

**Cross-Reference of NMED Approval with Modifications Comments (July 25, 2011)
and Update to the Groundwater Background Investigation Report, Revision 4**

NMED Comment No.	Summary of NOD Comment	Section(s)/Pages in Revision 4 (August 2010 Report)	Section(s) in Update to Revision 4 (November 2011 Report)	Nature of Revision
1	Correct the ages of Tshirege and Otowi Members of the Bandelier Tuff.	Section 2.1, p. 6	Section 2.1	Corrected ages of Tshirege and Otowi Members.
2	Provide expanded discussion of the regional water table occurrence.	Section 2.2, p. 7	Section 2.2	Expanded discussion of water table occurrence.
3	Reconcile the discrepancy in the discussion of sodium concentrations in groundwater.	Section 2.3.2, p. 10	Section 2.3.2	Corrected discussion of sodium trend in perched-intermediate groundwater.
4	Clarify the relationship between Tables 3.1-1 and B-1; clearly specify data preparation steps that are already reflected by the data sets in Tables B-4 through B-42 and those that were performed on these data sets in subsequent steps.	Section 3.1, p. 12	Section 3.1	Replaced Table B-1 with expanded discussion in text. Clarified Table 3.1-1.
5	Perform additional data-preparation steps in accordance with U.S. Environmental Protection Agency (EPA) guidance.	Section 3.1, p. 12	Section 3.1	Amended final data set in Appendix B to identify removed records.
6	Add a statement that low-level tritium results submitted by ARS Laboratory were screened-out before statistical analyses of the data were performed.	Section 3.4, p. 16	Section 3.4	Removed all tritium data from data set.
7	Resolve the discrepancy regarding the method.	Section 3.4.1, p. 15	Section 3.4.1	Removed reference in text to EPA Method 300 with respect to perchlorate.
8	Include all box plots used for outlier screening in the report.	Section 3.7, p. 19	Section 3.7	Expanded outlier analysis and amended Appendixes B and C to identify outliers.
9	Establish the screening value constituents in accordance with Section 17.2.2 and Table 17.4 in Appendix D of the EPA guidance.	Section 3.7, p. 20	Section 3.7	Revised text to include guidance provided by NMED in its approval with modifications letter.

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10	Correct the reference to Figure 2.3-1a.	Section 4.2.1, p. 24	Section 4.2.1	Corrected reference to Figure 2.3-1a.
11	Change the measurement unit for uranium-234 to pCi/L.	Section 4.2.1, p. 25	Section 4.2.1	Corrected measurement unit for uranium-234.
12	Correct the statement regarding EPA secondary standards for nickel, tin, strontium, and vanadium because such standards do not exist.	Section 4.4, p. 28	Section 4.4	No change since the error was made in Revision 3 of the Groundwater Background Investigation Report.
13	Revise the statement regarding upper tolerance limits (UTLs) having been calculated for some radionuclides and these UTLs are their screening values.	Section 4.4, p. 28	Section 4.4	Modified report to indicate the minimum detectable activity was selected as the screening value when a UTL could not be calculated for a radionuclide.
14	Provide information on the data set used to create the figures.	Figures 2.3-1a through 2.3-3b, pp. 45–47	Figures 2.3-1a through 2.3-3b	Modified figure captions to indicate mean values were calculated using Appendix B data.
15	Correct the wording to state “they do not cluster into a separate group....”	Table 1.2-1, p. 59	Table 1.2-1	Corrected table to state “they do not cluster....”
16	Remove all tritium data submitted by ARS Laboratory before performing the statistical analyses.	Table 3.1-1, p. 62	Table 3.1-1	Removed all tritium data from the data set. Reworded text in Table 3.1-1 to clarify. Expanded Table 3.4-2 to include all analytical methods used.
17	Provide units of measurement for all analytical data.	Tables 4.2-1 and 4.2-2, pp. 71–77	Tables 4.2-1 and 4.2-2	Added units of measurement for analytical data.
18	Correct typographical errors in Table 4.3-1 and recalculate percent differences in screening levels to make them relative to the Revision 3 screening levels.	Table 4.3-1, pp. 79–81	Table 4.3-1	Recalculated screening values in revised table.
19	Make the table titles more descriptive and revise the wording for the EPA standard type.	Tables 4.4-1 and 4.4-2, pp. 87–90	Tables 4.4-1 and 4.4-2	Modified table titles and changed wording for standard type for strontium-90 and radium-226.

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20	Reconcile the discrepancy regarding whether data from Earth and Environmental Sciences (EES) 6 for Barbara and Campsite Springs were included in the data set.	Appendix B, Table B-1, p. B-3	Table B-1	Replaced Table B-1 (steps in data removal) and clarified use of EES- 6 data in data set at Barbara and Campsite Springs.
21	Use italics, gray shading, or some other means to indicate what data were removed from the data sets.	Appendix B, Tables B-4 through B-42, pp. B-9 to B-608	Tables B-4 through B-42	Added extra column to Tables B-4 through B-42 to distinguish data removed from data set during preparation and outlier analysis.
22	Correct erroneous callouts to figures in Appendix C.	Appendix C, p. C-1	p. C-1	Revised Appendix C in its entirety and made all figures, captions, and table of contents consistent.
23	Provide units of measurement for the UTL data and revise to correct error in table note.	Appendix E, Tables E-1 and E-2, pp. E-3 to E-8	Tables E-1 and E-2	Provided units of measure for UTL data and removed table note.
n/a*	n/a	Throughout	Throughout	Minor editorial changes were made throughout the document for the sake of correctness and clarity.

*n/a = Not applicable.