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U S NAVY RESPONSE TO U S EPA REGION II COMMENTS ON DRAFT ENGINEERING
EVALUATION/COST ANALYSIS FOR SOLID WASTE MANAGEMENT UNIT 7B (SWMU7B)
SMALL BOATS SANDBLAST YARD JEB LITTLE CREEK VA
11/21/2012
CH2MHILL



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November 21, 2012

USEPA Region 3
NPL/BRAC Federal Facilities Branch (3HS11)
Attn: Mr. Jeffrey Boylan
1650 Arch Street
Philadelphia, PA 19103-2029

Subject: Response to USEPA Region 3 Comments on the
*Draft Engineering Evaluation/Cost Analysis for Solid Waste Management Unit 7b –
Small Boats Sandblast Yard*
Joint Expeditionary Base Little Creek, Virginia Beach, Virginia
Navy CLEAN 1000, Contract N62470-08-D-1000, Task Order WE32

Dear Mr. Boylan:

On behalf of the Navy, CH2M HILL is pleased to submit the following response to the comments from VDEQ received on October 17, 2012 on the *Draft Engineering Evaluation/Cost Analysis for Solid Waste Management Unit 7b – Small Boats Sandblast Yard, Joint Expeditionary Base Little Creek, Virginia Beach, Virginia* (CH2M HILL, September 2012):

Comment 1: Table 2 provides a summary of historical investigations that have occurred at the site. The summaries state that the ecological risk assessment (through Step 3A) identified potentially unacceptable ecological risks to lower trophic - level receptors exposed to metals and polycyclic aromatic hydrocarbons (PAHs) in sediment. Section 2.3.1 on page 2-3 states that the Tier I Partnering Team agreed that potential ecological risks associated with PAHs in sediment are not unacceptable and do not require further investigation/ action since they are not likely attributable to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) activities (sandblasting) at SWMU 7b. BTAG does not agree with this conclusion. The conclusion by the Partnering Team should instead be that ecological risk is unacceptable for PAHs; however, the PAHs are not attributable to SWMU 7b. There is no data to determine whether the PAHs are from another CERCLA or non-CERCLA site.

Response: The first sentence of the 2nd paragraph of section 2.3.1 was revised to read: "The Tier I Partnering Team agreed that potentially unacceptable ecological risks associated with PAHs in sediment are likely primarily attributable to the 19 stormwater outfalls that convey stormwater runoff from various locations within the facility, including numerous parking areas, and not attributable to historic sandblasting activities at SWMU 7b. Therefore, PAHs do not require further investigation/ action under CERCLA."

Comment 2: Pages 2-3 and 2-4, Section 2.3.1 Risk Assessment Summary: The second bullet regarding selenium supporting the conclusion of ecological risks being "...not unacceptable..." needs additional discussions to support the risk management decision logic. Additional lines of evidence such as including a spatial description of selenium may be appropriate. The range of maximum and mean HQs needs to be fully considered and further explained (include dates of sampling). Using site wide HQ (maximum or mean) values is too general and not specifically helpful in identifying potential hot spots. The surface sediment maximum site wide HQ of 2.5 and the mean site wide HQ less than 1.0 should be further explained, given the fact that all detected selenium concentrations exceeded the AET value and selenium was detected at only 10 of 41 surface sediment samples. EPA recognizes selenium was risk managed in the 2012 Final Post MILCON Evaluation Tech Memo, but feels additional lines of evidence in the EE/CA are warranted.

Response: Additional lines of evidence were added to the second bullet.

Comment 3: Pages 2-3 and 2-4, Section 2.3.1: The ecological screening value for selenium was the AET and the ecological screening value for silver was the ER-L. The text needs to logically state why the screening value changes from AET to ER-L depending upon which contaminant is being discussed.

Response: No ER-L, ER-M, TEL or PEL values have been developed for selenium. The text has been revised to reflect this.

Comment 4: Section 2.4 on page 2-5 states that because of the urban nature of Desert Cove, preliminary remediation goals (PRGs) were established as the Effect Range-Median (ER-M) screening value. Please expand this paragraph to provide relevant additional information/history that led to the establishment of PRGs at SWMU 7b.

Response: Section 2.4 was revised to read: "During development of clean-up goals for SWMU 3, a former sandblasting area with similar sediment COCs, regression equations developed based upon the correlation between ABM content and COC concentrations were used to calculate associated sediment concentrations using 1 percent ABM (the lowest possible integer). The resulting values generally fell between the PEL and ER-M. No correlation between ABM and metals COC concentrations at SWMU 7b was established. However, based upon the similarity of SWMU 3 and SWMU 7b, and the urban nature of Desert Cove, preliminary remediation goals (PRGs) were established as the NOAA ER-M screening value (Table 2-2). Because ABM itself is not toxic and does not pose risk to the environment, the presence of ABM in sediment does not drive the need for action at either site."

