

Associate Director for ESH Environment, Safety, and Health P.O. Box 1663, MS K491 Los Alamos, New Mexico 87545 505-667-4218/Fax 505-665-3811



30 Y 5 M2:51

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

Date: OCT 3 0 2015 Refer To: ADESH-15-160 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 Twenty [20] Sites in Eight [8] Site Monitoring Areas 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 20 Sites in 8 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 CoC (Attachment 1). A link to this certified document can be accessed at the following website: http://www.lanl.gov/community-environment/environmentalstewardship/protection/compliance/individual-permit-stormwater/index.php.



Certificates of Completion for Twenty Sites				
Site Number	Associated SMA Number	Watershed	Site Priority	
35-003(h)	Pratt-SMA-1.05	Mortandad	High	
35-003(p)	Pratt-SMA-1.05	Mortandad	High	
35-003(r)	Pratt-SMA-1.05	Mortandad	High	
35-004(a)	T-SMA-4	Mortandad	Moderate	
35-004(h)	Pratt-SMA-1.05	Mortandad	High	
35-008	M-SMA-10	Mortandad	Moderate	
35-009(a)	T-SMA-4	Mortandad	Moderate	
35-009(d)	Pratt-SMA-1.05	Mortandad	High	
35-010(e)	T-SMA-6.8	Mortandad	Moderate	
35-014(e)	M-SMA-10	Mortandad	Moderate	
35-014(g)	T-SMA-2.85	Mortandad	Moderate	
35-016(b)	T-SMA-3	Mortandad	Moderate	
35-016(c)	T-SMA-4	Mortandad	Moderate	
35-016(d)	T-SMA-4	Mortandad	Moderate	
35-016(e)	M-SMA-10.01	Mortandad	Moderate	
35-016(k)	Pratt-SMA-1.05	Mortandad	High	
35-016(1)	Pratt-SMA-1.05	Mortandad	High	
35-016(m)	Pratt-SMA-1.05	Mortandad	High	
35-016(n)	T-SMA-2.85	Mortandad	Moderate	
35-016(p)	M-SMA-12	Mortandad	Moderate	

 Table 1

 Certificates of Completion for Twenty Sites

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,

ionalos

D'ouglas 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 Twenty [20] Sites in Eight [8] Site Monitoring Areas Following Certificates of Completion from the New Mexico Environment Department
- 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 Terrill Lemke, ADESH-ENV-CP PRS Database
- (w/o att./date-stamped letter emailed) Cy: Everett Spencer, EPA Region 6 Brent Larsen, EPA Region 6 lasomailbox@nnsa.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 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 35-008 and 35-014(e) in M-SMA-10

October 30, 2015

NPDES PERMIT NO. NM0030759

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

PF: M012

M-SMA-10

Sites: 35-008 35-014(e)

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.

#### **CERTIFICATION STATEMENT OF AUTHORIZATION**

Environmental Programs Environmental Remediation Program Los Alamos National Laboratory

Environmental Management U.S. Department of Energy

10/2015

9-30-2015 Date

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

### PF: M012

## M-SMA-10

Sites: 35-008 35-014(e)

This certificate indicates completion of corrective action for Sites 35-008 and 35-014(e) 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-10 exceeded the target action level for gross alpha, causing the Permittees to initiate corrective action. The Permittees are certifying completion of correction action at Sites 35-008 and 35-014(e) 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 35-008 and 35-014(e), which are designated as Solid Waste Management Units (SWMUs) 35-008 and 35-014(e), respectively, for the purposes of the Consent Order.

Table 1
Site(s) Demonstrating Completion of Corrective Action

Site Number	Associated SMA Number	Watershed	Site Priority
35-008 35-014(e)	M-SMA-10	Mortandad	Moderate

## Completion of Corrective Action at Site 35-016(e) in M-SMA-10.01

October 30, 2015

NPDES PERMIT NO. NM0030759

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

#### **PF: M012A**

M-SMA-10.01

Site: 35-016(e)

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.

