

*Associate Directorate for Environmental Management*

P.O. Box 1663, MS M992  
Los Alamos, New Mexico 87545  
(505) 606-2337



*Environmental Management*

P. O. Box 1663, MS M984  
Los Alamos, New Mexico 87545  
(505) 665-5658/FAX (505) 606-2132

*Date:* APR 26 2018  
*Refer To:* ADEM-18-0048  
*LAUR:* 18-23425

John Kieling, Bureau Chief  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6303

**Subject: Notification of Newly Discovered Potential New Solid Waste Management Unit**

Dear Mr. Kieling:

In accordance with Section X of the Compliance Order on Consent (the Consent Order), the U.S. Department of Energy (DOE) and Los Alamos National Security, LLC (LANS) are providing notification of a newly discovered potential new solid waste management unit (SWMU) within Technical Area 2 (TA-02) at Los Alamos National Laboratory (LANL or the Laboratory).

This potential new SWMU consists of three former electrical transformer stations (structures 02-31, 02-45, and 02-51) that served buildings in TA-02. This site was not identified as a SWMU or area of concern (AOC) in the 1990 SWMU report. This site was discovered as a result of sampling performed to determine the extent of polychlorinated biphenyl (PCB) contamination detected at AOC 02-011(a)(ii). Sampling at AOC 02-011(a)(ii) during the investigation of Middle Los Alamos Canyon Aggregate Area had identified PCBs at concentrations requiring soil removal but had not defined the extent of PCB contamination. Additional sampling to define the depth and area of soil requiring removal and to define extent of contamination was performed during 2017 and 2018. The results of this sampling indicated PCB contamination at higher concentrations and over a greater area and depth than expected.

The 2017–2018 sampling results appeared inconsistent with the AOC 02-011(a)(ii) storm drain as a source of the PCB contamination. As a result, historical records, including engineering drawings and photographs, were reviewed and three potential sources of PCBs were identified. Former structure 02-31 was an electrical transformer station located 40 ft behind building 02-01. The transformer station was built in 1944 and was removed in 1950. Former structure 02-45 was built in 1954 to serve building 02-44. The transformer structure consisted of three transformers mounted across two telephone poles approximately 14 ft above the ground. The transformer station was replaced with another transformer station (structure 02-51). Former structure 02-51 was an electrical transformer station located approximately 20 ft southwest of former structure 02-31 and 20 ft

southeast of former structure 02-45. Historical records indicated PCB-containing transformer oil had been used at this former transformer station. Structure 02-51 was constructed in 1961 and demolished in 2003. The locations of the three former structures are shown in Plate 1.

Upon notification of a newly discovered potential new SWMU or AOC, Section X.C of the Consent Order requires DOE to develop and implement a preliminary screening plan, including sampling and analysis, for the newly discovered site. If the results of the preliminary screening plan investigation indicate hazardous constituents above residential screening levels, then the newly discovered site will be added to Appendix A of the Consent Order.

Substantial sampling and analysis has already been performed around the three former structures and a preliminary screening plan appears unnecessary. Because the three transformer stations were located in the same general area behind former building 02-01, it is not possible to differentiate releases from individual structures. The sampling results show PCB concentrations in excess of residential soil screening levels. Therefore, DOE and LANS recommend that this newly discovered site be added to Appendix A of the Consent Order as SWMU 02-014. Proposed revisions to Appendix A are included in Attachment 1. The results of the investigation of this site will be included in Revision 2 of the Phase II Investigation Report for Middle Los Alamos Canyon Aggregate Area to be submitted to the New Mexico Environment Department by September 28, 2018.

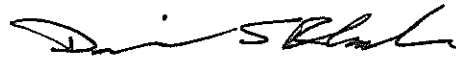
If you have any questions, please contact Kent Rich at (505) 665-4272 (krich@lanl.gov) or Cheryl Rodriguez at (505) 665-5330 (cheryl.rodriguez@em.doe.gov).

Sincerely,



Enrique Torres, Program Director  
Environmental Remediation Program  
Los Alamos National Laboratory

Sincerely,



David S. Rhodes, Director  
Office of Quality and Regulatory Compliance  
Environmental Management  
Los Alamos Field Office

ET/DR/KR

Enclosures: (1) Attachment 1: Proposed Changes to Appendix A of the Consent Order  
(2) Plate 1: Site Map of Former Structures at Technical Area 2

