

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

Environmental Management Los Alamos Field Office 1900 Diamond Drive, MS M984 Los Alamos, New Mexico 87544 (505) 665-5658/FAX (505) 606-2132

Date: MAR 0 6 2017 Refer To: ADESH-17-024 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 – Completion of Corrective Action for Five [5] Sites in Five [5] 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 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 [Resource Conservation and Recovery Act] "corrective action complete without controls/corrective action complete with controls" status or a Certificate of Completion under NMED's [New Mexico Environment Department's] Consent Order....

The certification that corrective action is complete was prepared in accordance with 40 Code of Federal Regulations 122.22(b). Accordingly, the certificates of completion issued under NMED's Compliance Order on Consent for these Sites are attached. This letter includes a signed certification statement for each Site (Attachment 1) and a copy of the NMED certificates of completion (Attachment 2). This certified document can be accessed at the website http://www.lanl.gov/ and by searching with the key words "Individual Permit."



**Certificates of Completion for Five Sites** 

Site Number	Associated SMA Number	Permitted Feature	Watershed	Site Priority
21-029	DP-SMA-0.3	D001	Los Alamos/Pueblo	Moderate
21-013(c)	DP-SMA-3	D007	Los Alamos/ Pueblo	Moderate
21-009	LA-SMA-5.91	L019	Los Alamos/ Pueblo	Moderate
21-024(j)	LA-SMA-6.395	L027	Los Alamos/Pueblo	Moderate
C-00-041	R-SMA-1	R002	Los Alamos/ Pueblo	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,

John C. Bretzke, Division Leader

Environmental Protection & Compliance Division

Los Alamos National Laboratory

Sincerely,

David S. Rhodes, Director

Office of Quality and Regulatory Compliance

Los Alamos Field Office

#### JB/DR/BR/SV:sm

Attachments: (1) One hard copy with electronic files – Completion of Corrective Action for

Five Sites in Five [5] SMAs Following Certificates of Completion from NMED

(see individual document for LA-UR number)

(2) NMED-issued certificates of completion for five Sites

Cy: (w/att.)

Sarah Holcomb, NMED-SWQB, P. O. Box 5469, Santa Fe, NM 87502

Cy: (w/electronic att.)

Laurie King, EPA Region 6, Dallas, TX

Steve Yanicak, NMED-DOE-OB, MS M894

emla.docs@em.doe.gov

Tadz Kostrubala, ADEM ER Program

Terrill Lemke, ADESH-EPC-CP

Public Reading Room (EPRR)

ADESH Records

PRS Database

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

Robert Houston, EPA Region 6

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Steve Veenis, ADEM ER Program

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Mike Saladen, ADESH-ENV-CP

John Bretzke, ADESH-EPC-EO

Michael Brandt, ADESH

William Mairson, PADOPS

Craig Leasure, PADOPS



## Completion of Corrective Action at Site 21-029 in DP-SMA-0.3

March 6, 2017

NPDES PERMIT NO. NM0030759 LA-UR-17-21147

PF: D001 DP-SMA-0.3 Site: 21-029

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."

Associate Directorate of Environmental Management

Los Alamos National Laboratory

2/2//2011

Date

Environmental Management

U.S. Department of Energy

Date

PF: D001 DP-SMA-0.3 Site: 21-029

This certificate indicates completion of corrective action for Site 21-029 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 DP-SMA-0.3 exceeded target action levels for gross alpha and radium-226 and radium-228, causing the Permittees to initiate corrective action. An enhanced control was installed and certified and the Site entered corrective active monitoring. Analytical results obtained from corrective action monitoring exceeded TALs for gross alpha, causing the Permittees to reinitiate corrective action. On October 30, 2015, the Permittees submitted to the U.S. Environmental Protection Agency a letter entitled "NPDES Permit No. NM0030759 Request for an Extension Based on Force Majeure under Part I.E.4(C) for Eighteen Sites within Ten Site Monitoring Areas" (ADESH-15-140). The Site subject to this certification was part of the force majeure request. As stated in the letter, the extension request for the force majeure deadline was made because the "Sites are eligible to be approved by the New Mexico Environment Department (NMED) and certified for completion of corrective action under the 2016 Complaince Order on Consent...." NMED approved the certificate of completion (COC); therefore, the request for an extension at this Site is no longer applicable. The Permittees are certifying completion of correction action at Site 21-029 through a demonstration that the Site has achieved a COC under the Section XXI of the 2016 Consent Order. Attachment 2 contains a copy of the COC from NMED for Site 21-029, which is designated as Solid Waste Management Unit 21-029, for the purposes of the Consent Order.

