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APR 5 2016

James A. K. Miyamoto, P.E.
Deputy Operations Officer
Naval Facilities Engineering Command, Hawaii
400 Marshall Road
Joint Base Pearl Harbor Hickam, Hawaii 96860

Re: Report Expectations and Completion of Scoping under Section 2.1 of the Red Hill Bulk Fuel Storage Facility ("Red Hill") Administrative Order on Consent ("AOC"), Statement of Work ("SOW")

Dear Mr. Miyamoto:

The U.S. Environmental Protection Agency ("EPA") and the State of Hawaii Department of Health ("DOH") submit this letter to the U.S. Department of the Navy ("Navy") and Defense Logistics Agency ("DLA") to clarify our expectations for the Tank Inspection, Repair and Maintenance ("TIRM") Report required under Section 2.2 of the Red Hill AOC SOW. Scoping meetings under Section 2.1 of the Red Hill AOC SOW to develop the content of the TIRM Report began on October 27, 2015. DOH and EPA, collectively referred to as the "Regulatory Agencies", believe that formal scoping of this task is nearly complete. We would like to schedule a conference call by April 19, 2016 to discuss the completion of formal scoping under Section 2.1.

The TIRM report must present sufficient data, information, and analysis regarding existing and recent TIRM procedures to enable the Regulatory Agencies to conduct an independent evaluation of the issues experienced during the TIRM work on Tank 5. In addition, it must enable the Regulatory Agencies to adequately evaluate proposed TIRM improvements. Further, we believe the report will have a significant influence on the risk and vulnerability assessment efforts pursuant to Section 8 and the Tank Upgrade Alternatives pursuant to Section 3 of the Red Hill AOC SOW.

On January 29, 2016 Navy and DLA submitted a preliminary outline of the TIRM Report to the Regulatory Agencies for initial review in response to prior scoping meetings. The Regulatory Agencies have reviewed this outline and are providing detailed comments and suggestions in the attachment to this letter. The January 29th submittal was more than an outline and included text for sections of the document. The Regulatory Agencies had difficulty distinguishing between partial sections where the

Navy and DLA intend to add significant additional content and sections that were considered generally complete.

Therefore, in order to clarify our expectations, we have attached a suggested outline for the TIRM Report and appendices, and possible approaches for improvement. Additionally, the Regulatory Agencies emphasize that the TIRM Report should include a thorough explanation of the rationale and objective for Tank 5 TIRM procedures in addition to the description of those procedures. On March 23, 2016 Navy and DLA provided the Regulatory Agencies with a revised draft outline. This revised draft outline is a substantial improvement to the January 29, 2016 submission and suggests that the content of the TIRM Report will include most of the information that the Regulatory Agencies expect to review. However, there is some additional content in our suggested outline that the Regulatory Agencies believe should still be included in the TIRM Report.

Given the January 2014 release from Tank 5, the primary focus of the TIRM Report should be on the TIRM procedures used on Tank 5 prior to the release, a root cause analysis of the Tank 5 release, lessons learned from the release, and TIRM procedure changes to date due to the Tank 5 release. The Regulatory Agencies expect that comprehensive coverage of Tank 5 related data and analysis will be included in the TIRM Report. The Regulatory Agencies also expect that the TIRM Report will contain data, information, and analysis on the prior TIRM work to the degree necessary to illustrate the evolution and improvements to the TIRM procedures over time.

Additionally, the Regulatory Agencies would like Navy and DLA to include an index of known design, construction, operation, maintenance and repair records for the Facility as a TIRM Report appendix. The Regulatory Agencies have had difficulty understanding what records may or may not be available for the Facility due to the lack of a comprehensive index. The Regulatory Agencies acknowledge that there is extensive information on the history, operations, and TIRM of Red Hill since it was constructed in the early 1940s. We also understand that the quality and clarity of the past documentation and records varies considerably, and some historic records may have been destroyed based on federal records retention standards. However, we suggest that the Navy and DLA develop records management practices for Red Hill more consistent with the centralized records management best practices commonly used in the petroleum storage industry and at other complex industrial installations with long service lives.

