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NAS JACKSONVILLE  
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U S EPA REGION IV LEGAL COMMENTS ON DRAFT RECORD OF DECISION FOR  
OPERABLE UNIT 8 (OU 8) POTENTIAL SOURCE OF CONTAMINATION 47 NAS  
JACKSONVILLE FL  
09/12/2008  
U S EPA REGION IV

**EPA Legal Comments on the  
Draft ROD OU 8/ PSC 47  
NAS Jacksonville, Florida**

**General Comments:**

1. The draft ROD generally follows the EPA guidance; however, certain information in required Sections is not well presented. RODs should closely adhere to EPA's "*Guide to Preparing Superfund Proposed Plans, Record of Decision, and Other Remedy Selection Decision Documents*" (OSWER 9200.1-23P July 1999) [hereinafter ROD Guide] to expedite review and minimize the extent of EPA comments. Use of suggested language in the ROD Guide Highlight Text Boxes is advised. Some of the Specific Comments below are based upon the EPA's ROD Guide that is derived in part from the requirements in the NCP at 40 CFR Part 300 *et. seq.* and CERCLA.
  
2. The selected remedy includes Alternative S-3 for the contaminated soils. However, most of the active remedial components for contaminated soils (excavation, off-site disposal, and capping) have been completed prior to finalization of this ROD as two "interim remedial actions" that did not follow the CERCLA process. The most recent interim action in 2008 utilized the FDEP risk-based corrective action (RBCA) approach under F.A.C. Chapter 62-780. It is not clear from both Proposed Plan and draft ROD what authority the Navy used for the earlier "interim action" conducted in 1999. The draft ROD provided to EPA does not include an accurate account of these interim actions; nor does the ROD clearly state that selected remedy for soils is different than what was evaluated in the Feasibility Study because the actions are completed. The EPA has advised the Navy that the ROD could proceed provided it is revised to reflect that these interim actions are essentially being "adopted" as part of the final remedy for contaminated soils. The details on these interim actions, including but not limited to, what authority was used, how much soil was excavated, whether the soil was RCRA hazardous waste, how waste was managed/disposed, the extent of the backfilling and where the cover was installed must be clarified in the ROD. In addition, the FS should be amended after the ROD is finalized to update the Preferred Alternative to reflect that the soil component (other than the LUCs) was completed under non-CERCLA authority and then re-analyzed following NCP process to demonstrate that it is compliant with CERCLA. Once the amended FS is approved by EPA and FDEP, the Navy should issue a Notice of Availability to inform the public that the Administrative Record file for this OU has been updated with addition of the amended FS.

As noted in Specific Comments below, there are several places within the ROD that should include an explanation that the soil remedy components have already been implemented under an authority other than CERCLA and only LUCs and monitoring still need to be implemented as part of the selected remedy. These Sections include, but are not limited to, the *Remedy Description* and DOCUMENTATION OF SIGNIFICANT CHANGES. Basically, the Preferred Alternative S-3 descriptions throughout the ROD must be revised to account for completion of these components. The ROD should state that although the interim actions were not performed under CERCLA process, they effectively addressed the contaminated soils by excavating areas above cleanup levels that are based on FDEP CTLs that are identified as chemical-specific ARARs in the ROD. In addition, the ROD should state that completed soil excavation actions, in

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particular the generation and disposal of contaminated soils (some of which was considered RCRA hazardous waste) were conducted in accordance with state and federal requirements that are being included as ARARs in the ROD. The ROD should indicate whether the disposal facilities would meet the EPA's criteria under the "Off-Site Rule" at 40 CFR 300.440.

3. Many of the Specific Comments and suggested text related to LUCs are based upon the EPA Headquarters *Federal Facility Restoration and Reuse Organization Checklist*<sup>1</sup> [hereinafter LUC Checklist]. Items 1- 9 of the LUC Checklist must be included or addressed in the ROD in order to obtain EPA HQ approval. In accordance with LUC Checklist #1 the ROD must include a Map/Figure showing the boundaries of the where the LUCs will be applied. The area should include the contaminated soil and capped areas that need to remain undisturbed and a depiction both of the plumes beneath the Site (including portions above cleanup levels that may have migrated outside the OU boundary).

