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**Associate Director for ESH**

Environment, Safety, and Health  
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Los Alamos, New Mexico 87545  
505-667-4218/Fax 505-665-3811

**Environmental Management**

Los Alamos Field Office, MS A316  
3747 West Jemez Road  
Los Alamos, New Mexico 87544  
(505) 665-5658/FAX (505) 606-2132

Date: **OCT 30 2015**

Refer To: ADESH-15-154

LAUR: on each SMA

Locates Action No.: n/a

Paulette Johnsey, Chief  
Water Enforcement Branch (6EN)  
Compliance Assurance and Enforcement Division  
U.S. Environmental Protection Agency, Region 6  
1445 Ross Avenue, Suite 1200  
Dallas, Texas 75202-2733

**Subject: NPDES Permit No. NM0030759 – Submittal of Completion of Corrective Action for Three [3] Sites [05-001(b), 05-002, and 53-001(b)] Following Certificates of Completion from the New Mexico Environment Department**

Dear Ms. Johnsey:

These documents are being submitted in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) Permit No. NM0030759 for Los Alamos National Laboratory, issued to Los Alamos National Security, LLC, and the U.S. Department of Energy, effective November 1, 2010. Completion of corrective action is being certified to the U.S. Environmental Protection Agency as specified in Part I, Section E.2(d):

The Site has achieved RCRA “corrective action complete without controls/corrective action complete with controls” status or a Certificate of Completion under NMED’s Consent Order....


The certification that corrective action is complete was prepared in accordance with 40 Code of Federal Regulations 122.22(b). The 3 Sites in 2 SMAs listed in Table 1 have received certificates of completion (CoC) issued under the New Mexico Environment Department’s (NMED’s) Compliance Order on Consent. This letter includes a signed certification statement for each Site and a copy of the NMED CoCs (Attachment 1). This certified document can be accessed at the following website: <http://www.lanl.gov/community-environment/environmental-stewardship/protection/compliance/individual-permit-stormwater/index.php>.

**Table 1**  
**Certificates of Completion for Three Sites**


Site Number	Associated SMA Number	Watershed	Site Priority
05-001(b)	M-SMA-12.9	Mortandad	Moderate
05-002	M-SMA-12.9	Mortandad	Moderate
53-001(b)	S-SMA-3.72	Sandia	Moderate

If you have any questions, please contact Terrill Lemke at (505) 665-2397 (tlemke@lanl.gov) or David Rhodes at (505) 665-5325 (david.rhodes@em.doe.gov).

Sincerely,

  
Alison M. Dorries, Division Leader  
Environmental Protection Division  
Los Alamos National Laboratory

Sincerely,

  
Douglas E. Hintze, Manager  
Environmental Management  
Los Alamos Field Office

AD/DH/BR/SV:sm

Attachments: One hard copy with electronic files – Completion of Corrective Action for Three [3] Sites [05-001(b), 05-002, and 53-001(b)] Following Certificates of Completion from NMED

Cy: (w/att.)

Bruce Yurdin, NMED-SWQB, P. O. Box 5469, Santa Fe, NM 87502  
emla.docs@em.doe.gov, MS A316  
Public Reading Room (EPRR)  
ADESH Records

Cy: (Letter and CD and/or DVD)

Laurie King, EPA Region 6, Dallas, TX  
Sarah Holcomb, NMED-SWQB  
Steve Yanicak, NMED-DOE-OB, MS M894  
PRS Database

Cy: (w/o att./date-stamped letter emailed)

Everett Spencer, EPA Region 6  
Brent Larsen, EPA Region 6  
lasomailbox@nmsa.doe.gov  
Kimberly Davis Lebak, DOE-NA-LA  
Peter Maggiore, DOE-NA-LA  
Karen Armijo, DOE-EM-LA  
David Rhodes, DOE-EM-LA  
Steve Veenis, ADEP ER Program  
Bruce Robinson, ADEP ER Program  
Terrill Lemke, ADESH-ENV-CP  
Mike Saladen, ADESH-ENV-CP  
Alison Dorries, ADESH-ENV-DO  
Michael Brandt, ADESH  
Amy De Palma, PADOPS  
Craig Leasure, PADOPS

**Completion of Corrective Action  
at Sites 05-001(b) and 05-002  
in M-SMA-12.9**

**October 30, 2015**

**NPDES PERMIT NO. NM0030759**

**LA-UR-15-28402**



LOS ALAMOS NATIONAL LABORATORY  
CERTIFICATION OF COMPLETION OF CORRECTIVE ACTION

PF: M020

M-SMA-12.9

Sites: 05-001(b)  
05-002

The following certification was performed in accordance with NPDES Permit No. NM0030759, Part I.E.2, which requires the Permittees (i.e., DOE and LANS) to certify the completion of corrective action.

