

5/16/05

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NWS EARLE  
5090.3a

**TO: MICHELE DIGEAMBEARDINO (EFANE)**

**FROM: RUSS TURNER (Tetra Tech, NUS)**

**SUBJECT: NWS Earle, Sites 3 and 10 (OU 6)  
Final Revised Record of Decision (ROD) and  
Remedial Design (RD) for Land Use Controls (LUC)**

Michele,

Copies of the subject documents are being distributed as follows:

One copy to EPA (Jessica Mollin)

One copy (RD for LUC only) to EFANE (Michele DiGeambeardino)

The revised ROD needs the NJDEP concurrence letter to make Appendix A complete. I am distributing the two documents along with the Navy reply to EPA comments to keep the document progressing while we await NJDEP concurrence.

Please call or leave a message if you have comments or questions.

Thanks.

  
Russ

Copy. Jessica Mollin (EPA)  
Garth Glenn (Tetra Tech NUS) (w/o enclosures)  
File

**Navy Response to EPA ORC Comments  
NWS Earle OU 6 (Sites 3 and 10) ROD and RD for LUC**

**Comments on Record of Decision - OU-6**

**General Comments**

1. Throughout the document, sample levels are compared to NJGWQS, and not MCLs. Include whether or not MCLs were exceeded.

Reply: MCLs were reviewed in the RI. There were no compounds that exceeded MCLs and not NJGWQS. The text has been changed throughout to also mention MCL's where appropriate.

2. There needs to be consistency when referencing GWQS. The ROD uses GWQS, GWS and GQS. It should always be GWQS and "Ground Water Quality Standards" should only be written during its first reference after which the acronym should be used.

Reply: Agreed, changed all references to GWQS throughout the document.

3. Limit ARARs to only those that are applicable to Sites 3 and 10.

Reply: Agreed. Removed ARARs that are not applicable to Sites 3 and 10 on Tables 9 and 10.

**Specific Comments**

4. Site 10 - Add language in the ROD clarifying that there are no UXOs at Site 10.

Reply: There is no known UXO interred at Site 10. Text has been revised to clarify this issue. (See PART II, Section I, Subsection C)

5. Page II-16 - Paragraph 1 - Include whether or not background arsenic levels were above or below regulatory levels.

Reply: Arsenic in groundwater and surface soils were below regulatory levels. Arsenic in sediment was above the ER-L, but below the ER-M ecotox threshold values. Added the following reference "Sediment was the only media where background concentrations for arsenic exceeded the regulatory levels". (See PART II, Section V, Subsection E, Item 1, Sub item b, paragraph 4, last sentence)

6. Page II-25 - Explain what is meant by poor laboratory of field decontamination procedures.

Reply: Phase I RI data is generally suspect because of possible field and/or laboratory deficiencies. Therefore Phase I data was used for planning Phase II RI field efforts but was not used in the calculation of site risks. Text revised as requested. (See PART II, Section V, Subsection E, Item 2, Sub item b, paragraph 2)

7. Page II-30 - Site 3 - Site description suggests that the Site may be situated in a flood plain, if so, that fact should be stated.

Reply: Site 3 is not situated in the 100-year flood plain. Table 10, Location Specific ARARs, has been revised to state that the site is not in the 100-year flood plain.

**8. Page II-33 - Table 7 - Costs should include present worth.**

Reply: The present worth costs are included in Table 9 for Site 3 and Table 10 for Site 10.

**9. Page II-33 & II-34 - Explain why all three alternatives are retained for Site 3, but only two alternatives are retained for Site 10.**

Reply: The final RI report for Site 10 concluded that typical aluminum and steel scrap, potentially associated with other metals and anti-corrosion treatments or coatings, appeared to have limited potential for effect on human health or the environment and suggested a focused FS for additional (gravel) cover.

The draft FS for Site 10 concluded that no action was needed to protect human health and the environment. Alternative 1, the No Action Alternative, was found to be equivalent to Alternative 2, Limited Action, and to Alternative 3, Covering and Institutional Controls. However, the Navy and EPA preferred Alternative 3, for the combination of (extra) protection it offered. Therefore, in the final FS, Alternative 3 was retained and Alternative 3 was selected for the PRAP.

**10. Page II-46 - Paragraph 5, paragraph 3 - This sentence reads awkwardly, it needs to be reworded and it needs to clarify that the soil cover system would only be for alternative 3.**

Reply: Agree, will reword as follows. "Alternatives 2 and 3 would present a greater opportunity for short-term impact due to soil grading and installation of fencing. Alternative 3 would present an even greater opportunity for short-term impact due to more grading and construction activities for installation of the soil cover system". (See PART II, Section IX, Subsection A, Item 5, paragraph 3).