There several sets of LUC Objectives throughout the ROD that use different language for both the soils and groundwater. The Navy must develop one set that includes objectives for soil and groundwater and those LUC performance objectives (or LUC Objectives) must remain consistent throughout the document. Typically, EPA only expects those Objectives to be described in the SELECTED REMEDY SECTION of the ROD but they can be included in the Description of the Selected Remedy as well. In order to reduce the repetition of the LUC language, EPA recommends that the LUC component for both soils and groundwater be provided in the SELECTED REMEDY SECTION. [See ROD Guide p.6-41] Other language on LUCs when describing each of the remedial alternatives can be simplified as provided in the Specific Comments below.

Examples of LUC Objectives for both soil and groundwater at PSC 47 are as follows:

- Prohibit residential, recreational or agricultural use of the Site. Prohibited residential uses shall include, but are not limited to, any form of housing, childcare facilities, pre-schools, elementary schools, secondary schools, play grounds, convalescent, or nursing care facilities.
- Prohibit the excavation of soils and disturbance of the cap at the Site to prevent unacceptable occupational exposure unless prior written approval is obtained from the Navy, EPA and FDEP.
- Prevent withdrawal and all uses of groundwater from the surficial aquifer underlying the Site (including but not limited to, human consumption, dewatering, irrigation, heating/cooling purposes, and industrial processes).
- Maintain the integrity of any existing or future monitoring or remediation system (including but not limited to the monitoring wells and the cap).

4. The ARARs that are to be provided in the ROD typically identify requirements for remedial actions that will be taken for the selected remedy. [See 40 CFR 300.430(f)(5)(ii)(B) and (C)] It is questionable whether the ARARs tables should include

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<sup>1</sup> SAMPLE FEDERAL FACILITY LAND USE CONTROL ROD CHECKLIST WITH SUGGESTED LANGUAGE. Copy available at

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requirements for the earlier interim actions under non-CERCLA authority that have been completed. Since the RBCA based document for the 2008 action did not include a listing of ARARs that were complied with in performing the soil removal and disposal, how can the Navy state in this ROD that the remedy “Complies with ARARs” as required by CERCLA Section 121? Since the FFA parties have agreed to allow the Navy to move forward with this ROD which essentially adopts the interim actions as part of the final remedy, inclusion of ARARs in this ROD that would have applied for those actions is necessary in order to meet that threshold requirement of CERCLA. Accordingly, the Action-specific ARARs tables should include the state and/or federal requirements related to the excavation, capping, and off-site disposal of contaminated soils that were complied with while conducting the interim actions.

**Specific Comments:**

1. Page 1-1, Section 1.1., 1<sup>st</sup> paragraph, last two sentences. Consider revising to reflect existence of the FFA and that cleanup is performed pursuant to CERCLA. See page 2-1. In the alternative, replace the word ‘Superfund’ with ‘CERCLA’ since technically the cleanup is not under the Superfund Program and add separate sentence on the FFA.

Suggested rewrite: “OU 8, PSC 47 site is part of a comprehensive environmental investigation and cleanup program currently being performed at NAS Jacksonville under CERCLA authority pursuant to the Federal Facility Agreement (FFA) entered into by the Navy, EPA and FDEP in October 1989.”

2. Page 1-1, Section 1.2, 5<sup>th</sup> sentence. Delete this sentence since earlier statement made clear that Navy and EPA jointly select the remedy.
3. Page 1-1, Section 1.2, 6<sup>th</sup> sentence. The word ‘concur’ is misspelled.
4. Page 1-2, Section 1.4. This Section contains much information on the LUC component of the remedy, some of which requires revision to be consistent with EPA LUC Checklist [see Comment below]. In addition, there is no mention of the fact that the soil excavation, disposal and cap have already been implemented as interim actions following FDEP RBCA regulations or other authority.

