

Document: Operations Plan for Lead Remediation of Small Arms Ranges

Reviewer: Ben Amoah-Forson

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Following are comments on the subject document.

General Comments

No.	Sec.	Comment	Responses
1	Applies to Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.7, 2.8, and 2.9.	Add the following sentence at the end of the first bulleted paragraph for Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.7, 2.8, and 2.9: "First 12-inches of presumably RCRA soil will be segregated separately from the second 12-inches and possibly subsequent 6-inch lifts of MTCA soil."	The sentence "First 12-inches of presumably RCRA soil will be segregated separately from the second 12-inches and possibly subsequent 6-inch lifts of MTCA soil." has been added to Sections 2.1, 2.2, 2.3, 2.4, 2.5, 2.7, 2.8, and 2.9.
2	Applies throughout the document	When discussing alternative actions in the areas that qualify as special conditions, replace "sampled" with "re-sampled" and "determine" and "document" with "confirm and document". Also add "Please refer to Appendix C for details of sampling activities in areas with special conditions" after "lead".	The word "sampled" has been replaced with "re-sampled" and the words "determine" and "document" with "confirm and document". Also the following sentence "Please refer to Appendix C for details of sampling activities in areas with special conditions" after "lead".
3	Applies throughout the document	When discussing areas with standing water, use the term "standing water" instead of "saturated".	The term "standing water" has been inserted in the text instead of "saturated" throughout the document.

Specific Comments

No.	Sec.	Comment	Responses
1	2.0	In the 5 th bullet, on page 6, change the first two sentences to: "All excavation will be performed along the face of the berm (upper layer of presumably RCRA and MTCA soils). After the first 24-inches (first 12-inches of RCRA and next 12-inches of MTCA) are removed; additional soil will be removed in 6-inch lifts until visual observations (i.e. lead bullets or bullet fragments seen on the surface of the excavation) rule out the need for further excavation".	The first two sentences of the 5 th bullet on page 6 have been changed to: "All excavation will be performed along the face of the berm (upper layer of presumably RCRA and MTCA soils). After the first 24-inches (first 12-inches of RCRA and next 12-inches of MTCA) are removed; additional soil will be removed in 6-inch lifts until visual observations (i.e. lead bullets or bullet fragments seen on the surface of the excavation) rule out the need for further excavation"

2	2.0	In the 1st bullet, on page 7 change “6-12 inch layer” to “12 inch layer”	In the 1st bullet, on page 7 “6-12 inch layer” has been changed to “12 inch layer”.
3	2.1	In the 1st bullet, on page 7 change “6-12 inch layer” to “12 inch layer”	In the 1st bullet, on page 7 “6-12 inch layer” has been changed to “12 inch layer”.
4	2.1	First lines, page 8 change “these could potentially be exempted from further remedial actions” to “they will be re-sampled and analyzed to confirm and document the concentration of lead”.	The first line on page 8 has been changed from “these could potentially be exempted from further remedial actions” to “they will be re-sampled and analyzed to confirm and document the concentration of lead”.
5	2.7	Last paragraph, first sentence replace “saturated with” to “under”	Last paragraph, first sentence “saturated with” has been replaced with “under”.
6	4.3	Paragraph 3, spell out Title of the Appendix F.	The title of Appendix F has been spelled out in Paragraph 3.
7	4.3	Please revise the first sentence to read “All excavated soil will be processed using a vibrating three-stage screening system”. This will be consistent with the Cultural Resource Monitoring Plan.	The first sentence has been revised to “All Category I and II excavated soil will be processed using a vibrating three-stage screening system”. This is consistent with the Draft Final Cultural Resources Monitoring Plan.
8	4.4	First paragraph change “directly from the excavator bucket” to “at regular intervals from the tertiary level of the screening unit”	The third sentence in the first paragraph has been changed from “directly from the excavator bucket” to “at regular intervals from the tertiary level of the screening unit”.
9	6.0	Third bullet, insert “RCRA (leachable lead concentration greater than 5 mg/L) designated” between “All” and “screened”. Delete “containing leachable lead above the RCRA TCLP (non-hazardous level of 5.0 mg/L”	In the third bullet, “RCRA (leachable lead concentration greater than 5 mg/L) designated” has been inserted between “All” and “screened”. Also “containing leachable lead above the RCRA TCLP (non-hazardous level of 5.0 mg/L” has been deleted.
10	Appendix C Section 1.0	Page 1, First bullet delete “oversaturated soil” and “seasonal or perennial”. Page 1, Second bullet replace “Proximity” with “Within”. Page 1, Delete third bullet	Page 1, in the first bullet “oversaturated soil” and “seasonal or perennial” has been deleted. Page 1, in the second bullet “Proximity” has been replaced with “Within”. Page 1, the third bullet has been deleted.
11	Appendix C Section 2.0	Table C.1 in the comments column for Field Firing Ranges (2A-20) and Field Firing Ranges No 1 and 2 (2A-22) replace “saturated and swampy soil conditions” with “standing water”.	In Table C.1 in the comments column for Field Firing Ranges (2A-20) and Field Firing Ranges No 1 and 2 (2A-22), “saturated and swampy soil conditions” has been replaced with “standing water”.
12	Appendix C Section 5.0	In the first bullet delete “buffer area surrounding the potential”	In the first bullet “buffer area surrounding the potential” has been deleted.

13	Appendix C Section 5.0	In the second bullet delete “and within close proximity of a residential structure,”	In the second bullet “and within close proximity of a residential structure,” has been deleted.
14	Appendix E Section E.2.1	Please revise the first paragraph in page 2 of 7 to read “For all hot spots that fall within grids under Category 3, a 29 ft x 29 ft area will be excavated. For hot spots that fall within grids under Category 4, a 58 ft x 58 ft area will be excavated. For hot spots within grids under Category 5, the entire grid (130 ft x 130 ft) will be excavated”.	The first paragraph in page 2 of 7 has been revised to read “For all hot spots that fall within grids under Category 3, a 29 ft x 29 ft area will be excavated. For hot spots that fall within grids under Category 4, a 58 ft x 58 ft area will be excavated. For hot spots within grids under Category 5, the entire grid (130 ft x 130 ft) will be excavated”.
15	Appendix E Section E.2.1	In the proceeding paragraphs that describe confirmatory sampling locations to confirm lateral extent of contaminated areas, please change “sidewall sample” to “surface sample”. These samples should be taken at the surface along excavation walls.	The term “sidewall sample” has been changed to “surface sample” in all paragraphs that describe confirmatory sampling in Section E.2.1. The samples will be collected at the surface along the excavation walls.
16	Appendix E Section E.2.2.1	Please revise the last but one sentence to read “The second soil sample will be collected at the base of the berm within the 15-foot wide panel ...”	The last but one sentence in Section E.2.2.1 has been revised to read “The second soil sample will be collected at the base of the berm within the 15-foot wide panel ...”