Response to the "Notice of Disapproval for the Phase II Investigation Report for Material Disposal Area (MDA) T at Technical Area (TA) 21, November 2007, Los Alamos National Laboratory EPA ID No: 0890019515, HWB-LANL-07-038," Dated February 29, 2008

INTRODUCTION

To facilitate review of this response, the New Mexico Environment Department's (NMED's) comments are included verbatim. The comments are divided into general and specific categories, as presented in the notice of disapproval. Los Alamos National Laboratory's (LANL's or the Laboratory's) responses follow each NMED comment. This response contains data on radioactive materials, including source, special nuclear, and byproduct material. Information on radioactive materials and radionuclides, including the results of sampling and analysis of radioactive constituents, is voluntarily provided to NMED in accordance with U.S. Department of Energy policy.

GENERAL COMMENTS

NMED Comment

1. *The Permittees proposed, in the approved work plan, to collect subsurface vapor samples at the same depth intervals where samples were collected during previous sampling events in the Phase II Investigation Work Plan (February 15, 2007, LA-UR-07-0930/EP2007-0105). The Permittees did not complete this requirement (e.g., 2005-2006 location ID 21-25263 depth of 79-81 feet versus 2007 sample location 2-603058 depth of 67.5-72.5). The Permittees must provide justification for the differences in sampling depths between sampling events. The Permittees are reminded that subsurface vapor samples must be collected for analysis of Volatile Organic Compounds (VOCs) and tritium using the same methods used in the 2006 sampling events unless prior approval is obtained from NMED. Vapor-monitoring data must continue to be conducted on a quarterly basis to provide a more accurate assessment of vapor-phase contamination at MDA T. The Permittees must submit to NMED periodic monitoring reports within 45 days of completion each of vapor sampling event. The periodic monitoring reports must be prepared in accordance with Section XI.D of the March 1, 2005 Order on Consent (Order).*

LANL Response

1. LANL did complete the requirement to collect subsurface vapor samples at the same depth intervals sampled previously; the sample elevations are the same for borehole locations 21-25263 and 21-603058. The apparent discrepancy arises from the fact that the surface elevation of the replacement borehole is approximately 10 ft lower than the original borehole 21-25263. Text has been added to section 3.6 to explain the different surface elevations of the boreholes. The sample interval was increased to 5 ft. Vapor monitoring will continue as scheduled on a quarterly basis through September 2008. As discussed in the February 22, 2008, meeting with NMED and confirmed by NMED in the August 17, 2007, letter from NMED, the results from the remaining three quarters will be submitted in a single monitoring report 45 d following completion of the last sample round. The schedule also was agreed to in the August 17, 2008, letter. The report will include an analysis of temporal and spatial trends of the four quarters of data collected from the permanent vapor

monitoring wells as well as a comparison to the two rounds of data collected in 2006. At that time, the need for additional quarterly sampling will be evaluated.

NMED Comment

2. *The Phase I Investigation Report (September 2006, LA-UR-06-6506/EP2006-0779) states on page 5 that building 21-257 (SWMU 21-011(a) (Table 2.1-1, September 2006) page 75) "is scheduled for decontamination and decommissioning (D&D) in June 2007." However, this activity is not discussed in the Report. The Permittees must provide documentation that the building was removed. If the building has not been demolished, the Permittees must provide an explanation as to why this information was not included in Section 3.6 of the Report (Deviations).*

LANL Response

2. Decontamination and decommissioning (D&D) of this building is not part of the approved investigation work plan and no report of a deviation is needed. Building 21-257 is still active and D&D has been postponed. The description of the planned D&D of building 21-257 was provided in the report as part of site operational history rather than as an investigation objective.