Revise the first sentence to read: “The ROD presents selected final remedy for the PSC 47 Site which includes previously implemented interim actions for contaminated soil and selection of MNA for contaminated groundwater, as well as LUCs, to prevent unacceptable exposures to soil and groundwater contamination remaining at the Site.”

5. Page 1-2, Section 1.4, 2<sup>nd</sup> paragraph. This paragraph contains redundant information on the COCs considering the statements in Section 1.3 and the sentences below the bulleted remedy components. Consider revising to specifically identify the COCs for soil and groundwater that are being addressed, or relocating this text to another Section of the ROD.

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6. Page 1-2, Section 1.4, 2<sup>nd</sup> paragraph. Consistent with the General Comment #2 above, the description the final remedy must indicate that the two interim actions performed under non-CERCLA authority have effectively implemented the preferred alternative for soils, except for the LUC component. This section of the ROD should state that although the interim actions were not performed under CERCLA process, they effectively addressed the contaminated soils by excavating and capping areas above cleanup levels which are based on FDEP CTLs that are identified as chemical-specific ARARs in the ROD. In addition, the ROD should state that completed soil excavation actions, in particular the generation and disposal of contaminated soils (some of which was considered RCRA hazardous waste) were conducted in accordance with state and federal requirements that are being included as ARARs in the ROD.
  
7. Page 1-2, Section 1.4, 3<sup>rd</sup> paragraph and bullets. There is not enough detail on each of the bulleted remedial components that make up this remedy. Consider revising as follows:
  - Excavation of contaminated soil areas with COC concentrations greater than cleanup levels, followed by backfilling and off-site disposal of excavated soils in a permitted landfill.
  - Installation of impervious cover system (i.e., cap) at areas with concentrations of soil COCs greater than industrial use and/or groundwater leachability cleanup levels.
  - Groundwater monitoring to verify the effectiveness of the cap and evaluate potential leaching of soil COCs into groundwater.
  - Monitored natural attenuation (MNA) of contaminated groundwater to evaluate decreases in COC concentrations as result of naturally occurring processes within the surficial aquifer.
  - Implementation and maintenance of land use controls (LUCs) to prevent unacceptable exposure to soil and groundwater contamination remaining at the Site. Periodic inspections will be conducted to verify continued implementation of the LUCs.
  
8. Page 1-3, Section 1.4, LUC text. As mentioned above, much of the language provided in this summary description of the remedy is both unnecessary and in some instances the language is not entirely consistent with EPA LUC Checklist. Also, the LUC Objectives provided in this Section do not match the LU Objectives provided in later Sections of the ROD and need to be revised consistent with earlier Comments. EPA suggests that this Section of the ROD only summarize the LUC component and leave the details until later in the REMEDY DESCRIPTION. The first paragraph and bullets should be revised as follows:

“Following soil excavation, soil and groundwater contamination will remain at the Site at concentrations that preclude unrestricted use and unlimited exposure; therefore the remedy includes LUCs (including institutional and engineering controls) to prevent unacceptable exposure to residual contaminated soil and groundwater. Institutional controls would include update of installation’s Master Plan and procedures to ensure

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industrial uses at the Site, prohibit use of the groundwater, and prohibit intrusive activities in contaminated areas. Engineering controls would include the cap over the contaminated soils and signs to advise that intrusive activities at PSC 47 require authorization. The boundaries of PSC 47 and the area subject to LUCs are shown in **Figure 2-xx**. Consistent with the RAOs developed for the site, the specific performance objectives of the LUCs to be implemented at PSC 47 are as follows:

- Prohibit residential, recreational or agricultural use of the Site. Prohibited residential uses shall include, but are not limited to, any form of housing, childcare facilities, pre-schools, elementary schools, secondary schools, play grounds, convalescent, or nursing care facilities.
- Prohibit the excavation of soils and disturbance of the cap at the Site to prevent unacceptable occupational exposure unless prior written approval is obtained from the Navy, EPA and FDEP.
- Prohibit withdrawal and all uses of groundwater from the surficial aquifer underlying the Site (including but not limited to, human consumption, dewatering, irrigation, heating/cooling purposes, and industrial processes).
- Maintain the integrity of any existing or future monitoring or remediation system (including but not limited to, the monitoring wells and the cap).