#### **CERTIFICATION STATEMENT OF AUTHORIZATION**

Environmental Programs Environmental Remediation Program Los Alamos National Laboratory

10/29/2015

Environmental Management U.S. Department of Energy

0-30-2015 Date

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

### PF: M012A

M-SMA-10.01

Site: 35-016(e)

This certificate indicates completion of corrective action for Site 35-016(e) 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 M-SMA-10.01 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 Site 35-016(e) 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 35-016(e), which is designated as Area of Concern 35-016(e) for the purposes of the Consent Order.

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

Site Number	Associated SMA Number	Watershed	Site Priority
35-016(e)	M-SMA-10.01	Mortandad	Moderate

## Completion of Corrective Action at Site 35-016(p) in M-SMA-12

October 30, 2015

NPDES PERMIT NO. NM0030759

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

#### PF: M015

M-SMA-12

Site: 35-016(p)

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.

#### **CERTIFICATION STATEMENT OF AUTHORIZATION**

Environmental Programs Environmental Remediation Program Los Alamos National Laboratory

12015

Environmental Management U.S. Department of Energy

-2015

Date

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

#### PF: M015

M-SMA-12

Site: 35-016(p)

This certificate indicates completion of corrective action for Site 35-016(p) 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 M-SMA-12 exceeded target action levels for aluminum, copper, and total polychlorinated biphenyls, causing the Permittees to initiate corrective action. The Permittees are certifying completion of correction action at Site 35-016(p) 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 35-016(p), which is designated as Solid Waste Management Unit 35-016(p) for the purposes of the Consent Order.

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

Site Number	Associated SMA Number	Watershed	Site Priority
35-016(p)	M-SMA-12	Mortandad	Moderate

## Completion of Corrective Action at Sites 35-003(h), 35-003(p), 35-003(r), 35-004(h), 35-009(d), 35-016(k), 35-016(l) and 35-016(m) in Pratt-SMA-1.05

October 30, 2015

NPDES PERMIT NO. NM0030759

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

PF: T001

#### Pratt-SMA-1.05

Sites: 35-003(h) 35-003(p) 35-003(r) 35-004(h) 35-009(d) 35-016(k) 35-016(l) 35-016(m)

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.

#### **CERTIFICATION STATEMENT OF AUTHORIZATION**

"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

Environmental Management U.S. Department of Energy

.

4/2015

10-30-2015 Date

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

PF: T001

Pratt-SMA-1.05

Sites: 35-003(h) 35-003(p) 35-003(r) 35-004(h) 35-009(d) 35-016(k) 35-016(l) 35-016(m)

This certificate indicates completion of corrective action for Sites 35-003(h), 35-003(p), 35-003(r), 35-004(h), 35-009(d), 35-016(k), 35-016(l) and 35-016(m) 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 Pratt-SMA-1.05 exceeded target action levels for aluminum, gross alpha, mercury, and total polychlorinated biphenyls, causing the Permittees to initiate corrective action. The Permittees are certifying completion of correction action at Sites 35-003(h), 35-003(p), 35-003(r), 35-004(h), 35-009(d), 35-016(k), 35-016(l) and 35-016(m) 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 35-003(h), 35-003(r), 35-003(n), 35-003(p), 35-003(r), 35-003(h), 35-004(h), 35-006(h), 35-006(h), and 35-016(m) and Areas of Concern (AOCs) 35-003(r) and 35-016(l) for the purposes of the Consent Order.

Table 1
Site(s) Demonstrating Completion of Corrective Action

Associated SMA Number	Watershed	Site Priority
Pratt-SMA-1.05	Mortandad	High

## Completion of Corrective Action at Sites 35-014(g) and 35-016(n) in T-SMA-2.85

October 30, 2015

NPDES PERMIT NO. NM0030759

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

**PF: T004** 

T-SMA-2.85

Sites: 35-014(g) 35-016(n)

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.

