



SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
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](http://www.nmenv.state.nm.us)



DAVE MARTIN  
Cabinet Secretary

BUTCH TONGATE  
Deputy Secretary

JAMES H. DAVIS, Ph.D.  
Director  
Resource Protection Division  
EP2012-5183

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

July 13, 2012

Peter Maggiore, Assistant Manager  
Environmental Projects Office  
Los Alamos Site Office  
3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

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: APPROVAL OF REQUEST FOR CERTIFICATES OF COMPLETION FOR SIX  
SOLID WASTE MANAGEMENT UNITS AND ONE AREA OF CONCERN IN  
THE UPPER CAÑADA DEL BUEY AGGREGATE AREA  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-11-049**

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) *Request for Certificates of Completion for Six Solid Waste Management Units and One Area of Concern in the Upper Cañada Del Buey Aggregate Area* (Request), dated July 14, 2011, and referenced by EP2011-0242.

The request included the following Solid Waste Management Units (SWMUs) and Area of Concern (AOC):

SWMU 46-002, Surface Impoundment  
SWMU 46-004(m), Inactive Outfall  
SWMU 46-004(p), Inactive Dry Well  
SWMU 46-006(b), Former Storage Shed

SWMU 46-006(g), Storage Area  
SWMU 52-001(d), Former Facility Equipment  
AOC C-46-001, Spill/Release Area

These SWMUs and the AOC were recommended for corrective action complete in the report entitled *Investigation Report for Upper Cañada del Buey Aggregate Area, Revision 1* (Report), dated May 2011 that summarized work completed in 2010. NMED approved the Report on May 31, 2011. The Permittees have satisfied the requirements of the March 1, 2005 Consent Order for completion of corrective action at these sites.

SWMU 46-002 is a surface impoundment system located at the eastern end of TA-46, southeast of the prototype fabrication building (46-77). The impoundment system was constructed in the early 1970s to receive sanitary wastewater from buildings located within the restricted access area of Technical Area (TA)-46. The lagoon was removed from service in the early 1990s when the Sanitary Wastewater System Consolidation (SWSC) plant came online. The outfall from the surface impoundment system had been removed from the National Pollutant Discharge Elimination System (NPDES) permit by 1993. Based on the risk screening assessment results, no potential unacceptable risks or doses from contaminants of potential concern (COPCs) exist for the industrial, construction worker, and residential scenarios. No potential ecological risks exist for any receptor following evaluations based on minimum ecological screening levels (ESLs), hazard index (HI) analyses, comparison with background concentrations, potential effects to plant and animal populations, and lowest observed adverse effect level (LOAEL) analyses.

SWMU 46-004(m) is a former NPDES-permitted outfall located approximately 60 ft north of building 46-30 at TA-46. The outfall protrudes from a slope on the hillside north of building 46-30. The outfall discharged effluent from an industrial drainline in building 46-30 to a ditch at the foot of the bank. In December 1995, the outfall was removed from the NPDES permit. Before the outfall was removed from the NPDES permit, all discharges to the outfall from building 46-30 ceased. Based on the risk screening assessment results, no potential unacceptable risks or doses from COPCs exist for the industrial, construction worker, and residential scenarios. No potential ecological risks exist for any receptor following evaluations based on minimum ESLs, HI analyses, comparison with background concentrations, potential effects to plant and animal populations, and LOAEL analyses.

SWMU 46-004(p) is an inactive dry well located next to the southwest corner of building 46-1 at TA-46. The dry well consists of corrugated metal pipe, approximately two feet in diameter and 10 feet in length, placed vertically in the ground, with a square concrete pad around the top three feet of the pipe, and covered with a hinged-metal lid. Building 46-1 housed offices, two assembly bays, a machine shop, several laboratories for the assembly and checkout of electrical components, general laboratories, and a uranium polishing area. All COPCs identified for

SWMU 46-004(p) were reported in samples collected from depths greater than 10 feet below ground surface (bgs). Therefore, no complete pathways to receptors for any of the exposure scenarios exist, and human health risk-screening assessments were not conducted for this site. All COPCs identified for SWMU 46-004(p) were reported in samples collected from depths greater than 10 feet bgs. Therefore, no complete pathways to any ecological receptors exist, and an ecological risk screening assessment was not conducted for this site.

