

TNO



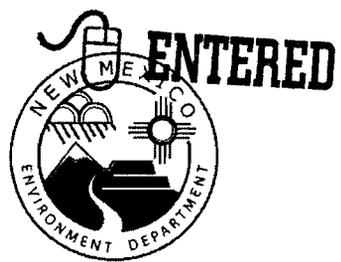
BILL RICHARDSON
Governor

DIANE DENISH
Lieutenant Governor

NEW MEXICO
ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone (505) 476-6000 Fax (505) 476-6030
www.nmenv.state.nm.us



RON CURRY
Secretary

SARAH COTTRELL
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 25, 2010

George J. Rael
Environmental Operations Manager
U.S. Department of Energy/National
Nuclear Security Administration
Los Alamos Site Office
3747 West Jemez Road, Mail Stop A316
Los Alamos, New Mexico, 87544

Michael Graham
Associate Director Environmental Programs
Los Alamos National Security, L.L.C.
P.O. Box 1663, Mail Stop J591
Los Alamos, New Mexico 87545

**RE: DIRECTION TO MODIFY
INTERIM MEASURE REPORT
SOLID WASTE MANAGEMENT UNIT 01-001(f) AND LOS ALAMOS SITE
MONITORING AREA 2 (LA-SMA-2)
LOS ALAMOS NATIONAL LABORATORY
EPA ID# NM0890010515
LANL-HWB-10-031**

Dear Messrs. Rael and Graham:

The New Mexico Environment Department (NMED) is in receipt of the Los Alamos National Security, L.L.C. and U.S. Department of Energy (the Permittees) document entitled *Interim Measure Report for Solid Waste Management Unit 01-001(f) and Los Alamos Site Monitoring Area 2* (IMR) dated May 2010 and referenced by LA-UR-10-2641/EP2010-0131. The IMR was submitted in response to NMED's May 5, 2009 Approval with Modifications (Approval) for the *Los Alamos Site Monitoring Area 2 Interim Measure and Monitoring Plan* (IMP) dated November 2008 and referenced by LA-UR-08-6891/EP2008-0578. The Approval required the Permittees to control the migration of polychlorinated biphenyls (PCBs) from the drainages above Los Alamos Site Monitoring Area 2 (LA-SMA-2) and to remove the source of PCBs.

33888



The IMR summarizes interim measures that partially completed the source removal and entirely completed the installation of sediment migration controls. NMED hereby directs the Permittees to address the following comments and concerns in the report summarizing the completion of Interim Measures implementation due on October 1, 2010 (referenced below as the "LA-SMA-2 Interim Measures Completion Report" or "Report").

Comment 1 – Page 4, Section 2.3, Fourth Bulleted Item

The Permittees state that the extent of cadmium, copper, chromium, nickel, methylene chloride, plutonium 239/240, uranium 234, uranium 235/236, uranium 238, and polycyclic aromatic hydrocarbons at Solid Waste Management Unit (SWMU) 01-001(f) has not been defined. This issue must be addressed as part of the Upper Los Alamos Canyon Aggregate Area Phase 2 Site Investigation.

Comment 2 – Page 8, Section 3.2, Paragraph 3

The Permittees propose to defer installing run-on controls at the top of the drainage pending the issuance of a National Pollutant Discharge Elimination System (NPDES) permit. NMED understands that the NPDES Permit has been issued. The Permittees must provide documentation that the requirements in the NPDES permit for run-on controls and monitoring at the top of the drainage have been implemented in the Report.

Comment 3 – Page 10, Section 4.1.3 Sampling and PCB Screening Methods

The Permittees do not provide a description of the methods of sample collection (e.g., method of location selection, use of a shovel or coring device, collection of loose material vs. in-place soils or tuff) or a description of the expedited solvent extraction screening analysis. The Permittees must provide a description of the sampling methods and PCB screening analysis as required by Section IX.A of the March 1, 2005 Consent Order (Order) in the Report.

Comment 4 – Page 13, Section 5.1 Confirmation and Source Removal

The Permittees state that PCB concentrations exceeded the recreational SSL (6.5 mg/kg) at 14 of the confirmation sampling locations. Based on the data presented in Plate 1, the recreational soils screening level (SSL) was exceeded at 22 locations. This discrepancy may be due to the comparison of individual aroclor concentrations to the SSL rather than additive concentrations. PCB concentrations for different congeners are additive for each sample and should not be considered individually in making comparisons to a screening level. Further removal actions conducted in 2010 after submittal of this IMP and must address cumulative residual PCB contamination and the Permittees must use the sum of aroclor concentrations detected in each sample to make comparisons to risk-based SSLs.