SPECIFIC COMMENTS

NMED Comment

3. Section 3.1, Borehole Abandonment, page 4

Permittees' Statement: *"Four boreholes [locations 21-25372, 21-25373, 21-25375, and 21-25376] from the 2005-2006 investigation were to be abandoned. Location 21-25373 was abandoned...[t]he other three boreholes have not been abandoned as of November 15, 2007. Site access issues and operational protocols associated with Consolidated Unit 21-016(a)-99's designation as a NES regulated under 10 CFR 830 prevented the abandonment. These boreholes will be abandoned as soon as operational protocols permit access to the borehole locations."*

NMED's Comment: *According to Figure 3.2-1 on page 14, the borehole locations are well outside of the NES boundary. The Permittees must properly abandon these wells as previously planned since they are not located within the NES boundary.*

LANL Response

3. The text was incorrect in that the boreholes are not within the nuclear environmental site (NES) boundary but are within the Material Disposal Area (MDA) T nuclear facility boundary. The text has been corrected in section 3.1 and Figure 3.2-1 has been revised to indicate the nuclear facility boundary. Current operational rules and guidelines for work within the nuclear facility require protocols and start-up requirements that are similar to the requirements for work within nuclear environmental site. The boreholes are scheduled to be plugged and abandoned in March or April 2008.

NMED Comment

4. ***Section 3.2, Installation and Sampling of Permanent Vapor-Monitoring Wells, page 5, paragraph 2***

   Permittees' Statement: *"Before sampling, pore gas was purged from each sampling port by pumping; once proper purge of the sampling system was verified, vapor sampling proceeded in accordance with standard operating procedure EP-ERSS-SOP-5074, Sampling for Sub-Atmospheric Air. Subsurface pore-gas samples were collected in SUMMA canisters for VOC analysis and in silica gel samplers for tritium analysis. Sample locations and depths are tabulated in Table 3.2-1."*

   NMED's Comment: *The Permittees reference a Standard Operating Procedure (SOP) in the Report without including a description of the sampling procedures actually used. The Permittees must provide descriptions of the procedures used during sampling. Section IX.A in the Order on Consent (March 1, 2005) specifically states that "[t]he Respondents shall provide a brief description of investigation, sampling or analytical methods and procedures in documents submitted to the Department that includes sufficient detail to evaluate the quality of the acquired data." The Permittees must revise this section to provide adequate descriptions of the methods actually used during the sampling event. In addition, the Permittees must provide detailed vapor monitoring well construction diagrams and the associated boring logs for the newly installed vapor monitoring wells. The boring logs must provide detailed lithologic descriptions of the soils and rock observed during drilling.*

LANL Response

4. Additional text describing the subsurface pore gas SOP has been added to section 3.2. The well construction diagrams (Figures 3.2-2, 3.2-3, and 3.2-4) have been revised to include more details including elevations of sample ports and well construction materials. Borehole logs for locations 21-25262, 21-25263, and 21-25264 have been resubmitted for reference and are included in Appendix A. Boreholes 21-603058 and 21-603059 were moved 40 ft and 35 ft, respectively, and the goal of the replacement boreholes was to install sample ports at identical subsurface elevations as the original boreholes. The two replacement boreholes (21-603058 and 21-603059) were not logged because of their proximity to the original boreholes and text noting this has been added to section 3.6. NMED was notified on October 24, 2007, regarding the replacement boreholes and approved the deviation on October 26, 2007.

NMED Comment

5. ***Section 3.2, Installation and Sampling of Permanent Vapor-Monitoring Wells, page 5, paragraph 2***

   Permittees' Statement: *"One round of pore-gas sampling was collected from all ports in each well, except port 2 at location 21-603059. Port 2 did not produce pore-gas vapor, possibly because the welded formation does not allow the extraction of sub-surface vapor."*

   NMED's Comment: *The Permittees do not explain why Sampling Port 2 was placed at a depth corresponding to a welded interval in the tuff. NMED assumes that the boring log was reviewed prior to construction of the vapor monitoring well and that welded intervals were identified before installation began. Since the Permittees have not abandoned boring 21-25262, both borings must be monitored in the future at all depths corresponding to those sampled during the 2006 sampling events. Based on Table 6.5-2 (page 215) of the Investigation Report for MDA-T (September 2006,*

LA-UR-06-6506), NMED understands port 2 to be at depth 114-116 feet below ground surface (bgs). The Permittees must explain why they were unable to collect a sample at port 2 when two samples were collected at this depth in the 2005-2006 sampling rounds at sample location 21-25262. The Permittees must provide NMED with sufficient justification for not collecting samples from this location when samples were collected previously at that depth.

