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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 23, 2009

David Gregory
Federal Project Director
Los Alamos Site Office
Department of Energy
3747 West Jemez Rd, MS A316
Los Alamos, NM 87544

David McInroy
Remediation Services Deputy Project Director
Los Alamos National Laboratory
P.O. Box 1663, MS M992
Los Alamos, NM 87545

**RE: DIRECTION TO CONDUCT ADDITIONAL INVESTIGATIONS AT MATERIAL DISPOSAL AREA H, SWMU 54-004, AT TECHNICAL AREA 54 TO DEFINE THE EXTENT OF CONTAMINATION
LOS ALAMOS NATIONAL LABORATORY EPA ID No: NM0890010515
HWB-LANL-09-014**

Dear Messrs. Gregory and McInroy:

The New Mexico Environment Department (NMED) hereby directs the United States Department of Energy and the Los Alamos National Security, LLC (collectively, the Permittees) to collect additional data to evaluate the lateral and vertical extent of vapor phase contamination at Material Disposal Area (MDA) H. NMED requires this additional data in order to evaluate remedy alternatives at MDA H.

The Permittees are currently monitoring three existing vapor monitoring wells at MDA H (54-01023, 54-15461, and 54-15462) for subsurface vapor-phase contamination. The data collected so far indicate that tritium and volatile organic compounds are present in the subsurface to depths of approximately 250 ft below ground surface (bgs) and there are no defined temporal trends. During various sampling events in the past, the highest detected concentrations of contaminants were from samples collected from the deepest sampling points. The vertical extent of contamination is therefore not defined for MDA H. Data were not always collected from the same depths at each location, making it difficult to evaluate subsurface conditions. Additionally, recently submitted data have quality problems and may not be representative and defensible.



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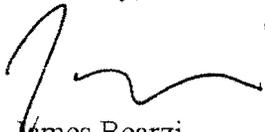
To define the vertical extent, the Permittees must extend the depth of existing vapor monitoring well 54-15462 to its original depth of 300 ft bgs. Currently boring 54-15462 is filled with slough below the Cerro Toledo interval. The Permittees must replace the FLUTE system in borehole 54-15462 with a stainless steel tubing system with sampling intervals at depths that include the base of the boring and intervals 15 feet below the Cerro Toledo, in the Cerro Toledo, five ft above the Cerro Toledo, and other depths above the Cerro Toledo that correspond to the current sample port depths.

The Permittees must also drill a new borehole north of shafts 4 and 9, approximately 25-30 ft north of the fence line. The borehole must be drilled to the same approximate total depth as boring 54-15462 and a vapor monitoring well must be constructed in the same manner as boring 54-15462. In addition, the FLUTE system in boring 54-01023 must be replaced with a vapor monitoring well consisting of stainless steel tubing with sampling intervals in the Cerro Toledo interval, five ft above the Cerro Toledo, and other depths above the Cerro Toledo that correspond to the current sample port depths.

The Permittees must submit a work plan for NMED's review on later than August 31, 2009. The work plan must include all details including the selection of the new borehole location, the methods of drilling, vapor monitoring well design, and schedule for completion. All submittals (including maps and tables) must be in the form of two paper copies and one electronic copy in accordance with Section XI.A of the Order. The Permittees must also continue quarterly sampling and reporting from MDA H.

Please contact Neelam Dhawan of my staff at (505) 476-6042 should you have any questions.

Sincerely,



James Bearzi
Chief
Hazardous Waste Bureau

cc: D. Cobrain, NMED HWB
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File: Reading and LANL/TA 54/54-004, 2009