Table 1
Site Demonstrating Completion of Corrective Action

Site Number	Associated SMA Number	Watershed	Site Priority
21-029	DP-SMA-0.3	Los Alamos/Pueblo	Moderate

# Completion of Corrective Action at Site 21-013(c) in DP-SMA-3

March 6, 2017

NPDES PERMIT NO. NM0030759 LA-UR-17-21148

PF: D007 DP-SMA-3 Site: 21-013(c)

The following certification of completion of corrective action 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."

Associate Directorate of Environmental Management

Los Alamos National Laboratory

Environmental Management Los Alamos Field Office

U.S. Department of Energy

5-3-2017

Date

PF: D007 DP-SMA-3 Site: 21-013(c)

This certificate indicates completion of corrective action for Site 21-013(c) 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 DP-SMA-3 exceeded target action levels for gross alpha, aluminum, and copper, causing the Permittees to initiate corrective action. On October 30, 2015, the Permittees submitted to the U.S. Environmental Protection Agency a letter entitled "NPDES Permit No. NM0030759 Request for an Extension Based on Force Majeure under Part I.E.4(C) for Eighteen Sites within Ten Site Monitoring Areas" (ADESH-15-140). The Site subject to this certification was part of the force majeure request. As stated in the letter, the extension request for the force majeure deadline was made because the "Sites are eligible to be approved by the New Mexico Environment Department (NMED) and certified for completion of corrective action under the 2016 Complaince Order on Consent...." NMED approved the certificate of completion (COC); therefore, the request for an extension at this Site is no longer applicable. The Permittees are certifying completion of correction action at Site 21-013(c) by demonstrating that the Site has achieved a COC under Section XXI of the 2016 Consent Order. Attachment 2 contains a copy of the COC from NMED for Site 21-013(c), which is designated as Solid Waste Management Unit 21-013(c) for the purposes of the Consent Order.

Table 1
Site Demonstrating Completion of Corrective Action

Site Number	Associated SMA Number	Watershed	Site Priority
21-013(c)	DP-SMA-3	Los Alamos/Pueblo	Moderate

## Completion of Corrective Action at Site 21-009 in LA-SMA-5.91

March 6, 2017

NPDES PERMIT NO. NM0030759 LA-UR-17-21149

PF: L019 LA-SMA-5.91 Site: 21-009

The following certification of completion of corrective action 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."

Associate Directorate of Environmental Management

Los Alamos National Laboratory

Environmental Management Los Alamos Field Office

U.S. Department of Energy

3-3-2017

Date

2/16/2017

PF: L019 LA-SMA-5.91 Site: 21-009

This certificate indicates completion of corrective action for Site 21-009 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 and corrective action confirmation monitoring at LA-SMA-5.91 exceeded target action levels for gross alpha, causing the Permittees to initiate corrective action. On October 30, 2015, the Permittees submitted to the U.S. Environmental Protection Agency a letter entitled "NPDES Permit No. NM0030759 Request for an Extension Based on Force Majeure under Part I.E.4(C) for Eighteen Sites within Ten Site Monitoring Areas" (ADESH-15-140). The Site subject to this certification was part of the force majeure request. As stated in the letter, the extension request for the force majeure deadline was made because the "Sites are eligible to be approved by the New Mexico Environment Department (NMED) and certified for completion of corrective action under the 2016 Complaince Order on Consent...." NMED approved the certificate of completion (COC); therefore, the request for an extension at this Site is no longer applicable. The Permittees are certifying completion of correction action at Site 21-009 by demonstrating that the Site has achieved a COC under Section XXI of the 2016 Consent Order. Attachment 2 contains a copy of the COC from NMED for Sites 21-009, which is designated as Area of Concern 21-009 for the purposes of the Consent Order.

Table 1
Site Demonstrating Completion of Corrective Action

Site Numbers	Associated SMA Number	Watershed	Site Priority
21-009	LA-SMA-5.91	Los Alamos/Pueblo	Moderate

# Completion of Corrective Action at Site 21-024(j) in LA-SMA-6.395

March 6, 2017

NPDES PERMIT NO. NM0030759 LA-UR-17-21151

PF: L027 LA-SMA-6.395 Site: 21-024(j)

The following certification of completion of corrective action 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."

