N62661.AR.002671
NS NEWPORT
5090.3a

U S NAVY RESPONSES TO RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT COMMENTS DATED 4 JUNE 2012 TO DRAFT FINAL ENGINEERING EVALUATION/COST ANALYSIS AUGUST 2011 MUNITIONS RESPONSE PROGRAM SITE 1 (MRP01) NS NEWPORT RI

6/4/2012

U S NAVY

NAVY RESPONSES TO
RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT (RIDEM)
COMMENTS DATED JUNE 4, 2012
ON THE DRAFT FINAL ENGINEERING EVALUATION/COST ANALYSIS (AUGUST 2011)
FOR THE MRP SITE 01, CARR POINT RECREATIONAL VEHICLE CAMPING PARK AREA
NAVAL STATION NEWPORT
NEWPORT, RHODE ISLAND

Navy responses to Rhode Island Department of Environmental Management (RIDEM) comments on the Navy's Draft Final Engineering Evaluation/Cost Analysis (EE/CA) for the MRP Site 01, Carr Point Recreational Vehicle Camping Park Area are presented below. The RIDEM comments are presented first (in italics) followed by the Navy's comments.

General Comment

1. During the conference call held on May 22, 2012 between the Navy, EPA and RIDEM, EPA requested that the Navy consider comparing the confirmatory sampling data to RIDEM's Industrial/Commercial Direct Exposure Criteria (I/C DEC) for all individual contaminants of concern (COCs) rather than the revised benzo(a)pyrene (B(a)P) equivalent (0.8 mg/kg) proposed in the Draft Final EE/CA. The purpose of this request was for the Navy to demonstrate compliance with RIDEM's regulations since these are ARARs for this removal action.

Please be advised that the industrial/commercial standard was not intended to apply to a campground which will be utilized by children. However, Section 3.39 of the Remediation Regulations includes "activities related to outdoor recreational areas with restrictions in place to limit potential exposure" in the definition of "industrial/commercial activities". Therefore, because access to this site will be extremely limited (14 days per year), EPA's request stated above is acceptable based on the restrictions that will be put into place for this site.

RIDEM strongly recommends that the Navy consider setting the cleanup goal for this Site to RIDEM's Residential DEC. This would avoid the need for LUCs, restricted access to the site and yearly inspections and reporting requirements. And as stated in RIDEM's comment below, we believe that the cost estimate for the current removal action is grossly overestimated and the cleanup of the entire site to residential standards could possibly be equivalent to the proposed cost reflected in this document.

Response: Navy concurs with the agreed upon revision to utilize RIDEM I/C DEC for comparison to confirmation sampling results.

2. Based on a comparison of soil results to I/C DECs, it appears that two samples outside the area depicted on Figure 4-1 of the EE/CA (which depicts the boundaries of the proposed excavation area) have individual PAH concentrations above the I/C DEC: SS115 and SS122. Please identify and include these two locations for remediation in the EE/CA.

Response: A review of the existing analytical data for samples SS115 and SS122 did not show any exceedances of RIDEM I/C DECs. Sample SS115 contained benzo(a)pyrene, benzo(b)fluoranthene, and chrysene at concentrations that exceed the **residential** criteria, but not the **I/C DEC**. Sample SS122 had **residential** exceedances for benzo(a)pyrene and chrysene but no **I/C DEC** exceedances. RIDEM regulations indicate that the I/C DEC for benzo(a)pyrene is 0.8 mg/kg, for benzo(b)fluoranthene it is 7.8 mg/kg, and for chrysene it is 780 mg/kg. There is no RIDEM criteria for benzo(a)pyrene equivalents.

Navy would like to clarify that the boundary of the proposed excavation area was based on the Technical Memorandum (Tetra Tech, 2010) which evaluated recreational risk at MRP Site 1. The proposed excavation area encompasses locations where the 1E-05 cumulative cancer risk benchmark was exceeded. In addition, based on the May 22, 2012 conference call between

Navy, EPA, and RIDEM; confirmatory sample results will be compared to RIDEM I/C DECs and not to the 0.8 mg/kg benzo(a)pyrene equivalents that was initially proposed as the PRG in the Draft EE/CA.

***Comment 1:* Page 3-2, Section 3.3, Remedial Goals; 2nd paragraph.**

"…a subset of the confirmatory samples will also be analyzed for metals and all results will be compared to RIDEM Industrial/Commercial DEC exposure criteria."

Please specify what fraction this "subset" comprises, or state that this will be discussed in the remedial action workplan.

Response: The document will be revised to state that all confirmation samples will be analyzed for metals.

***Comment 2:* 2. Page 4-6, Section 4.5.3, Cost.**

RIDEM continues to believe that the cost estimate for soil excavation is extraordinarily high. Soil excavation costs for non-hazardous soil are typically about $60-$90/ton, including excavation, hauling and disposal. Using the upper end of this range, the total cost comes to approximately $250,000 for 50,000 ft3. Assuming this amount, excavating twice the estimated volume would be substantially lower than the initial estimate of $922K. Please review and revise the cost evaluation as necessary. Using a more realistic cost, the Navy could clean up the site to residential standards for less than the initial estimate.

Response: Comment noted. Cost estimates have been reviewed and some adjustments have been made. These include a revision of the excavation cost per cubic yard and the weight of excavated material for disposal as a non-hazardous waste, among other minor changes. The costs decreased slightly, based on these modifications, but are not significantly lower than what was presented in the Draft Final EE/CA. The estimated costs are comparable to those used at similar sites.