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LETTER AND U S NAVY RESPONSE TO U S EPA REGION III COMMENTS REGARDING
DRAFT PROPOSED PLAN FOR SITE 28 BUILDING 28 X-RAY FACILITY TANK DRAIN FIELD
NWS YORKTOWN VA
05/14/2009
CH2M HILL



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May 14, 2010

391638.RP.DF.28

Mr. Rob Thomson
Office of Federal Facility Remediation
United States Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Subject: Response to Comments on *Draft Proposed Plan Site 28: Building 28 X-Ray Facility Tank Drain Field, Naval Weapons Station Yorktown, Yorktown, Virginia, October 2009*

Dear Mr. Thomson:

On behalf of the U.S. Department of the Navy's Naval Facilities Engineering Command (NAVFAC), CH2M HILL has prepared this letter in response to your March 10, 2010 e-mail, providing comments for the subject document within a response letter and via track changes in the Word file. Responses to comments are presented in two separate sections; responses to address comments provided within the document text and responses to address comments provided in the response letter. Comments received are shown in italics, followed by the Navy's response in Blue.

Comments Within Document Text

❖ *Comment #1 - [Section 1, Introduction] It assumed that the public knows Superfund and CERCLA are the same thing?*

Response: The public may not know that Superfund and CERCLA are the same; therefore, the requested change to the text was made.

❖ *Comment #2 - [Section 1, Introduction] What insert page?*

Response: The insert page is the final page of the document where the public may write their responses to be submitted. The text has been revised to direct the public towards the contact information provided at the end of Section 7 instead of the insert page.

- ❖ Comment #3 - [Section 2, Site Background] Where is Bldg 28 on the map?

Response: The figure has been updated to include the location of Building 28, as well as a more representative study area boundary, based on historical sampling locations.

- ❖ Comment #4 - [Section 2, Site Screening Process Report] Acronym unnecessary

Response: Agreed. The requested change to the text has been retained.

- ❖ Comment #5 - [Section 2, Site Screening Process Report] Not ok. The HI is based on cumulative risk, not risk posed by any one individual contaminant. If the Baker 2001 report was based on a contaminant-specific analysis, then the conclusion is not supportable. Please review the document and see if there is a rationale for this conclusion that complies with the NCP and EPA's risk guidance (because that rationale doesn't.). (In fact, an HHRA based on risk posed by single chemicals conflicts with Step 4 of the HHRA text box later in this PRAP.)

Response: The risk screening discussion included in the Site Background section are general summaries of previous documents and do not discuss all risk management considerations made during the course of the site investigation. The text has been revised to succinctly identify the results and decisions put forth in the 2001 SSP Report.

- ❖ Comment #6 - [Section 2, Round One Remedial Investigation Report] 3a or 3A? 3A is capitalized in the ERA discussion, 4 paragraphs below. (2) These steps mean nothing to the public. Is it really necessary to explain the specific step? If so, the steps will have to be explained in this PRAP so it's understandable to the public.

Response: The Navy agrees that it is not necessary to identify the difference between Step 3A and 3B; therefore, all references to these steps will be identified as Step 3. Since a specific Step 7 evaluation was conducted as a separate investigation, the Navy feels that the specific steps do need to be identified within the text. In addition, general information regarding the different steps is included in the "What is Ecological Risk and How is it Calculated" call out boxes.

- ❖ Comment #7 - [Section 2, Round One Remedial Investigation Report] Deleted text, immediately below, is not a justification for taking no action. If the HI based on all COCs is less than one or if the HI to any one target organ is less than one, THEN that would be a basis for deciding that no action is necessary to abate risk at the site.

Response: The risk management decision in the RI was based on the fact that no target-organ-specific contaminant exceeded 1. The PP was revised to reflect this information.

- ❖ Comment #8 - [Section 2, Round One Remedial Investigation Report] 3a or 3A?

Response: The Navy agreed in the response to Comment #7, above, that it is not necessary to identify the difference between Step 3A and 3B of the ERA, therefore all references to the Step 3A will be revised to read Step 3.

- ❖ Comment #9 - [Section 2, Ecological Risk Assessment – Step 7] 3a or 3A?

Response: The Navy agreed in the response to Comment #7, above, that it is not necessary to identify the difference between Step 3A and 3B of the ERA; therefore, all references to the Step 3A will be revised to read Step 3.