The LUC implementation actions including monitoring and enforcement requirements will be provided in a LUC Remedial Design (RD) that will be prepared by the Navy as the component of the overall RD. Within 90 days of ROD signature, the Navy shall prepare and submit to EPA and FDEP for review and approval (pursuant to those Primary Document review procedures stipulated in the FFA) the LUC RD for PSC 47 that shall contain implementation and maintenance actions, including periodic inspections that the Navy and/or NAS Jacksonville shall undertake to achieve the LUC performance objectives. The Navy or any subsequent owners shall not modify, delete, or terminate any LUC without EPA and FDEP approval.”

9. Page 1-4, Section 1.5, 4<sup>th</sup> sentence. This sentence appears to have been borrowed from Cecil Field Site 15 ROD since reference is to prohibited land uses associated with that remedy. Revise to reflect that LUCs will be instituted to prevent residential, agricultural, and recreational uses.
10. Page 1-5, Section 1.7. Revise title of this Section to **AUTHORIZING SIGNATURES**. Note that the Table of Contents outline will need to be revised consistent with this change.
11. Page 2-1, Section 2.2. Consider adding Subsection for *Enforcement Activities* beginning with the second paragraph since subsection for Site History.
12. Page 2-5, Subsection 2.2.2 This Subsection includes very little information on the RI/FS that typically is summarized in this part of the ROD.

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13. Page 2-6, Section 2.4. The last sentence of the first paragraph states “cleanup activities are being performed under CERCLA.” which is not reflective of the action following RBCA process that the Navy recently completed at PSC 47. Accordingly, add a couple sentences to clarify that cleanup of contaminated soil areas at PSC 47 have been performed as two IRAs under non-CERCLA process to mitigate risks. Also state how these actions are consistent with the selected remedy and the FFA parties have agreed to adopt those earlier remedial actions as part of the final CERCLA remedy for the Site consistent with the RCRA/CERCLA coordination provisions in the FFA. [Refer to ROD Guide 6-8 and 6-9.]
14. Page 2-7, Subsection 2.5.1., 1<sup>st</sup> paragraph. Add the following sentence: “Groundwater beneath PSC 47 is not currently used; however the aquifer is a potential source of drinking water and would be classified (Class G-II) under FDEP regulations.”
15. Page 2-8, Subsection 2.5.3.1. Presumably, the description provided herein is based on the RI/FS and does not consider the extent of residual contamination after the April 2008 IRA. This Section should include a description of the soil contamination at the Site in its current condition or the text should make clear that summary is based data before the IRAs. Please provide summary of the post-excavation sampling results from the April 2008 IRA.
16. Pages 2-10 thru 2-15, Figures 2-3 thru 2-8. It is unclear whether the COC exceedances depicted on the figures are prior to or after the excavations performed as IRAs. Please clarify on the Figures if this represents site conditions before IRAs (i.e., based upon RI/FS data) or instead represents extent of residual COCs after the IRAs.
17. Pages 2-10 thru 2-15, LUC Boundary **Figure 2-xx.** In accordance with LUC Checklist #1 the ROD must include a Map/Figure showing the boundaries of the where the LUCs will be applied. The area should include the contaminated soil, location of monitoring wells and capped areas that need to remain undisturbed, as well as a depiction both of the plumes beneath the Site (including portions above cleanup levels that may have migrated outside the OU boundary). The Legend on the Figure should include use restrictions or other important considerations.
18. Page 2-19, Subsection 2.5.3.2, 1<sup>st</sup> paragraph. The summary of the arsenic concentrations in the groundwater suggests that they have remained in the 6000-9000ug/L range since 2004 which is several orders of magnitude over the cleanup level of 10ug/L. EPA guidance on use of MNA remedies makes clear that there should be clear evidence of decreasing trends of COCs as result of naturally occurring processes. In addition, an MNA remedy should be able to attain cleanup levels within a reasonable timeframe compared to other remedies employing active treatment. Consequently, it is important for the team to establish triggers in a post-ROD primary document that will be used to determine whether the remedy can achieve the cleanup levels or whether the contingent remedy should selected.
19. Page 2-19, Subsection 2.5.4. This Section should describe the current and “reasonably anticipated land uses”, as well as any known prohibited uses. Please indicate that PSC 47