**11. Page II-49 - Table 10 - Explain why Alternative 2 is excluded. Also, under Location-Specific ARARs, explain why it is applicable for Alternative 3 but not Alternative 1. It should be applicable for both.**

Reply: Table 8 mentions that Alternative 2 offers minimal additional protection for additional cost, so Alternative 2 is eliminated.

Table 10 has been revised to discuss Alternative 1 potential Location-Specific ARARs.

**12. Page II-50 - Table 10 - "Time Until Action is Complete" - explain why it would take 1.5 years to institute a CEA.**

Reply: This time frame is applicable because according to NJDEP regulations for instituting a CEA, it cannot be implemented until after active remediation has been completed. The CEA request will be submitted after cap installation.

**13. Page II-57 - LUC objectives should be written as an "and" statement, that the Navy will be doing : a); b); c); and d).**

Reply: Agreed, made change for all LUC objective lists (three locations).

14. Page C-1, comment 2 - Incorporate the first sentence of the response into the ROD itself.

Reply: Agreed. Added the following sentence "There are six different watersheds that originate on the Mainside Area." (See PART II, Section V, Subsection A, paragraph 2)

**Navy Response to EPA Program Comments  
NWS Earle OU 6 (Sites 3 and 10) ROD and RD for LUC**

**Comments on the Draft OU 6 ROD**

**EPA Program Reviewer Comments**

1. Add an Appendix D and put the NJDEP's concurrence letter in this appendix.

Reply: Agreed, made change, NJDEP concurrence now is Appendix A.

2. Page I-1, Section II, 3<sup>rd</sup> paragraph. Add the following sentence in this paragraph: "The state concurrence letter is included as Appendix D".

Reply: Agreed, made change, except it is now Appendix A. (See PART I, Section II, paragraph 3)

3. Page 1-2, Section IV, 1<sup>st</sup> sentence. Change remedy to remedies.

Reply: Agreed, made change. (See PART I, Section IV, paragraph 1)

4. Page I-2, Site 3, 2<sup>nd</sup> paragraph, 3<sup>rd</sup> sentence. This sentence is not consistent with the sentence on page I-3, paragraph b which implies that water can be used with treatment. Change the language so that these sentences are consistent with each other.

Reply: Agreed, added the words "untreated groundwater from the" in front of the word 'aquifer'. (See PART I, Section IV, Site 3, item 2, paragraph 1)

5. Page I-3, paragraph under LUC objectives and paragraph #4. Be consistent with "5" or "five". Check this throughout the document.

Reply: Agreed, made change throughout using the Navy CLEAN program style guide, spelling out numerals ten and under as recommended. (See PART I, Section IV, Site 3, item 4, paragraph 1)

6. Page I-3, Site 10, paragraph #1, 3<sup>rd</sup> sentence. Put a hyphen between "one" and "year" and replace "at" with "as".

Reply: Agreed, made change. (See PART I, Section IV, Site 10, item 1, paragraph 1)

7. Page I-3, Site 10, Paragraph #2, 1<sup>st</sup> sentence. Put a comma after "titled" and put parentheses around the document title.

Reply: Agreed, added comma. Added quotation marks around the document title. (See PART I, Section IV, Site 10, item 2, paragraph 1)

8. Page I-4, 1<sup>st</sup> paragraph, 2<sup>nd</sup> sentence and paragraph b. See above comment #4.

Reply: Agreed, added the words "untreated groundwater from the" in front of the word 'aquifer'. (See PART I, Section IV, Site 10, item 2, paragraph 1)

9. Page I-5, William J. McCabe, Acting Director, ERRD will be signing off on the ROD, not Jane Kenny.

Reply: Agreed, made change.

10. Page II-15, 1b, 2<sup>nd</sup> paragraph, are any of these compounds above MCLs?

Reply: Added NJDEP Residential Soil Cleanup Criteria exceedance reference. "Barium was the only detected concentration above NJDEP Residential Soil Cleanup Criteria (700 mg/kg). It should also be noted that the duplicate sample (in reference to the high barium concentration sample) only had a concentration of 307 mg/kg of barium. The 1993 RI analytical data did not meet validation criteria and was only used quantitatively in the risk assessment." (See PART II, Section V, Subsection E, Site 3, item b, paragraph 2)

11. Page II-17, 2<sup>nd</sup> paragraph, 2<sup>nd</sup> sentence. Move "(1.3 mg/kg)" from after "Antimony" to after "concentrations".