- ❖ Comment #10 - [Section 2, Ecological Risk Assessment – Step 7] Please add another sentence here and at the end of the next paragraph (or beef up the last paragraph of this section) to make a substantive conclusion. How was it that the BERA concluded that no unacceptable risks were present? All COCs were below screening values?

Response: The Navy agrees that the clarifying language should be included. Additional text was added to the last paragraph of the summary indicating that toxicity testing concluded that no further investigation or action was required at the site. This conclusion was supported by the Navy and USEPA, in partnership with the VDEQ. No revisions were made to the text where the comment was located.

- ❖ Comment #11 - [Section 2, Ecological Risk Assessment – Step 7] You should specify which ones.

Response: Agreed. The text was revised to specify the specific type of invertebrates used in the toxicity tests.

- ❖ Comment #12 - [Section 2, Ecological Risk Assessment – Step 7] Add a sentence to make a substantive conclusion

Response: The Navy agrees that the clarifying language should be included. Additional text was added to the last paragraph of the summary indicating that toxicity testing concluded that no further investigation or action was required at the site. This conclusion was supported by the Navy and USEPA, in partnership with the VDEQ.

- ❖ Comment #13 - [Section 5] This statement conflicts with the last sentence of the previous paragraph. Please edit to clarify or resolve the conflict.

Response: In order to avoid confusion, the text has been revised to indicate that the results of the most current *risk assessments* (which identified no unacceptable risks to receptors) are summarized in Section 5.

- ❖ Comment #14 - [Section 5, What is Human Health Risk and How is it Calculated?] See? Risk management decisions are not based on risk posed by one individual contaminant.

Response: Risk management decisions throughout the document were revised to be consistent with this call out box. (i.e., discussion of individual contaminant values were revised to specify that no target-organ-specific contaminant exceeded unity).

- ❖ Comment # 15 - [Section 5.1, Soils] Is this related to reference reach?

Response: Correct. The “reference concentrations” are related to the reference reach. The text was revised to clarify this information.

- ❖ *Comment # 16 - [Section 5.1, Soils] Per EPA guidance, consideration of background is a risk management function, not a risk assessment function. EPA Region 3 BTAG sticks with this interpretation as chemicals present at background concentrations may still significantly influence toxicity of site –related contaminants (and elimination of these compounds often literally means that they are never considered when one attempts to assess what is happening at the site. While chemicals present at background concentrations should not be considered as “risk drivers” and the focus of BERA investigation, compounds present at or below background conditions should only be completely eliminated at Step 8.*

Response: As part of the Navy ecological risk assessment process, background comparisons are included as part of Step 3A. This is consistent with the original language included in the Proposed Plan and; therefore, no revisions were retained within the text.

- ❖ *Comment #17- [Section 5.3, Sediment] What is risk screening? What steps in the “How is the HHR calculated” text box were done to determine if sediment poses an unacceptable risk to human health?? Add more text to explain how this conclusion was determined.*

Response: A Human Health Risk Assessment was completed in order to assess potential risk to current and future receptors. The text has been revised to indicate this fact.

- ❖ *Comment #18 - [Section 5.3, Sediment] Wetland and aquatic receptors or only the aquatic receptors in the wetland?*

Response: Both wetland and aquatic receptors were addressed in the ERA. The text has been revised to clarify this information.

- ❖ *Comment #19- [Section 5.3, Sediment] Frankly, this is pretty shaky weight of evidence for the sediment. Frogs may not be the most sensitive receptor for this contaminant and media. If you have info showing this, you should state that. It’s not a convincing argument.*

Response: A more robust explanation of the risk assessment findings was included in the text.

- ❖ *Comment #20- [Section 5.4, Surface Water] What is risk screening? What steps in the “How is the HHR calculated” text box were done to determine if sediment poses an unacceptable risk to human health?? Add more text to explain how this conclusion was determined.*

Response: As indicated in the response to Comment #18, above, a Human Health Risk Assessment was completed in order to assess potential risk to current and future receptors. The text has been revised to indicate this fact.

- ❖ *Comment #21- [Section 5.1, Surface Water] What is the significance of this finding? If silver is suspended, not dissolved, does it pose a different risk?*

Response: Dissolved concentrations of silver are significantly more bioavailable to organisms and are, therefore, a better indication of risk to receptors. The text has been revised to clarify this fact.