## **CERTIFICATION STATEMENT OF AUTHORIZATION**

Environmental Programs Environmental Remediation Program Los Alamos National Laboratory

10/29/2015

Date

Shell

Environmental Management U.S. Department of Energy

10-30-2015 Date

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

#### **PF: T004**

#### T-SMA-2.85

Sites: 35-014(g) 35-016(n)

This certificate indicates completion of corrective action for Sites 35-014(g) and 35-016(n) 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 T-SMA-2.85 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 35-014(g) and 35-016(n) 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 35-014(g) and 35-016(n), which are designated as Solid Waste Management Unit 35-014(g) and Area of Concern 35-016(n), respectively, for the purposes of the Consent Order.

 Table 1

 Site(s) Demonstrating Completion of Corrective Action

Site Number	Associated SMA Number	Watershed	Site Priority
35-014(g) 35-016(n)	T-SMA-2.85	Mortandad	Moderate

1

## Completion of Corrective Action at Site 35-016(b) in T-SMA-3

October 30, 2015

NPDES PERMIT NO. NM0030759

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

#### **PF: T005**

T-SMA-3

Site: 35-016(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.

#### **CERTIFICATION STATEMENT OF AUTHORIZATION**

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: T005**

T-SMA-3

Site: 35-016(b)

This certificate indicates completion of corrective action for Site 35-016(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 T-SMA-3 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 Site 35-016(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 35-016(b), which is designated as Area of Concern 35-016(b) for the purposes of the Consent Order.

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

Site Number	Associated SMA Number	Watershed	Site Priority
35-016(b)	T-SMA-3	Mortandad	Moderate

## Completion of Corrective Action at Sites 35-004(a), 35-009(a), 35-016(c) and 35-016(d) in T-SMA-4

October 30, 2015

NPDES PERMIT NO. NM0030759

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

**PF: T006** 

T-SMA-4

Sites: 35-004(a) 35-009(a) 35-016(c) 35-016(d)

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.

### **CERTIFICATION STATEMENT OF AUTHORIZATION**

Environmental Programs Environmental Remediation Program Los Alamos National Laboratory

Environmental Management U.S. Department of Energy

129/2015

Date

Date

### NPDES PERMIT NO. NM0030759

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

**PF: T006** 

T-SMA-4

Sites: 35-004(a) 35-009(a) 35-016(c) 35-016(d)

This certificate indicates completion of corrective action for Sites 35-004(a), 35-009(a), 35-016(c) and 35-016(d) 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 T-SMA-4 exceeded target action levels for copper, gross alpha, and mercury, causing the Permittees to initiate corrective action. The Permittees are certifying completion of correction action at Sites 35-004(a), 35-009(a), 35-016(c) and 35-016(d) 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 35-004(a), 35-016(c) and 35-016(d), which are designated as Solid Waste Management Units (SWMUs) 35-004(a), 35-009(a), 35-009(a), 35-016(c), and 35-016(d), respectively, for the purposes of the Consent Order.

Site Number	Associated SMA Number	Watershed	Site Priority
35-004(a) 35-009(a) 35-016(c) 35-016(d)	T-SMA-4	Mortandad	Moderate

Table 1Site(s) Demonstrating Completion of Corrective Action

# Completion of Corrective Action at Site 35-010(e) in T-SMA-6.8

October 30, 2015

NPDES PERMIT NO. NM0030759

LA-UR-15-28452

### NPDES PERMIT NO. NM0030759

# LOS ALAMOS NATIONAL LABORATORY CERTIFICATION OF COMPLETION OF CORRECTIVE ACTION

#### **PF: T008**

T-SMA-6.8

Site: 35-010(e)

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.