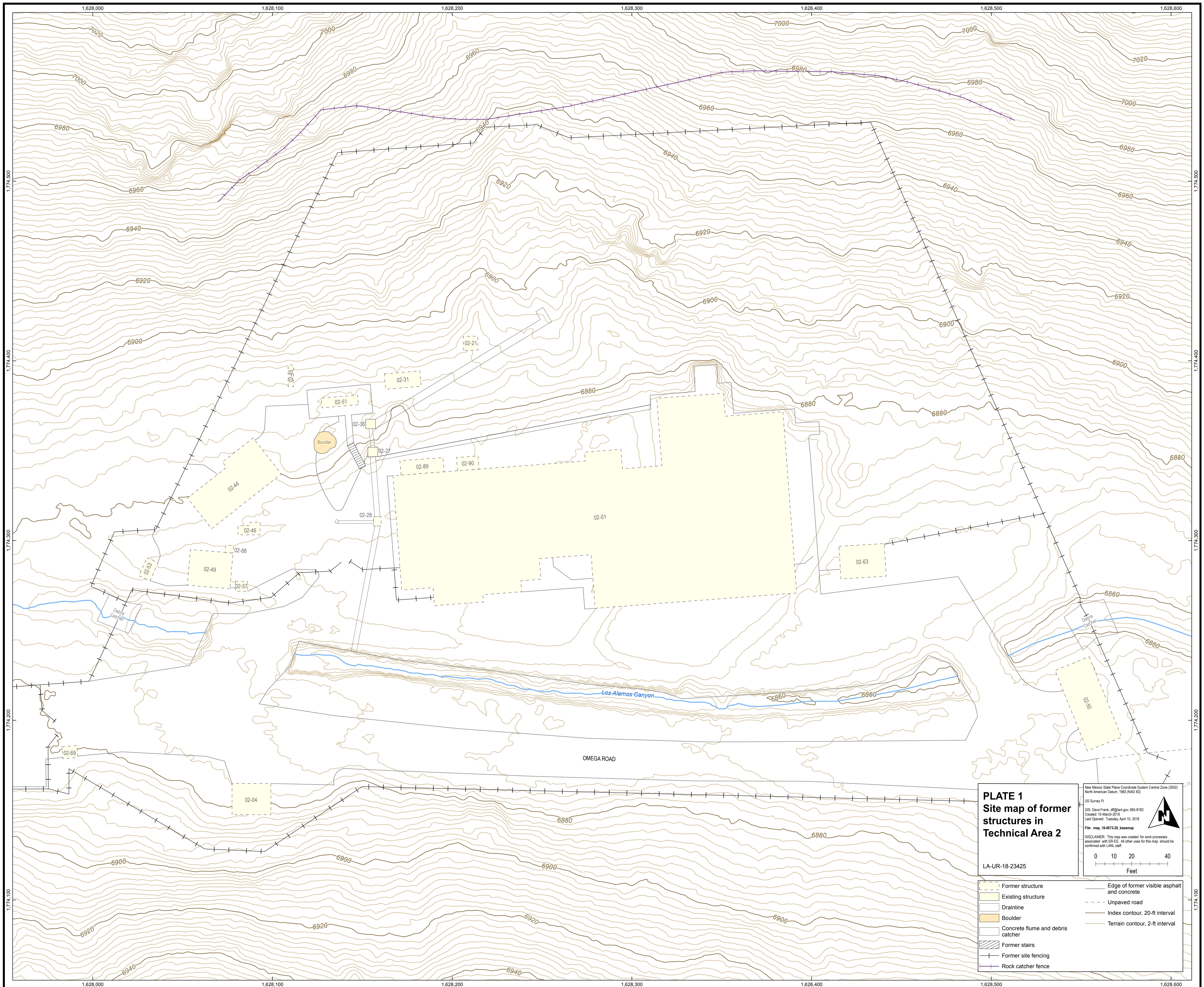
Cy: Laurie King, EPA Region 6, Dallas, TX  
Raymond Martinez, San Ildefonso Pueblo  
Dino Chavarria, Santa Clara Pueblo  
Steve Yanicak, NMED-DOE-OB, MS M894  
lasomailbox@mnsa.doe.gov  
Peter Maggiore, DOE-NA-LA  
Arturo Duran, DOE-EM-LA  
David Rhodes, DOE-EM-LA  
emla.docs@em.doe.gov  
Kent Rich, ADEM ER Program

Enrique Torres, ADEM ER Program  
Randy Erickson, ADEM  
Jocelyn Buckley, ADESH-EPC-CP  
Mike Saladen, ADESH-EPC-CP  
Benjamine Roberts, ADESH-EPC-DO  
William Mairson, ADESH/PADOPS  
Craig Leasure, PADOPS  
Public Reading Room (EPRR)  
ADESH Records  
PRS Database