Comment 5 – Figure 4.1-1, Sampling locations at SWMU 01-001(f), former septic tank and outfall

Five sampling locations are marked at the location of the former septic tank as having been excavated; confirmation samples to demonstrate removal of PCB contamination were not collected. Confirmation samples must be collected from the five locations marked on Figure 4.1-1 to demonstrate that soils containing concentrations of PCBs greater than the screening levels have been removed. The results of the confirmation sampling must be included in the Report.

Comment 6 – Table 5.1-1 Screening Level Analytical Results

Sample CALA-10-4634 (location LA-609812), obtained at a depth of 2-2.5 feet is not listed as excavated in Table 5.1-1; however, a confirmation sample is listed for the same location at a depth of 3-3.5 feet (CALA-10-11222). Collection of the deeper sample implies that the soils at the depth corresponding to sample CALA-10-4634 were removed. The Permittees must clarify whether the soils at depths less than 3 feet were removed in the LA-SMA-2 Interim Measures Completion Report.

Comment 7 – Appendix B, Geomorphology Section B-4.0, Paragraph Three

The Permittees state “[t]hese data indicate significant concentrations of PCBs...at depths up to approximately 1m, with lower concentrations beginning somewhere between 1m and 1.5m below ground surface.” This statement is not supported by the data. There is less than 1 mg/kg difference between the samples obtained from location LA-605596 at depths of 32-58 cm and 90-152 cm (combined aroclor concentrations of 2.301 mg/kg and 1.36 mg/kg, respectively) and less than 10 mg/kg difference between the samples obtained from location LA-605601 at depths of 46-65 cm and 65-100 cm (combined aroclor concentrations of 20.38 mg/kg and 11.48 mg/kg, respectively). The variation between concentrations with depth at only two locations is insufficient to support the conclusion. In addition, LA-605601 was not advanced below a depth of 1 meter while the comparison references depths to 1.5 meters; therefore, a comparison between the two boring locations is not appropriate. The text in paragraph three of Section B-4.0 must be either revised or removed if this Appendix is included in the LA-SMA-2 Interim Measures Completion Report.

Comment 8 – Appendix E, Analytical Results for All Analyses

Section 3.1 states that only aroclor 1254 and aroclor 1260 are present at the site. Appendix E contains numerous instances where the standard quantitation limit and, in some cases, the detection limit for other aroclors exceeds the default PCB cleanup level of 1 mg/kg listed in Section VIII.B.1.a of the Order. More frequently, the standard quantitation limit exceeds the default PCB cleanup level of 1 mg/kg and, in many cases, also exceeds the recreational SSL of 6.5 mg/kg. Although the elevated detection and standard quantitation limits are due to dilution and the individual aroclor analytical results are listed as not detected, no discussion of this issue is included in the text of the IMR. Since it is possible that elevated detection and quantitation

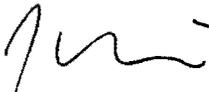
Messrs. Rael and Graham
Page 4 of 4
August 25, 2010

limits may not reveal the presence of contaminants, a discussion of the elevated detection limits must be included in the Report.

No revisions of the IMR are required. All revisions required by this letter must be incorporated into the Interim Measures Completion Report due on October 1, 2010.

Please contact Dave Cobrain of my staff at (505) 476-6055 if you have questions.

Sincerely,



James P. Bearzi
Chief
Hazardous Waste Bureau

JPB:dc

cc: J. Kieling, NMED HWB
D. Cobrain, NMED HWB
T. Skibitski, NMED DOE OB
S. Yanicak, NMED DOE OB, MS J993
G. Saums, NMED SWQB
L. King, EPA 6PD-N
C. Rodriguez, LANL LASO, MS A316
B. Coel-Roback, LANL ENV, MS M992
D. Katzman, LANL ENV, MS M992
R. Gallegos, City of Santa Fe

file: Reading and LANL General (Los Alamos and Pueblo Canyons, Surface Water)