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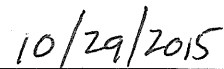
CERTIFICATION STATEMENT OF AUTHORIZATION

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"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."



Environmental Programs  
Environmental Remediation Program  
Los Alamos National Laboratory



Date



Environmental Management  
U.S. Department of Energy



Date



**LOS ALAMOS NATIONAL LABORATORY  
CERTIFICATION OF COMPLETION OF CORRECTIVE ACTION**

**PF: M020**

**M-SMA-12.9**

**Sites: 05-001(b)  
05-002**

This certificate indicates completion of corrective action for Sites 05-001(b) and 05-002 pursuant to Part 1, E.2(d), of the Individual Permit NM0030759. This certification that corrective action is complete was prepared in accordance with 40 Code of Federal Regulations 122.22(b).

Table 1 presents the Sites achieving Resource Conservation and Recovery Act “corrective action complete without controls/corrective action complete with controls” status under the Compliance Order on Consent (the Consent Order). Analytical results obtained from baseline confirmation monitoring at M-SMA-12.9 exceeded target action levels for copper and gross alpha, causing the Permittees to initiate corrective action. The Permittees are certifying completion of correction action at Sites 05-001(b) and 05-002 through a demonstration that each Site has achieved a certificate of completion under the Section VII.E.6.b of the Consent Order. Attachment 1 contains a copy of the certificate of completion from the New Mexico Environment Department for Sites 05-001(b) and 05-002, which are designated as Solid Waste Management Units (SWMUs) 05-001(b) and 05-002, respectively, for the purposes of the Consent Order.

**Table 1  
Site(s) Demonstrating Completion of Corrective Action**

<b>Site Number</b>	<b>Associated SMA Number</b>	<b>Watershed</b>	<b>Site Priority</b>
05-001(b) 05-002	M-SMA-12.9	Mortandad	Moderate

# **Attachment 1**

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*Certificate of Completion for Sites 05-001(b) and 05-002*







SUSANA MARTINEZ  
Governor  
JOHN A. SANCHEZ  
Lieutenant Governor

NEW MEXICO  
ENVIRONMENT DEPARTMENT

2905 Rodeo Park Drive East, Building 1  
Santa Fe, New Mexico 87505-6303  
Phone (505) 476-6000 Fax (505) 476-6030  
[www.env.nm.gov](http://www.env.nm.gov)



RYAN FLYNN  
Cabinet Secretary  
BUTCH TONGATE  
Deputy Secretary

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

September 16, 2015

Christine Gelles, Acting Manager  
U.S. Department of Energy  
Los Alamos Field Office, DOE  
3747 West Jemez Rd, MS A316  
Los Alamos, NM 87544

Michael Brandt, Associate Director  
Environment, Safety, Health  
Los Alamos National Laboratory  
P.O. Box 1663, MS K491  
Los Alamos, NM 87545

**RE: CERTIFICATES OF COMPLETION  
SIX SOLID WASTE MANAGEMENT UNITS AND ONE AREA OF CONCERN  
AT TECHNICAL AREA 5  
MIDDLE MORTANDAD/TEN SITE AGGREGATE AREA  
EPA ID #NM0890010515  
HWB-LANL-11-068**

Dear Ms. Gelles and Mr. Brandt:

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 Twenty-Seven Solid Waste Management Units and Ten Areas of Concern in the Middle Mortandad/Ten Site Aggregate Area*, dated August 31, 2011 and referenced by EP2011-0297.

Several solid waste management units (SWMUs) and areas of concern (AOC) were recommended for corrective action complete in the *Investigation Report for the Middle Mortandad/Ten Site Aggregate Area, Revision 2* (Report), dated February 2008 (LA-UR-08-0336/EP2008-0035). NMED issued an Approval with Direction (AWD) for the Report on April 1, 2008.

