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LETTER AND U S EPA REGION 1 ADDITIONAL COMMENTS TO DRAFT STUDY AREA SCREENING EVALUATION SITE 4 NS NEWPORT RI
7/13/2011
U S EPA REGION 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
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BOSTON, MASSACHUSETTS 02109-3912

July 13, 2011

Maritza L. Montegross
Remedial Project Manager
NAVFAC MIDLANT, Code OPNEEV
9742 Maryland Avenue, Bldg. Z-144
Norfolk, VA 23511-3095

Re: Draft Study Area Screening Evaluation
Site 04, Coddington Cove Rubble Fill Area
Naval Station Newport
April 2011

Dear Ms. Montegross:

On June 10, 2011, EPA issued comments on the document entitled "Draft Study Area Screening Evaluation for Site 04 – Coddington Cove Rubble Fill Area, Naval Station Newport, Newport, Rhode Island," dated April 2011, prepared by Tetra Tech NUS, Inc. for the Navy. The document presents the results of a sampling and analysis investigation of potentially contaminated media at the subject site to determine if a potential risk to human health or the environment exists at the site. After further review of the document, EPA identified additional comments that warrant Navy's consideration. Please accept the additional comments attached and address these comments in the Navy's responses to comments on this report and in preparation of the Draft Final. EPA apologizes that these were not issued within the FFA review timeline and recognizes that the Navy may require additional time to prepare responses to comments. Several of the additional comments are consistent with RIDEM's comments issued on June 13, 2011.

If you have any questions, please contact me at (617) 918-1754 or at lombardo.ginny@epa.gov.

Sincerely,

Ginny Lombardo

Ginny Lombardo
Remedial Project Manager

cc: Gary Jablonski, RI DEM
Darlene Ward, NAVSTA Newport
Stephen Parker, TtNUS
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Additional EPA Comments on
Draft Study Area Screening Evaluation
Site 04 - Coddington Cove Rubble Fill Area
Naval Station Newport
Newport, Rhode Island
April 2011

GENERAL COMMENTS

1. Throughout the report, the Navy offers reasoning to dismiss contaminant data that exceeds the screening levels (e.g., background conditions, conservativeness of screening levels, land use, frequency/magnitude of exceedances, off-site sources). However, the purpose of the Study Area Screening Evaluation (SASE) is to eliminate from further consideration those sites that pose no significant threat or potential threat to human health and the environment and are available for unrestricted use. The SASE Report attempts to support a no further action decision by making risk management arguments that should rather be supported through a Baseline Risk Assessment under a Remedial Investigation. Contaminants clearly exceed screening levels and do represent a potential risk to receptors.

2. Throughout the report, the Navy indicates that the levels of metals in site soils and sediments are consistent with NAVSTA Newport background soil conditions and suggests that, based on this background analysis, these constituents do not need to be retained as COPCs. EPA disagrees with this approach. Background conditions cannot be used to eliminate COPCs. EPA's background guidance, "Role of Background in the CERCLA Cleanup Program," (April 26, 2002) indicates that background concentrations of contaminants found at the site "should be considered in the risk assessment and risk management." The guidance states:

   - "EPA cautioned that eliminating COPCs based on background (either because concentrations are below background levels or attributable to background sources) could result in the loss of important risk information for those potentially exposed, even though cleanup may or may not eliminate a source of risks caused by background levels."
   - "Specifically, the COPCs with high background concentrations should be discussed in the risk characterization, and if data are available, the contribution of background to site concentrations should be distinguished."
   - "When concentrations of naturally occurring elements at a site exceed risk-based screening levels, that information should be discussed qualitatively in the risk characterization."

   The SASE Report must be revised to be consistent with EPA guidance on the role of background in the CERCLA program.

   In addition, the report text and Appendix G indicates that, for the purposes of the background comparison, "it was assumed that before fill was placed at the site most of the soil was also Stissing Silt Loam." Provide additional support for this assumption. Since much of the site is urban fill, a comparison of site data to undisturbed background soil conditions at the base does not seem appropriate.