Thank you for providing a draft outline for review. We look forward to continuing the progress of implementing the work outlined in the Red Hill AOC and scheduling a conference call prior to April 19, 2016 to discuss the conclusion of formal scoping. Please let us know if you have comments or questions.

Sincerely,



Bob Pallarino
EPA Project Coordinator



Steven Chang, P.E.
DOH Project Coordinator

CC with attachment:

Captain Dean Tufts, Navy

Attachment

Comments on Section 2.2 of Red Hill Bulk Fuel Storage Facility (“Facility”) Administrative Order on Consent (“AOC”), Statement of Work (“SOW”)

Suggested Report Outline

The structure and organization of the January 29, 2016 Tank Inspection, Repair and Maintenance (“TIRM”) Report outline should be improved. One principal concern is that this outline appears to omit the basis for deciding to implement important work at the Facility. The Regulatory Agencies suggest an outline, such as the model below for the TIRM Report, to facilitate the process of improving the final deliverable. Additional details, outline components, and topics for any areas affecting the Facility history, operations, practices and purpose of the TIRM Report can and should be inserted as appropriate. Structural details are not provided for Chapters 4, and 6- 8 below because the organization and structure provided in the January 29th submittal appears to be adequate.

On March 23, 2016 Navy and DLA provided the Regulatory Agencies with a revised draft outline. However, there is some additional content in our suggested outline below that the Regulatory Agencies believe should still be included in the TIRM Report.

The suggested outline:

- Executive Summary
- Chapter 1- Report Introduction
- Chapter 2- Tank 5 Inspection, Repair and Maintenance Practices
 - Chapter 2.1- Summary
 - Chapter 2.2- Cleaning
 - Summary of the tank cleaning process selected
 - Basis for why this particular process for cleaning was implemented
 - Summary of records
 - All important and supporting records contained in report Appendix
 - Quality Assurance and Quality Control program for cleaning, including records in the Appendix
 - Chapter 2.3- Inspection
 - Summary of the process selected
 - Basis for why this particular process for inspection was implemented
 - Summary of records
 - All important and supporting records contained in report Appendix
 - Quality Assurance and Quality Control program for inspection
 - Chapter 2.4- Repair
 - Summary of the process selected

- Basis for why this particular process for inspection was implemented
- Summary of records
- All important and supporting records contained in report Appendix
- Quality Assurance and Quality Control program for repair
- Chapter 2.5- Repair Verification
 - Summary of the inspection and verification methods selected
 - Basis for why this particular process for inspection was implemented
 - Outline of the advantages and limitations of the selected repair verification process, and notes about how those limitations were addressed
 - Summary of records
 - All important and supporting records contained in report Appendix
 - Quality Assurance and Quality Control program for repair verification
- Chapter 2.6- Recommissioning
 - Summary of the process
 - Basis for why this particular process for recommissioning was implemented
 - Summary of records
 - All important and supporting records contained in report Appendix
- Chapter 2.7- Additional Information Navy/DLA wish to add, if any
- Chapter 3- Observations from Tank 5 Incident and Lessons Learned
 - Chapter 3.1- Summary
 - Chapter 3.2- Tank 5 Incident Investigation
 - Chapter 3.2.1- Incident Causes
 - Chapter 3.2.1.1- Poor Quality Repairs
 - Chapter 3.2.1.2 – QC / QA system failure to detect the failed repair
 - Chapter 3.2.1.3- Incident Reporting and Process
 - Chapter 3.2.1.4- Improper Filling and failure of the level monitoring system to detect the release
 - Chapter 3.2.1.5- Any additional details Navy/ DLA want to add
 - Chapter 3.2.2- Additional Observations
 - Inspection Discussion
 - Previous Tanks Information and Outcomes
 - Chapter 3.3- Lesson #1 Contracting
 - Chapter 3.3.1- Summary of FAR Requirements
 - Chapter 3.3.2- Contracting for tanks prior to Tank 5
 - Chapter 3.3.2.1- Type of Contract
 - Chapter 3.3.2.2- Process to Award
 - Chapter 3.3.2.3- Observations for tanks Prior to Tank 5
 - Inclusion of Available Contracts in Report Appendix
 - Chapter 3.3.3- Contracting for Tank 5
 - Chapter 3.3.3.1- Type of Contract

