## **REVIEW COMMENTS**

**PROJECT:** BLM Red Devil Mine

**DOCUMENT:** Draft-Final RI Report **PHONE:** (907) 766-3184 **REVIEWER:** Anne Marie Palmieri **DATE:**3/8/13

Item No.	Location (page, par., sen.)	COMMENTS	Contractor Response
1.	Page 1-1, para 3	The RI/FS should be conducted <i>in a manner consistent with</i> Alaska regulation, not <i>in a manner that considers</i> them. 18 AAC 75 is an <i>applicable</i> requirement, not a <i>to be considered</i> .	Text change will be made.
2.	Page 1-2	Revise the definition of the site to be consistent with the definition in 18 AAC 75.990.	Per 40 cfr 300.5, On-site means the areal extent of contamination and all suitable areas in very close proximity to the contamination necessary for implementation of the response action. Text was added to Section 1.2 to better clarify features contained within the site.
3.	Page 1-14, para 1	In 2006, the petroleum contamination was partially removed, not remediated. Remediation did not begin until the soils were placed in a biocell. Revise.	Text will be revised to indicate timing of removal and active remediation.
4.	Page 1-33, para 2, line 6	Sentence beginning "No sampling for lead" Sentence needs revision.	Text will be corrected. It should state: "No sampling for lead was conducted in soils surrounding this removed debris; however, building materials tested for lead did not exceed the toxicity characteristic levels established by the Resource Conservation and Recovery Act (RCRA).
5.	Sections 2.3 and 2.4	It is not clear in the narrative as to why the 2010 and 211 samples are considered to be "characterization" and the 2012 samples are "baseline monitoring". 1) There should be an explanation. 2) There should also be some narrative as to whether or not the results from the 2012 sampling showed any significant differences from the 2010 and 2011 data. 3) There should be a statement regarding trends or differences between spring and fall sampling.	<ol> <li>An explanation of the nomenclature will be added to the introduction of the chapter.</li> <li>There is substantial discussion of differences in 2012 data compared to 2010/2011 data provided in Chapters 3 and 4.</li> <li>There is substantial discussion of trends/differences between spring and fall sampling and observations in Chapters 3 and 4.</li> </ol>
6.	Section 4.1.3, Section 4.1.4, etc.	Background: In a sample set which is too small to calculate a 95% UTL, the lowest value should be used for conservatism.	Using the minimum detected background concentration guarantees an underestimation of background. The recommended value, UTL, is an estimate on the upper tolerance limit. When insufficient samples are not available to calculate the UTL, the maximum concentration better represents the upper limit. No change to report.
7.	Section 4.1.3, 4.1.4, etc.	In sections where statistics have not been employed, revise text to remove the reference and state how the background value was selected. Also remove "statistics" in titles of associated tables.	Text and table will be adjusted to not reference statistics.
8.	Section 4.2.2.2, and throughout	DRO regulatory citation is incorrect – 18 AAC 75.341, Table B2, under 40" precipitation climate zone, migration to groundwater pathway.	The citation will be corrected.

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9.	Figure 4-5	Sample results for TCLP for the 2010 composite samples are not consistent with Table 4-18 and Table 5-1.	Several results in Figure 4-5 are incorrect. The figure will be revised.
10.	Figures 4-42 to 4-46	Background: Those vegetation samples where the corresponding soil samples have COC results below background values should be treated as background vegetation samples in the risk assessment.	BLM will review those site soil and vegetation sample results and consider use of the vegetation samples for background in the risk assessment.
11.	Section 5.1.1	Much of the ground surface at the site is vegetated, however most of the main processing area (highest concentrations) is not vegetated. Suggest revision of bullet. Wind erosion is included in the risk assessment.	The bullet will be revised.
12.	Section 5.3	Again, we request that this section be removed as the laboratory method used was not an EPA approved method and has been shown to underestimate bioavailability. Inclusion of this section is not in agreement with what was discussed during the development of the EPA-BLM joint memo to OMB (final dated 11/1/12). We agreed that the results could be used in the uncertainty section of the risk assessment only.	Section 5.3 will be removed. The discussion of arsenic bioavailability tests will be presented in Chapter 6 – Baseline Risk Assessment.
13.	Table 6-83	What is the proposed cleanup level in this table? Section 6.4.1 states that the cleanup level would be the lower of the background or RBCL, but there are no indicators in this table. Also, cumulative risk would have to meet the regulatory thresholds.	The table is intended to show a range of potential risk based cleanup values. The FS will propose actual cleanup levels to be used at the site.
14.		end	