#### **CERTIFICATION STATEMENT OF AUTHORIZATION**

"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

29/2015

Environmental Management U.S. Department of Energy

Date

### NPDES PERMIT NO. NM0030759

# LOS ALAMOS NATIONAL LABORATORY CERTIFICATION OF COMPLETION OF CORRECTIVE ACTION

#### **PF: T008**

T-SMA-6.8

Site: 35-010(e)

This certificate indicates completion of corrective action for Site 35-010(e) 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 T-SMA-6.8 exceeded the target action level for gross alpha, causing the Permittees to initiate corrective action. The Permittees are certifying completion of correction action at Site 35-010(e) 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 35-010(e), which is designated as Area of Concern 35-010(e) for the purposes of the Consent Order.

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

Site Number	Associated SMA Number	Watershed	Site Priority
35-010(e)	T-SMA-6.8	Mortandad	Moderate

# Attachment 1

Certificate of Completion for Twenty Sites



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



RYAN FLYNN Cabinet Secretary BUTCH TONGATE Deputy Secretary

### **CERTIFIED MAIL – RETURN RECEIPT REQUESTED**

October 14, 2015

Doug Hintze, Manager U.S. Department of Energy EM-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 SEVENTEEN SOLID WASTE MANAGEMENT UNITS AND EIGHT AREAS OF CONCERN AT TECHNICAL AREA 35 MIDDLE MORTANDAD/TEN SITE AGGREGATE AREA EPA ID #NM0890010515 HWB-LANL-11-068

Dear Messrs. Hintze and 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. To date, NMED has issued certificates of completion for ten solid waste management units (SWMUs) and two areas of concern (AOCs).

NMED hereby issues certificates of completion for the following twenty-five sites pursuant to Section VII.E.6.b of the Consent Order.

**SWMU 35-003(h)** is the site of a former exchange concrete retention tank. This tank was constructed in 1961 and added as a component of the waste treatment plant (WWTP). The tank had dimensions of 8 ft x 12 ft x10 ft deep and was connected to buildings TA-35-41 and TA-35-10 by 4-in diameter stainless steel underground pipes. The retention tank and associated piping was removed in February 1985. The tank and excavated soil were screened for radioactive contamination during the removal. No detection of radionuclides was documented. The site was included in the investigation of CU 35-003(a)-99 that included components of the former WWTP. Investigations conducted during 1995, 1996, 1997, and 2004-2005 indicate that there are no potential unacceptable risks or doses from the residual contamination for the industrial scenario. However, under the residential land use scenarios, the site poses an unacceptable risk to human health. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site. The site use must be restricted to industrial activities.

**SWMU 35-003(p)** is the former site of the Air Filter Building, TA-35-7. Radioactive air was filtered in this building and cleaning filters were washed by tap water and/or long-decayed wastewater from the tank farms. This long-decayed wastewater was contaminated with strontium-89 and strontium-90. Build-up of strontium in the air filters became a problem and required numerous washings, which produced more radioactive wastewater. The large volumes of water overwhelmed the storage capacity of the system and led to spills, overflows, and other unplanned releases to Pratt Canyon. The Air Filter Building underwent D&D first in 1980, and again in 1996. The building and associated piping was removed in 1996. The site was included in the investigation of CU 35-003(a)-99 that also included components of the former WWTP. Investigations conducted during 1995, 1996, 1997, and 2004-2005 indicate that there are no potential unacceptable risks or doses from the residual contamination for the industrial land use scenario. However, under the residential land use scenario, the site poses an unacceptable risk to human health. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site. The site use must be restricted to industrial activities.

**AOC 35-003(r)** is the site of a canyon disposal area for liquid sludge effluent associated with the former WWTP. The AOC is located in Pratt Canyon and extends from eastern edge of Ten Site Mesa to the confluence of Pratt and Ten Site Canyons. Pratt Canyon is contaminated with radionuclides. The WWTP that released the effluent ceased operation in 1963. The site was included in the investigation of CU 35-003(d)-00. Investigations conducted during 1995, 1997, 1998, 2005, and 2007 indicate that there are no potential unacceptable risks or doses from the residual contamination for the recreational land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site. The site use must be restricted to recreational activities.