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Site is expected to remain as industrial use area and whether the Base Master Plan establishes a land use plan. Also, later in the ROD there are statements that the area is not expected to be used for recreational activities in the future. What is the basis for such a declaration?

Although the Navy may contend that groundwater is not expected to be used for beneficial purposes, include statement that groundwater at this Site is a potential source of drinking water and considered a Class II under FDEP Groundwater regulations. As noted below, the RAOs therefore should include restoration of the groundwater as potential drinking water source. [Refer to ROD Guide p 6-12 and Outline on p.6-62 for tips on writing this Section and See LUC Checklist #2]

20. Page 2-21, Section 2.6. Somewhere in this Section, please summarize the risks/exposure pathways from the contaminated soil and groundwater necessitating the application of LUCs. Basically, need a statement that unacceptable risk due to potential exposure to COCs in both soil and groundwater necessitate the implementation of LUCs to prevent use of the groundwater and excavation of soils. [See LUC Checklist #3]
21. Page 2-26, Section 2.6.3. Consider adding a statement clarifying that despite the two IRAs conducted at the Site, soil contamination remains and additional remedial action is necessary. [Reference the ROD Guide p.6-13 and the Highlight 6-12 for standard language.]
22. Page 2-27, Section 2.7. As previously noted in Comments on the Proposed Plan, the RAO to restore groundwater to meet drinking water standards is a separate RAO the prevent unacceptable risk from exposure to contaminated groundwater. Please separate this restoration objective into its own bullet or Combine/Replace with RAO Number 2 since there is no discussion of nearby surface water resources and whether recharge of groundwater into surface water is likely given small size of the plumes.
23. Page 2-27, Section 2.7.1 2<sup>nd</sup> paragraph and bullets. Consider adding a sentence that states: The cleanup goals for soil were based upon Chemical-specific ARARs, namely the residential and leachability Soil Cleanup Target Levels (SCTLs) provided in F.A.C. 62-777 Table II.
24. Page 2-28, Section 2.7.1 2<sup>nd</sup> paragraph. Add the following as a replacement for the second sentence: “The cleanup goals for groundwater were based upon Chemical-specific ARARs, namely the State of Florida primary drinking water standards and the Groundwater Cleanup Target Levels (GCTLs) which are equal to or more stringent than the EPA’s Safe Drink Water Act regulations MCLs.” Consider deleting the bullets already stated earlier in Section 2.7.1
25. Page 2-29, Section 2.8., 3<sup>rd</sup> Paragraph. This paragraph does not provide sufficient explanation on the two completed (IRAs), the most recent following FDEP risk-based corrective action (RBCA) approach under F.A.C. Chapter 62-780. The Navy needs to clarify that these IRAs were not performed under CERCLA but they essentially are what Alternative S-3 entails except for the LUCs component. See General Comment #2 above.

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26. Pages 2-31 and 2-32, Section 2.8., Component 3 -LUCs. As mentioned above in General Comments, the LUC objectives are included in too many places and are inconsistent with one another. Accordingly, revise the paragraph as provided below, delete the bullets and the next paragraph on p. 2-32. A description of the LUC performance objectives and LUCs, along with commitment language will be provided later in the REMEDY DESCRIPTION Section of the ROD.

Suggested text: “LUCs in the form of institutional and engineering controls would be implemented to prevent unacceptable exposure to residual contaminated soil and groundwater remaining at levels that preclude unrestricted use and unlimited exposure. Institutional controls would include update of the installation’s Master Plan and procedures to ensure industrial use at the Site, prohibit use of the groundwater, and prohibit intrusive activities in contaminated areas. Engineering controls would include the cap over the contaminated soils and signs to advise that intrusive activities require authorization.”

