

Privileged, Procurement Sensitive, Source Selection Information, See FAR 2.101 and 3.104, 5 U.S.C. 552(b)(3)"

**TITLE: RISK/VULNERABILITY ASSESSMENT
RED HILL BULK FUEL STORAGE FACILITY
JOINT BASE PEARL HARBOR-HICKAM (JBPHH), OAHU, HAWAII**

Ref:

- (a) Administrative Order on Consent for the Red Hill Bulk Fuel Storage Facility, U.S. Environmental Protection Agency, 2015 (<http://www.cnrc.navy.mil/regions/cnrh/om/environmental/red-hill-tank.html>)

1.0 INTENT

The intent of this contract task order (CTO) is to design and develop a quantitative Risk/Vulnerability Assessment (RVA) to address Section 8 of the Statement of Work detailed in the Administrative Order on Consent (AOC) (EPA Docket No. RCRA 7003-R9-2015-01, DOH Docket No. 15-UST-EA-01) for the Red Hill Bulk Fuel Storage Facility (RHFSF). Your proposal shall include a summary of your experience in performing these types of RVAs including projects completed with associated references. Expectation is that tasks associated with this CTO will assist the Government to smoothly and adequately address AOC requirements with minimal or no rework.

All work shall be performed in accordance with applicable State and local laws, regulations, and policies, and AOC for the RHFSF, and State of Hawaii Department of Health (DOH) Underground Storage Tank (UST) requirements.

2.0 LOCATION

The Red Hill Bulk Fuel Storage Facility site is located approximately 2.5 miles northeast of Pearl Harbor. The facility lies along the western edge of the Koolau Range and is situated on a topographic ridge that divides the Halawa Valley and the Moanalua Valley (Figure 1). The site is bordered to the south by the Salt Lake volcanic crater, and occupies approximately 144 acres of land. The surface topography varies from approximately 200 ft to 500 ft above mean sea level (msl).

3.0 BACKGROUND

The facility consists of 20 12.5 million gallon underground storage tanks (USTs) constructed in the early 1940s (Figure 2). Currently three USTs are out of service (T-1, T-5, T-19). The facility currently stores Jet Propulsion fuel no. 5 (JP-5), Jet Propulsion fuel no. 8 (JP-8), and marine diesel (F-76). Historic fuel storage has included diesel oil, Navy Special Fuel Oil (NSFO), Navy distillate (ND), F-76, aviation gas (AVGAS), motor gas (MOGAS), JP-5, and JP-8.

There have been several prior petroleum, oil and lubrication (POL) releases at the site and numerous environmental activities/studies done for various reasons including: pipe and tank testing, release response, tank monitoring, long-term monitoring, and removal actions.

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In January 2014, up to 27,000 gallons of JP-8 was released from T-5 which was being re-filled after having undergone inspections and repair. The Navy plans to eventually bring T-5 back into service.

4.0 SCOPE OF WORK

The project will be performed in phases. The first phase is to design, with collaboration from the Navy and Stakeholders, the specific methodology to perform the RHFSF RVA. Initially, the Contractor will submit a cost proposal for Phase 1 which includes Tasks 1, 2, 3, and 4 listed below. After receiving Navy and Stakeholder concurrence on the methodology, the phase 2 will be to perform and document the RVA, Task 5. The Contractor will submit a proposal for contract modification to include this second phase after completion of the first phase.

The RVA will assess the level of risk the RHFSF may pose to the groundwater and drinking water aquifers to inform the Government in subsequent development of best available practicable technology (BAPT) decisions. At a minimum, the quantitative RVA will be designed to:

- perform an internal system risk/reliability analysis (e.g. equipment failures, fires, human error etc.)
- evaluate the risk of penetration by ongoing corrosion-fatigue and associated potential leak rates
- evaluate the ability to quantify the reliability of leak detections
- evaluate seismic risk (including geotechnical hazards)
- perform formal Failure Modes and Effect Analysis of releases due to weld defects, corrosion, fatigue, equipment failure, fire, and human error etc.
- evaluate of structure, system and component fragilities (condition damage probabilities), and
- calculate annual probability of damage (or release)

4.1. Task 1 - Project Management

- a. The Contractor shall provide project oversight and coordination, provide budget control/tracking/reports, attend meetings to discuss special concerns, provide periodic progress reports, and project completion/close-out efforts. Assume a project duration of five months for Phase 1 and there will be periods of less activity.
- b. The Contractor shall prepare and maintain a detailed project schedule. The project schedule is critical since the AOC has stipulated penalties for missed milestones.
- c. All Contractor personnel (including subcontractors) anticipated to work on this project will be required to sign a Navy non-disclosure agreement prior to handling any project information.