- ❖ *Comment #22- [Section 5.4, Surface Water] You've got reduced growth for three classes of receptors? The weight of evidence discussion needs to be beefed up.*

Response: Although reduced growth was observed relative to some reference reach samples, instances of increased growth relative to other reference reach samples was also observed. In all instances, statistical analysis did not reveal a significant correlation between site media and risk to receptors. A more robust explanation of the risk assessment findings was included in the text to clarify this fact.

- ❖ *Comment #23- [Section 5.4, Surface Water] Clarify what receptors you mean*

Response: As indicated in the response to Comment #19, both wetland and aquatic receptors were addressed in the ERA. The text has been revised to clarify this information.

- ❖ *Comment #24- [Section 7] CERCLA requires a transcript, not minutes. See CERCLA Section 117(a)(2).*

Response: A responsiveness summary and meeting transcripts of public meeting will be provided in the ROD and included the Administrative Record. The text has been revised to be consistent with this fact.

- ❖ *Comment #25 - [Glossary] Natural?*

Response: Correct. The requested change to the text has been retained.

- ❖ *Comment #26 - [Glossary] Needs to be linked to AI concept*

Response: The Navy believes this comment should have referenced the HI concept; therefore, the definition has been revised to clarify the connection between unity and risk.

Comments within Concurrent Letter

- ❖ *Comment #1 - It's not very readable for the public.*

Response: While the document could be prepared in more simplistic language and without a glossary, exposing the public to the language commonly used in risk analysis better equips them to understand and discuss any concerns regarding the site and the proposed remedy. In addition, responses to many of the USEPA comments required further technical explanations. The Navy will continue to work with the USEPA in providing the public with a document which best communicates the risks posed by the site while maintaining a level of understanding for the public. The public comment period and public meeting provide an opportunity to communicate at various levels appropriate for the diversity of educational backgrounds of participants.

- ❖ *Comment #2 – The steps don't mean very much to people; wouldn't it be better to just explain if the ERA was abbreviated or not? Frankly, discussion of what steps were done left me wondering if a full ERA was done or not--and I'm supposed to be able to read this stuff.*

Response: The Navy agrees that it is not necessary to identify the difference between Step 3A and 3B; therefore all references to these steps will be identified as Step 3. Since a specific Step 7 evaluation was conducted as a separate investigation, the Navy feels that the specific steps do need to be identified within the text. In addition, general information regarding the different steps is included in the "What is Ecological Risk and How is it Calculated" call out boxes.

- ❖ *Comment #3 – Language like "intake . . . was screened . . . with screening values . . ." is just not understandable.*

Response: The glossary at the end of the document is meant to define any terms with which the reader may be unfamiliar. 'Dietary intake' was added to the glossary; however, no changes were made to the main text.

- ❖ *Comment #4 – Section 2 summary jumps directly to the conclusion that there is no unacceptable eco risk without explaining what leads them to that conclusion.*

Response: Correct. The risk assessments provided in the site background discussion are a general summary that do not typically discuss all risk management considerations. The text has been revised to more succinctly identify the results and decisions put forth in the SSP and RI reports.

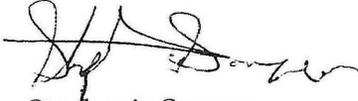
- ❖ *Comment #5 - I've never heard of "reference reach". I find the concept confusing compared to a background study. I'd be grateful if you or yours could especially scrutinize use of that term--is it accurate? is it necessary? could it be said in a way that would be clearer to the public?*

Response: The term 'reference reach' is a relevant and appropriate term, utilized within the text of the Step 7 ERA. The glossary at the end of the document is meant to define any terms with which the reader may be unfamiliar. No changes were made to the text.

Definitions provided within the text have not been retained; all bolded terms are defined within the glossary. All other editorial changes have been accepted and retained and are not discussed on a case by case basis within this letter. If you have any questions or comments regarding the above response to comments, please feel free to contact me at 757-671-6273.

Sincerely,

CH2M HILL

A handwritten signature in black ink, appearing to read 'Stephanie Sawyer', written over a horizontal line.

Stephanie Sawyer
Project Manager

cc: Mr. Tom Kowalski/NAVFAC
Mr. Wade Smith/VDEQ
Mr. Bill Friedmann/CH2M HILL
Ms. Stephanie Sawyer/CH2M HILL