27. Page 2-33, Section 2.8., Alternative S-3. As mentioned above in General Comment #2, the description of the preferred alternative for soils must provide details on the interim actions, including but not limited to, what authority was used, how much soil was excavated, whether the soil was RCRA hazardous waste, how waste was managed/disposed, the extent of the backfilling and where the cap was installed. Accordingly, the verbs throughout this section describing actions that ‘would’ or ‘will be’ performed should be changed to the past tense. Basically, the entire description of Alternative 3A should be an accounting of the completed interim actions, except for the LUCs and monitoring. Volumes of soil removed can be provided as opposed to estimated. Names and location of the disposal facilities used for the excavated soil can be provided. In order to be consistent with the description of the other remedial alternatives, please break-out the remedial components. For example: Component 1- Excavation and Off-Site Disposal to Allow Industrial Use; Component 2- Capping to Prevent Leaching; Component 3- LUCs; and Component 4- Monitoring.

28. Pages 2-33 and 2-34, Section 2.8., Alternative S-3, LUC Component. As mentioned above in General Comments, the LUC objectives are included in too many places and are inconsistent with one another. Accordingly, revise the paragraph as provided below, delete the bullets and the next paragraph on p. 2-34. A description of the LUC performance objectives and LUCs, along with commitment language will be provided later in the REMEDY DESCRIPTION Section of the ROD.

Suggested text: “LUCs in the form of institutional and engineering controls would be implemented to prevent unacceptable exposure to residual contaminated soil and groundwater remaining at levels that preclude unrestricted use and unlimited exposure. Institutional controls would include update of the installation’s Master Plan and procedures to ensure industrial use at the Site, prohibit use of the groundwater, and prohibit intrusive activities in contaminated areas. Engineering controls would include the cap over the contaminated soils and signs to advise that intrusive activities require authorization.”

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29. Pages 2-36 and 2-37, Section 2.8., Alternative GW-2 Generally, in order to use MNA as a remedial component, the required information has been collected and analyzed sufficient to demonstrate MNA is viable before the remedy is selected. Based upon the language in this Section that only one of the four tiers has been demonstrated, it appears that selection of MNA may be premature. Accordingly, the establishment of “trigger points” that would invoke implementation of the contingency remedy is necessary. If, after monitoring for a specified timeframe, it is shown that cleanup levels cannot be attained within a reasonable timeframe due to poor attenuation rates or other factors, then EPA will require that the contingency remedy be chosen.
30. Page 2-38, Section 2.8., Alternative GW-2, LUC Component. As mentioned above in General Comments, the LUC objectives are included in too many places and are inconsistent with one another. Accordingly, revise the paragraph as provided below, delete the bullets and the next paragraph. A description of the LUC performance objectives and LUCs, along with commitment language will be provided later in the REMEDY DESCRIPTION Section of the ROD.
- Suggested text: “LUCs in the form of institutional and engineering controls would be implemented to prevent unacceptable exposure to residual contaminated soil and groundwater remaining at levels that preclude unrestricted use and unlimited exposure. Institutional controls would include update of the installation’s Master Plan and procedures to ensure industrial use at the Site, prohibit use of the groundwater, and prohibit intrusive activities in contaminated areas. Engineering controls would include the cap over the contaminated soils and signs to advise that intrusive activities require authorization.”
31. Page 2-43, Section 2.9. SUMMARY OF COMPARATIVE ANALYSIS OF ALTERNATIVES. The approach taken in this ROD for this Section is not consistent with EPA ROD Guide which suggests that each of the nine criteria be listed and explained followed by a comparative analysis for each alternative. The Navy is only providing only a limited comparison summary in the Tables. Since there are no Location-specific ARARs, revise the Tables 2-2 and 2-3 to delete that entry in the row and the corresponding answer.
32. Page 2-43, PRINCIPAL THREAT WASTES The EPA disagrees that the cap and MNA partially satisfy the statutory preference for remedies that employ treatment that reduces toxicity, mobility, or volume. Revise the last sentence to state that “...the selected remedy will not satisfy....”.
33. Page 2-49, Section 2.11 SELECTED REMEDY. Overall, this Section is poorly written contains misleading statements. This Section must include an adequate description of each remedial component for the selected alternatives S-3 and GW-2, including the LUC component as suggested below. As stated above in General Comment #2, this Section must include the details on the completed interim actions, including but not limited to, what authority was used, how much soil was excavated, whether the soil was RCRA

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hazardous waste, how waste was managed/disposed, the extent of the backfilling and where the cover was installed.