Reply: Agreed, made change. (See PART II, Section V, Subsection E, Site 3, item c, paragraph 2)

12. Page II-30, 2<sup>nd</sup> paragraph, last sentence. This last sentence needs more information to clarify it. For example, indicate if high metal concentrations were found in the surface or subsurface soil.

Reply: Removed the last sentence and added the following: "One surface soil sample collected from a test pit showed high metals concentrations (Weston, 1993). Site 10 was a disposal area for shell casings and exposed corroded shell casings were observed during the field investigations. It should be noted that samples collected from surface soil would almost certainly show high metals concentrations due to the demilitarized metal shell casings interred near the surface." (See PART II, Section VI, Subsection A, Site 10, item 2, paragraph 2)

13. Page II-37, 3<sup>rd</sup> and 4<sup>th</sup> paragraphs. These two paragraphs are repetitive; the restricted activities don't need to be mentioned in each paragraph. Check for this throughout the document.

Reply: Agreed, made change. Removed 4<sup>th</sup> paragraph. (See PART II, Section VIII, Subsection A, item 2, subitem c, paragraph 4)

14. Page II-57, 1<sup>st</sup> paragraph, last sentence. Add word "excessive" to vehicular traffic.

Reply: Agreed, made change. (See PART II, Section X, Subsection A, paragraph 7)

15. Page II-57, 2<sup>nd</sup> paragraph. The first two sentences contradict each other. Should say "The Navy has prepared a remedial design (RD) for land use controls (LUCs) containing the LUC implementation actions that has been submitted to the USEPA for review and concurrence." This language should also be changed on pages II-61 and II-65.

Reply: Agreed, made change throughout. (See PART II, Section X, Subsection A, paragraph 8; PART II, Section X, Subsection B, paragraph 8; and PART II, Section XI, Subsection A, item 2, paragraph 7)

16. Page 11-57, 2nd paragraph. Restricted activities are mentioned twice, they only need to be mentioned once. Check for this throughout the document.

Reply: Agreed, made change throughout.

17. It should be explained somewhere in the ROD why there was such a large gap in time from when the public meeting occurred to when the ROD was finally issued.

Reply: Agreed, added the following explanation in Part II-Decision Summary, Section II - SITE HISTORY AND ENFORCEMENT ACTIVITY, last paragraph: "There is a substantial gap between the public comment period (April 23, 2001 to May 23, 2001) for the Proposed Plan and submission of the final ROD (May 2005) due to major policy negotiations regarding the approach to ensuring implementation of land use controls between the Navy and EPA underway in the period."

18. The public meeting occurred on May 10, 2001, but the attendance list in Appendix B was from January 15, 2003 and May 6, 2003 public meetings. Indicate what these meetings were for on Page III-2, section III-B.

Reply: Agreed, made change. The public meeting was on May 10, 2001 as discussed in the text. The Appendix is a typo, removed 2003 dates and added May 10, 2001. (See PART III, Sections II and III)

19. Appendix C states that the public meeting was held on May 10, 2000. Is it 2000 or 2001? Where is the attendance list from this meeting?

Reply: Agreed, made change. The correct date is May 10, 2001. Added the May 10, 2001 attendance list to Appendix C.

**Navy Response to EPA LUC Comments  
NWS Earle OU 6 (Sites 3 and 10) ROD and RD for LUC**

**LUC Comments on Record of Decision - OU-6**

1. Pages I-2 (4th paragraph, 1<sup>st</sup> sentence) and I-3 (last paragraph, 1<sup>st</sup> sentence), change the wording of these sentences to: "Land use controls (LUCs) will be implemented by the Navy according to the document entitled "Principles and Procedures for Specifying, Monitoring and Enforcement of Land Use Controls and other Post-ROD actions" as agreed between EPA and DOD.

Reply: Agreed, made change. (See PART I, Section IV, Site 3, item 2, paragraph 1; and Section I, Site 10, item 2, paragraph 1)

2. The maps should show the boundaries of the LUCs. In addition, the maps need to show where the groundwater restrictions are.

Reply: Agreed. Added Figures 12 and 15, which show the soil and groundwater LUCs.

3. Add "excessive vehicular traffic" to LUC objectives in the ROD.

Reply: Agreed, made change where applicable.

4. Add: "Refer to the RD for LUC implementation actions, since these details may need to be adjusted periodically based on site conditions and other factors."

Reply: Agreed, made change to PART II, Section X, Subsection A, paragraph 12 and PART II, Section X, Subsection B, paragraph 13.

