



TETRA TECH

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Project Number 112G01474

Ms. Kymberlee Keckler, Remedial Project Manager
U.S. EPA Region I
1 Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

Reference: CLEAN Contract No. N62472-03-D-0057
Contract Task Order No. 130

Subject: Response to Comments, U.S. EPA Letter dated April 9, 2009
Former Derecktor Shipyard,
Naval Station Newport, Newport RI

Dear Ms Keckler:

On behalf of Ms. Winoma Johnson, US Navy NAVFAC, I am providing to you a response to the comment letter from USEPA dated April 9, 2009, which was in reference to the Draft Final FS Revision 1 for the Former Derecktor Shipyard, and the Navy's response to comments dated March 16, 2009. It also reflects conference calls held May 5, 2009 and May 18, 2009, as well as follow-up electronic mail dated June 17, 2009 and June 23, 2009.

If you have any questions, please do not hesitate to contact me at 978-474-8434.

Very truly yours,

Stephen S. Parker, LSP
Project Manager

Enclosures

c: S. Bird, NAVFAC (w/encl.)
J. Forrelli, TtNUS (w/encl.)
G. Glenn, TtNUS (w/encl.)
W. Johnson, NAVFAC (w/encl.)
P. Kulpa, RIDEM (w/encl.)
C. Mueller, NAVSTA (w/encl.)
J. Ropp, TtNUS (w/encl.)
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File 112G01474-3.1 (w/encl.)
AR, c/o Glenn Wagner, TtNUS Pittsburgh (w/encl.)



**Response to Correspondence from USEPA
Former Robert E. Derektor Shipyard
EPA Letter dated April 9, 2009**

The letter dated April 9, 2009 was issued in response to the Navy correspondence dated March 16, 2009. Please refer to that letter and attachments for the comment numbers and attachments cited below.

1. General Comment: *The Navy has not responded to EPA's comments concerning contamination at depth and possible exposure in the Stillwater Basin (bullet 2 on page 1 of 13). Contamination at depth would not have been discovered during the BERA sampling because the BERA focused on the biotic zone. EPA repeats its request that the PDI include sediment core sampling to address concerns about future risk (i.e., defined by the PRGs).*

Response:

This issue was discussed in detail at the teleconference 5/18/09. It was proposed that for the FS, a single line item in the FS cost estimates should be sufficient to provide a cost for the PDI. The cost for the PDI under each alternative would be different, acknowledging that a PDI for limited action would be lower than that for a dredging option. There did not seem to be any disagreement on this approach. K. Keckler stated that the PDI line item costs should be higher than in those provided in the previous FS document, understanding that the EPA expects the PDI to be comprehensive (1).

2. General Comment: *EPA has not found an appropriate literature-based sediment value that would be useful as a possible PRG for TBT at Derektor. EPA acknowledges the disconnection between the Navy-calculated PRG and the observed concentrations in toxic and non-toxic samples at Derektor. EPA proposes to follow up on the Navy's approach in the RTC, by using the value of 228 mg/Kg as an unbounded NOEC (i.e., the highest concentration at which no toxicity was observed). Since there is no LOEC (i.e., lowest concentration at which toxicity was observed); it is not possible say whether any value above the NOEC would be protective. Theoretically, there could be a toxicity threshold at 230 mg/Kg, or a dose response that starts at any concentration above 228 mg/Kg. The LOEC is not defined. In the PDI, if sediments are below 228 mg/Kg, EPA agrees no remediation based on TBT would be required. If sediments are found above 228 mg/Kg, our respective agencies must develop an appropriate PRG value for TBT for decision-making purposes.*

Response:

This issue was discussed on May 18, 2009 with EPA and Navy risk assessors. Based on the assessment conducted on TBT data available for the site (2), the Navy agreed to seek TBT in the PDI because it was previously found at the site, and because of the high toxicity exhibited by this compound. The Navy and EPA agreed that the data does not currently support a PRG for TBT, but if a TBT concentration of 228 ug/kg (total, not adjusted) is found in any sample during the PDI, the group would meet and discuss if and how a PRG for TBT should be developed (1).