NMED hereby issues certificates of completion without controls for the following sites pursuant to Section VII.E.6.b of the Consent Order.

**SWMU 05-001(a)** is steel barricaded firing pit #1 (structure TA-05-07), used for implosion tests from 1944-1947. The firing pit structure (8 feet(ft) x 5.5 ft x 3 ft) contained an intra-structure made from plate steel and concrete. Experimental shots, using high explosives (HE) as the energy source, were set up at the site and fired on open ground. The debris from the shots was bulldozed to the edge of Mortandad Canyon. In 1959, the pit was abandoned in place. Decommissioning and decontamination (D&D) activities were conducted in 1985. No contamination was detected on the surface of the structures or in soils located directly beneath the firing pit. The site was included in the investigation of CU 05-001(a)-99. Potential contaminants of concern at the site include HE, natural and depleted uranium, and metals. Investigations conducted during 1995 and 2004 indicated that there are no potential unacceptable risks or doses from the residual contamination for the industrial or residential land use scenarios. The results of the ecological risk-screening assessment indicated no potential unacceptable risk to ecological receptors at the site.

**SWMU 05-001(b)** is steel barricaded firing pit # 2 (structure TA-05-15), used from 1945 until the late 1940s. The firing pit structure (8 ft x 5.5 ft x 3 ft) contained an intra-structure made from plate steel and concrete and was located 200 ft from SWMU 05-001(a). Experimental shots, using HE as the energy source, were set up at the site and fired on open ground. The debris from the shots was bulldozed to the edge of Mortandad Canyon. In 1959, the pit was abandoned in place. D&D activities were conducted in 1985. Structure TA-05-15 contained uranium, and when the metal structure was removed from the ground, contamination was found. The contamination was traced vertically to a depth of about 15 ft. When the area was decontaminated, the pit was backfilled with clean soil. The site was included in the investigation of CU 05-001(a)-99. Potential contaminants of concern at the site include HE, natural and depleted uranium, and metals. Investigations conducted during 1995 and 2004 indicated that there are no potential unacceptable risks or doses from the residual contamination for the industrial or residential land use scenarios. The results of the ecological risk-screening assessment indicated no potential unacceptable risk to ecological receptors at the site.

**AOC 05-001(c)** is an inactive firing site located at the end of a spur road south of Puye Road approximately 20 to 30 ft below the eastern edge of the mesa. Gravel and metal shrapnel was found off the edge of the mesa in a small erosion gully just east of the end of the spur road. Between 1944 and 1945, two to three tests were conducted at the site, each involving approximately 2500 lbs of HE. The site was closed in the spring of 1945. Potential contaminants of concern at the site include HE, natural and depleted uranium, and metals. Investigations conducted during 1995 and 2004 indicated that there are no potential unacceptable risks or doses from the residual contamination for the industrial or residential land use scenarios. The results of the ecological risk-screening assessment indicated no potential unacceptable risk to ecological receptors at the site.

**SWMU 05-002** is a canyon-side disposal site that was created by bulldozing shot debris from firing pits [SWMUs 05-001(a) and 05-001(b)] over the north facing slope of Mortandad Canyon. The debris zone extended to the canyon bottom. In 1985, shot debris that was visible on the surface was removed, but the side of the canyon was not monitored for radioactivity or decontaminated. Waste materials potentially disposed of at the site include shot debris, cables,

wire, trace amounts of uranium, lead, beryllium, cadmium, and uranium-contaminated aluminum or steel. The site was included in the investigation of CU 05-001(a)-99. Investigations conducted during 1995 and 2004 indicated that there are no potential unacceptable risks or doses from the residual contamination for the industrial or residential land use scenarios scenario. The results of the ecological risk-screening assessment indicated no potential unacceptable risk to ecological receptors at the site.

