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LETTER AND COMMENTS FROM U S EPA REGION I REGARDING DRAFT FINAL
ENGINEERING EVALUATION/COST ANALYSIS FOR AREA OF CONCERN 55C NAS SOUTH
WEYMOUTH MA
11/13/2009
U S EPA REGION I



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

November 13, 2009

Brian J. Helland, P.E.
BRAC Program Management Office NE
4911 South Broad Street
Philadelphia, PA 19112-1303

Re: Draft Final Engineering Evaluation/Cost Analysis for AOC 55C

Dear Mr. Helland:

Thank you for the opportunity to review the *Draft Final Engineering Evaluation/Cost Analysis (EECA) for Area of Concern 55C Debris Area North of Trotter Road* at the former Naval Air Station South Weymouth, Weymouth, MA, dated October 2009. The document presents the removal action objectives and describes the development and evaluation of the alternatives considered feasible for conducting the removal action. EPA reviewed the document for consistency, technical accuracy, completeness, and incorporation of EPA comments on the March 2009 Draft EE/CA. Detailed comments are provided in Attachment A.

So that this document can stand alone, please add a section (*e.g.*, Section 2.4) that explains the basis for the human and ecological benchmarks and the final PRGs. Specifically, please briefly explain 1) why the residential soil screening levels are a conservative surrogate for sediment, 2) why the human health screening benchmarks for soil and sediment were the 2004 Region 9 values rather than the 2009 EPA regional screening levels, 3) how the NOECs and LOECs were derived from the sediment toxicity data, 4) why the geometric mean of the NOEC and LOEC is a reasonable conservative PRG for sediment toxicity results of samples with multiple chemicals, 5) that the ecological benchmarks were based on sediment toxicity because no unacceptable ecological risks were identified for soil or surface water, and 6) the basis for using the TSCA residential value of 1000 ug/kg, rather than the residential soil risk-based screening value for individual Aroclors.

For clarity, please provide footnotes in Table 1 that explain NOEC, LOEC and PEC-Q and note that they refer to the sediment toxicity test results performed with aquatic invertebrates.

For clarity, please provide footnotes to Tables 2, 3, and 4 to explain the basis for the human health benchmarks (*i.e.*, 2004 EPA Region 9) and base background (*i.e.*, same as footnote 3 of Table 6).

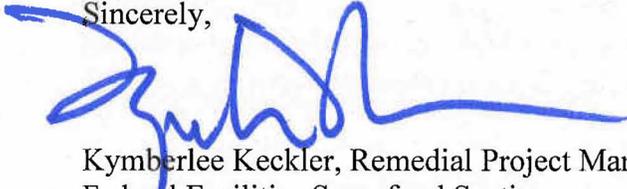
Section 2.3 incorrectly states that "...ARARs are not directly applicable to removal actions,...." Please either delete this sentence or provide citations in CERCLA, NCP or elsewhere that support this assertion.

No change to the EE/CA is required regarding GC2, but issues related to vernal pool organisms (*e.g.*, amphibians and fingernail clams), need to be recognized in the removal action work plan.

Regarding GC7, the revised Ecological Risk Assessment and Human Health Risk Assessment were submitted in November 2009 and are still under review.

I look forward working with you and the Massachusetts Department of Environmental Protection on the investigation and remediation of AOC55C. Please do not hesitate to contact me at (617) 918-1385 should you have any questions.

Sincerely,



Kimberlee Keckler, Remedial Project Manager
Federal Facilities Superfund Section

Attachment

cc: Dave Barney, USN, South Weymouth, MA
Dave Chaffin, MADEP, Boston, MA
Kevin Donovan, SSTTDC, South Weymouth, MA
Phoebe Call, TTNUS, Wilmington, MA

