



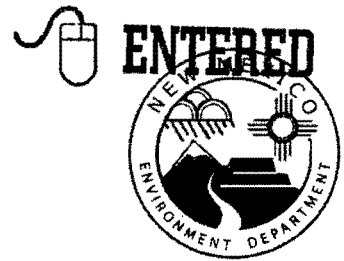
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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

November 9, 2010

George J. Rael, Federal Projects Director  
Assistant Manager  
U.S. Department. of Energy / National  
Nuclear Security Administration  
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Michael J. Graham, Associate Director  
Environmental Programs  
Los Alamos National Security, L.L.C.  
P.O. Box 1663, MS M991  
Los Alamos, NM 87545

**RE: NOTICE OF APPROVAL  
INVESTIGATION REPORT  
UPPER SANDIA CANYON AGGREGATE AREA  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-10-040**

Dear Messrs. Rael and Graham:

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) the *Investigation Report for Upper Sandia Canyon Aggregate Area, Revision 1* (Revised Report), dated October 01, 2010 (referenced by LA-UR-10-6410/EP2010-0419) and the *Response to the Notice of Disapproval for the Investigation Report for Upper Sandia Canyon Aggregate Area*. NMED hereby issues this Notice of Approval for the Revised Report and the Response to the Notice of Disapproval (NOD), and provides following comments. The comment numbers correspond to the original NOD comments.

34104



**Specific Comments # 7, 9, 12, and 19:**

The Permittees are reminded to collect samples which were required by the NMED's Approval with Modifications Letter (August 12, 2008) and were excluded from the investigations at Solid Waste Management Unit (SWMU) 03-014(u) and SWMU 03-015. The Permittees must also collect additional samples at Area of Concern (AOC) 03-038(d) and SWMU 60-007(b) as indicated in their NOD Response.

**Specific Comment # 13:**

In response to NMED's Comment, the Permittees added Section 6.31.4.4 to the Revised Report to discuss the vertical extent of contamination at location 03-608320. The Permittees failed to include fluoranthene, phenanthrene, and pyrene in their discussion of extent of contamination for organic chemicals at SWMU 03-045(e). Table 6.31-3 indicates that vertical extent of contamination is not defined for these chemicals. The Permittees have proposed to collect additional samples at the outfall and in the drainage during the Phase II investigations to define the lateral extent of contamination. The Permittees must also collect additional samples at location 03-608320 to define the vertical extent of contamination during the Phase II investigations.

**Specific Comment # 21:**

NMED did not approve the *Remedy Completion Report for the Investigation and Remediation of Solid waste Management Unit 61-002 at Technical Area 61, Revision 1* dated November 2007, because the Permittees did not submit the work plan as required by specific comment number #1 of the NOD (August 9, 2007). A document is not approved unless an approval letter is issued by NMED.

The investigations conducted in 2005 and 2006 clearly identified the limited source area of petroleum hydrocarbons in the northwest area. The Permittees opted not to remediate, and instead use an industrial land use scenario as a justification not to conduct additional cleanup. Contamination was detected in samples collected from depth to 23-25 ft below ground surface (bgs). The Permittees excavated to four ft bgs and backfilled the excavated area with clean backfill material. Aroclor-1254 was detected at 11 mg/kg and 2.4 mg/kg in samples collected from a depth of 1.5-2.0 ft bgs (locations 61-24316 and 61-24314, respectively). As stated earlier in the NOD, use of 95% upper confidence level of the mean to calculate exposure point concentrations (EPCs) at this site is not appropriate. Source areas were identified, were limited in size, were accessible, but inexplicably not removed.

The human health risk screening assessment indicates that there is unacceptable risk to a construction worker. The Permittees state that controls on future construction activities will be implemented through LANL's Permits and Requirements Identification System and Excavation Permit System. This is not an acceptable control, as it is not enforceable. Corrective action continues not to be complete at this site.

Removal of contaminated soil with concentrations above risk-based screening levels and

confirmatory sampling demonstrating no unacceptable risk to human health and the environment is required before NMED can approve the interim action. Upon completion of removal of the contaminated soil, confirmatory data should be collected to supplement the data for the Investigation Report as appropriate. The risk assessment for SWMU 61-002 must then be updated accordingly.

**Specific Comment # 23:**

The Permittees state in their response that Figure 6.4-1 has been revised to accurately depict the sampling location types at AOC 03-003(d). The Permittees used red circles to indicate that only surface samples were collected at locations 03-608150 and 03-608161. However, both surface and subsurface samples were collected at all locations (see Tables 6.4-1 and 6.4-2). The Permittees should have used red triangles instead of red circles to indicate that both surface and subsurface samples were collected to be accurate and consistent with the legends in the figure. No revision is required unless this figure will be used in future submittals.

**Specific Comment # 29:**

The response to this comment is adequate as provided. NMED agrees that the elevated level of manganese is limited to a small area and that overall risk to the site is not represented by this single datum. However, within the comment, the permittees assert that a hazard index of 1.4 is equivalent to the target index of 1.0. This conclusion is fatuous, as many factors must be evaluated when assessing a hazard index; it is not simply a comparison of numbers. The Permittees should refrain from making such statements in future submittals.

The Permittees must address all relevant comments in the next submittal. The Permittees must submit the proposed Phase II Investigation Work Plan by **May 9, 2011**. 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.

Messrs. Rael and Graham  
November 9, 2010  
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Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,



James P. Bearzi  
Chief  
Hazardous Waste Bureau

cc: J. Kieling, NMED HWB  
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File: 2010 LANL, Upper Sandia Canyon Aggregate Area Investigation Report.