3. Attachment A - Specific Comments #3 and 4: *As previously discussed with the Navy, no data on actual levels of asbestos in the sediments have been provided to EPA (only visual confirmation by divers). EPA agreed that asbestos sampling could be done as part of the PDI to determine the extent of potential contamination. In light of this, the Navy should include the PRG for asbestos in the ROD that was referenced earlier letters from EPA. The risk-based value establishes the level at which the Navy needs to take action if sediment asbestos levels are higher than anticipated. The asbestos concentration is relevant for sediment disposal purposes. Since it is a risk-based value, an action would not be prompted unless risk factors are identified during the PDI. Specifically, the RAOs should be: "1) Prevent inhalation of asbestos fibers from sediment having asbestos concentrations greater than or equal to 1% and 2) Prevent exposure to*

asbestos fibers from sediment that would contribute to a cumulative ILCR of > IE-04 through the inhalation pathway." EPA expects the remedy for Dereecktor Shipyard to meet ARARs, including those for asbestos.

Response:

The Navy discussed this issue during a conference call with EPA on May 5, 2009.

It was agreed that asbestos had been released to the water and probably to the sediment under Pier 1 at Site 19. EPA stated that this release is actionable under CERCLA, and two options were identified as possible paths forward, either to measure risk and determine a PRG during the PDI stage or do so now, during the FS.

After further review Navy agrees that NESHAPs is an action specific ARAR and therefore, material dredged will be tested for asbestos to determine handling and disposal requirements accordingly. Therefore, for the dredging alternative, the Navy agrees to

1. Handle any potential asbestos in the sediment as "incidental" to the main removal action.
2. Agree to sample any sediment that requires off-site disposal for compliance with NESHAP regulations.

However, the Navy has determined that a PRG for asbestos should not be developed for the CERCLA action at this site. The rationale for this decision is based on the following:

1. **Incomplete Current Exposure Pathway:** Current site conditions at Dereecktor (Site 19) indicate that there is no likely completed exposure pathway, based on the assessment report prepared by NAVSEA dated October 2007, based on the industrial nature of the site, the depth of the water and the distance between the release area and the shoreline.
2. **Likelihood of Future Exposure –** Based on the small quantity of asbestos that potentially may enter the water column, the distance to the shoreline, there is a low probability of exposure through inhalation.
3. **Applicability of EPA Risk Assessment Framework –** It is clearly stated in the guidance that the framework only applies to investigating and characterizing the potential for human exposure from asbestos contamination in outdoor soil and indoor dust.

4. Attachment B – General Comments #2 and #8 – See comment above and the Blackburn ROD for the proper ARARs for sites with asbestos in sediments. Finally, any asbestos that falls into the water is under the jurisdiction of this CERCLA remedy. To the extent that asbestos is still a threat to be released from the pier, the CERCLA remedy cannot achieve cleanup standards until the potential threat of release is addressed.

Response:

The Navy concurs that presence of asbestos on pipes under the pier constitutes a potential threat of release of asbestos to the water, and the Navy shall be cognizant of this threat at all times, as well as when selecting a remedial action:

The Pier 1 steam line demolition/removal project was awarded on July 1, 2009. The project includes removing and disposing of the steam and condensate lines on the Coasters Harbor Island (CHI) bridge 669 and the inactive steam, condensate, water, and fuel lines under Pier 1 on Naval Station Newport. Work will include removal of piping, pipe insulation (asbestos), concrete stanchions, pipe hangers and all miscellaneous piping and pipe support material. Approximately 7100 linear feet of steam and condensate piping, water, and fuel lines, asbestos insulation, non asbestos insulation pipe fittings, valves, pipe hangers, concrete stanchions, steel truss structures, and bridge supports shall be removed within the

scope of this project. It is anticipated that this construction project shall be completed prior to construction of the CERCLA remedy.