**LUC Comments on RD - OU-6**

1. Page 6, Section 2.0. Replace this paragraph with the LUC objectives (as written in the ROD and including "excessive vehicular traffic").

Reply: Agreed, inserted LUC objectives from Section I of the ROD. (See Section 2, first paragraph)

2. General comment - the LUC implementation actions are described for both Sites 3 and 10, but with the exception of action 1, they are identical and don't need to be repeated.

Reply: Disagree. Even though the LUC implementation actions are mostly the same, except action 1, action 3, and action 7, the Navy prefers to list the LUC obligations separately for each site. The separate statements are less ambiguous and less likely to be misunderstood.

3. Page 6, Section 3.0, Site 3, #1 and #7. The vegetative cover and groundwater monitoring are not LUCs, these paragraphs should be deleted.

Reply: Agree. These sections have been deleted for both Site 3 and Site 10. (See Section 3.0).

4. Page 6, Section 3.0, Site 3, #3. In the text there is a reference to "excessive vehicular traffic" but this does not appear on the sign. Add it to the activities listed on the sign and to the objectives.

Reply: Agree. See Section 3.0, Site 3, Item 2, Sub Item e."

5. Page 8, Section 3.0, Site 3, #5. Add: "The Navy will notify EPA 45 days in advance of any changes to the internal procedures that would affect the LUCs."

Reply: Agree. Statement has been added. (See Section 3.0, Site 3, Item 4)

6. Page 9, Section 3.0, #8b. Reword as follows: " Notify.... remedial action or any activity that is inconsistent with the LUC objectives or use restrictions. The Navy will notify EPA and the State of New Jersey regarding how the Navy has addressed or will address the breach within 10 days of sending EPA and the State of New Jersey notification of the breach."

Reply: Agreed, made change. (See Section 3.0, Site 3, Item 6, Sub Item b)

7. Page 9, Section 3.0, #8c. Add the following language: "The Navy will provide EPA and the State of New Jersey with similar notice, within the same time frames, as to federal-to-federal transfers."

Reply: Agreed, made change. (See Section 3.0, Site 3, Item 6, Sub Item c)

8. Page 9, Section 3.0, #11. Delete and substitute: "Any activity that is inconsistent with the LUC objectives or use restrictions, or any other action that may interfere with the effectiveness of the LUCs will be addressed by the Navy as soon as practicable, but in no case will the process be initiated later than \_\_\_ days after the Navy becomes aware of the breach."

Reply: Agreed, made change. Also note the wording was added: "...process be initiated later than 72 hours after the Navy becomes aware of the breach." This wording is consistent with the wording in action 8, b. (See Section 3.0, Site 3, Item 9)

9. General comment, add the following to the RD: "Monitoring of the environmental use restrictions and controls will be conducted annually by the Navy. The monitoring results will be included in a separate report or as a section of another environmental report, if appropriate, and provided to the USEPA and the State of New Jersey. The annual monitoring reports will be used in preparation of the Five Year Review to evaluate the effectiveness of the remedy. The annual monitoring report, submitted to the regulatory agencies by the Navy, will evaluate the status of the LUCs and how any LUC deficiencies or inconsistent uses have been addressed."

Reply: Agreed, made change. (See Section 3.0, last paragraph)

10. Add: A comprehensive list of LUCs.

Reply: Each site now has a complete listing of LUCs. (See Section 3.0)

11. Include a figure showing the boundaries of the LUCs, including for groundwater. There are references to figures but they were not included.

Reply: Agreed, made change. Added reference to Section 2.0 for both Sites 3 and 10. Updated Figures 5 and 6 to include soil and groundwater LUC control limits.

12. Add information on periodic monitoring or visual inspections of LUCs, frequency of inspections (to be determined by site-specific conditions) and reporting of inspection results.

Reply: Agreed, made change for comment 9. (See Section 3.0, last paragraph)

13. In addition to notification in case of proposed land change uses (see page 8, #8 and page 12, #8), include notification in case of changes in the risk or remedy.

Reply: Agree. Added the following clause at the end of Section 3.0 Item 6 b, first sentence for both sites. "....including change in risk or remedy".

14. Include more details on development of internal-DON policies and procedures with respect to LUC monitoring, reporting and enforcement in order to institutionalize LUC management and to ensure base personnel are aware of restrictions and precautions that should be taken. This is covered very briefly on page 8, #5 and page 6, section 2.0.

Reply: Text added to Section 2, Paragraph 2, last sentence.