**SWMU 35-004(a)** is made up of outdoor storage areas previously used to store drums of oil and drums containing organic chemicals. These areas are located south and east of building TA-35-25. Stained soil was observed at the site during a 1988 reconnaissance. In 1995, contaminated soil was removed from the storage area. Investigations conducted during 2004 indicate that there

are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 35-004(h)** is an area, near the northeast corner of building TA-35-7, which was formerly used to store containers of oil, capacitors, and organic chemicals like freon. The area is no longer used as a storage area and the date of closure is not documented. The disposition of the containers is not documented. Stained soil was observed at the site during a 1988 reconnaissance. Building TA-35-7 underwent first D&D in 1980 and a second D&D in 1996 at which time the building and associated piping were removed. Investigations conducted during 2005 indicate that there are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 35-008** is a former canyon-side disposal area for debris, which includes scrap metal and piping, paint cans, 55-gal drums, and miscellaneous building materials. It is located along the rim of the north-facing slope of Mortandad Canyon. The debris extends from the canyon rim to the canyon floor. No releases of hazardous materials have been documented from this disposal area. The site was included in the investigation of CU 35-008-00. Investigations conducted during 1995, 1997, and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 35-009(a)** is a septic system that operated from 1951 to 1975. The septic system includes a 1500-gallon septic tank, dosing chamber, and a distribution box. These structures were abandoned in place when new sanitary sewer lines were routed to sewage lagoons located east of TA-35 in Ten Site Canyon. The septic system discharged to drain fields on the south-facing slope of Ten Site canyon. The septic system received sanitary wastes and possibly industrial and radiological wastes from building TA-35-2. Specific waste stream information is not available. The site was cleaned up during a voluntary corrective action (VCA) reported in September 1996. The VCA included removal and disposal of the tank contents and filling the tank with concrete. Investigations conducted during 1996, 1997, and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the industrial land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site. The site use must be restricted to industrial activities.

**SWMU 35-009(d)** is an abandoned 1600-gal septic tank and associated leach field. The tank is located at the northeast corner of Ten Site Mesa, and the leach field extends from the tank towards the east. The leach field covers an area of approximately 1800 ft<sup>2</sup> and consists of fine-to coarse-grained sandstone and cobble filter bed material. The septic system served TA-35 from 1966 to 1990. It handled sanitary waste and possibly industrial waste including radionuclides from building TA-35-27 and other laboratory buildings. During a 1996 VCA, the tank was pumped out, filled with concrete. No releases of hazardous materials are documented

for the site. Investigations conducted during 1996 and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**AOC 35-010(e)** is the NPDES permitted outfall EPA-SSS-10S from the sand filter beds that discharged into Ten Site Canyon. A depth-recording gauge station is located at the outfall that measured the effluent levels. A rock dissipater apron is present at the discharge point. Flow records of the NPDES outfall were used to estimate how much effluent was discharged during a significant portion of the life of sewage lagoons and filter beds. The average flow rate was approximately 45, 000 gallons per day (gpd). The planned capacity of the facility was 12,000 gpd. The site was included in the investigations of CU 35-010(a)-99. Investigations conducted during 1995, 1997, and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 35-014(e)** is a dielectric oil spill that was bulldozed off the mesa top. The oil spill occurred when a forklift punctured an aboveground oil storage tank. The storage tank was removed in 1992. The site was included in the investigation of CU 35-008-00. Investigations conducted during 1995, 1997, and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 35-014(g)** is the site of a former oil spill on concrete adjacent to an asphalt-paved catchment basin located at the northeast corner of building TA-35-207. The catchment basin directs storm water flow to AOC 35-016(n), a corrugated metal pipe outfall and daylight drainage channel. A small oil stain was visible on the concrete; however, no obvious oil staining was apparent in the catchment basin or the outfall. The origin and the date of the spill are not known. Currently there are no visible signs of spill, as it was reportedly cleaned up in the late 1980s. The site was included in the investigation of CU 35-014(g)-00. Investigations conducted during 1995, 1998, and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**AOC 35-014(g3)** is an oil stained area resulting from a major oil spill that occurred near the former tank farm (SWMU 35-015(a)) on the west side of TA-35-86. The amount of oil that was released is not known, but the source of the spill was reportedly an oil tank truck. The spill flowed southward through a culvert under the road on the south side of TA-35-86, across the parking lot west of TA-35-207, and south through a natural drainage pathway into Ten Site Canyon. The spill occurred prior to May 9, 1984, the date of documentation photographs. The path of the spill was clearly visible in 1986 aerial photograph. The stained area was also observed in 1991. At that time, all vegetation in the path of the spill was dead and the area still