LANL Response

5. Samples collected previously from this depth were obtained from a different borehole. The 115-ft interval yielded pore gas from the original borehole during Phase I because it was more permeable, possibly because of local features, such as the presence of a fracture within or nearby the sample interval. Several attempts were made to collect a sample from Port #2 (115 ft below ground surface [bgs]) at well 21-603059. As noted in the response to Comment 4, borehole 21-603059 was not logged. Therefore, the borehole log was not reviewed as assumed in the comment. Text has been added to section 3.2 to clarify the sampling process and port placement. The port was surged with nitrogen and suction was applied, but the interval would not yield. The subsurface formation at the replacement location is not permeable enough for the transmission of pore gas.

   As discussed in the February 22, 2008, meeting with NMED, the two rounds of data collected in 2006 show this interval to have similar chemical concentrations as the intervals directly above and below (Port #1 at 80 ft bgs and Port #3 at 190 ft bgs). Using data collected from Port #1 and Port #3, trends and analysis of change in concentrations with depth can still be made without information from Port #2. The need to collect pore-gas data from 115 ft bgs at location 21-25262 will be evaluated following analysis of the four rounds of quarterly data from location 21-603059 and comparison to the first two rounds collected from location 21-25262.

NMED Comment

6. Section 3.4.2, MDA-T Subsurface Vapor Data, Tritium, page 8

Permittees' Statement: *"Tritium activities are substantially lower in the first round of samples collected during the 2007 investigation than in samples collected during the 2005-2006 sampling rounds."*

NMED's Comment: *The Permittees have not provided a rationale for why tritium activities measured in 2007 are significantly lower than the 2005-2006 results. Further, the Report provides no description in Section 3.2 ("Installation and Sampling of Permanent Vapor-Monitoring Wells" page 5) of the type of well the Permittees have installed in the borings. The Permittees did not provide sufficient information to determine whether the reduction in tritium concentrations is the result of the vapor monitoring well installation, a change in the method in which the samples were collected, or a result of some other factor. The as-built diagrams for vapor-monitoring well locations 21-603058, 21-603059, and 21-25264 in Figures 3.2-2 to 3.2-4 (pages 15-17) of the Report indicate that the samples were collected over a larger interval (five feet) than the straddle packer system that isolated a two foot interval within the boreholes (see Phase I Investigation Report for MDA-T, September 2006, LA-UR-06-6506, page 18). Section IX.A in the Order on Consent (March 1, 2005) specifically states that "[t]he Respondents shall provide a brief description of investigation, sampling or analytical methods and procedures in documents submitted to the Department that includes sufficient detail to evaluate the quality of the acquired data" (page 168). The Permittees must revise this section to describe all of the differences between the 2005-2006 sampling events and the November 2007*

sampling event. The description must include an adequate description of all pore-gas sampling methods used during each sampling event.

LANL Response

6. Text summarizing the installation and sampling of the permanent vapor-monitoring wells has been added to section 3.2. Details have also been added to the well completion diagrams (Figures 3.2-2, 3.2-3, and 3.2-4) to provide more information regarding well construction. Use of the permanent ports installed in the vapor-monitoring wells will provide more consistent sampling from event to event than is possible with the packer system. Temporal and spatial trends in data will be addressed in the monitoring report submitted following the collection of the four quarters of pore-gas data. Please note that the requirements of Section IX.A of the Compliance Order on Consent do not apply to radionuclides. As discussed in the February 22 meeting with NMED, MDA A tritium results showed similar variations between 2006 and 2007; in the case of MDA A, the sampling techniques were identical for both rounds. Therefore, we believe different sampling techniques (packer vs. sample port) did not substantially affect analytical results. Further, the inability to obtain a sample from Port #2 in well 21-603059 attests to the ability of the well construction methods to obtain a good annular seal around the sample interval. Therefore, dilution from short-circuiting around the seal is not likely to be the cause of the reduction in tritium activity.

