

FINAL

**Notes from Conference call 1/13/05
Excavation Options, Old Fire Fighting Training Area
NAVSTA Newport, Newport Rhode Island**

Convened 0935

Present were:

Curt Frye, EFANE
Todd Bober, EFANE
Paul Kulpa, RIDEM
Richard Gottlieb, RIDEM
Dave Barclift, EFANE
Lisa Yeuter, EFANE
Kymberlee Keckler, USEPA
Stephen Parker, TtNUS
Jim Forrelli, TtNUS
Dan Hartigan, TtNUS
Jennifer Stump, Gannett Fleming
Greg Kemp, Gannett Fleming
Carl Tipman, TtFW
Dan Sullivan TtFW

(Note: The following is a summary of the discussions held, not a verbatim transcript of all the participants.)

C Frye introduced the call, stated that he wanted to review the submittal under Navy cover letter dated December 23, 2004 (Constructability Review) and a second submittal under Navy cover letter dated January 11, 2005 (Residual Risk Estimates). He noted that this is preliminary discussion, with a follow-up meeting in 2-3 weeks. The discussion today is being held so that the regulatory parties can understand what the Navy is working on, and so that the Navy can understand the regulatory issues, and hear what they would need more detail on. C. Frye stressed that the Navy is on a tight timeline for available funds, and a quick solution is necessary for beginning work this year.

C. Frye also stated that the information that has been provided to the review parties indicates that the excavation should only be conducted to the top of the water table; however, this would be discussed in this and the following meeting.

K. Keckler stated that the EPA would be submitting comments to the Navy's submittal dated December 23, requesting more detail.

Carl Tippman introduced the constructability review, as described in the December 23 letter and attachments. He explained that there are three primary options, one is to excavate to the water table starting at the shoreline through standard procedures (Option C), the second is to excavate into the water table to capture different groups of contaminants without attempting to control water (Option B) and the third is to drive sheet piling around each work area, excavate that area to the target depth to capture all contaminants exceeding cleanup goals, while controlling water through dewatering and treatment. Mr. Tippman stressed that under the option B, excavation without dewatering, the maximum effective depth of the excavation was approximately 3 feet below the water table.

A discussion was held regarding how this work compares to that conducted at the Former Melville North Landfill (Melville). R. Gottlieb stated that at Melville, the Navy excavated 12 feet into the groundwater, and asked why this is such a problem here. Carl indicated that their recollection is that the excavation went 3 feet into groundwater. Paul Kulpa stated that the maximum excavation at Melville was 15.5 feet. At times the tide would come in and flood the excavation, but water was not a continual problem. Dan Sullivan stated that the excavation touched the beach in only two places. This effort at the OFFTA site would encompass the entire shoreline, so that there would be more

impact of water, in addition, the shoreline at Melville was one side of a four-sided site. At this site the shoreline is three sides of a four-sided site, providing more impact. In all, there was disagreement about the effective depth of excavation below the water table.

Greg Kemp stated that the presence of bedrock and till at the OFFTA site may impact the excavation, and those areas where bedrock and till are shallow would also not support the placement of the sheeting.

Rich Gottlieb also requested explanation of the costs stated in the December 23 letter.

Carl Tippman summarized the plan of excavation option C: Beginning at the shoreline on the western portion of the site, excavate uphill toward Taylor Drive and east across the site. A silt curtain would separate the active excavation area from that area where clean material has been placed. Figure 2 of the submittal shows an excavation from west to east.

Jennifer Stump asked how close the new revetment would be to the eelgrass – Carl Tippmann stated the revetment design is conceptual, a traditional design is depicted on the sketch, and distance from the eelgrass will be as necessary to ensure the eelgrass is protected. Greg Kemp asked if the sediment under the revetment would be removed. Carl stated that some would be removed for installation of the revetment. The soil excavation would be conducted to the mean high tide line (note that sediment is the unconsolidated material seaward of this point), and the revetment would extend at least to mean low water line vertically. The horizontal extent of the revetment seaward of the mean high tide line would depend on the existing contours and the final configuration of the revetment. K. Keckler stated that sediment contamination will need to be removed, and that waste cannot be left in place under the revetment. Greg Kemp indicated that, per his review of the data, approximately half of the grids would contain residual concentrations exceeding PRGs by an order of 5 under alternative C.