smelled strongly of oil. The tank farm underwent D&D in 1988/1989. Investigations conducted during 1995 and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the recreational land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site. The site use must be restricted to recreational activities.

**SWMU 35-016(a)** is an inactive outfall that was established in 1958 to discharge noncontact cooling water from TA-35-34. The outfall discharged into Ten Site Canyon. The SWMU included an approximately 70-ft-long drainline of undocumented construction, between TA-35-34 and the outfall. The outfall was included on NPDES Permit No. 04A089 until 1985 when it was eliminated from the permit. The volume of cooling water discharged through the outfall is not documented. The site was included in the investigation of CU 35-016(a)-00. Investigations conducted during 1996 and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**AOC 35-016(b)** is an inactive outfall, established in 1977, which discharged photographic processing effluents and storm water from roof drains associated with building TA-35-87. The outfall was permitted as NPDES outfall No. 06A132. The effluent discharge volume was limited to 3000 gal/day, released to Ten Site Canyon. Formerly photographic fluids were processed through a silver and cyanide recovery process before being released. The photographic laboratory waste drains that discharged to this outfall were either plugged or rerouted to the sanitary sewer system. Investigations conducted during 1995, 1997, and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 35-016(c)** consists of two inactive outfalls established in 1964 to discharge noncontact cooling water from warehouse TA-35-67. The outfalls were operated under former NPDES Permit No. 04A088 and Permit No. 04A012. The two outfalls were combined prior to 1985 under Permit No. 04A012 and deactivated in 1987. The site was included in the investigation of CU 35-016(c)-00. Investigations conducted during 1996 and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the recreational land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site. The site use must be restricted to recreational activities.

**SWMU 35-016(d)** is an inactive outfall that was constructed in 1962 to discharge noncontact cooling water from the Reactor Components Development Building, TA-35-46. This outfall was listed as active on NPDES Permit No. 04A087 in 1985. The outfall became inactive on April 10, 1987. The site was included in the investigation of CU 35-016(c)-00. Investigations conducted during 1996 and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the recreational land use scenario. The results of the ecological risk-

screening assessment indicate no potential unacceptable risk to ecological receptors at the site. The site use must be restricted to recreational activities.

**AOC 35-016(e)** is an inactive outfall, established in 1977, which discharged noncontact cooling water from building TA-35-85. This outfall was deleted from NPDES Permit No. 04A090 in April 1987. The outfall is located north of TA-35-85 on the rim of Mortandad Canyon and discharged to the steep slope. The volume of water released is not documented, but the erosion that has taken place below the outfall suggests that significant amounts of water were released. The investigations for this site were conducted with the investigation of CU 35-008-00. Investigations conducted during 1995, 1997, and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**AOC 35-016(f)** is an active storm drain located north of TA-35-85. The outfall consists of corrugated metal pipe 18 in. in diameter that discharges into small channel cut into backfill material on the south slope of Mortandad Canyon. Documented releases, consisting of oil spills, have occurred near the source area for the storm drain. The volume of spills is not documented. Soil samples from the stained areas contained detectable concentrations of PCBs. Investigations conducted during 1995 and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 35-016(k)** is the site of an inactive outfall that discharged noncontact cooling water from the Gas Laser Building, TA-35-29. The outfall was included on NPDES Permit No. 04A116 and was operational from 1961 to 1987. The outfall discharges into a steep channel lined with riprap that drains into Pratt Canyon. The site was included in the investigation of CU 35-016(k)-00. Investigations conducted during 1994, 1997, 2004, 2005, and 2007 indicate that there are no potential unacceptable risks or doses from the residual contamination for the recreational land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site. The site use must be restricted to recreational activities.