Associate Directorate of Environmental Management

Los Alamos National Laboratory

Environmental Management Los Alamos Field Office

U.S. Department of Energy

3 3-2017

Date

PF: L027 LA-SMA-6.395 Site: 21-024(j)

This certificate indicates completion of corrective action for Site 21-024(j) 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 LA-SMA-6.395 exceeded target action levels for gross alpha, causing the Permittees to initiate corrective action. On October 30, 2015, the Permittees submitted to the U.S. Environmental Protection Agency a letter entitled "NPDES Permit No. NM0030759 Request for an Extension Based on Force Majeure under Part I.E.4(C) for Eighteen Sites within Ten Site Monitoring Areas" (ADESH-15-140). The Site subject to this certification was part of the force majeure request. As stated in the letter, the extension request for the force majeure deadline was made because the "Sites are eligible to be approved by the New Mexico Environment Department (NMED) and certified for completion of corrective action under the 2016 Complaince Order on Consent...." NMED approved the certificate of completion (COC); therefore, the request for an extension at this site is no longer applicable. The Permittees are certifying completion of correction action at Site 21-024(j) by demonstrating that the Site has achieved a COC under Section XXI of the 2016 Consent Order. Attachment 2 contains a copy of the COC from NMED for Site 21-024(j), which is designated as Solid Waste Management Unit 21-024(j) for the purposes of the Consent Order.

Table 1
Site Demonstrating Completion of Corrective Action

Site Number	Associated SMA Number	Watershed	Site Priority
21-024(j)	LA-SMA-6.395	Los Alamos/Pueblo	Moderate

## Completion of Corrective Action at Site C-00-041 in R-SMA-1

March 6, 2017

NPDES PERMIT NO. NM0030759 LA-UR-17-21152

PF: R002 R-SMA-1 Site: C-00-041

The following certification of completion of corrective action 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."

Associate Directorate of Environmental Management

Los Alamos National Laboratory

Environmental Management Los Alamos Field Office

-5. Chil

U.S. Department of Energy

3-3-2017

2/16/2017

Date

PF: R002 R-SMA-1 Site: C-00-041

This certificate indicates completion of corrective action for Site C-00-041 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 R-SMA-1 exceeded target action levels for gross alpha, aluminum, and zinc, causing the Permittees to initiate corrective action. On October 30, 2015, the Permittees submitted to the U.S. Environmental Protection Agency a letter entitled "NPDES Permit No. NM0030759 Request for an Extension Based on Force Majeure under Part I.E.4(C) for Eighteen Sites within Ten Site Monitoring Areas" (ADESH-15-140). The Site subject to this certification was part of the force majeure request. As stated in the letter, the extension request for the force majeure deadline was made because the "Sites are eligible to be approved by the New Mexico Environment Department (NMED) and certified for completion of corrective action under the 2016 Complaince Order on Consent...." NMED approved the certificate of completion (COC); therefore, the request for an extension at this Site is no longer applicable. The Permittees are certifying completion of correction action at Site C-00-041 by demonstrating that the Site has achieved a COC under Section XXI of the 2016 Consent Order. Attachment 2 contains a copy of the COC from NMED for Site C-00-041, which is designated as Area of Concern C-00-041 for the purposes of the Consent Order.

Table 1
Site Demonstrating Completion of Corrective Action

Site Number	Associated SMA Number	Watershed	Site Priority
C-00-041	R-SMA-1	Los Alamos/Pueblo	Moderate

#### **Attachment 2**

New Mexico Environment Department Certificates of Completion for Five 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

January 19, 2016

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

TWO AREAS OF CONCERN AND TWELVE SOLID WASTE MANAGEMENT UNITS IN THE DELTA PRIME SITE AGGREGATE AREA EPA ID #NM0890010515

EPA 1D #NM0890010515 HWB-LANL-15-032

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 Two Areas of Concern and Twelve Solid Waste Management Units in the Delta Prime Site Aggregate Area (Request), dated June 18, 2015 and referenced by ADESH-15-085/LAUR 15-23983.

These twelve solid waste management units (SWMUs) and two areas of concern (AOC) were recommended for corrective action complete in the *Phase II Investigation Report for Delta Prime Site Aggregate Area, Revision 1* (Report), dated October 2010 (LA-UR-10-6478/EP2010-0325). A Notice of Disapproval (NOD) was issued for the Report on June 24, 2010. NMED issued a Direction to Modify (DTM) for the Report on October 19, 2010.

NMED hereby issues certificates of completion for the following twelve sites pursuant to Section VII.E.6.b of the Consent Order. The nature and extent is not defined at two sites that require either additional information or additional investigations.