34. Page 2-49, Section 2.11.1. Revise the first paragraph to reflect that excavation, off-site disposal, and capping remedial components for S-3 have been completed. See previous Comments on this issue of accurately describing the interim actions that have already been implemented. Also, revise the second bullet to remove the words ‘active treatment’ since that is not the case with either S-3 or GW-2. EPA does not consider an MNA remedy to equate to “treatment” as understood in the context of the CERCLA requirement. Revise the fourth bullet to state that the selected remedy includes a contingency remedy as opposed to “preferred remedy would also include...”.
35. Pages 2-49 and 2-50, Section 2.11.1. Information on the cost of the remedy should be provided in its own subsection entitled *Summary of Estimated Remedy Costs* that follows the *Remedy Description* subsection. [See EPA ROD Guide p. 6-41] Also, the second full paragraphs on p. 2-50 discussing LUCs should be deleted considering the addition of the LUC Component as described below.
36. Page 2-50, Section 2.11.1. The information provided in the third full paragraph should be included in its own subsection entitled *Expected Outcomes of the Selected Remedy* that follows the *Remedy Description* subsection. [See ROD Guide p. 6-45 thru 6-48] Also, additional information consistent with what is described in the ROD Guide should be provided.
37. Page 2-49 and 2-50, Section 2.11.2. **Remedy Description** Add this subsection and include a summary paragraph followed by the listing of each remedy component along with a detailed description of what that component entails similar to the way handled earlier in the ROD when presenting each of the Remedial Alternatives.

There should also be a subsection that describes the *Contingency Remedy*. Note that much of that language could be cut from the fourth bullet under Section 2.11.1.. Also the language found on p. 2-38 on the establishment of trigger points should be included in this paragraph.

38. Page. 2-50, Section 2.11.2. Remedial Component: LUCs. Although some of the LUC Checklist items appear to have been addressed throughout the document, some of the text does not match the suggested LUC Checklist sample language and there are inconsistent listings of LUC performance objectives. Also, the actual LUCs should be listed after the LUC Performance Objectives. [Reference Navy Principles General Procedures 2 and LUC Checklist] Accordingly, please add the following text as the description for the LUC component that applies for both S-3 and GW-2.

“Following soil excavation, soil and groundwater contamination will remain at the Site at concentrations that preclude unrestricted use and unlimited exposure; therefore the remedy includes LUCs (including institutional and engineering controls) to prevent unacceptable exposure to residual contaminated soil and groundwater. The boundaries of PSC 47 and the area subject to LUCs are shown in **Figure 2-xx**. Consistent with the

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RAOs developed for the site, the specific performance objectives of the LUCs to be implemented at PSC 47 are as follows:

- Prohibit residential, recreational or agricultural use of the Site. Prohibited residential uses shall include, but are not limited to, any form of housing, childcare facilities, pre-schools, elementary schools, secondary schools, play grounds, convalescent, or nursing care facilities.
- Prohibit the excavation of soils and disturbance of the cap at the Site to prevent unacceptable occupational exposure unless prior written approval is obtained from the Navy, EPA and FDEP.
- Prohibit withdrawal and all uses of groundwater from the surficial aquifer underlying the Site (including but not limited to, human consumption, dewatering, irrigation, heating/cooling purposes, and industrial processes).
- Maintain the integrity of any existing or future monitoring or remediation system (including but not limited to, the monitoring wells and the cap).