**AOC 35-016(l)** is the site of surface discharge channels. The channels were established in 1961 to discharge rainwater runoff from TA-35-29 and water leaks from an ultraviolet water sterilizer in TA-35-29. Stained areas from past dielectric oil spills are present in the source areas for these channels. Radiation data collected from the concrete catch basin for these drains was at levels 50% greater than background gamma radiation readings during 1988 site visit. These drainage channels discharge to the same riprap-lined channel as SWMU 35-016(k). The site was included in the investigation of CU 35-016(k)-00. Investigations conducted during 1994, 1997, 2004, 2005, and 2007 indicate that there are no potential unacceptable risks or doses from the residual contamination for the recreational land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site. The site use must be restricted to recreational activities.

**SWMU 35-016(m)** is an inactive noncontact cooling tower outfall. The outfall was included on NPDES Permit No. 03A039 and was intended for discharging treated cooling tower blowdown from two planned reactors in building TA-35-33. The reactors were never installed, the cooling tower never operated, and the outfall never served its intended purpose; instead it discharged storm water runoff from parking areas at the east end of TA-35 mesa top. Investigations conducted during 1994 and 2005 indicate that there are no potential unacceptable risks or doses from the residual contamination for the recreational and residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**AOC 35-016(n) is** comprised of a 10 inch diameter corrugated metal pipe outfall, and natural drainage channel installed around 1997 to receive storm water runoff from the roof and paved area south of TA-35-86, and a grassy slope adjacent to building TA-35-207. The source of the outfall is a drainage channel that leads to asphalt-paved catchment basin. The outfall receives flow from the catchment basin via an intake grate. The site was included in the investigation of CU 35-014(g)-00. Investigations conducted during 1995, 1998, and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 35-016(o)** consists of four distinct and active storm drains established in 1951 to handle storm water runoff from TA-35-02. This SWMU also possibly handled TA-35-02 floor drain effluent from rooms A-10, A-13, and A-22. These four outfalls comprising SWMU 35-016(o) are located on the eastern side of the mesa, on the south slope of Mortandad Canyon, approximately 20 ft below the mesa edge. The outfalls consist of cast-iron drainpipes. No documented releases of hazardous materials have occurred at these outfalls. Investigations conducted during 1997, 2004, and 2007 indicate that there are no potential unacceptable risks or doses from the residual contamination for the recreational land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site. The site use must be restricted to recreational activities.

**SWMU 35-016(p)** is an unpermitted and active outfall established in 1968 to discharge noncontact cooling water condensate from TA-35-27. A separate reference states that this outfall discharges only stormwater runoff from the roof of TA-35-27. The outfall is located north and slightly east of TA-35-27 on the south slope of Mortandad Canyon. No documented releases of hazardous materials have occurred at this outfall. Investigations conducted during 2004 and 2007 indicate that there are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 35-016(q)** is an active stormwater outfall and associated trench located southeast of TA-35-34, the Sodium Testing Building. The site was included in the investigation of CU 35-016(a)-00. Investigations conducted during 1996 and 2004 indicate that there are no potential unacceptable risks or doses from the residual contamination for the residential land use scenario.

The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

NMED has determined that the above mentioned sites 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.

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

Sincerely, John E. Kieling 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-35, MMTS LANL 11-068