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1/20/04-01649

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EV23DO:EVS

JAN 20 2004

U.S. Environmental Protection Agency
Region III
Attn: Mr. Todd Richardson
Federal Facilities Branch
1650 Arch Street
Philadelphia, Pennsylvania 19103

Re: Response to EPA Comments on Draft Site 11
Remedial Investigation for Alleganey Ballistics
Laboratory, Rocket Center, West Virginia

Dear Mr. Richardson:

The attachment to this letter provides to you the Navy's response to your comments provided in your letter of 3 November 2003 on our Draft Site 11 Remedial Investigation, Alleganey Ballistics Laboratory, Rocket Center, West Virginia, November 2002.

If you have any questions concerning this issue, please contact me at (757) 322-4795.

Sincerely,

D. T. O'CONNOR
Remedial Project Manager
Carribean and Other IR Section
Environmental Programs Branch
Environmental Division
By direction of the Commander

Enclosure

Copy to:
Tom Bass
John Aubert
Lou Williams
Dave McBride
Steve Glennie
Administrative Record File (Alleganey Ballistics Laboratory, WV)

Response to EPA Comments on HHRA from Draft Site 11 Remedial Investigation, Allegany Ballistics Laboratory, Rocket Center, West Virginia

Table 2s.

Comment 1: Table 2.1. The RBC for iron should be revised.

Response: The RBCs on all of the Table 2s will be updated, as necessary, to the values on the USEPA Region III October 2003 RBC Table.

Comment 2: Table 2.14. Provide the soil-to-groundwater screening tables 2s. Also, provide the table 3s showing the COCs.

Response: Table 2.14 is the soil-to-groundwater screening table. A table will be added to the Table 3s showing the COPCs for this pathway. However, as indicated in Table 1, this pathway will not be quantitatively evaluated in the risk assessment, but will be evaluated qualitatively.

Table 3s.

Comment 3: The UCLs could not be verified. Please provide sample calculations.

Response: The equations used to calculate the UCLs are shown in the text and will be verified. The data set statistics are included in Appendix E, which includes the values used in the equations used to calculate the UCLs. The background data set at ABL is currently under review by USEPA and WVDEP. Once these data are accepted by the agencies the UCLs will be revised accordingly.

Table 4s.

Comment 4: Table 4.13, 4.18 and 4.23. Previous comment for tables 4.9, 4.14 and 4.19. The AT-N CT

Response: The AT-N CT will be corrected to 730 days.

Table 5s.

Comment 5: Table 5s. Please note that the target organ for iron is the liver (see NCEA Paper.) Please also see the NCEA toxicity profile for TCE online for the correct target organs for TCE. The target organs for the oral route for TCE are the liver, kidney and the fetus. The target organs for the inhalation route for TCE are CNS, liver, and the endocrine system.

Response: The target organs for iron and TCE will be changed as suggested.

Tables 7s/8s.

Comment 6: Table 7.4. RME/8.4 RME. Supplemental tables. Typographical Error. R [air exchange rate (min^{-1})] should be 0.083, not 0.0083. Note for future reference that Region 3 is now using 6 m^3 for the shower room stall volume.

Response: The air exchange rate of 0.0083 min^{-1} is based on an the air exchange rate of 0.5 hr^{-1} , as presented in the Foster and Chrostowski shower model reference. This value is correct and will not be changed.

Comment 7: Table 7.5 RME/8.5 RME. Supplemental tables. Two-film Volatilization Model should be reviewed by Pat Flores-Brown for accuracy.

Response: Please provide the contact information for Patricia Flores-Brown if you would like us to forward this calculation to her.

Comment 8: Table 7.16 RME. Cadmium RfD- Use the chronic value of $5.17\text{E}-05 \text{ mg/kg/day}$, not the subchronic value.

Response: Table 7.16.RME evaluates construction worker risks, and therefore, use of the subchronic cadmium RfD is appropriate.

Table 9s and 10s.

Comment 9: Table 9s-RME/CT - Resident. Please consider presenting the risks for the groundwater aquifer having the highest risks/HIs, if exposure to both aquifers is not expected to occur at the same time. Provide footnotes in the table explaining how the risks were added.

Response: The Table 9s will be revised as suggested.

Comment 10: Table 9.4 RME-Cancer/Noncancer - Groundwater, Air, Alluvial Aquifer, Construction Worker. The total risks are incorrect. Also, the total risks across all media and all exposure routes are incorrect. Recalculate target organs for this receptor. Note that total risks appear to be acceptable when recalculated.

Response: Target organ hazards will be recalculated based on comment 5. Total risk numbers will be checked and revised as necessary.

Comment 11: Table 9.6-9.9 CT and 10.6-10.9 CT. Note for future risk assessment reports that all exposure pathways for each media of concern should be considered in the summary of risks/HIs for the CT even if only one exposure pathway for a media exceeds the acceptable risk/HIs level of concern. Otherwise, the CT risks/HIs presented for the media of concern are not reflective of the total risks/HIs for that media/receptor for the CT pathway.

Response: Comment noted.

Comment 12: Table 10s-RME. It is recommended that the RME risks in table 9s be included in table 10s for media with acceptable risks in order to show that there is no risk for that media for the "no action" alternative (See RAGS D Instructions and the RPM for presentation preference.) Also, in cases where cancer risks are acceptable but non-cancer risks are not acceptable (e.g., for chemicals with cancer and noncancer effects,) the cancer risks should also be included for reference.

Response: The Table 10s only include the risk drivers for each media in which risks exceed USEPA target levels. Therefore, since there are no risk drivers for the media with risks that

are acceptable, these tables have not been prepared. However, the Table 9s for the RME risks can also be used as the Table 10s for the RME risks, if that is what EPA would like us to do.

Comment 13: The total lifetime cancer risks for the resident were not calculated. Please include the ingestion, dermal and inhalation routes, not just the risks for the ingestion route for the child and adult.

Response: The ingestion, dermal, and inhalation route risks will be included in the total lifetime cancer risk tables.

Comment 14: Table 10s. A footnote should be added indicating which metals are present at background levels.

Response: A footnote will be added to the Table 10s indicating which metals are present at background levels.

Text Comments:

Comment 15: Page 7-5. Note that there is no MCL for lead. The action level is 15 ppb.

Response: MCL will be changed to action level.

Comment 16: Page 7-5. Please check with the hydrogeologist regarding the use of a DAF of 20 for this site.

Response: We will check with the project hydrogeologist to make sure the use of a DAF of 20 is appropriate.