

**REVIEW COMMENTS**

**PROJECT:** Ross Adams Mine

**DOCUMENT:** Draft Action Memo

**DATE:** 11/28/17

**REVIEWERS:** Palmieri (DEC) and Buelow (EPA)

Item No.	Location (page, par., sen.)	COMMENTS	USFS Response
1.	General	This document presents a lengthy description of the site’s history, background, and characteristics, but gives a much shorter summary of the release and the health risks. Additional information is needed in the release and health risks sections in order to outline the area of contamination, what the human health and ecological risks are, and why the removal action is needed.	The content of this removal action memo was reflective of EPA’s guidance <a href="#">here</a> . The Forest Service also has internal guidance on how to complete an Action Memo. Added more information on the release; more detailed info can be found in the hyperlinks embedded in the RAM. Also referenced and linked are Appendices A and C—the Screening Level Ecological Risk Assessment and the Human Health Risk Assessment respectively. The purpose of this RAM is to request/document approval of the proposed removal action. All information contained herein was added to provide sufficient documentation for Mr. Carlson to approve the removal action.
2.	General	Editorial: Please number the pages.	Done. Added page numbers in the lower right hand side.
3.	Section I, page 1, para 1, line 2	Editorial: revise to read: “...proposed <i>Potentially Responsible Party</i> (PRP)-lead removal...”	Changed. Acronym defined in the Subject line.
4.	Section I, page 1, bulleted list and Section III	Editorial: revise numbering as i, ii, iii. Also, ending punctuation should be: bullet 1 – “;” bullet 2 – “; and” bullet 3 – “.” (note: this list is duplicated in Section III and this comment applies there as well.)	Not changed. Note: The "numbers" are not sequential (i) (iv) and (v) but rather represent the removal action factors from 40 CFR 300.415(b)(2). Please refer to that section in the CFR for clarification.
5.	Section II, A, 1, para 1, line 2	Editorial: Delete semicolon: “...survey which is indicative...”	Not changed. The use of the semicolon in this sentence was used appropriately.
6.	Section II, A, 1, para 2, line 4	Editorial: revise to read: “...under a <i>United States Forest Service</i> (USFS) permit.”	Added "(USFS)" under Section I., para 3 after "USDA Forest Service".
7.	Section II, A, 1, para 3, line 1	Revise to read: “The Site includes contaminated <del>surface</del> areas at the mine <i>portals</i> , haul roads,...”. ‘Surface’ is defined as 0-2 feet below ground surface and some of these waste rock piles extend below two feet.	Changed to read: “The Site includes the mine, haul roads, ore staging area (OSA), former barge loading area...” to reflect definition consistency amongst the EECA and the SOW to the ASAOC.
8.	Section II, A, 2, para 1, last line	Revise to read: “...connecting the Site to <del>either other USFS or POW</del> communities or roads.”	Done.

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9.	Section II, A, 3, Current Use	UCore: This section regarding UCore’s current use should be <b>revise</b> to include greater detail. UCore has been conducting exploration activities on the claims adjacent to the Site, but have been using the main haul roads, loading areas, and beach frontage. They have not been using the mine portals or smaller access roads to the portals. For several years, UCore housed its seasonal workers on a barge in Kendrick Bay and transported them across to the current floating dock via skiff. However, in a recent Operations Plan, UCore proposed housing the workers in small trailers on-site – whether or not the workers were housed on-site should be determined.	Section updated to reflect provided (via USFS email request) paragraph from UCore on 4 Dec 2017.
10.	Section II, A, 3, Current Use	Dotson: The Dotsons used their cabin quite frequently in the past. Was the cabin was sold to UCore or the FS? This should be confirmed as it will affect not only current use but also future use. Also, the drinking water source for the cabin is Cabin Creek.	Earlier this summer, a letter was sent to Ms. Anderson from the District Ranger informing her that the cabin will be removed during the cleanup operation. Further info via the District Ranger indicates that the Dotson’s no longer hold a valid permit for the cabin.
11.	Section II, A, 3, Current Use, line 6	Editorial: revise to read: “...investigation, and <del>while</del> one family member...”	Done.
12.	Section II, A, 3, Future Use	In public presentations located on UCore’s website, an on-site worker camp is shown as part of the Conceptual Project Design. <a href="http://ucore.com/PDAC2014.pdf">http://ucore.com/PDAC2014.pdf</a> . In other mines in Southeast Alaska, the typical worker schedule is 2-weeks on work followed by 2 weeks off work. This should be added as a future use.	While I do not disagree with your assessment that a typical worker schedule is 2-weeks on/2 weeks off, to add it to this removal action memo would be speculative. Future site usage by any mine exploration will be reflected in detail in their Plan of operations. Activity is adequately captured in the RAM.
13.	Section II, A, 4	This section lists surface water and stream sediment as having COPCs, yet they are not mentioned at all in the rest of the document, including the proposed actions. Clarify if they were screened out or how the proposed actions will address these COPCs.	Removed reference to stream sediments. The removal action scope does not include freshwater stream sediment.