ATTACHMENT A

<u>Page</u>	<u>Comment</u>
p. 4, §1.3	The text at the top of the page states that the ecological risk assessment (ERA) will be issued before the completion of the removal action. Please plan to complete the ERA before submittal of the removal action work plan.
p. 6, §1.3	The text in the first paragraph under <i>Human Health Risk Assessment</i> states that the Human Health Risk Assessment (HHRA) will be issued before the completion of the removal action. Please plan to complete the HHRA before submittal of the removal action work plan.
p. 6, §1.4, ¶1	The last sentence states that there was no unacceptable risk associated with surface water alone. The last paragraph in Section 1.3 lists surface water as potentially contributing to unacceptable cancer risk for future residents. Please clarify.
p. 8, §2.1, ¶2	Please state that post excavation analytical results will be compared to the preliminary remediation goals (PRGs) and that the PRGs were developed using various criteria including site-specific ecological NOEC and LOEC, Oak Ridge Regional Screening Levels (RSLs), and base background. Table 6 indicates that Region IX PRGs and MassDEP S-1 standards were not used to set PRGs and the ecological goals were established as the geometric mean of the NOEC and LOEC.
p. 11, §3.2	The second last bullet refers to the removal of surface metal during the electromagnetic (EM) survey. The discussions of the EM survey and earlier investigations do not mention that metal debris was removed from the site. If it has been removed please document that in the discussion in Section 1.0 of this document and also include information on the amount and disposition of that metal debris. Based on EPA's site visit, the metal debris appears to still be present.
p. 12, §3.2	The third last bullet discusses confirmatory sampling frequency. Please clarify that samples will be collected from the base of the excavation at a frequency of at least one sample for every 1,000 square feet. The sidewall sampling frequency of one sample every 40 to 50 feet is acceptable given the expected excavation depth of approximately two feet. This will result in the collection of 30+ samples including QA/QC samples.
p. 13, §4.1.1	a) An alternative cannot meet <i>most</i> of the ARARs and be a viable alternative unless certain ARARs are waived. Please revise the discussion under <i>Compliance with ARARs</i> to more clearly indicate whether the alternatives satisfy the ARARs. b) The No Action alternative is not effective. Delete the second sentence under <i>Long-term effectiveness and permanence</i> .
p. 15, §4.2	Please state that the No Action alternative is not protective of human health and the environment and does not satisfy the ARARs and therefore cannot be selected as the removal action for this site because the ultimate goal is to select No Further Action as the final remedy for this site.

- Table 5 a) Please include the RSLs as chemical-specific TBCs.
- b) EPA 540-R-03-001, January 2003 is cited as a chemical-specific ARAR for lead in soil. Table 6 indicates that lead is not a contaminant of concern (COC) for soil. Lead is identified as a COC for sediment and the cleanup goal of 722 milligrams per kilogram (mg/Kg) is based on ecological risk. This would not satisfy the residential risk standards. Please correct.
- Table 6 Please clarify how the PEC-Q values were calculated, because no consideration was given to the PEC-Q values as PRGs for this removal action. What is the relevancy of a PEC-Q value exceedance? For example, SD-403 had no exceedances of any NOEC, but the PEC-Q was 1.5 times the PEC-Q for the LOEC. If this situation arises when confirmation sampling is conducted, would that warrant cleanup?
- Table 7 a) The alternatives evaluated are not consistent with those discussed throughout the EE/CA. The No Action alternative does not have institutional controls. The Institutional Control alternative was dismissed and not evaluated in the EE/CA text because it is not protective. Costs should be evaluated for the No Action alternative, for comparison purposes, and for the excavation alternative. Please revise accordingly.
- b) Although the EE/CA does not indicate how much debris is present, EPA assumes that there is enough debris to warrant a line item for this cost estimate. It is not apparent that the cost estimate includes disposal of debris. Please include it or clarify why it was omitted. Please add the costs for management of the debris if that is not already included.
- c) The indirect costs appear to be out of proportion to the direct costs estimated for this removal action, totaling 95% of the direct costs. While indirect costs should be expected to be a larger percentage of direct costs for smaller projects, 95% is too high. Please correct the indirect cost estimate.
- Figures 2 & 3 Please clarify the basis for the site boundary for AOC-55C. Figure 2 shows debris extending beyond the limits of the indicated site boundary and Figure 3 shows the excavation limits extending beyond the limits of the boundary. The site boundary is defined as the limits of contamination and in this case also the limits of debris indicating that the boundary needs to be updated.