

**Cross-Reference of NMED Disapproval Comments and Revisions to
Lower Mortandad/Cedro Canyons Aggregate Area Investigation Report**

NMED NOD Comment No.	Summary of NOD Comment	Section(s)/Page(s) in Original Report	Section(s)/Page(s) in Revised Report	Nature of Revision
General Comments				
1	Modify the risk assessments at Solid Waste Management Units (SWMUs) 05-003, 05-004, 05-005(b), and 05-006(c) to include an evaluation of a construction worker receptor.	Section I-4.0, pp. I-8 to I-15	n/a*	No revision to the report is necessary. The industrial exposure scenario accounts for shallow intrusive activities that might occur at the sites in the Lower Mortandad/Cedro Canyons Aggregate Area.
2	Discuss in Appendix B (Field Methods) of the investigation report how sediment sampling locations were chosen in the field, including how the determination was made that a given sampling location was representative of geomorphic conditions most likely to have been affected by Laboratory operations.	Appendix B (Field Methods)	Sections B-5.4, p. B-4, and B-9.0, p. B-7	Text in Appendix B has been revised to explain how sediment sampling locations were selected and were representative of conditions most likely affected by Laboratory operations.
3	Update the risk assessments to include an evaluation of the vapor-intrusion pathway.	Section I-4.3, p. I-11 Figure I-3.1-1	Table of Contents Sections 6.4.2.5, I-4.1, I-4.2.1, I-4.2.2, I-4.2.3, I-4.2.4, I-4.3, I-4.4.2, and I-4.4.4, pp. I-9 to I-16 Tables I-4.2-7, I-4.2-26, and I-4.2-27	Text discussing SWMUs 05-003 and 05-005(b) has been added to section I-4.1 to explain why the pathway is not evaluated. The vapor-intrusion pathway has been added to the risk assessments for SWMU 05-004 (limited to locations on the mesa top) and SWMU 05-006(c) in sections I-4.2.2 and I-4.2.4. Text and tables have also been revised and previous section I-4.3 has been deleted.

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4	Modify the human health risk assessments to use the updated soil and tap water screening levels for hexavalent chromium and the oral cancer slope factor of 0.5 mg/kg-d.	Section I-4.0, pp. I-8–I-15 Tables I-4.2-11, I-4.2-15, I-4.2-19, and I-4.2-23	Sections 6.4.1.5 and 6.4.2.5 Tables I-4.2-12, I-4.2-16, I-4.2-20, and I-4.2-24	The Laboratory applied the 2009 soil screening levels (SSLs) available from NMED at the time the report was written in October 2011. Subsequent changes to the chromium(VI) SSLs in February 2012 are not applicable to this report. A more representative screen is to compare the total chromium data with the chromium(III) SSL (from 2009) because this is the form of chromium in soil and tuff at these sites. Tables have been revised to compare the total chromium exposure point concentration with the chromium(III) SSL for each scenario.
5	Modify Figure I-3.1-1 to indicate whether the pathways are designated as complete or incomplete and if they are evaluated (quantitatively and/or qualitatively) in the risk assessments.	Figure I-3.1-1	Figure I-3.1-1	A note has been added to the figure for the VL, L, and M designations to indicate the pathway is potentially complete and is evaluated in the risk assessments, while NA indicates the pathway is incomplete and is not evaluated in the risk assessments.
6	Remove the discussion comparing exposure point concentrations (EPCs) with background concentrations from the ecological risk assessments at SWMUs 05-004, 05-005(b), and 05-006(c). Retain all inorganic chemicals that were eliminated as chemicals of potential ecological concern (COPECs) based on a comparison of EPCs with background concentrations. Modify the ecological risk assessments to use the accepted methods for refining COPECs, such as the application of area use factors and use of ecological screening levels based on lowest observed adverse effects levels (LOAELs).	Section I-5.4.4, p. I-19 Tables I-5.4-1, I-5.4-2, and I-5.4-3	Sections I-5.4.4, I-5.4.7, I-5.4.8, and I-5.5.1, pp. I-20 to I-26 Tables I-5.4-1, I-5.4-2, I-5.4-3, I-5.4-8, I-5.4-9, and I-5.4-10	The comparison of EPCs with background concentrations is relevant in the context of uncertainty associated with potential risks and exposures to COPECs. <ul style="list-style-type: none"> a. A reevaluation of chemical of potential concern (COPC) concentrations relative to background at the risk assessment stage is warranted because the concentrations used at this point are depth dependent. Text and tables have been revised accordingly. b. No revision necessary. c. Chromium was retained as a COPEC at SWMU 05-006(c) and evaluated accordingly. d. Inorganic COPECs retained following the comparison to background were

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				<p>evaluated using the area use factors and LOAELs ESLs.</p> <p>The discussions and tables comparing EPCs with background concentrations have been revised. Some inorganic chemicals were eliminated as COPECs.</p>
7	<p>Clarify how the population area use factors (PAUFs) were calculated, and modify Table I-5.4-4 to display the correct PAUFs. Modify any subsequent calculations if necessary.</p>	Table I-5.4-4	<p>Section I-5.4.5, pp. I-20 to 21</p> <p>Tables I-5.4-4, I-5.4-5, I-5.4-6, and I-5.4-7</p>	<p>Table I-5.4-4 has been revised. The site areas as well as the PAUFs and area use factors (AUFs) calculation results have been updated and corrected. The site areas, AUFs, and the AUF-adjusted Mexican spotted owl hazard indexes (HIs) have been revised; the hazard quotients and HIs in tables have also been recalculated as appropriate.</p>
8	<p>Modify the discussion of lead to state concentrations increase with increasing depth at locations 05-613800 and 05-614431. Provide a basis for the conclusion that the vertical extent of lead contamination is defined.</p>	Section 6.4.2.4, pp. 37 to 43	Section 6.4.2.4, p. 41	<p>The text has been revised to provide the rationale that lead concentrations at these locations were an order of magnitude or more below the residential SSL, indicating cleanup levels were met and additional sampling for extent of lead is not warranted.</p>

*n/a = Not applicable