**SWMU 05-005(a)** is a former French drain from control building TA-05-04, was constructed in 1945 and abandoned, along with the control building, in 1959. It was used to discharge waste from the control building; the types of waste discharged into the French drain are unknown. The control building was removed in 1960. The French drain and affected soil was removed in 1985 during the D&D operations. The site was included in the investigation of CU 05-005(a)-00. Investigations conducted during 1995 and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the industrial or residential land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 05-006(b)** is potentially contaminated soil at the location of former structure TA-05-04. During 1985 D&D activities, uranium-contaminated soil was found at the former site of TA-05-04. Contamination in the area of the control building was believed to have entered the environment through the French drain. A radiation survey conducted in 1988 depicted radiation levels above background. The site was included in the investigation of CU 05-005(a)-00. Investigations conducted during 1995 and 2004 indicated that there are no potential unacceptable risks or doses from the residual contamination for the industrial or residential land use scenarios. The results of the ecological risk-screening assessment indicated no potential unacceptable risk to ecological receptors at the site.

**SWMU 05-006(e)** is potentially contaminated soil associated with a former platform (TA-05-19) that was adjacent to Building 05-04. The platform was 6 ft x 6 ft wooden structure mounted 26 ft above the ground on two wooden poles. It was built around 1953 and abandoned in place in 1959. The entire area was demolished when Building 05-04 was removed in 1985. The site was included in the investigation of CU 05-005(a)-00. Investigations conducted during 1995 and 2004 indicated that there are no potential unacceptable risks or doses from the residual contamination for the industrial or residential land use scenarios. The results of the ecological risk-screening assessment indicated no potential unacceptable risk to ecological receptors at the site.

NMED has determined that SWMUs 05-001(a), 05-001(b), 05-002, 05-005(a), 05-006(b), 05-006(e), and AOC 05-001(c) qualify for certificates of completion indicating that additional corrective action under the Consent Order is not required. Although corrective action is complete under the Consent Order, the Permittees must continue to comply with all applicable state and federal regulations. If new information becomes available that indicates that these sites may pose a risk to human health or the environment, NMED may require additional investigations and corrective action at these sites.

Ms. Gelles and Mr. Brandt  
September 16, 2015  
Page 4

Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,



John E. Kielling  
Chief

Hazardous Waste Bureau

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

File: 2015 LANL, Certificates of Completion for SWMUs in TA-5, MMTS  
LANL 11-068

**Completion of Corrective Action  
at Site 53-001(b)  
in S-SMA-3.72**

**October 30, 2015**

**NPDES PERMIT NO. NM0030759**

**LA-UR-15-28403**



**LOS ALAMOS NATIONAL LABORATORY  
CERTIFICATION OF COMPLETION OF CORRECTIVE ACTION**

PF: S009

S-SMA-3.72

Site: 53-001(b)

The following certification was performed in accordance with NPDES Permit No. NM0030759, Part I.E.2, which requires the Permittees (i.e., DOE and LANS) to certify the completion of corrective action.

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**CERTIFICATION STATEMENT OF AUTHORIZATION**

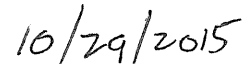
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"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."



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Environmental Programs  
Environmental Remediation Program  
Los Alamos National Laboratory



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Date



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Environmental Management  
U.S. Department of Energy



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Date





**LOS ALAMOS NATIONAL LABORATORY  
CERTIFICATION OF COMPLETION OF CORRECTIVE ACTION**

**PF: S009**

**S-SMA-3.72**

**Site: 53-001(b)**

This certificate indicates completion of corrective action for Site 53-001(b) pursuant to Part 1, E.2(d), of the Individual Permit NM0030759. This certification that corrective action is complete was prepared in accordance with 40 Code of Federal Regulations 122.22(b).

Table 1 presents the Site achieving Resource Conservation and Recovery Act “corrective action complete without controls/corrective action complete with controls” status under the Compliance Order on Consent (the Consent Order). Analytical results obtained from baseline confirmation monitoring at S-SMA-3.72 exceeded target action level for copper, causing the Permittees to initiate corrective action. The Permittees are certifying completion of correction action at Site 53-001(b) through a demonstration that the Site has achieved a certificate of completion under the Section VII.E.6.b of the Consent Order. Attachment 1 contains a copy of the certificate of completion from the New Mexico Environment Department for Site 53-001(b), which is designated as Solid Waste Management Unit 53-001(b) for the purposes of the Consent Order.