NMED Comment

7. Table 3.4-2, Summary of VOCs Detected in Pore Gas at Consolidate Unit 21-016(a)-99, page 37

NMED's Comment: The information provided in this table is insufficient. The Permittees have included dashes in the table, but did not define the symbol in the table's key. Revise the table accordingly.

LANL Response:

7. A footnote has been added to Table 3.4-2 to define the meaning of the dash.

NMED Comment

8. Table 3.4-2, Summary of VOCs Detected in Pore Gas at Consolidated Unit 21-016(a)-99, page 37

NMED's Comment: *The report indicates that VOCs are present in the subsurface and that concentrations decrease with depth. The soil screening levels for an industrial worker do not include an evaluation of VOC migration to indoor air.*

In reviewing the pore gas data, several volatile organic compounds (VOCs) were detected. It is possible to model pore gas data and evaluate the vapor intrusion pathway for the migration of VOCs from pore gas into buildings. Under an industrial scenario, the vapor migration to indoor air pathway should be identified as a complete exposure route and evaluated using a vapor intrusion model, such as the Johnson and Ettinger model. Unless the Permittees provide additional lines of evidence for determining that the pore gas data are not applicable to the risk assessment as a source for exposure via inhalation, the data should be used in a quantitative evaluation of this pathway. The Permittees must provide an evaluation for vapor intrusion to in the revised Report.

LANL Response

8. The current and reasonably foreseeable future land use for this site is industrial. A comparison was made to TA-54, MDA L, site conditions to address NMED's concern. The concentrations of pore-gas volatile organic compounds (VOCs) detected at MDA T are orders of magnitude lower than those measured at MDA L, which has a well-defined plume (LANL 2006, 091888). The VOCs measured inside buildings at MDA L did not exceed the OSHA permissible explosive levels and the American Conference of Government Industrial Hygienists threshold limit value time-weighted average levels and were in fact orders of magnitude less than these limits. Given the much higher concentrations measured in the pore gas at MDA L, concentrations measured in a building at MDA T are likely to be below these industrial limits. Therefore, an evaluation for vapor intrusion is not necessary. No revisions to the text are needed.

NMED Comment

9. Table 3.4-3, Summary of Tritium Detected in Pore Gas at Consolidate Unit 21-016(a)-99, page 39

NMED's Comment: The information provided in this table is insufficient. It is unclear if the function of Table 3.4-3 is only to identify sample locations or whether other information was omitted. The Permittees must revise the table to indicate all sample locations, depths, and analytical results, including non-detects.

LANL Response

9. Table 3.4-3 has been revised to include all sample numbers and depths collected. Samples with results below detection limit have been noted with a dash.

NMED Comment

10. Table 3.5-1, Summary Statistics, Exposure Point Concentrations, and Calculated Doses for Residential and Recreational Scenarios for the DP Canyon Slope, at Consolidated unit 21-016(a)-99, MDA-T, pages 40-41

NMED's Comment: *The Permittees entitle two columns, "Mean Concentration" and "Screening Level", yet do not provide the units of measure. Revise the table to include the appropriate units of measure.*

LANL Response

10. Table 3.5-1 has been updated to include units of measure for Mean Concentration (pCi/g) and Screening Level (pCi/g). The table previously had incorrect units (mg/kg) for minimum, maximum, mean, standard deviation, and 95% upper confidence level. Because the table only includes radiological results, the labels should have been reported in "activities in picocuries per gram" rather than "concentrations in milligrams per kilogram." The column labels have been corrected. The values in the columns have not changed.

