



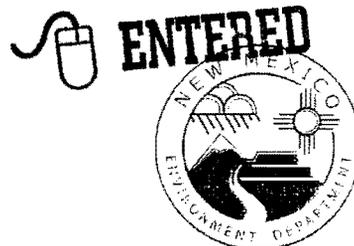
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Secretary

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Deputy Secretary

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

November 9, 2009

David Gregory  
Federal Project Director  
Los Alamos Site Office  
Department of Energy  
3747 West Jemez Road, Mail Stop A316  
Los Alamos, NM 87544

David McInroy  
Remediation Services Deputy Project Director  
Los Alamos National Laboratory  
Environmental Programs, MS M992  
Los Alamos, NM 87545

**RE: NOTICE OF DISAPPROVAL  
PHASE III INVESTIGATION REPORT FOR  
MATERIAL DISPOSAL AREA T, CONSOLIDATED UNIT 21-016(a)-99,  
AT TECHNICAL AREA 21  
LOS ALAMOS NATIONAL LABORATORY (LANL),  
EPA ID #NM0890010515  
HWB-LANL-09-045**

Dear Messrs. Gregory and McInroy:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security, L.L.C.'s (LANS) (collectively, the Permittees) *Phase III Investigation Report for Material Disposal Area T, Consolidated Unit 21-016(a)-99, at Technical Area 21* (Report), dated September 18, 2009 and referenced by LA-UR-09-6266/EP2009-0455. NMED hereby disapproves the Report. The Permittees must re-submit the Report addressing the following comments and include all missing data.

**COMMENTS**

1. In numerous pieces of correspondence, NMED directed the Permittees to sample the vapor-monitoring wells at MDA T (*see NMED January 16, 2007 Notice of Approval with Direction; NMED April 9, 2007 Approval with Modifications; NMED February 8, 2008 Notice of Disapproval; NMED March 28, 2008 Approval with Modifications; NMED October 20, 2008 Response to Comments; NMED February 25, 2009 Intent to Assess Stipulated Penalties;*



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NMED May 22, 2009 *Final Demand for Payment of Stipulated Penalties*). The purpose of the Phase III work at MDA T was to fill in the data gaps left by the Permittees' failure to sample the vapor-monitoring wells as well as to define the horizontal and vertical extent of vapor-phase contamination. The Report further highlights how the Permittees continue to not follow standard site investigation methods and NMED's direction at this site.

2. In the approved Work Plan, the Permittees proposed drilling, sampling and monitoring three vapor-monitoring wells at MDA T. The Report covers data for vapor-monitoring well 21-25262. NMED and the Permittees agreed to include installation of the vapor-monitoring well at Building 21-257 in the DP Aggregate corrective action activities. The Permittees did not make this change clear in the Report and must revise the Report to clearly state that the installation of the Building 21-257 vapor-monitoring well is part of the DP Aggregate investigation activities.

Data from the North Perimeter Road vapor-monitoring well also was not included in the Report. The Permittees must revise the Report to include these data.

3. In Section 3.4, Deviations, the Permittees discuss deviations regarding sampling and analysis, but omit other deviations such as collection of data from the North Perimeter Road vapor-monitoring well, inclusion of the Building 21-257 vapor-monitoring well with the DP Aggregate investigation activities, and not following the schedule provided in Table 1 of the Work Plan. The Permittees did not provide justification for their failure to install the North Perimeter Road vapor-monitoring well, or request an extension. As required by Section XI.C.7.b of the March 1, 2005 Compliance Order on Consent (Order), the Permittees must discuss field observations or conditions that altered the planned work or may have influenced the results of sampling, testing, and logging. The Permittees must revise the Report to discuss any changes to the Work Plan.
4. The Permittees discuss the vapor-monitoring schedule on page 4, Section 3.1, Field Activities, where they state "monthly sampling of MDA T vapor-monitoring wells 21-607955 and at building 21-257 for 12 rounds (upon completion), continued sampling of MDA T vapor-monitoring well 21-25262 for an additional eight rounds (August 2009 – June 2010)." Vapor-monitoring data for the well located adjacent to Building 21-257 will be included in the DP Aggregate investigation activities. Additionally, as stated in NMED's May 26, 2009 letter *Correction Approval with Modifications Phase III Work Plan for Material Disposal Area T, Consolidated Unit 21-016(a)-99*, vapor-monitoring at all vapor-monitoring wells at MDA T (21-25262, 21-607955, 21-603058, 21-603059, and 21-25264) must continue for the foreseeable future. NMED reaffirms the vapor-monitoring schedule outlined in previous correspondence; the Permittees must revise the Report to remove all statements regarding timeframes for vapor-monitoring that NMED has not approved.
5. In Appendix B, Field Methods, the Permittees must ensure that the descriptions of the field methods reflect the actual procedures used in the field. The section must be written in past tense to reflect past actions. The Permittees must revise Appendix B of the Report to describe the methods actually implemented in the field.

**Specific Comments**

**1. Section 6.1.1, Solid Media, page 12:**

**Permittees' Statement:** "Core samples from BH 21-25262 were collected in 2009 to confirm the nature and extent of specific inorganic, organic, and radioactive COPCs in the MDA T subsurface. As determined by previous investigations (LANL 2006, 094151; LANL 2008, 102182), data from the 2009–2010 investigation include only analytical results for the following: anions using EPA Method 300.0, perchlorate using EPA Method SW-846:6850, VOCs using EPA Method SW-846:8260B, and tritium using EPA Method 906.0. Therefore, the following data review discusses results (historical and current) only from analyses included in the 2009–2010 samples."

**NMED Comment:** The approved Work Plan states that "[a]nalysis will also be conducted for perchlorate using the LANL method that allows more sensitive detection than that of the U.S. Environmental Protection Agency (EPA) test method previously used to investigate MDA T." EPA Method 6850 was not part of the approved Work Plan. Further characterization of perchlorate in the subsurface may be necessary, because MDA T is a potential source of perchlorate contamination in alluvial and groundwater wells in DP Canyon. No revision is necessary.

The Permittees must address all comments and submit the revised Report to NMED no later than November 20, 2010. All submittals (including maps) must be in the form of two paper copies and one electronic copy in accordance with Section XI.A of the March 1, 2005 Order on Consent (Order).

Please contact Kristen Van Horn of my staff at (505) 476-6046 should you have any questions.

Sincerely,



James P. Bearzi  
Chief  
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB  
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