**Table 1  
Site(s) Demonstrating Completion of Corrective Action**

<b>Site Number</b>	<b>Associated SMA Number</b>	<b>Watershed</b>	<b>Site Priority</b>
53-001(b)	S-SMA-3.72	Sandia	Moderate

# **Attachment 1**

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*Certificate of Completion for Site 53-001(b)*





SUSANA MARTINEZ  
Governor

JOHN A. SANCHEZ  
Lieutenant Governor

**NEW MEXICO  
ENVIRONMENT DEPARTMENT**

*Hazardous Waste Bureau*

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Santa Fe, New Mexico 87505-6303  
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[www.nmenv.state.nm.us](http://www.nmenv.state.nm.us)



RYAN FLYNN  
Secretary-Designate

BUTCH TONGATE  
Deputy Secretary

TOM BLAINE, P.E.  
Director  
Environmental Health Division

EP2013-5156

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

July 31, 2013

Pete Maggiore  
Assistant Manager  
Environmental Projects Office  
National Nuclear Security Administration  
Los Alamos Site Office  
3747 West Jemez Road, MS A316  
Los Alamos, NM 87544

Jeffrey D. Mousseau  
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  
ONE SOLID WASTE MANAGEMENT UNIT AND TWO AREAS OF CONCERN  
IN THE LOWER SANDIA CANYON AGGREGATE AREA  
EPA ID #NM0890010515  
HWB-LANL-12-020**

Dear Messrs. Maggiore and Mousseau:

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 One Solid Waste Management Unit and Two Areas of Concern in the Lower Sandia Canyon Aggregate Area*, dated March 21, 2012 and referenced by EP2012-0081.

Solid waste management unit (SWMU) 53-001(b), area of concern (AOC) 53-013, and AOC 53-014 were recommended for corrective action complete without controls in the *Investigation Report for Lower Sandia Canyon Aggregate Area Revision 1* (LA-UR-11-4795/EP2011-0261). NMED approved the Report on September 26, 2011.

SWMU 53-001(b) is an outdoor storage area located on a concrete pad on the south side of building 53-2 at technical area (TA) 53. The site was used to store drums containing product and waste associated with maintenance activities conducted at building 53-2. The storage area was constructed in 1971. The area was also used as a less than 90-day storage area that was taken out of service in 1998. Investigations were conducted in 1995 and 2010. Based on the results of the risk screening assessments, no potential unacceptable risk from residual contamination exists for the industrial, construction worker, and residential scenarios. The ecological risk screening assessment results also indicate that the site does not pose any unacceptable risk to environmental receptors.

AOC 53-013 is a lead spill site located near the east end of TA-53, northeast of buildings 53-10 and 53-315. Lead shot was present within two fenced areas used for storage and the staging of equipment used in experiments. Lead shot was used as radiation shielding for experiments conducted in building 53-10. The dates when shot was spilled on the ground are not known, but possibly date back to the late 1960s or early 1970s. Investigations were conducted in 1995 and 2010. Based on the results of the risk screening assessments, no potential unacceptable risk from residual contamination exists for the industrial, construction worker, and residential scenarios. The ecological risk screening assessment results also indicate that the site does not pose any unacceptable risk to environmental receptors.

AOC 53-014 is a lead spill site that is located at a paved storage area in TA-53 west of building 53-18. Lead shot was spilled on the paved surface and stormwater subsequently washed lead into an asphalt-lined channel that joins the drainage below NPDES outfall (03A113). A voluntary corrective action was conducted in 1997 to remove the lead shot from the paved area, the asphalt channel, and the drainage. The sediment was sieved to remove lead and confirmatory samples were collected. The results of the sediment samples collected at the site indicated that detected lead concentrations were below the NMED soil screening levels. The site does not pose any potential unacceptable risk for the industrial, construction worker, and residential scenarios. The ecological risk screening assessment results also indicate that the site does not pose any unacceptable risk to environmental receptors.

The Permittees have demonstrated that these sites are eligible for corrective action complete without controls. NMED hereby issues Certificates of Completion for SWMU 53-001(b), AOC 53-013, and AOC 53-014 pursuant to section VII.E.6.b of the Consent Order.

Messrs. Maggiore and Mousseau  
July 31, 2013  
Page 3

Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "John E. Kieling" with a stylized flourish at the end.

John E. Kieling  
Chief  
Hazardous Waste Bureau

cc: 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  
R. Massey, DOE LASO, MS A316  
K. Rich, EP-CAP, MS M992

File: 2013 LANL, Certificates of Completion for Lower Sandia Canyon AA Sites (LANL 12-020)