NMED Comment

11. Table 3.5-1, Summary Statistics, Exposure Point Concentrations, and Calculated Doses for Residential and Recreational Scenarios for the DP Canyon Slope, at Consolidated unit 21-016(a)-99, MDA-T, pages 40-41

NMED's Comment: *The Permittees compare the number of samples analyzed from the Phase I IR to that of the Phase II; however, the number of reported analyses is inconsistent. For example, the Permittees have indicated that under residential statistics 58 sampling events were analyzed for plutonium-238 and 87 for plutonium-239/240. Based on a review of the Phase I IR (September 2006), 85 samples were analyzed for plutonium-238 and 87 for plutonium-239/240. The Permittees must explain this discrepancy.*

LANL Response

11. There is no discrepancy; the values that are reported in Table 3.5-1 of the Phase II are correct. The risk analysis presented in the Phase II Report only includes comparisons for the DP Canyon Slope. Table J-2.3-5, " DP Canyon Slope, Residential Scenario COPC Statistics," presented on pages J-39 and J-40 of the Phase I IR (Appendix J), lists the following numbers of analyses for the following chemicals: americium-241(58); plutonium-238 (58), and plutonium-239/240 (56). These values are consistent with the number of analyses reported in Table 3.5-1 of the Phase II Report.

NMED Comment

12. Section 3.6, Deviations, page 9

Permittees' Statement: *"Two of the vapor-monitoring wells were moved outside of the NES boundary*

NMED's Comment: *The Permittees' rationale for drilling two new borehole locations, 21-603058 and 21-603059, to replace borings 21-25262 and 21-25263 is unclear (see Figure 3.2-1, page 14 of the Phase II Investigation Report (IR) (November, 2007)).*

On page 12 of the Phase I Investigation Report for MDA-T (LA-UR-06-6506, September 2006) the Permittees state that boreholes 21-25262, 21-25263, and 21-25264 were, "...drilled to characterize subsurface tritium and VOC pore gas..." This sentence is included in Section 3.1, "Surface and Subsurface Investigation Outside of the Nuclear Environmental Site."

On page 3 of the Permittees "Submittal of the Phase II Investigation Work Plan (IWP) for Consolidated Unit 21-016(a)-99" (LA-UR-07-0930, February 15, 2007), the Permittees propose to abandon borings 21-25263 and 21-25264, rather than clean out the borings by removing residual slough and install a multi-port pore gas monitoring well at location 21-25262. The Permittees rationale was that "location 21-25262 is centrally located with respect to the MDA-T absorption beds and the central axis of DP Mesa..." indicating that there were no access issues with respect to the NES boundary. This document specifically indicates that boreholes 21-25262 and 21-25263 are not located within the NES boundary (Figure 3.2.1).

In NMED's "Approval with Modifications Phase II IWP for Consolidated Unit 21-016(a)-99" dated April 9, 2007, NMED directed the Permittees to "remove the slough from all three pore-gas sampling locations (21-25262, 21-25263, and 21-25264) and install permanent pore-gas monitoring wells" (page 2). The Permittees agreed to do so in

their response, "Submittal of the Response to the Approval with Modifications, Phase II IWP" dated June 22, 2007 (LA-UR-07-3844 (page 2)).

NMED agreed to an October 26, 2007 emailed request from Bruce Wedgeworth of your staff to move borehole locations 21-25262 and 21-25263 "...from within the Solid Waste Management Unit (SWMU) boundaries of MDA-T to outside SWMU boundaries and fence line to assist in getting an immediate start, which is currently not possible because of requirements within nuclear sites." However, this agreement appears to have been based on inaccurate information, since NMED was led to believe that boreholes 21-25262 and 21-25263 were located within the NES boundary. NMED's administrative record indicates otherwise (Report Figure 3.2-1, page 14).

Finally, the earliest figure illustrating the NES boundary at MDA-T dates back to the Permittees June 22, 2005 "Response to the Notice of "Approval with Modifications IWP for MDA-T Solid Waste Management Unit 21-016(a)-99" (LA-UR-05-4548). There is no evidence that the designation of this NES boundary has changed according to the figure in the Report (November 2007).

