



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 1  
1 CONGRESS STREET, SUITE 1100  
BOSTON, MASSACHUSETTS 02114-2023

July 1, 2009

Winoma Johnson, P.E.  
NAVFAC MIDLANT (Code OPNEEV)  
Environmental Restoration  
Building Z-144, Room 109  
9742 Maryland Avenue  
Norfolk, VA 23511-3095

Re: **Derecktor Shipyard On-Shore Cleanup Assessment**

Dear Ms. Johnson:

Thank you for the opportunity to review the *Derecktor Shipyard On-Shore Follow-up Investigation Proposal*, submitted in June 2009. During the meeting and site walk on May 7, 2008, EPA outlined what it saw as potential data gaps that needed to be filled to complete the onshore assessment. The information that EPA provided over a year ago is repeated herein in Attachment A. It is unclear to EPA why development of this work plan has taken fourteen months.

The document proposes resampling four wells in the Northern Waterfront and installing four new overburden wells. EPA does not remember agreeing to limit the groundwater analyses to VOCs. Please plan to analyze the groundwater for a full suite of analytes in all samples. While not expressly provided in the work plan, EPA is willing to consider the Navy's rationale for limiting the analyses to VOCs.

The proposal for a revised HHRA lists ingestion and inhalation of VOCs as the two exposure pathways for residents at the site. Dermal exposure for bathing/showering residents should be included as an exposure pathway.

I look forward to working with you and the Rhode Island Department of Environmental Management toward the cleanup of the Derecktor Shipyard. Please do not hesitate to contact me at (617) 918-1385 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Kymberlee Keckler".

Kymberlee Keckler, Remedial Project Manager  
Federal Facilities Superfund Section

Attachment

- cc: Paul Kulpa, RIDEM, Providence, RI
- Cornelia Mueller, NETC, Newport, RI
- Chau Vu, USEPA, Boston, MA
- Todd Finlayson, Gannett Fleming, Orono, ME
- Steven Parker, Tetra Tech-NUS, Wilmington, MA

## ATTACHMENT A

### DERECKTOR SHIPYARD ON SHORE CLEANUP ASSESSMENT

Site walkover Wednesday, May 7, 2008

#### Subsurface soil:

From the 1997 SASE, although the number of samples might be sufficient for four designated areas – North Waterfront, Central Shipyard, South Waterfront, and Building 234 – not all of these samples were analyzed for a full suite of chemicals. For each area, only a subset of samples was analyzed for SVOCs.

#### Groundwater:

From the 1997 SASE, there are no groundwater data for the South Waterfront area. For other areas, the number of groundwater samples is limited (5 samples at North Waterfront; 2 samples at Central Shipyard, and 2 samples at Building 234 area) and would not be adequate to characterize groundwater risks at the site. Using a limited number of samples to conduct a risk assessment could pose high uncertainty in evaluating groundwater risk at the site.

#### South Waterfront:

Following removal of waste and debris from this area of the site, the removed material was disposed of at Tank Farms 4 and 5 or off site. No confirmatory sampling was performed in the South Waterfront following the removal of waste. The only data available to potentially characterize the residual soils are from the characterization done on the waste stockpiles themselves. The limited data collected are presented in Appendix A. Review indicates that the greatest lead and arsenic concentrations were found in Berm Section 6 with lead as high as 920 ppm and arsenic as high as 23 ppm. PCBs were reported not detected in the stockpile characterization samples.

This area was restored by grading the residual soil and mulching and seeding the area. Consequently there is no barrier to exposure to surface or subsurface soil in the South Waterfront area. In order to properly evaluate residual risk, sampling of the area will be required to confirm that the residual contaminants in soil do not pose an unacceptable risk to human health. Presumably the receptors of interest would be construction and utility workers under a restricted use scenario; however, the Navy will need to confirm that a residential use of the area will not be allowed; otherwise the receptors should also include residents. The media of concern would be surface and subsurface soil.

Groundwater data are not available for this area. If future resident is included as a receptor of concern, groundwater data are needed to evaluate exposure to this medium.

#### Building 42 Sumps:

#### S42-1 Sump Area:

Contaminated soil was removed from the soil within an approximate 11-foot by 11-foot by 1-foot deep area beneath the former sump. However, the 2002 Removal Action Report stated that the soil beneath the sump was a dense graded aggregate suggesting it was relatively impermeable. Multiple contaminants of concern were detected in the samples collected for the 1997 SASE; therefore, further characterization of the soil topographically down gradient from the sump discharge location is warranted to determine if runoff from the discharge point occurred and potentially impacted downgradient soil that has not been characterized. It should be noted that arsenic has historically been used as a paint additive and its presence at S42-1 is not necessarily natural.

#### S42-4 Sump Area:

No soil samples were collected from beneath this sump in the 1997 SASE due to access problems and no investigation or remediation was conducted during the 2002 Removal Actions. No discharge piping was found to be connected to this sump during the 1997 SASE investigation. Based on the sampling results at S42-1 and the nature of the soil surface beneath the building, additional characterization beneath the S42-4 sump and in the downgradient soil is warranted. It is recommended that soil along the western side of Building 42 be sampled and analyzed for a full suite of chemicals.

