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ST JULIENS CREEK  
5090.3a

LETTER AND U S NAVY RESPONSE TO ADDITIONAL U S EPA REGION III COMMENTS  
REGARDING DRAFT FINAL RECORD OF DECISION FOR SITE 2 WASTE DISPOSAL AREA  
B ST JULIENS CREEK ANNEX CHESAPEAKE VA  
10/06/2010  
CH2M HILL

**Responses to Comments**  
**Further Comments on Response to Comments**  
**Draft Final Record of Decision, Site 2: Waste Disposal Area B,**  
**EPA Designation: OU-2 Landfill B**  
**St. Juliens Creek Annex**  
**Chesapeake, Virginia**

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**Comments from USEPA Legal, provided 4 October 2010.**

8. *Comment:* Section 2.5.1: Suggest editing insert to introductory paragraph as follows: “Maximum concentrations of constituents identified as site COCs detected in each medium are presented in Table 2.”

**Response:** The requested revision has been made.

26. *Comment:* Table 7: (Doesn't St. Julien's Creek constitute surface water at the site?)

**Response:** Site impacts to surface water are limited to the inlet within Site 2, which will be filled in through installation of the soil cover. Thus, as the surface water inlet will be eliminated as part of the remedy, there will be no remaining surface water in which to meet surface water cleanup standards.

27. *Comment:* Section 2.9.1, bullet list of Alternatives: What is the “ad” at the end of Alternative 3? Also, please add LUCs to the bullet list, since these are also components of the remedial alternatives considered. Please add LUCs to the common elements discussed directly below the bullet list of Alternatives. The common elements paragraph states that, “The alternatives are described in Table 8.” In fact, they're not really described in much detail in the Table. I would suggest instead, “The components of each alternative are described briefly in Table 8.”

**Response:** The “ad” at the end of Alternative 3 was a typo and has been removed. LUCs have been added to the bullet list and to the common elements discussion directly below the bullet list. The reference to Table 8 has been changed as requested.

28. **Comment:** *Section 2.9.1, Contingency Remedy Component:* In the line of this paragraph, add an apostrophe to the "PRB's effectiveness." In the line of this paragraph, suggest changing "uncertainty with" to "uncertainty as to."

**Response:** The requested revisions have been made.

31. **Comment:** *Section 2.9.2, Overall Protection of Human Health and the Environment:* Although each alternative must satisfy the threshold criteria of Overall Protection and Compliance with ARARs in order to be considered further in the analysis, this doesn't mean that the analysis of these criteria should be simply "yes" or "no." The alternatives should also be measured against these criteria and ranked according to how well they satisfy each criterion. See ROD Guidance Highlight 6-24 at page 6-30. For future reference, starting with the FS, the SJCA Partnering Team should examine the factors that allow some alternatives to satisfy these criteria better than others, even if all alternatives pass the threshold test. The alternatives should be ranked in order of their ability to satisfy the Threshold Criteria the same as for the Primary Balancing Criteria.

**Response:** Comment noted. The SJCA Partnering Team will apply the suggestion to future sites moving forward starting at the FS phase.

- 36, 39, 40 & 42 **Comments:** Regarding Long-term Effectiveness: I still don't understand why Alternatives 3 & 6, which have all the same components as Alternative 2 plus a few more, are less effective in the long term than Alternative 2. Do the additional components actually cause a problem in Alternatives 3 and 6 that isn't present with Alternative 2?

**Response:** Alternatives 3 and 6 are less effective in the long term than Alternative 2 because of their reliance on containment. Because long-term effectiveness looks at the magnitude and characteristics of the residual risk at the conclusion of remedial activities, its evaluation of Alternative 2 begins after MNA has reduced groundwater contaminant concentrations to the cleanup levels. Alternatives 3 and 6 rely on containment within the High-concentration Target Area to achieve the RAOs. Containment has the potential for failure over time and may reduce the natural degradation processes within the High-Concentration Target Area (note that MNA is not a remedial component of the high-concentration target area in Alternatives 3 and 6). Therefore, Alternative 2 is considered to have a higher level of long-term effectiveness than Alternatives 3 and 6, and no changes have been made to the text or table.

40. **Comment:** *The response to Comment 40 states that Alternatives 7 & 8 are scored higher. However, Table 9 does not score them any higher than 2, 4, & 5?*

**Response:** Alternatives 2, 4, 5, 7, and 8 are relatively similar with regard to long-term effectiveness in comparison to the other alternatives. The alternatives were scored numerically within the FS; however, the SJCA Partnering Team opted to use symbols instead of numbers in the tables in the Proposed Plan and ROD because they were believed to be more reader-friendly. Symbols were aligned with numerical ranges, resulting in selection of the same symbol for multiple alternatives. The text was then used to distinguish one alternative from another within each relative ranking. Due to the confusion caused by the use of symbols, Table 8 has been revised to include

numerical scores for the Primary Balancing Criteria. This revision makes it more clear that Alternatives 7 and 8 scored higher than Alternatives 2, 4, and 5.

43. **Comment:** *Section 2.9.2, Reduction in Toxicity, Mobility, or Volume Through Treatment:* Suggest the following edit to the inserted sentence that begins 5 lines from the bottom of the paragraph: “Therefore, when the alternatives employing treatment as a component of the remedy are compared against one another, the alternative rankings from higher to lower are 4, 5, 6, and 8.”

**Response:** The requested revision was made, with the exception of the use of “highest to lowest” instead of “higher to lower.”

54. **Comment:** *Section 2.11.2, Land Use Controls bullets:* If the residential use prohibition is deleted under the assumption that the digging prohibition and the vapor intrusion LUC will cover any potential exposure due to residential use, what about playgrounds, which are generally included in the residential use prohibition? Are we sure that the prohibition on digging and the LUC restricting construction of new buildings without further evaluation of vapor intrusion pathways will be sufficient to protect potential human receptors from contaminants remaining onsite?

**Response:** The proposed LUCs are sufficient to protect potential human receptors from contaminants remaining on site. The basis for preventing construction of playgrounds would be to prevent contact with waste and soil. However, contact will be prevented through installation of the soil cover and implementation of the LUC to prohibit digging into the soil cover.

55. **Comment:** *Section 2.11.2, Land Use Controls, First and Second bullets under LUCs:* I still don’t understand why it makes sense to use “restrict” in the first bullet and “prohibit” in the second bullet. (Also same question as previous comments: is it OK to delete explicit residential prohibition? If so, delete “and” and put a period at the end of the digging prohibition.)

**Response:** “Restrict” has been changed to “Prohibit” in the first bullet, and the requested text change has been made.

56. **Comment:** *Section 2.11.2, MNA Section, second paragraph, second line:* Parenthetical includes “ethane” twice. Should the first one be “ethene” as in reaction under ERD Section above?

**Response:** The first “ethane” in the parenthetical has been changed to “ethene.”

57. **Comment:** *Section 2.11.5, Expected Outcomes:* Last sentence should reference “each medium” in the singular.

**Response:** Media has been changed to “medium”.