The Permittees must therefore remove the slough from boreholes 21-25262 and 21-25263, as previously directed by NMED, and continue to conduct quarterly vapor-monitoring for VOCs and tritium at boreholes 21-25262, 21-25263, 21-25264, 21-603058 and 21-603059. The Permittees must submit to NMED periodic monitoring reports within 45 days of completion of each vapor sampling event. The Permittees must prepare the reports in accordance with the applicable procedures included in Section XI.D of the March 1, 2005 Order on Consent.

LANL Response

12. The designation of the NES boundary in previously submitted figures is accurate. As stated in Comment #3, the area outside of the NES, but within the solid waste management unit boundary, is designated as the MDA T nuclear facility. Section 3.1 and Figure 3.2-1 have been revised to note this change. Administrative controls and requirements for work within the MDA T nuclear facility boundary are now the same as those for working within the NES boundary. The work authorization process for work within the MDA T nuclear facility is equivalent to work within the MDA T NES.

    The two new boreholes (21-603059 and 21-603058) are replacements for the boreholes within the MDA T nuclear facility. The replacement boreholes were approved by NMED on October 26, 2007. Boreholes 21-25262 and 21-25263 are scheduled for abandonment in March or April 2008.

    As discussed in Comment #1, the results from the remaining three quarters will be submitted in a single monitoring report 45 d following completion of the last sample round, as confirmed in the August 17, 2007, letter from NMED.

NMED Comment

13. Section 4.0, Conclusions, page 10

Permittees' Statement: *"The 2007 data indicate that the vertical extent of americium-241, plutonium-238, and plutonium-239 on DP Canyon slope is defined...the data also indicate that there has been some redistribution of americium-241, plutonium-238, and plutonium-239 on the DP-Canyon*

slope. There is some potential for the radionuclides to migrate further into DP Canyon. However, as presented in the investigation report for MDA-T, the extent of contamination beyond the toe of the slope into DP Canyon has been defined and presented in the Los Alamos and Pueblo Canyons investigation report."

***NMED's Comment:** The Permittees must provide the appropriate information (e.g., sample collection locations, relevant maps, sample analytical results) to support this assertion. Revise the Report to include the appropriate information and specific reference citations.*

LANL Response

13. Page number references for the "Los Alamos and Pueblo Canyon Investigation Report" (LANL 2004, 087390) were omitted. Page numbers and figure references have been included in the text in section 4.0 for clarification. Results from the Los Alamos and Pueblo Canyon investigation report have not been reproduced in this report.

NMED Comment

14. Appendix A, Field Information

***NMED's Comment:** Appendix A provides logs for borings 21-01860, 21-01861, 21-01862, 21-02568, 21-02569, 21-25266, and 21-60300. The Appendix does not include logs for borings 21-25264, 21-603058, and 21-603059. The Permittees must provide the logs for these three boreholes. See comment #4.*

LANL Response

14. As stated in Comment #4, borehole logs for locations 21-25262, 21-25263, and 21-25264 were submitted in the 2006 investigation report and have been resubmitted for reference in Appendix A. The two replacement boreholes (21-603058 and 21-603059) were not logged because of their proximity to the existing boreholes. Text noting this has been added to section 3.6.

NMED Comment

15. Section 4.0, Conclusions, page 10

***NMED's Comment:** The Permittees must reference concentrations not dose when discussing relative risk. Revise the Report accordingly.*

LANL Response

15. Section 4.0 and Table 3.5-1 have been clarified to indicate that the screening levels and summary statistics are reported in picocuries per gram. The reference for screening levels has also been added to the table. Radiological dose is reported in mrem/year.