The following generally describes the LUCs that will be implemented at PSC 47 to achieve the aforementioned LUC performance objectives:

- Incorporating the LUC boundary and land use restrictions for PSC 47 into the installation's Master Plan (and any other relevant documents governing land use at NAS Jacksonville).
- Utilizing the installation Dig Permit process to require review/approval and implementation of worker protection practices before any intrusive activities are performed at the Site.
- Posting signs adjacent to contaminated areas and cap advising that any excavation activity must be authorized in advance by the responsible environmental department. The size, location, and content of the signs will be specified in the LUC RD.
- Monitoring and maintenance of cap and signs.
- In the event any portion of PSC 47 is transferred, land use restrictions consistent with LUC performance objectives will be included in the deed and/or lease.

The Navy is responsible for implementing, maintaining, reporting on, and enforcing the LUCs. Although the Navy may later transfer these procedural responsibilities to another party by contract, property transfer agreement, or through other means, the Navy shall retain ultimate responsibility for remedy integrity. The LUCs will be maintained until the concentration of hazardous substances in the soil and groundwater are at such levels to allow for unrestricted use and unlimited exposure.

The LUC implementation actions including monitoring and enforcement requirements will be provided in a LUC Remedial Design (RD) that will be prepared by the Navy as the component of the overall RD. Within 90 days of ROD signature, the Navy shall prepare and submit to EPA and FDEP for review and approval (pursuant to those Primary Document review procedures stipulated in the FFA) the LUC RD for PSC 47 that shall contain implementation and maintenance actions, including periodic inspections that the Navy and/or NAS Jacksonville shall undertake to achieve the LUC performance

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objectives. The Navy or any subsequent owners shall not modify, delete, or terminate any LUC without EPA and FDEP approval.”

39. Page 2-50, Section 2.12.1. 1<sup>st</sup> paragraph. Revise to reflect that components of S-3 have already been completed as opposed to “has already been initiated”. Although natural attenuation may eventually reduce COCs to meet cleanup goals it would be an overstatement to suggest that it will significantly reduce risks as provided in the last sentence.
40. Page 2-51, Section 2.12.2 Compliance with ARARs. The last paragraph should be revised to include the following sentences: “As noted above, major components of S-3, the selected remedy for soils, were implemented prior to finalization of this ROD. The regulatory requirements for the work conducted as interim actions under non-CERCLA authority are identified herein as ARARs. Consequently, some of the Action-specific ARARs have been complied with by the Navy while implementing the interim actions.”
41. Page 2-54, Section 2.13 DOCUMENTATION OF SIGNIFICANT CHANGES. Include the following text or some variation thereof as the first sentence of the first paragraph: “CERCLA Section 117(b) requires an explanation of significant changes from the selected remedy presented in the Proposed Plan that was published for public comment.” [Refer to ROD Guide pp.6-53 and 6-57] As mentioned above in General Comments, this Section of the ROD should include an explanation that the soil remedy components for excavation and capping have already been implemented under an authority other than CERCLA and only LUCs and monitoring still need to be implemented as part of the selected remedy. The Navy should explain why it decided to proceed with conducting the latest interim action under non-CERCLA authority despite requirements of the FFA to conduct CERCLA response actions at the Site since that rationale was not provided in the Proposed Plan.
42. Pages Tables 2-4 and 2-5, State and Federal Chemical- and Action-Specific ARARs. As mentioned in the General Comments, the ARARs that otherwise would have been identified for the interim actions that were completed under non-CERCLA authority should be included in the Tables. In particular, the requirements related to excavation, characterization, management and disposal of contaminated soils (some of which were considered RCRA hazardous waste), suppression of fugitive dust, and cap installation should be included as Action-Specific ARARs. Also, the ROD should only contain the site-specific ARARs for this remedial action, not other remedial alternatives that include treatment of the groundwater.

NOTE: The EPA Region 4 Attorney intends on contacting the Navy attorney to discuss revisions to the Tables and identification of additional ARARs for this remedy. A hard-copy of the Tables with EPA suggested revisions will be faxed to the Navy’s contractor for use in preparing the ROD.