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U S NAVY RESPONSE TO THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES AND THE U S EPA REGION IV COMMENTS ON THE DRAFT PROPOSED PLAN SITE UNEXPLODED ORDNANCE 19 (UXO-19) OPERABLE UNIT 25 (OU 25) MCB CAMP LEJEUNE NC

12/29/2014

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Response to Comments
Draft Proposed Plan Site UXO 19, Operable Unit 25
Marine Corps Installations East – Marine Corps Base Camp Lejeune (MCIEAST-MCB CAMLEJ), North Carolina

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Introduction

The purpose of this document is to address comments on the Draft Proposed Plan (PP) for Site UXO-19, Operable Unit (OU) 25. The North Carolina Department of Environment and Natural Resources (NCDENR) and the United States Environmental Protection Agency (USEPA) provided the comments listed below. The responses to comments are provided in bolded text.

North Carolina Department of Environment and Natural Resources

Comments (Dated November 7, 2014 and December 4, 2014 and December 12, 2014)

1. Next to the last paragraph on page 6 should state, ". . .with several possibly <u>containing</u> high explosives . . ." or other appropriate language. Please correct this Typo.

   This typo will be corrected.

2. The PA/SI Section on page 3 should include a brief discussion of the Expanded Site Investigation (ESI) that was completed prior to the Remedial Investigation/Feasibility Study (RI/FS). Several paragraphs throughout the plan state that investigation work was completed during the RI/FS. To the best of my knowledge no field work was completed during the RI/FS. The RI/FS at Site UXO-19 compiles and summarizes the Site investigation work completed during the PA/SI and ESI.

   The ESI field activities are documented in the RI/FS and a footnote will be added for clarification as follows: The RI was initially planned and conducted as an Expanded Site Inspection (ESI); however, it was later determined that an RI was needed. Because the data collected during the Focused PA/SI and ESI was sufficient to complete an RI, no additional field work was necessary and the ESI results are provided and evaluated in the RI/FS.

   Additionally, per follow-up comments, the PA/SI conducted was a Focused PA/SI and references in the text will be changed. For additional clarification, planning documents associated with each field investigation are listed in the section summarizing the report that documents the results of the investigation. The first investigation was completed under the "Site-specific Work Plan Addendum for Focused PA/SI" (April 2009), and is documented in the "Focused PA/SI Report" (October 2010). The 100 percent intrusive

investigation, referred to as "Expanded SI", was completed under the "Focused PA/SI Work Plan Addendum" (2011) and documented in the RI/FS report (2013).

3. The RI/FS Section on page 3 refers to ESI work as being part of the RI/FS. No active field investigation work was completed during the RI/FS.

   See response to Comment 2.

4. There was no reduction in human contact with MEC/MPPEH during the RI as stated in the paragraph below the first bullet in the right column on page 9. All reduction in potential human contact and other field work was completed during the PA/SI and ESI. Please make appropriate changes in this section and throughout the report.

   See response to Comment 2.

5. Short Term Effectiveness of the alternative remedies 1 and 2 as discussed in the Evaluation of Alternatives Section on pages 10-13 and as compared and analyzed in Table 3 on page 12 should have a low relative ranking since they do nothing in the short term to reduce risk. However, since this is a UXO site and 100% geophysical mapping and intrusive investigation were completed, Alternative 2 would be effective in the short term and the long term since it restricts contact with potential Munitions and Explosives of Concern (MEC) through land use controls (LUCs).

   However, Alternative 1, No Action alternative, is not effective in the short term or the long term since contact with potential MEC could occur at any time. Therefore, the relative ranking of Alternative 1 should be low (or none). In the future all no action alternatives should be not effective or have the lowest ranking in the ranking system, which in this case, is low.

   Follow-up comments recommended the following rankings at Site UXO-19 for the Short-Term-Effectiveness Criteria for Alternatives:
   1 (No Action) - Low
   2 (LUCs) - Low to Moderate
   3 (DGM & MEC Removal) - Moderate
   4 (MEC Removal, Excavation & Sifting) - Low to Moderate

   Text will be added to indicate that Alternative 1, No Action, did not meet the threshold criteria and therefore is not eligible for selection and not included in the evaluation. The short-term effectiveness ranking, as well as the other Primary Balancing Criteria, for the No Action alternative in Table 3 (now numbered as Table 5) will be changed to Not Applicable (NA). For the LUCs alternative, the short-term effectiveness ranking will be maintained as high because short-term effectiveness, in terms of risks to workers, potential impacts to the community and environment during implementation, and time to implement would be most favorable for Alternative 2 as no activities other than administration of LUCs would be conducted, resulting in lower potential risks. Alternative 2 also has the lowest potential impact to the environment during implementation, and shortest implementation time-frame since no active treatment would be performed, only LUCs. The short-term effectiveness rankings for Alternatives 3 and 4 will be maintained as moderate and low, respectively.

USEPA Region 4

Comments (Dated December 11, 2014)

1. Please use the term Proposed Plan because that is what the NCP and EPA guidance require. Also, the FFA instructs the Navy to follow EPA guidance.

   Proposed Plan will be used instead of PRAP.

2. Section 2.2, under RI/FS, Paragraph 2, "Limiting site conditions…"- This sentence defines limiting site conditions, although it is not exactly mentioned in earlier statements. The second sentence of this paragraph infers that there are site limitations, however, it has to be an interpretation to understand the thought. I would suggest rewording this sentence to read: "Site conditions that could limit MMRP investigations include ..", or remove the word "limiting" and begin the sentence with "Site".

