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October 2, 2009

Mr. Paul E. Herman, P.E.
Remedial Project Manager
Virginia Department of Environmental Quality
629 East Main Street, 4th Floor
Richmond, VA 23219

Subject: Response to Comments, *Draft Revised Ecological Risk Assessment Work Plan and Sampling and Analysis Plan for SWMU 7b – Desert Cove*, Naval Amphibious Base Little Creek, Virginia Beach, Virginia.

Dear Mr. Herman:

On behalf of the Navy, CH2M HILL has prepared the following responses to comments received from VDEQ on the *Draft Revised Ecological Risk Assessment Work Plan and Sampling and Analysis Plan for SWMU 7b – Desert Cove*, Naval Amphibious Base Little Creek, Virginia Beach, Virginia.

1. General Comment: How is tributyl tin (TBT) to be assessed? The mechanisms used to evaluate the total tin data to determine whether or not TBT assessment is needed should be discussed early in this document and any analytical SOPs specific to TBT should be identified where necessary throughout the document.

Response: TBT will be analyzed and evaluated in SWMU 7b sediments similar to the way it was evaluated at SWMU 8. Seven samples (1 Cove, 1 Connector Channel, and 5 Pier area) will be analyzed for TBT. Data will be used to calculate the ratio of TBT to total tin in each area. The TBT ratio for each area will be used to estimate the TBT fraction of total tin at all sample locations within that area. Once the TBT fraction is estimated, the value will be compared to the NOAA SQUIRT value of 3.4 mg/kg to evaluate potential risks. Worksheets 3, 4, 5, 6, 7, 10, 11, 14, 15, 17, 19, 20, 23, 24, 25, 26, 27, 28, 30, 31, 32, 34, 35 and 36 were updated to reflect addition of TBT analysis.

2. Worksheet 1: Please delete the VDEQ signature line. VDEQ does not sign SAP documents.

Response: The VDEQ signature line has been deleted.

3. Worksheet 7: Add Adina Carver to the table.

Response: Adina Carver has been added to Worksheets 3, 4, and 7.

4. Worksheet 10: Please label Intercove Road and Signal Point Road on Figure 2 as they are used as points of reference in the text.

Response: Figure 2 has been revised accordingly.

5. Worksheet 11: In the 3rd bullet's 3rd sub-bullet please insert the words "indicator parameter" before the word "data" to clearly define the limited water quality data to be collected. Please provide the same revision in the 5th sentence of the 4th bullet and include the depths (top, mid, bottom) to be sampled. Please provide the surface water quality indicator parameter qualification elsewhere in the document as necessary.

Response: Worksheet 11 has been revised accordingly and the "indicator parameter" qualifier has been added throughout the document.

6. Worksheet 12-1: As this is the only worksheet is it necessary to label it 12-1?

Response: Comment noted, however, with the addition of TBT to Worksheet 12 as 12-2, Worksheet 12-1 has not been changed.

7. Worksheet 14, Project Tasks: In the 2nd bullet please add a statement to the last sentence addressing the management of the decontamination fluids in accordance with state and federal regulations.

Response: The last sentence of the 2nd bullet was revised to read "Decontamination fluids will be collected, containerized, and disposed of in accordance with state and federal regulations for the handling of investigation derived waste".

8. Worksheet 15-3: Please add tin to the table or explain why it is left off the table.

Response: Tin is not a simultaneously extracted metal (SEM) metal so its inclusion in this table is not appropriate. Tin (and TBT) are included in Worksheet 15-1.

9. Appendix A, Completeness Checklist, EPA QA/R 5 - A.9: Worksheet 29 does not appear to identify "how long" project information should be kept nor does it seem to address "back up plans for records stored electronically". Please clarify.

Response: The following bullet was added to Worksheet 29: "Following project completion, hardcopy deliverables such as logbooks, chain of custodies, raw data, data validation reports, etc will be archived indefinitely."

10. Appendix A, Completeness Checklist, EPA QA/R 5 - B.1: Worksheet 17 does not appear to address "what to do if sampling sites become inaccessible". Please clarify. Worksheet 37 doesn't appear to specify "what information is critical and what is for informational purposes" nor does it identify "sources of variability" and how "variability should be reconciled with project information". Please clarify.

Response: Although some of the requested information is suggested for Worksheet 37, all of the above elements are more appropriately addressed as part of Worksheet 17. The

following sentences were added to the bottom of Worksheet 17: "If sample locations become inaccessible (boats, piers, etc.) the Navy will be notified and efforts will be made to temporarily relocate the obstruction if feasible. If relocation is not feasible, samples will be collected as close to the proposed location as possible. All sample locations and associated data are considered critical. Deviations from the SAP will be reviewed to assess whether CA is warranted and to assess impacts to achievement of project objectives."

11. Appendix A, Completeness Checklist, EPA QA/R 5 - B.6: Worksheets 22 and 25 do not appear to "note availability and location of spare parts" nor do they appear to require the "effectiveness of [the] corrective action [be] determined and documented. Please correct.

Response: The following sentence was added to the Maintenance Activity header on Worksheet 22: "Request replacement parts or equipment from supplier." Additionally, the following sentences were added to the CA header on Worksheet 22: "Return to supplier and request replacement equipment. Document CA, receipt of, and proper calibration of replacement equipment in field logbook." A footnote has been added to Worksheet 25's Maintenance Activity column stating "The laboratory will request replacement parts from supplier as needed", as well as to the Corrective Action column in Worksheet 25 stating "The laboratory supervisor will monitor the effectiveness of the corrective action through the testing of calibration standards. The laboratory will keep a maintenance log for each instrument."

12. Appendix A, Completeness Checklist, EPA QA/R 5 - B.8: While Worksheets 22 and 24 appear to identify critical supplies and consumables they do not note the "supply source" nor provide "procedures for tracking, storing, and retrieving these materials." Please clarify.

Response: The following note was added to Worksheet 22: "The FTL will procure all field equipment from the CH2M HILL warehouse. Equipment will be shipped to the Virginia Beach office, tested, and packed in the field vehicle. Upon completion of field activities all equipment will be returned to the warehouse." Additionally, the following note was added to Worksheet 24: "The laboratories will obtain all standards for calibration from reputable vendors. The laboratories will track, store, and retrieve these standards according to the procedures in their method-specific SOPs, which are listed in Worksheet #23."

If you have any questions concerning these responses to comments, please feel free to contact me at (757) 671-6266.

Sincerely



Cecilia Landin,
Project Manager

cc: Mr. Jeffrey Boylan/ USEPA
Mr. Tim Reisch/ NAVFAC Mid Atlantic
Ms. Jamie Butler/CH2M HILL