Attachment C

5. Specific Comments #14 – See previous responses concerning asbestos. The Navy should include a risk based PRG for asbestos in sediment.

Response:

Please see the response to the comment #3 above.

6. Specific Comment #50a, 70c, 71b – State hazardous waste regulations are relevant and appropriate to any lead contaminated sediment that exceeds toxicity characteristic thresholds. The extent of any such sediment needs to be identified so that they are addressed by the remedial alternatives. There is a human health risk from such sediments if they are not addressed by the remedial action (at a minimum identifying their location for developing effective institutional controls to prevent exposure).

Background - The original comments 50a and 70c stated that EPA believed RCRA to be relevant and appropriate for sediment left in place, because the sediment contained lead at concentrations above 100 mg/kg. Comment 50a stated: *It is therefore possible that sediment from any of these samples could be RCRA hazardous. Moreover, EPA has previously provided evidence of spills in the area where RCRA wastes were known to occur.*

Discussion: This was discussed between EPA and the Navy on May 5, 2009. Both party's legal counsel were present. The role of State hazardous waste regulations was not discussed at that time. However, the role of RCRA regarding in-situ sediment was discussed at length. It was determined that the Navy and EPA disagreed as follows:

The Navy's position is that if the CERCLA risk assessment shows no risk to receptors from sediment, the sediments do not have to be remediated. The RCRA leaching standards should not be used to direct sediment cleanup if there is no risk measured. To do so would indicate that RCRA is a chemical – specific ARAR, above and beyond the CERCLA risk assessment findings. RCRA standards apply to the disposal of any waste generated, such as sediment excavated from the site during an action.

EPA stated that if the total concentration measured for lead in sediment could provide a TCLP result of >5 mg/L (total lead is present in sediment at concentrations exceeding 20x this benchmark = 100 mg/kg), it does not matter if the CERCLA risk assessment showed no risk from exposure to that sediment: because the RCRA standard is exceeded, it is presumed to pose a risk to anyone coming into contact with it, and it must be addressed in the remedial action. EPA also stated that the leachability of the lead from the sediment can be measured to refute this, but it cannot be conclusively stated otherwise unless such testing is done.

Follow-up

Based on follow-up e-mails and discussions between the Navy and EPA (ref 2, 3), it was agreed that:

1. Navy shall TCLP-test the excavated sediment that exceeds PRGs for proper disposal.
2. Navy shall not be required to TCLP-test sediment that will remain on site and do not exceed PRGs.

After clarification and EPA's follow-up summary table (attached) showing the ARAR interpretations that they recommend, the Navy concurs with the interpreted ARARs provided attached (ref 2).

EPA further noted that if testing demonstrates that the sediments are characteristically hazardous at the lower concentration range, areas outside of the CERCLA remedy could require further action under separate federal and state hazardous waste authorities.

Based on the above, the Navy considers this comment resolved.

7. Specific Comment #68b, 72a – The OSHA standard is not an ARAR. EPA identified ARARs for the proper handling of asbestos contaminated sediments.

Response:

Please refer to the response to the comment No 3 (above), NESHAPs will be included as an action-specific ARAR. As an action-specific ARAR, the NESHAPs requirements would be met by keeping sediment with asbestos in it wet during all handling operations.

References:

- 1) Final Meeting Notes, Conference Call held May 18, 2009, Site 19 Former Derecktor Shipyard, Transmittal 6/17/09.
- 2) Electronic Mail, Kymberlee Keckler to Winoma Johnson, June 23, 2009 10:20PM, re: RCRA issue at Derecktor
- 3) Electronic Mail, Kymberlee Keckler to Winoma Johnson, June 17, 2009 1:16 PM, re: RCRA issue at Derecktor
- 4) Summary of TBT at Site 19, Derecktor Shipyard, Naval Station Newport, Newport RI Revised 11/7/08. Tetra Tech NUS Inc.
- 5) Preliminary Assessment, Former Derecktor Shipyard May 1993. Halliburton NUS Corporation, Wayne, PA.
- 6) Bathymetry/Remots® Survey of Coddington Cove, RI. 10 April 1986. Science Applications International Corporation Newport RI.