   Suggested revisions will be made.

3. Section 2.2, under PA/SI, Paragraph 2 - Need to provide more detail on this effort including a map or figure depicting the extent of the survey and even transects. The total amount of items should be provided and state how they were managed (blown-up on-site or taken for treatment elsewhere and disposed). This info is included in the PA/SI.

   These details will be added.

4. Section 3.1 Munitions Constituents - Please include statement that includes reference for the screening levels such as the origin EPA RSLs or other Agency guidance and the concentration.

   A statement referencing the screening levels and tables summarizing constituents and concentrations that exceeded screening levels will be added to this section.

5. Section 3.1, MEC/MPPEH - Should this be "illuminating smoke" without a comma?

   No, illuminating and smoke are two different types of fillers.

6. Section 3.1, MEC/MPPEH - Should add a statement that states the munitions were recovered and destroyed. As it reads, the paragraph is only describing what was found (uncovered), it does not give the final disposition of the materials. Please describe how these removed items were treated/disposed.

   A statement will be added about MEC recovery and disposition to Section 3.1.

7. Section 3.3, second to last sentence - This is an undefined activity and should be clarified with examples of such that could include digging with a shovel or intrusive activity.

   This text will be edited to provide examples of "aggressive contact" activities (digging, kicking, striking, and/or throwing).

8. Section 3.2, Munitions Constituents - This is too strong of a statement and facts at the site suggest constituents are not always "controlled". Revise to state "may be controlled in some instances by physical..."

   The statement will be revised as suggested.

9. Section 3.2, MEC/MPPEH, last sentence of first paragraph - This statement is not supported with any data or references. Stormwater for example can result in erosion that exposes items as noted in next paragraph. Revise or remove this statement accordingly.

   This statement will be removed.

10. Section 3.3, Second sentence - Revise as follows: "Although the term PTW is generally associated with, for example, contaminated soil, buried waste, NAPL and other toxic wastes, buried MEC..."

    The sentence will be revised as suggested.

11. Section 5.1, last sentence - Need to elaborate that contaminant levels in soil and groundwater were found to be within acceptable risk range or for GW did not exceed MCLs or other health based drinking water levels

    A statement indicating that contaminant levels in soil and groundwater were within acceptable risk range.

12. Section 5.3 - Use the DoD ranking system of 1-4 that indicates threat or hazard level due to MEC/MPPEH. Indicate the ranking of this site and what the ranking scale means for context to readers unfamiliar with the process. Note: this info is included in the RI/FS and can be added as a brief summary to the text. Suggestion would be to include the ranking/discussion before and after removal. (pg. 6-8 of RI/FS)

    The ranking and discussion about MEC HA from the RI/FS will be added.

13. Section 6, first bullet - add "posed by MEC/MPPEH remaining in surface and subsurface soils." And Section 6, second bullet - This cannot be done without treatment or some other physical interaction with the MEC/MPPEH items. Suggest that this RAO be revised to better reflect what is intended. The two RAOs can be combined. See example from Milan's Proposed Plan:

    Reduce or prevent the potential for direct physical contact of receptors with MEC at the surface and within the subsurface to allow current land use of the site to continue.

    The RAOs will be changed to a single RAO as suggested:

    Reduce or prevent the potential for direct physical contact with MEC/MPPEH to allow current and reasonably anticipated land use of the site to continue (infantry training).

14. Section 7 - Should this be MEC/MPPEH? Note that the term MEC is used throughout this page and thus there may need to be multiple revisions.

    MEC will be changed to MEC/MPPEH.

15. Section 7, second paragraph - add: therefore, it does not meet the threshold criteria and will not be evaluated further.

    This statement will be added.

16. Section 8.2, Long-term Effectiveness and Permanence - remove: "except the No Action alternative"

    The reference to the No Action alternative will be removed from this section.

17. Table 3 - The No Action evaluation table has changed based on the discussions. The proposal is to discontinue ranking after the threshold criteria. "No Action" does not meet the threshold criteria, therefore, the no action is not protective and will not be evaluated further.

    Agree. Changes to the text and table will be made to reflect the discussions about No Action and Primary Balancing Criteria.

18. Section 8.2, Cost - remove: "not including the No Action alternative"

    Text will be removed.

19. Section 9 - The EPA prefers that the navy use the LUC Checklist language in the PP but it will be required in the ROD in order for EPA to approve/sign. Reference LUC Checklist #6 and #7, see below.

    _ 6. Duration language: "Land Use Controls will be maintained until the concentration of hazardous substances in the soil and groundwater are at such levels to allow for unrestricted use and exposure."

    _7. Include language that the [federal agency] is responsible for implementing, maintaining, reporting on, and enforcing the land use controls. This may be modified to include another party should the site-specific circumstances warrant it.

    Section 9 will be updated to include LUC Checklist language referenced in the comment.

20. Section 9, 3rd paragraph - Revise to delete "LUCs' and replace with the phrase 'land use restrictions. And add another LUC above to revise the Base Master Plan and/or GIS mapping with the land use restrictions for this site.

    This change will be made and a LUC to revise Base Master Plan and/or GIS mapping with land use restrictions for the site will be added.