DLA shall provide clarification in section 2.4.2 of the Risk Scope that the contractor will provide a concise document for review.** The document should describe the interpretation of both site-specific and other sources of raw data. The document should clearly state how input parameters were derived, including references to supporting data, guidance, and assumptions. The Regulatory Agencies recognize that this document may need to be reviewed quickly to limit delay in the implementation schedule. To help facilitate this rapid review, the Regulatory Agencies suggest that the Navy and DLA consider distributing this concise document to the external subject matter experts (USGS, BWS and DLNR) at the same time it is provided to the Regulatory Agencies. At the end of the first week of the two-week review period, the Navy and DLA should host a conference call with their contractor to answer questions. Additionally, the Regulatory Agencies expect the Navy and DLA and its contractor to resolve the Regulatory Agencies comments to our satisfaction.
6. **The Navy and DLA will clarify the status updates shown in Figure 2-1.** The Regulatory Agencies request clarification regarding the format, content, purpose and schedule of the status updates to ensure that these updates will meet our oversight needs.
7. **The Navy and DLA will consider requiring their contractor to produce additional interim deliverables.** The Regulatory Agencies suggest that the Navy and DLA consider utilizing the work underway as part of the QRVA to help inform difficult decisions for other portions of the AOC-SOW. Initial findings of the QRVA that are documented in interim deliverables may help support other AOC-SOW decisions.
8. **The Navy and DLA will modify Figure 2-1 to clarify the QRVA process.** The SME box should clarify that these SMEs include the external SMEs. The feedback loop on the diagram should clearly describe the purpose of this part of the process.

Data collection to support the QRVA will require substantial effort, and the Regulatory Agencies are eager to see the work required under section 8 proceed immediately. The conditions above can be resolved via a response letter.

Per Section 8.3 of the Red Hill AOC-SOW, “[w]ithin eighteen (18) months from the Regulatory Agencies’ approval of the Risk/Vulnerability Assessment Scope of Work, Navy and DLA shall submit a Risk/Vulnerability Assessment 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-SOW. Please let us know if you have any questions or concerns regarding this conditional approval.

Sincerely,



Bob Pallarino  
Project Coordinator  
EPA Region 9 Land Division



*Go* Steven Chang  
Project Coordinator  
DOH Solid and Hazardous Waste Branch

cc: Mark S. Manfredi, Navy (via email)  
John Montgomery, Navy (via email)