#### Bldg 6, TP14 Excavation Area for PCBs:

The purpose of the excavations conducted in this area was to determine the extent of PCB contamination in the soil and to remove the PCB contaminated soil to achieve the RIDEM residential/industrial/commercial cleanup standard of 10 ppm PCBs. Based on the results of the analytical data provided in the 2002 Removal Action Report the Navy has not demonstrated that the objective has been achieved. Interpretation of the results presented indicate that some areas known to have PCB concentrations in excess of the cleanup threshold have not been adequately excavated and sampled and for other areas where PCB screening indicated exceedance of the cleanup threshold, no additional soil removal or confirmatory sampling was conducted. A No Further Action ROD cannot be approved for the site until an adequate characterization of the Building 6 TP-14 area for PCBs demonstrates that the PCB concentrations are in compliance with the cleanup threshold or that sufficient data on residual PCBs are available to determine that no unacceptable risk exists.

Review of Figure 7 in the 2002 Removal Action Report indicates that screening samples HS26, HS32, HS14, HS27, HS13, and EAETP14F1 (Figure 6) had PCB concentrations of 10 ppm or greater and were not remediated or resampled to confirm that cleanup has been achieved. Lastly, 40 CFR 761 requires a significantly denser sampling grid than was used to collect the PCB samples discussed in the 2002 Removal Action Report. To the extent that excavation to bedrock has been reached in some areas of the enlarged TP-14 excavation that information should be provided to support any proposal to forgo sampling in some areas of the excavation. The expectation is that a comprehensive sampling plan will be developed to confirm cleanup not only of PCB contamination

but to confirm that concentrations of other COCs do not result in unacceptable risks for this area.

#### Huts 1 and 2 and TP-16 Area:

Huts 1 and 2 were formerly used as a vehicle maintenance facility. Based on this usage, contaminants associated with vehicle maintenance are expected to be present in this area. Prior investigations have not adequately investigated the area and the nearby TP-16 was found to have elevated TPH concentrations of 4,900 ppm and also TCLP lead of over 70 mg/L. Additional soil characterization is required for the area around Huts 1 and 2.

#### Areas of Surface Soil With Elevated Leachable Lead Concentrations:

Table 4-5B in the 1997 SASE identifies numerous investigation locations with elevated leachable lead concentrations in surface and subsurface soils. Areas of principal concern are those with elevated leachable lead in surface soil. These areas are: TP-16, TP-28, TP-8, TP-10, and MW-08. Note that soil is characterized hazardous if the TCLP lead concentration is greater than 5 mg/L. All these surface soil areas have TCLP lead concentrations ranging from 8 to 20 times the hazardous threshold. Consequently consideration should be given to excavating the soil in these areas for off site disposal to avoid future management of this hazardous material or potentially failing to manage it in the future as hazardous material. In addition, a monitoring well should be installed at or downgradient of TP-11 where elevated concentrations of leachable lead were detected in subsurface soil and a monitoring well does not currently exist.

#### North Waterfront:

Elevated concentrations of TCE were detected in monitoring wells MW-03 and MW-12 in the North Waterfront Area in the vicinity of the former hazardous waste and bilge water outside storage area. This contamination may be due to a local source or an upgradient source; however, prior use of the area suggests a local source. Additional soil characterization is required in the area just north of Pier No. 1 and a monitoring well should be installed upgradient of MW-03 and MW-12 to determine if there is an upgradient source of TCE.

#### Disposal Pits Northeast of Building 6:

An investigation of the disposal pits located north or northeast of Building 6 was conducted during the removal actions of 2001. One east-west and two north-south trenches were dug to evaluate subsurface soil contamination. The trenches were located on the eastern half of the northern side of Building 42. Presumably this location was selected based on historical evidence as to the location of the disposal pits. There is some concern regarding the location of the trenches based on the approximate disposal pit location shown in Figure 4-1 of the 1997 SASE, which shows the disposal pits located off the northeastern corner of Building 42. If that location is correct then none of the three trenches installed for the 2001 removal actions would have intersected the disposal pits. Confirmatory of the disposal pit location and/or rationale for the 2001 removal action trench locations is needed to assess the adequacy of the trench investigations conducted in 2001. It is

expected that some additional soil investigation will be required to clear this area for a NFA ROD.

## **REFERENCES**

Site Assessment Screening Evaluation Report, June 1997, Brown & Root Environmental

Final Remedial Action Report For Various Removal Actions at the Derecktor Shipyard and Miscellaneous Investigations at Naval Station Newport, July 2002, Foster Wheeler Environmental Corporation

Responses to USEPA and RIDEM Comments on the Draft Final Remedial Action Report For Various Removal Actions at the Derecktor Shipyard and Miscellaneous Investigations at Naval Station Newport, July 2002, Foster Wheeler Environmental Corporation.