RCRA ARAR Interpretations

Provided via electronic mail from K. Keckler to W. Johnson 6/23/09

State Location Specific

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| Hazardous Waste Regulations – Floodplain Operations (Sec 8.05) | RIGL 23-19.1 et seq.; DEM OWM-HW01-07(8.05) | Relevant and Appropriate | RI is delegated to administer the federal resource Conservation and Recovery Act (RCRA) statute through its state regulations. Facilities located in the 100-year flood plain will be design, constructed and operated in accordance with standards equivalent to those of 40 CFR 264.18. | These standards will be complied with through dredging and off-site disposal of all sediments that exceed hazardous waste and Rhode Island Waste Standards. |
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Federal Action Specific

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| Hazardous Waste Regulations – Subtitle C – Standards for Hazardous Waste Facilities | 42 USC 6291 et seq.; 40 CFR Part 264 | Applicable | RI is delegated to administer the federal resource Conservation and Recovery Act (RCRA) statute through its state regulations. The standards of 40 CFR Part 264 are incorporated by reference (see DEM OWM-HW01-07, Sec 2.02). | Dredged / Excavated sediment and debris will be tested before disposal in an off-site facility authorized to accept the waste. If determined to be hazardous waste, materials handling and disposal will be conducted in accordance with the State requirements (which incorporate these federal standards). |
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State Action Specific:

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| <p>Hazardous Waste Regulations – Hazardous Waste Identification – Sec 5.08</p> | <p>RIGL 23-19.1 et seq.; DEM OWM-HW01-07 (5.08)</p> | <p>Applicable</p> | <p>RI is delegated to administer the federal resource Conservation and Recovery Act (RCRA) statute through its state regulations. The standards of 40 CFR Part 261 regarding RCRA identification and listing are incorporated by reference. A generator must determine if any of his wastes meet any of the definitions of a hazardous waste. He must first determine if his waste meets any of the federal definitions of hazardous waste as required by 40 CFR 262.11. If the waste does not meet any of the federal definitions, the generator must determine if any of the Rhode Island waste types apply, as defined under the "Rhode Island Wastes" definition in Rule 3.00 of these regulations.</p> | <p>Dredged sediment and debris will be tested to determine if they meet hazardous waste or Rhode Island waste standards before disposal in a facility authorized to accept the waste. If determined to be hazardous waste or Rhode Island Waste, materials handling and disposal will be conducted in accordance with state requirements.</p> |
| <p>Hazardous Waste Regulations – Operational requirements for Treatment Storage and Disposal Facilities (sec 9)</p> | <p>RIGL 23-19.1 et seq.; DEM OWM-HW01-07 (9.00)</p> | <p>Applicable</p> | <p>Outlines specifications and standards for design, operation, closure and monitoring of performance for hazardous waste storage, treatment, and disposal facilities, in particular closure and post-closure (9.16) and proper operation and maintenance (9.23). The standards of 40 CFR Part 264 are incorporated by reference.</p> | <p>Management of materials classified as hazardous wastes or Rhode Island wastes (including dewatering) will be conducted in accordance with these standards.</p> |
| <p>Rules and Regulations for dredging and the Management of Dredged material</p> | <p>DEM-OWR-DR-02-03</p> | <p>Applicable</p> | <p>Standards to ensure that dredging in the marine environment and management of the associated dredged material is conducted in a manner which is protective of groundwater and surface water quality so as to ensure the continued viability and integrity of drinking water and fish and wildlife resources. Establish standards and criteria governing the dewatering of dredged material for upland use or disposal.</p> | <p>Dredging operations, particularly dewatering, will be conducted in accordance with these standards.</p> |