## Attachment 1 Proposed Changes to Appendix A of the Consent Order

Appendix A  
Solid Waste Management Unit/Area of Concern List



Count	SWMU/AOC	Unit #	Unit Type	Status *	Date	Campaign
99	AOC	01-007(k)	Soil Contamination Area	CoC without Controls	3/16/2015	
100	SWMU	01-007(l)	Soil contamination associated with TA-1 Buildings and Structures	RFI or Field Work Rpt Submitted to NMED		Historical Properties - Upper LA Cyn
101	AOC	02-003(a)	Soil contamination associated with former valve house and gaseous	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
102	AOC	02-003(b)	Soil contamination associated with former condensate trap	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
103	AOC	02-003(c)	Soil contamination associated with former delay system	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
104	AOC	02-003(d)	Soil contamination associated with former gaseous effluent line	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
105	AOC	02-003(e)	Soil contamination associated with former holding tank (near water	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
106	AOC	02-004(a)	Former Omega West reactor facility	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
107	AOC	02-004(b)	Former Reactor facility effluent storage tank TA-2-54	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
108	AOC	02-004(c)	Former Reactor facility effluent storage tank TA-2-55	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
109	AOC	02-004(d)	Former Reactor facility effluent storage tank TA-2-56	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
110	AOC	02-004(e)	Former Reactor facility acid pit TA-2-53	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
111	AOC	02-004(f)	Former Reactor facility equipment building	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
112	AOC	02-004(g)	Soil contamination associated with former aboveground tank	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
113	SWMU	02-005	Soil contamination from Drift loss, cooling tower blowdown	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
114	SWMU	02-006(a)	Former French drain	RFI or Field Work Rpt Submitted to NMED		Historical Properties - Middle LA Cyn
115	SWMU	02-006(b)	Former Acid waste line	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
116	AOC	02-006(c)	Former Drainline	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
117	AOC	02-006(d)	Drainline	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
118	AOC	02-006(e)	Former sump	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
119	SWMU	02-007	Soil contamination from former septic system	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
120	SWMU	02-008(a)	Outfall from Structure 02-49	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
121	AOC	02-008(c)	Outfall from Building 2-1	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
122	SWMU	02-009(a)	Soil contamination associated with former water boiler reactor	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
123	SWMU	02-009(b)	Soil contamination associated with former water boiler reactor	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
124	SWMU	02-009(c)	Soil contamination associated with condensate trap and leach field	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
125	AOC	02-009(d)	Soil contamination	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
126	AOC	02-009(e)	Soil contamination (duplicate of SWMU 02-009(c))	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
127	AOC	02-010	Soil contamination associated with former chemical stack 2-3	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
128	AOC	02-011(a)	Storm drains associated with former Building 2-1	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
129	AOC	02-011(b)	Former drains	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
130	AOC	02-011(c)	Storm drain	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
131	AOC	02-011(d)	Outfall from Building 2-44	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
132	AOC	02-011(e)	Outfall from Structure 2-49 (duplicate of 02-008(a))	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
133	AOC	02-012	Soil contamination from former underground tanks	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
134	SWMU	02-014	Former Electrical Transformer Stations	RFI or Field Work in Progress (IM, ACA)		Historical Properties - Middle LA Cyn
135	AOC	03-001(e)	Storage Area	Pre-Investigation		Pajarito Watershed
136	AOC	03-001(i)	Storage Area	CoC with Controls	10/13/2006	
137	SWMU	03-001(k)	Storage Area	Pre-Investigation		Pajarito Watershed
138	SWMU	03-002(c)	Storage area	RFI or Field Work Rpt Submitted to NMED		Sandia Canyon Watershed
139	SWMU	03-003(a)	Storage area	Pre-Investigation		Pajarito Watershed
140	SWMU	03-003(b)	Storage area	Pre-Investigation		Pajarito Watershed
141	SWMU	03-003(c)	Storage Area	CoC without Controls	2/18/2011	
142	AOC	03-003(d)	Storage area	RFI or Field Work in Progress (IM, ACA)		Sandia Canyon Watershed
143	AOC	03-003(e)	Storage area	Deferred Site		
144	AOC	03-003(f)	Storage area	Deferred Site		
145	AOC	03-003(g)	Storage area	Deferred Site		
146	AOC	03-003(h)	Storage area	Deferred Site		
147	AOC	03-003(i)	Storage area	Deferred Site		

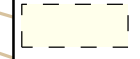
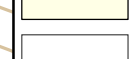

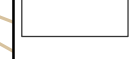


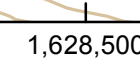







**PLATE 1**  
**Site map of former**  
**structures in**  
**Technical Area 2**

LA-UR-18-23425

New Mexico State Plane Coordinate System Central Zone (3000)  
 North American Datum, 1983 (NAD 83)  
 US Survey Ft.  
 GIS: Dave Frank, dfrank@gov. 665-8182  
 Created: 15-March-2018  
 Last Opened: Tuesday, April 10, 2018  
 File: map\_16-0073-28\_basemap  
 DISCLAIMER: This map was created for work processes associated with ER-ES. All other uses for this map should be confirmed with LANL staff.

-  Former structure
-  Existing structure
-  Drainline
-  Boulder
-  Concrete flume and debris catcher
-  Former stairs
-  Former site fencing
-  Rock catcher fence
-  Edge of former visible asphalt and concrete
-  Unpaved road
-  Index contour, 20-ft interval
-  Terrain contour, 2-ft interval