



NEW MEXICO
ENVIRONMENT DEPARTMENT



ENTERED



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

SUSANA MARTINEZ
Governor

JOHN A. SANCHEZ
Lieutenant Governor

DAVE MARTIN
Secretary

RAJ SOLOMON, P.E.
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 21, 2011

George J. Rael
Assistant Manager
Environmental Projects Office
U.S. Department. of Energy
National Nuclear Security Administration
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: CERTIFICATES OF COMPLETION
AREAS OF CONCERN OUTSIDE THE NUCLEAR ENVIRONMENTAL SITE
BOUNDARY, TECHNICAL AREA 49
EPA ID #NM0890010515
HWB-LANL-10-098**

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 Two Technical Area 49 Areas of Concern Outside the Nuclear Environmental Site Boundary*, dated December 6, 2010 and referenced by EP2010-0546.

Results of site investigations for these two Areas of Concern (AOCs) were presented in the *RCRA Facility Investigation Report for Technical Area 49 Potential Release Sites (Areas 5, 6, 10 and 11)*, dated August 1997. AOC 49-005(b) and AOC 49-006 were recommended for corrective action complete without controls in the report entitled *Investigation Report for Sites at*

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Technical Area 49 Outside the Nuclear Environmental Site Boundary, Revision 1 (Report), dated September 2010. NMED approved the Report September 22, 2010.

Area 5 is located in the center of Technical Area 49 (TA-49) and served as the main control area of hydronuclear and related experiments conducted from 1959 to 1961. AOC 49-005(b) and AOC 49-006 are located within Area 5.

AOC 49-005(b) is a small landfill used to dispose of uncontaminated construction debris. The landfill was created within the four concrete basement walls of the former counting room (former structure 49-67) with dimensions of less than 10 feet by 10 feet by 10 feet. Building 49-67 was removed in 1964. Uncontaminated construction debris resulting from site cleanup operations conducted in 1971 and 1984 was placed within the concrete basement walls and covered with soil. The below-ground concrete walls and landfill remain at the site.

AOC 49-005(b) was investigated during RCRA Facility Investigations (RFIs) conducted during 1995 and 2009-2010. Sampling and analyses identified constituents of potential concern (COPCs) associated with the small landfill. Based on risk-screening assessment results, there are no potential unacceptable risks or doses from the COPCs for the industrial, construction worker, or residential scenarios. No potential ecological risks were found for any receptor based on ecological screening level comparisons, hazard index analyses, and comparisons to background concentrations.

AOC 49-006 is the probable location of a former sump in Area 5. Photographic liquids may have been discharged to the sump from a trailer that housed a darkroom. A radiochemistry laboratory in one of the former trailers is another potential source of liquid at Area 5, although this material was reportedly disposed of off-site. Historical engineering documents discuss the construction of two sumps in Area 5 in 1959. No other existing records or drawings confirm the presence of this sump and it is not known exactly where in Area 5 the sump may have been located.

AOC 49-006 was also investigated during RFIs conducted in 1995 and 2009. The site location, near the former location of the photography trailer, was based on the presence of vegetation believed to be resulting from increased infiltration of precipitation, indicative of a former sump and land disturbance. Sampling and analyses identified COPCs associated with this location. Based on risk-screening assessment results, there are no potential unacceptable risks or doses from the COPCs for the industrial, construction worker, or residential scenarios. No potential ecological risks were found for any receptor based on ecological screening level comparisons, hazard index analyses, and comparisons to background concentrations.

The Permittees have satisfied the requirements of the March 1, 2005 Consent Order for corrective action at the two AOCs within Area 5; AOC 49-005(b) and AOC 49-006. The sites qualify for Corrective Action Complete status.

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If new information becomes available that indicates that either site may pose a risk to human health or the environment, NMED may require the Permittees to conduct additional investigation at these sites. NMED hereby issues this Certificate of Completion for AOC 49-005(b) and AOC 49-006 pursuant to Section VII.E.6.b of the Consent Order.

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
D. Cobrain, NMED HWB
N. Dhawan, 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, LANS, EP-CAP, MS M992
File: 2011 LANL, Certificates of Completion TA-49 (AOC 49-005(b), AOC 49-006)