- Chapter 3.3.3.2- Background to Develop Statement of Work
 - Chapter 3.3.3.3- Process to Award
 - Chapter 3.3.3.4- Observations and shortcomings of Contracting for Tank 5
 - Inclusion of Tank 5 Contracts in Report Appendix
 - Chapter 3.3.4- Contracting Solution or Improvement
- Chapter 3.4- Lesson #2 Contractor Quality Control
 - Observation and Shortcoming
 - Solution or Improvement
 - Why solution or improvement was selected
- Chapter 3.5- Lesson #3 Refilling Procedure
 - Observation and Shortcoming
 - Solution or Improvement
 - Why solution or improvement was selected
- Chapter 3.6 – Lesson #4 Government Quality Assurance
 - Observation and Shortcoming
 - Solution or Improvement
 - More Detail in Chapter 4
- Chapter 3.7 – Lesson #5 Cleaning and Initial Inspection
 - Observation and Shortcoming
 - Solution or Improvement
 - Why solution or improvement was selected
- Chapter 3.8 – Lesson #6 Ventilation
 - Observation and Shortcoming
 - Solution or Improvement
 - Why solution or improvement was selected
- Chapter 3.9, etc. – Lesson #7 – Any additional Lessons Navy/DLA wish to add
 - Observation and Shortcoming
 - Solution or Improvement
 - Reasoning for Improvement
- Chapter 4- Quality Control and Quality Assurance After Tank 5
- Chapter 5- Options for Improving the TIRM procedure
 - Objectives for each improvement
 - Cost and benefit for each potential improvement
 - Projected Feasibility of each improvement
 - Projected Reliability of each improvement
- Chapter 6- Destructive Testing

- Reasons for using it or not using it
 - Confidence in Non Destructive Testing detection limits with and without
- Chapter 7- Schedule/ Frequency of TIRM
 - Schedule and/ or frequency of out-of service inspections
 - Other relevant TIRM not requiring empty tanks
 - Relationship to Section 4 corrosion rates
 - Comparison to relevant petroleum industry/ regulatory prescriptive inspection intervals
 - Chapter 8- Planned Actions Underway Independent of Tank Upgrade
 - Report Appendices with Records and other supporting documentation

Evaluation and Presentation of Options for TIRM Improvements

The Regulatory Agencies suggest the TIRM report present the improvement options in a matrix or table in order to facilitate discussions during the TIRM decision meetings.

Suggested Report Appendices

The Regulatory Agencies expect Navy and DLA to provide a comprehensive set of documents related to TIRM for the Facility in the appendices of the TIRM Report. Currently, it is our understanding that Navy and DLA plan to provide historical or draft records for the following:

1. TesTex Inspection Report for Tank 5
2. QC Plan by Willbros Government Services for Tank 5,
3. Surface Preparation and Coating Inspection Reports by NACE Inspector for Tank 5
4. API 653 Inspection Certification for Tank 5
5. Nozzle Pressure Test Procedure
6. Nozzle Pressure Test Results
7. Welder Qualifications, Weld Procedures Qualifications and Weld Procedure Records for Tank 5
8. Contract Award (SOW) awarded for Tank 5
9. NAVSUP Return to Service Instruction- Discussion of new filling instruction
10. Draft of New Tank Inspection Specification
11. Draft of New Tank Repair Specification
12. Contracts to Clean Inspect, Repair Red Hill Tanks after 1994

In addition to these document listed above, the Regulatory Agencies request that TIRM Report include the following:

1. Out-of-service tank inspection reports available for each tank at the Facility after 1994
2. QC Plan for tanks by primary contractors other than Willbros Government Services that performed TIRM on tanks at the Facility after 1994
3. Records for all past release incidents of all tanks
4. The last records of inspections for all tanks that have not undergone an inspection modeled after the API 653 standard.