4.2. Task 2 - Meetings

- a. The Contractor shall have weekly progress meetings (telecons) during development of the in-progress Work Plan (assume 12 meetings). The weekly progress meetings discussion will include the scope of the proposed work including scheduling, channels of communication, coordination and points of contact.

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- b. The Contractor shall be responsible for providing meeting support including but not limited to supplying draft meeting agendas and all other relevant and pertinent meeting materials.
- c. The Contractor shall have a multiday (5 day) scoping meeting with Navy and Regulators to present the draft work plan to all parties. The Contractor will supply all material needed to hold the meeting, including all prep work, meeting exhibits, and presentations. The Contractor shall also provide a facilitator for this meeting.
- d. The Contractor shall be responsible for documenting the minutes of all meetings and provide a draft within seven calendar days of the meeting.

4.3. Task 3 – Evaluate Methodology

- a. The Contractor shall review existing information pertaining to the RHFSF.
- b. The Contractor shall perform a site visit to the RHFSF to become familiar them with the facility.
- c. The Contractor shall determine methodology and approach for the quantitative RVA.
- d. The Contractor shall determine the data needed for the methodology and approach and identify data gaps.
- e. The Contractor shall identify how the other AOC sections fit into the methodology and approach and the impact of the other sections and data gaps on the schedule.

4.4. Task 4 - Prepare Work Plan on RVA Methodology

- a. The Contractor shall prepare an internal Navy in-progress Work Plan on the RVA methodology for review. The in-progress Work Plan version will contain sufficient level of detail to adequately describe the quantitative RVA data collection efforts, types of analysis to be performed, data evolution steps, and final reporting/deliverable requirements. (Assume 2 rounds of review).
- b. The Contractor shall prepare a draft Work Plan on the RVA methodology for review that incorporates the comments received on the in-progress Work Plan. (Assume 2 rounds of review).
- c. The Contractor shall prepare a final Work Plan on the RVA methodology that incorporates the comments received from the Navy and Stakeholders on the draft Work Plan.

4.5. Task 5 – Perform RVA and Prepare Report

- a. After obtaining Navy and Stakeholder concurrence on the Final Work Plan, the Contractor shall perform and document the RVA.
- b. An internal Navy in-progress draft RVA report shall be submitted to the Navy 12 months after being given the notice to proceed on the Phase 2 of the project.

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- c. The Contractor shall prepare a draft RVA report for review that incorporates the comments received on the in-progress draft RVA report. (Assume 2 rounds of review).
- d. The Contractor shall prepare a final RVA report for review that incorporates the comments received on the draft RVA report. (Assume 2 rounds of review).

5.0 DELIVERABLES

The Contractor shall submit the following deliverables:

<u>Deliverable</u>	<u>Copies</u>	<u>Submittal Date (calendar days)</u>
a. In-Progress Work Plan (Navy only)	electronic	60 days after Notice to Proceed (NTP) on Phase 1
b. Draft Work Plan	electronic	15 days after receipt of comments
c. Final Work Plan	electronic	30 days after receipt of comments
d. Weekly Progress Meeting Minutes (draft and final) (12x)	electronic	7 days after the completion of meeting
e. Regulator/Stakeholder Mtg Minutes (draft and final)	electronic	7 days after the completion of meeting
f. In-Progress RVA Report (Navy only)	electronic	12 months after Notice to Proceed (NTP) on Phase 2
g. Draft RVA Report	electronic	30 days after receipt of comments
h. Final RVA Report	electronic	30 days after receipt of comments

6.0 TECHNICAL POINT OF CONTACT (POC)

"Privileged, Personally Identifying Information, 5 USC 552a, 5 U.S.C. 552(b)(6).

The Project Manager (PM) and technical point-of-contact for this CTO is [REDACTED] of the Environmental Compliance Branch, Naval Facilities Engineering Command Pacific, telephone-[REDACTED]. The alternative PM and technical point-of-contact is [REDACTED] of the Environmental Restoration Branch, NAVFAC Pacific, telephone-[REDACTED]. The contractor will designate an individual who is directly responsible for, and is the contact in all technical matters pertaining to this CTO. Arrange for technical contacts and conferences through the PM. Keep the PM informed of progress and problems encountered.