C. Tippman continued by describing Excavation Option B: this would be a deeper excavation than that described above. Removal of the soils would take place to the deepest extent possible without groundwater control, which is approximately 3 feet below the groundwater table. Scenario A would consist of sheet piling one grid cell at a time, similar to what was done at Gould Island. Each 100 foot by 100 foot grid cell would be excavated after driving sheet piling around the perimeter to box in each. The soil would be excavated as water is withdrawn as needed.

P. Kulpa stated that at McAllister, there was a deep trench “Gravity Wall” excavated below the water table at the shoreline, and there was no need for sheeting or dewatering. Dan Sullivan stated that sheet piling was not possible due to presence of shallow bedrock, and a portadam was used instead. He further noted that port-a-dams are limited to holding back 4-5 feet of water.

There was further extensive discussion about Melville and comparability of the two sites. It was clarified that at Melville there was a solid waste removal as well as contaminant removal with confirmatory sampling. RIDEM stated that they do not agree with the need for sheet piling at this site. They used another site (unnamed) as a reference, located on a river that has a planned excavation of 200,000 CY which will not require sheeting, and cost is estimated to be much lower than this effort.

C. Frye stated that the large excavation could be done, but it would have to be shown that there is a cost and risk benefit associated with that effort.

Carl began presentation of the cost estimates, and both EPA and RIDEM requested complete breakdown of these estimates. They stated that they need to understand these costs better. RIDEM stated that all the estimates appear to be too high. (In reference the mound removal of 11,000 cubic yards of material was awarded at approximately \$1.9 million.) Dan Sullivan noted that treated water and sheet piling add major expense as well as the elevated current price of steel. They would expect to get 2-3 re-drives on each piece of sheet piling used.

Steve Parker introduced the residual risk summary provided under Navy cover letter dated January 11, 2005. Residual cancer risk was calculated for a future resident using detected concentrations in soils that would remain in the 0-10 foot (below ground surface) interval after each of the excavation options. Residual risk was calculated using maximum concentrations remaining, and then using average concentrations remaining. Finally, residual risk was calculated using average concentrations remaining but presuming arsenic was not a COC. The findings were that regardless of the excavation options conducted, the residual risk was similar, and in excess of the RIDEM risk target of 1E-5. Only by presuming arsenic is not a COC could the residual risk reduction meet the RIDEM risk target.

J. Stump first clarified that undetected concentrations were not considered in this assessment (S. Parker concurred). J. Stump asked if 95% UCLs were used, S. Parker stated that they could be, but the average is more realistic considering the addition of clean soil placed in the excavation, and thus being mixed with the remaining soil during the exposure scenario. J. Stump disagreed that the residual risks were all that similar between excavation options. EPA and RIDEM both requested backup for these calculations.

Rich Gottlieb stated that RIDEM regulations allow used of a risk assessment to assure removal of the contaminants or application of the method 1 criteria, not a mix and match.

Greg Kemp asked if under any of the scenarios would the buried structures (foundations, piping, etc) be removed. C. Frye stated that they would, under all these options.

Greg Kemp also asked if the sediments would be resampled this year, C. Frye stated that they would after mound removal is completed – anticipated in February 2005.

Paul Kulpa stated that there is also a goal of no free product remaining, in addition to the risk reduction. There was some additional discussion on this point: Additional costs not shown here would have to be incurred to address the free product remaining in the ground, under any of the excavation options evaluated. This includes the soil saturated with oil that is present below the water table. Rich Gottlieb stated that if the action is remove the source area there is no point in removing only part of it, as this would require continued monitoring.

It was agreed that a meeting would be held at 10:00, February 3, 2005 at NAVSTA Newport to complete these discussions.

It was agreed that the Navy would provide the following items prior to the next meeting:

- Residual risk calculations
- Breakdown of cost estimates
- Detail on the revetment construction

K. Keckler indicated that the EPA would be providing comments on the "OFFTA Excavation Constructability Review" and the associated Excel spreadsheets provided for Alternatives A1, A2, A3, B1, B2, B3, and C for soil removal at the Old Fire Fighting Training Area, received via e-mail dated December 27, 2004 after receipt of additional details on proposed revetment construction and a breakdown of the cost estimates.

EPA and RIDEM indicated their preference for complete removal of the contaminated soil from the site and that pending review of the additional information requested (risk assessment details, revetment design, and cost breakdowns) nothing less than one of the A alternatives would be acceptable.

Group Adjourned at 11:15 AM