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14.	Section II, A, 4	The information provided in this section is a list of COPCs from the HHRA. This section should include information about the locations, concentrations, and estimated volumes of contamination by media. This section should also include releases that are a threat to ecological receptors. Some of this information is included in a general description in Section II, A, 3, paragraphs 3 and 4. This section should also include some detail information about the cancer and non-cancer risks that are posed.	Rewrote section and added table from EECA that shows estimated volumes (and areas) of contamination.
15.	Section II, C, 1, para 1	Editorial: revise to read: "...action is the <del>United States Forest Service</del> USFS."	Done.
16.	Section II, C, 1, para 1	Please define the 'established commitment for coordination'.	This refers to the fact that ADEC and EPA have been involved in Ross Adams and continue to do so throughout the entire process.
17.	Section II, C, 1, para 2	Editorial: revise to read: "The <del>previous Region 10 On-Scene Coordinator</del> USFS held a...". The public meetings were held by the USFS regardless of who actually coordinated the meeting.	Unchanged. This is an internal USFS document and I am identifying who actually conducted the public meeting.
18.	Section II, C, 1, para 2	Revise to read: "No <i>written</i> comments were received."	Done.
19.	Section III, A, line 4	Editorial: revise to read: "...worker, <del>U.S. Forest Service</del> USFS worker,..."	Done.
20.	Section III	This section should be revised to include not only the risk to human health, but also the risk to ecological receptors. This section should include statements about the calculated risks of background and the additive risk caused by the mining activities by receptor, as well as the Federal and State risk thresholds. The RAOs should be outlined, too.	Please refer to the EPA guidance on preparing Removal Action memoranda.
21.	Section V, A, 1, para 4, line 8.	Revise to read: "...also comply with <del>potential</del> <i>State and Federal Applicable or Relevant and Appropriate Requirements (ARARs)</i> ."	Done.
22.	Section V, A, 1, para 4, lines 8-10	It is accurate that the calculated risk from the background concentrations exceeds the allowable health risk, this sentence should be revised to reflect that the removal action will address the additive risk caused by the mining activities. The background risk should also be discussed in Section III.	Done. Major rewrite of this section.

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23.	Section V, A, 1, Alternative M-5, bullet 2	Editorial: revise to read: "...disposal, <del>expect</del> <i>except</i> for drill..."	Done.
24.	Section V, A, 1, Alternative M-5, bullet 7	The exact design of the repository will need to be determined during the design phase of the project. A bottom liner will be required unless modeling of infiltration of the cap and resulting leachate shows that it is not needed, in accordance with 18 AAC 60.	Acknowledged. A separate briefing paper was prepared years ago specifically discussing the repository.
25.	Section V, A, 1, primary factors, bullet 1	This bullet addresses reduction of risk in mrem/year and less than 1E-5. Neither these terms nor the fact <b>that these are RAOs were</b> previously discussed in Section III. Context needs to be provided. EPA does not support 15 mrem/year as a cleanup level. It should be based off of cancer risk. There need to be cleanup levels clearly established in this section.	The RAOs and cleanup levels were discussed in detail in the EECA (but I added to the RAM for ease of reference). Please refer to <a href="#">this report</a> by the Department of Energy to the United States Congress. Here is a quote from this report "There are no across-the-board standards for the cleanup of uranium mine wastes; however, several states and BLM have developed their own guidelines. Site-specific standards are generally developed when needed, based on current and reasonably anticipated future land use. The standards of most state or federal land management agencies are based on background concentrations of site-related contaminants (e.g., radium, arsenic) plus some incremental added risk (e.g., background concentration plus a concentration equal to an added lifetime cancer risk of $1 \times 10^{-4}$ ). Because even fairly low levels of radium can translate into risks above the $1 \times 10^{-6}$ level for a residential use scenario, CERCLA authority could be used to justify cleanups of mines. Many edits added to reflect this.
26.	Section V, A, 2	What is the USFS' long-term remedy plan for this site? As there is going to be waste left in place, there needs to be Five Year Reviews to ensure that the remedy is functioning as intended (e.g. repository cap is still intact and the water coming out from the 300' portal opening meets Alaska Water Quality Standards, etc).	This is a Removal Action on a site that is not listed on the NPL. Therefore, a five year review is not required. See EPA guidance here: <a href="https://semspub.epa.gov/work/11/174052.pdf">https://semspub.epa.gov/work/11/174052.pdf</a> . However, I would note that the EECA addresses this: "Inspections would be performed on an annual basis for the first three years following construction, and thereafter every 5 years, to inspect the completed removal action, and perform maintenance as necessary." This removal action is consistent with any long term remedy.

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27.	Section V, A, 4	We would like to discuss the statement: “This removal action will attain to the extent practicable, considering the exigencies of the situation, applicable or relevant and appropriate requirements of federal environmental or more stringent state environmental laws.” ARARs must be attained or waived if this removal action is going to meet the expectations of a remedial process as well.	You are welcome to call and discuss, but this language is taken directly from 40 CFR 300.415(j) aka—part of the National Contingency Plan.
28.	Section V, B	Editorial: revise to read: “The total estimated <del>PRP</del> cost of...	Unchanged. There are other costs associated with this (not included in the Cost Estimate) that the USFS will incur; such as the cabin removal.
29.	Section VI	This text should be revised to be more detailed and site-specific. It is suggested that a statement <b>in</b> included that addresses the background risk and the additive risk resulting from the mining activities.	Context added throughout the RAM to address background risk.
30.	Section VII	Is Newmont the only PRP or should Dawn Mining also be included in this section?	Changed wording to read “Newmont and/or its subsidiaries Newmont Exploration, Ltd and Dawn Mining Co. are expected to fund and perform the proposed Removal Action under the terms of a Consent Decree.”
31.	ARARs List	The ARARs should not be ‘potential ARARs’, but actual ARARs.	Removed “potential” from heading.
32.	ARARs List	18 AAC 75 should be applicable.	Please submit the rationale for this to be “applicable” vice relevant and appropriate.
33.	ARARs List	18 AAC 83 should be applicable. The pipe that will direct the water from the 300’ portal to the creek will be a point source discharge.	Please submit the rationale for this to be “applicable.” The water coming from the 300ft portal meets water quality standards. An entire briefing paper exists on this issue, much of which was incorporated into this RAM.
34.		--end--	