Comment 5: Page 2-5, Section 2.4.1 Determination of Removal Areas: The text states "A grid cell is defined as being impacted if the RQ for one or more individual COCs exceeds 1.5 and the average RQ for the five COCs exceeds one." The logic used to support this statement needs to be included in this section.

Response: The first sentence of Section 2.4.1 was revised to read: "In line with the methodology established for SWMU 3, to define the area requiring action under CERCLA, a remediation quotient (RQ), was calculated. " Additionally, the 5th sentence was revised to read: "In line with SWMU 3 and as discussed during the July

2012 Tier I Partnering Team meeting and documented herein, a grid cell is defined as being impacted if the RQ for one or more individual COCs exceeds 1.5 and the average RQ for the five COCs exceeds one.”

Comment 6: Section 2.4.1 on page 2-5 states that grid cell LW07-M3 is proposed for elimination from the CERCLA remediation boundary because the cell is located within the military construction action dredge limits. However, Figure 2-5 shows that the edges of this grid were not dredged, presumably because this was adjacent to the piers. This report should explain how this area of the grid will be addressed.

Response: The first sentence following the bulleted lines of evidence was revised to read: “Prior to completion of the NTCRA, additional sampling to confirm COC concentrations in those grid cells proposed for elimination will be conducted. If no exceedances of criteria are noted, action will not be required within the entire grid cell. If exceedances of criteria are noted, action will be required within the entire grid cell.”

Comment 7: Section 2.4.1 on page 2-5 states that per facility direction, sediment cannot be dredged within 5 feet of the bulkhead shoreline and 10 feet of the piers, without the potential for structural impacts to the surrounding area. With this approach, sediment above PRGs could be left in Desert Cove adjacent to these structures. BTAG recommends that thin-layer sand placement be used in these areas adjacent to the bulk-head and piers to address any residual contamination and to facilitate enhanced natural recovery of the area that cannot be removed because of these restrictions.

Response: No piers are located with the area proposed for removal. Placement of a minimum of 6-inch clean sand layer will be performed within the entire grid to include any areas adjacent to the bulk-head. The text and cost estimate were updated to reflect this change.

Comment 8: Page 3-1, Section 3.2.2 Removal Action Scope: The recommended removal alternative is identified in Section 6 as Alternative 2, which involves mechanical dredging, upland disposal, and enhanced natural recovery. Alternative 2 also involves backfilling the dredged areas “...with a clean sand layer.” The criteria used to define this clean sand layer need to be included.

Response: The text has been updated to reflect that prior to placement sand will be sampled to determine its suitability for use as clean fill. Sampling requirements and clean fill criteria will be determined as part of the work-planning phase.

Comment 9: Section 4.1.2 on page 4-2 states that as part of Alternative 2 (Mechanical dredging, upland disposal, and enhanced natural recovery), the overlying water from the dredged material will be pumped through a temporary water treatment system to meet the Virginia Pollution Discharge Elimination System requirements for discharge to Little Creek Harbor. The specific water quality criteria for this discharge should be provided to ensure the discharge is protective of ecological receptors, including against sublethal effects. This comment also applies to Alternatives 3 and 4 presented in Sections 4.1.3 and 4.1.4, respectively.

Response: The MILCON subcontractor will be utilizing a water filtration system that will be located on the scow to decant the dredged sediment. The previously discussed

onsite temporary water treatment system will not be utilized for Alternatives 2 and 3. The text for Alternatives 2 and 3 has been updated to reflect these changes. Because sediment will be mixed with a polymer to enhance dewatering, weep water generated as a part of Alternative 4 will pass through a temporary onsite wastewater treatment system prior to point source discharge to Desert Cove. Alternative 4 language has been updating accordingly.

In response to VDEQ comments received, the Virginia Water Quality Standards, as they pertain to the SWMU 7b sediment COCs with applicable values, has been added to the chemical-specific ARARs table. No effluent monitoring will be conducted during dredging and dewatering, therefore specific water quality criteria are not identified. Decant water will be filtered to remove solids and monitoring for visual changes in turbidity and sheen will be conducted. A turbidity curtain and oil boom will be employed during all dredging and sand placement activities, with additional protection surrounding the effluent discharge point.

Comment 10: EPA recommends including any similar comments/responses that were made on the SWMU 3 EE/CA into the SWMU 7b EE/CA document as well.

Response: Similar comments/responses from the SWMU 3 EE/CA have been included in the SWMU 7b EE/CA.

The above response (and other Team comments/responses) will be incorporated into the draft final version of the SWMU 7b EE/CA to be submitted for public comment.

Please do not hesitate to contact me at 757-671-6280 if you have any questions concerning these responses.

Sincerely,



Nathaniel Price, P.E.
Project Manager

cc: Mr. Bryan Peed/NAVFAC Mid-Atlantic
Mr. Paul Herman, P.E./VDEQ
Ms. Cecilia Landin/CH2M HILL
Administrative Record File