SPECIFIC COMMENTS

1. Page 2-9, Section 2.3.2: The report indicates that "no monitoring wells achieved the optimum stabilization criteria" for turbidity during well development and "final turbidity levels did not go below 130 NTUs." The report goes on to provide turbidity data for the wells, showing that turbidity was elevated throughout well development. Explain how this turbidity issue may have impacted the groundwater analytical results.

2. Page 4-9, Section 4.2.2, Metals: The text indicates that manganese did not exceed the RSLs. However, the table on page 4-8 shows that manganese did exceed the RSL in 1 sample. Correct, as appropriate, throughout the report.

3. Page 5-8 – 5-9, Section 5.2.2, PAHs; Page 5-13, Section 5.3; and Page 8-5, Section 8.5: The text indicates that "PAHs in surface water are expected to be present as a result of roadway runoff carried through this wetland." Page 8-5 states, "contaminants in surface water and sediment are more likely to be a result of the location of the wetland and the source of the receiving waters as road runoff and storm drainage from the urban surroundings." On page 5-9, the text discusses the breakdown of asphalt at the likely source of PAHs at the site, stating that "large pieces of asphalt and concrete were observed in the fill layers during test pitting." The report also notes that "ash…might have been disposed of here and could be contributing to PAH levels." Therefore, PAHs in soils, sediment and surface water are likely attributable to the sources at the site.

4. Page 5-12, Section 5.2.5: The text states, "The distribution of metals in site media suggests that their presence is largely not site related." EPA disagrees with this overarching conclusion. See General Comment 2 above regarding comparison of site date to background. In addition, maximum levels of chromium, lead and manganese in site soils and lead and vanadium in sediment are not consistent with background data sets. Further, this site was utilized as a disposal area and much of the soil sampled is not native soils, but rather urban fill material. Since a wide variety of metals-containing materials were likely disposed at the site, Navy cannot conclude that the presence of metals contamination is not site related.

5. Page 5-12, Section 5.2.5: The text states "only arsenic, iron and chromium were detected above screening criteria in surface soil." Iron is not reported in Section 4 as above screening criteria. However, lead exceeded the screening criteria in surface soils and should be discussed here.

6. Page 6-4, Section 6.1.1: Chromium was also detected in surface soils at concentrations exceeding the RSLs. Add discussion of chromium results to this section.

7. Page 6-5, Section 6.1.1: It is EPA policy to screen maximum detected concentrations against risk-based screening levels (RSLs) based on a target risk level of 1E-6 to screen for contaminants of potential concern (COPCs). The risks from those contaminants with maximum concentrations exceeding the RSLs would then need to be further quantitatively

evaluated using site-specific exposure assumptions and default values if necessary, following standard risk assessment procedures. With respect to the discussion in the report on PAH risks, EPA does not accept a qualitative assessment as described in this section for benzo(a)pyrene, i.e., describing that the 95%UCL at 1,150 ug/kg is below the 10-4 risk level at 1,500 ug/kg, to assess and possibly screen out the contaminant. This qualitative assessment might show that the 95%UCL, which could be used for the risk assessment, would possibly result in an acceptable risk level below 10-4. However, it does not address the concern that when evaluating all the other contaminants, the cumulative risk could be unacceptable and it does not take into consideration site-specific exposure conditions. The main purpose of going through the proper risk assessment procedure is to ensure that site-specific conditions are evaluated and to present cumulative risks from all contaminants at the site. Risk management would then be used to determine whether the risks calculated for the site would trigger remedial action.

8. Page 6-6, Section 6.2.1: The text states that arsenic, beryllium, lead, and manganese were detected in subsurface soils at concentrations exceeding RSL or RIDEM DC criteria. However, Section 4, table on page 4-8, shows that chromium and iron also exceeded the screening criteria for subsurface soils.

9. Appendix G, Section 3.1: The text indicates that "Metals concentrations in Wetland Soil/Sediment were compared to SE surface soil background concentrations." EPA does not agree that background soil data can be compared with site sediment data for evaluation of background conditions.