SWMU 46-006(b) is a former storage shed that was located approximately 40 feet north of the Laser Isotope Support Facility at TA-46. The shed was installed sometime before 1977. The site of the shed is paved with asphalt and slopes toward a storm drain to the southeast. The shed was removed in 1990. Based on the risk-screening assessment results, no potential unacceptable risks from COPCs exist for the industrial, construction worker, and residential scenarios. No potential ecological risks exist for any receptor following evaluations based on minimum ESLs, HI analyses, comparison with background concentrations, potential effects to populations (individuals for threatened and endangered species), and LOAEL analyses.

SWMU 46-006(g) is a storage shed located at the west end of building 46-31 at TA-46. The shed is of corrugated-steel construction and measures 10 feet by 20 feet. From 1982 to 1984, the shed housed vacuum pumps used in experiments involving plasma vaporization of depleted uranium powder. The area around the shed is level and paved. Based on the risk-screening assessment results, no potential unacceptable risks from COPCs exist for the industrial, construction worker, and residential scenarios. No potential ecological risk was found for any receptor following evaluations based on minimum ESL, HI analyses, comparison with background concentrations, potential effects to populations (individuals for threatened and endangered species), and LOAEL analyses.

SWMU 52-001(d) used to contain various facility equipment. This site operated from 1967 to 1968 and underwent decontamination and decommissioning in 1989. Supplemental information provided to NMED in 2008 demonstrated that any releases outside building 52-01 would be associated with the other SWMUs associated with the building and additional sampling of SWMU 52-001(d) was not necessary.

AOC C-46-001 is the location of a one-time spill of mercury in the vicinity of building 46-75 at TA-46. On July 22, 1975, 0.55 to 1.1 lb of mercury spilled on the ground near building 46-75. The spill was cleaned up shortly after it occurred and aerial photos show the entire area surrounding building 46-75 was paved at the time of the spill. A human health risk assessment was not performed for AOC C-46-001 because no COPCs were identified for the site. Therefore, no potential unacceptable risks from COPCs exist for the industrial, construction worker, and residential scenarios. An ecological risk assessment was not performed for AOC C-46-001 because no COPCs were identified for the site. Therefore, no potential risks from COPCs to ecological receptors exist.

NMED has reviewed the Request and, based on review of associated soil sample analytical data, the nature and extent of contamination at the SWMUs and AOC have been defined. NMED has

Messrs. Rael and Graham  
July 13, 2012  
Page 4

determined that the requirements of the Consent Order have been satisfied and the sites qualify for "Corrective Action Complete Without Controls" status. NMED hereby issues this certificate for the SWMUs and AOC listed above pursuant to Section VII.E.6.b of the Consent Order.

If, in the future, any additional information becomes available that indicates the site(s) may pose a risk to human health or the environment, NMED may require the Permittees to conduct additional corrective action at the site(s).

If you have any questions regarding this letter, please contact Daniel Comeau at (505) 476-6043.

Sincerely,



John E. Kieling  
Acting Chief  
Hazardous Waste Bureau

cc: N. Dhawan, NMED HWB  
D. Cobrain, NMED HWB  
D. Comeau, NMED HWB  
S. Yanicak, NMED DOE OB, MS J993  
T. Skibitski, NMED DOE OB  
L. King, EPA 6PD-N  
C. Rodriguez, DOE-LASO, MS A316  
K. Rich, EP-CAP, MS M992

File: 2011 - Approval\_Rqst\_for\_CoCs, Upper CdB AA; LANL-11-049

'12 JLE 2:22P

NR-EP-7-17-2012-452698