REFERENCE

LANL (Los Alamos National Laboratory), April 2004. "Los Alamos and Pueblo Canyons Investigation Report," Los Alamos National Laboratory document LA-UR-04-2714, Los Alamos, New Mexico. (LANL 2004, 087390)

LANL (Los Alamos National Laboratory), March 2006. "Investigation Report for Material Disposal Area L, Solid Waste Management Unit 54-006, at Technical Area 54, Revision 1," Los Alamos National Laboratory document LA-UR-06-1564, Los Alamos, New Mexico. (LANL 2006, 091888)

Cross-Reference of NMED NOD Comments and Revisions to Phase II Investigation Report for Material Disposal Area T at Technical Area 21, Revision 1

NMED Comment No.	Section(s), Table(s), or Figure(s) in Original Report	Page(s) in Original Report	Section(s), Table(s), or Figure(s) in Phase II Investigation Report for MDA T Revision 1	Section(s)/Page(s) in Revised Report 1	Nature of Revision
General Comments					
1	General Comment	All	Sections 3.2 and 3.6	pp. 5, 10	Text has been added to sections 3.2 and 3.6 to explain monitoring well construction and the different surface elevations of the boreholes.
2	General Comment	All	Not applicable	Not applicable	No revision was made.
Specific Comments					
3	Section 3.1	p. 4	Section 3.1, and Figure 3.2-1	pp. 4, 15	The text has been corrected in section 3.1, and Figure 3.2-1 has been revised to note the nuclear facility boundary.
4	Section 3.2	p. 5	Section 3.2; Section 3.6; Figures 3.2-2, 3.2-3, 3.2-4, and Appendix A	pp. 5–6, 10, 16, 17, 18, and Appendix A	Additional text describing the subsurface pore-gas SOP has been added to section 3.2. The well construction diagrams (Figures 3.2-2, 3.2-3, and 3.2-4) have been revised to include more details including elevations of sample ports and well construction materials. Borehole logs for locations 21-25262, 21-25263, and 21-25264 have been resubmitted for reference in Appendix A. The omitted boring logs for the replacement wells are noted in section 3.6.
5	Section 3.2	p. 5	Section 3.2	p. 5–6	Text has been added to section 3.2 to clarify the sampling process.
6	Section 3.4-2	p. 8	Section 3.2, p. 5, Figures 3.2-2, 3.2-3, and 3.2-4	pp. 5, 16, 17, and 18	Text summarizing the installation and sampling of the permanent vapor-monitoring wells has been added to section 3.2. Details have also been added to the well completion diagrams (Figures 3.2-2, 3.2-3, and 3.2-4) to provide more information regarding well construction.
7	Table 3.4-2	p. 37	Table 3.4-2	p. 37	A footnote has been added to Table 3.4-2 that defines the meaning of the dash.
8	Table 3.4-2	p. 37	Section 2.1	p. 2	A brief description of current land use has been added to section 2.1.
9	Table 3.4-3	p. 39	Table 3.4-3	p. 40	Table 3.4-3 has been revised to include all sample numbers and depths collected.

NMED Comment No.	Section(s), Table(s), or Figure(s) in Original Report	Page(s) in Original Report	Section(s), Table(s), or Figure(s) in Phase II Investigation Report for MDA T Revision 1	Section(s)/Page(s) in Revised Report 1	Nature of Revision
10	Table 3.5-1	pp. 40–41	Table 3.5-1	pp. 41–42	Table 3.5-1 has been updated to include units of measure for Mean Concentration (pCi/g) and Screening Level (pCi/g).
11	Table 3.5-1	pp. 40–41	Not applicable	Not applicable	No revision was made.
12	Section 3.6	p. 9	Section 3.1, 3.6, and Figure 3.2-1	pp. 4, 10, and 15	The text has been corrected in section 3.1, and Figure 3.2-1 has been revised to note the nuclear facility boundary. Text has been added to section 3.6 to further clarify the deviation.
13	Section 4.0	p. 10	Section 4.0	p. 11	Page numbers that include figure references have been included in the text in section 4.0 for clarification.
14	Appendix A	Appendix A	Section 3.6; Appendix A.	p. 10, Appendix A	Borehole logs for locations 21-25262, 21-25263, and 21-25264 were resubmitted in Appendix A. Text noting this has been added to section 3.6.
15	Section 4.0	p. 10	Section 4.0, Table 3.5-1	pp. 11, 41–42	Section 4.0 and Table 3.5-1 have been clarified to indicate that the screening levels and summary statistics are reported in picocuries per gram.