AOC 21-002(b) is a former drum storage structure that consisted of three tin-sided walls, a roof and a concrete floor was built in 1945. Fifty-five gallon drums with unknown contents were stored at the site. The site underwent decontamination and decommissioning (D&D) in 1966. The investigations conducted at the site indicate that the site does not pose unacceptable risk under residential, construction, and industrial land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**AOC 21-009** is a former waste treatment laboratory that was constructed in 1948. The site underwent D&D in 1965. The investigations conducted at the site indicate that the site does not pose unacceptable risk under residential, construction, and industrial land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 21-012(b)** consists of two concrete steam blowdown pits, a separate drainline that drained each pit towards the southern edge of the DP Mesa, a seepage pit filled with river stones, a drywell, an outfall pipe associated with floor drains, and piping conveying effluent between structures. It was built in 1945 to serve as a steam plant. The building was removed in 1985 and replaced with a new steam plant. The area was regraded. The investigations conducted at the site indicate that the site does not pose unacceptable risk under residential, construction, and industrial land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 21-013(c)** is a former surface disposal area located at the eastern end of DP Mesa. The site consisted of mounds of earth, an excavated trench, and an earthen berm that contained scattered concrete, asphalt, and metal debris. Other surface debris included glass, scrap metal, wood, cans, paper, and plastic. The dates of operation are not known. The investigations conducted at the site indicate that the site does not pose unacceptable risk under residential, construction, and industrial land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 21-022(f)** is an inactive sump and a pipeline. The sump received industrial waste from laboratory sinks in a research building and a mechanical equipment building. The building was built in 1945 and the sump was built to convey laboratory liquid effluent to material disposal area U. The depth of the sump is a minimum of 6-10 inches below ground surface. The sump was connected to a manhole in 1965 which connects to the Waste Disposal Plant. The investigations conducted at the site indicate that the site does not pose unacceptable risk under residential and industrial land use scenario. However, the site poses an unacceptable risk under the construction worker scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 21-024(a)** is an inactive septic system that previously routed sewage from the old steam plant through a septic tank to the surface on the south rim of DP Mesa. The septic system was constructed in 1945. The septic system was not used after 1966 and was left in place. The associated building was removed in 1985, but there is no available documentation indicating if

the piping or tank was removed. The investigations conducted at the site indicate that the site does not pose unacceptable risk under residential, construction, and industrial land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

SWMU 21-024(e) is an inactive septic system that routed sewage from the former TA-21 laundry and a former diesel plant and shop through a septic tank to the surface on the south rim of DP Mesa. The septic system was constructed in 1945. The laundry went through D&D in 1965 and the diesel power plant underwent D&D in 2006. In 1996, the septic was emptied and filled with pea gravel, inlet and outlet lines were grouted with cement and the surrounding area was restored and reseeded. The investigations conducted at the site indicate that the site does not pose unacceptable risk under residential, construction, and industrial land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 21-024(h)** is a septic tank, pipelines, and associated outfall that originally received sewage from an administrative building, shop and a polonium-processing laboratory. The septic system was constructed in 1945. The septic system use was discontinued in 1966 and was left in place. The investigations conducted at the site indicate that the site does not pose unacceptable risk under residential, construction, and industrial land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 21-024(i)** is an inactive septic tank, pipelines, and associated outfall. The only portion of the septic system remaining at the site is the inlet line from a chemistry building to the fence line that is overlain currently by a building. The portion of the inlet line from the fence to the septic tank, the septic tank, the outlet line, and the outfall were removed in 2001. The septic system was constructed in 1945 to serve a laboratory. The septic system was not used after 1965 but was left in place. The investigations conducted at the site indicate that the site does not pose unacceptable risk to human health under residential, construction, and industrial land use scenarios. However, the total dose from radionuclide contamination for a residential land use scenario is approximately 26 mrem/yr which is higher than the DOE target dose of 15 mrem/yr. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 21-024(j)** is an inactive septic tank, pipelines, and associated outfall that received sewage from a warehouse and a laboratory. The septic system was constructed in 1961 to serve the warehouse/laboratory. The septic was not used after 1966 and was left in place. The investigations conducted at the site indicate that the site does not pose unacceptable risk under residential, construction, and industrial land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

**SWMU 21-024(o)** is thought to have been a 4 inch vitrified clay pipe drainline that served the old diesel power plant and an associated outfall. The diesel power plant was built in 1947-1948. The pipe discharged south into Los Alamos canyon. The building was removed in 2006 and the

foundation was left in place. The investigations conducted at the site indicate that the site does not pose unacceptable risk under residential, construction, and industrial land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

SWMU 21-029, DP Tank Farm was located on the western edge of TA-21 and was the primary fueling station supporting Laboratory operations from January 1946 until February 1985. Structures included fuel tanks, fill ports, valve boxes, and the East and West Fill Stations. Investigations were conducted in 2001 and an RFI was approved in 2002. In 2003, NMED did not approve the site for No Further Action because potential offsite contaminant migration to the canyon had not been addressed. The Permittees have completed investigation of the canyon reaches upstream and downstream of SWMU 21-029 and the results were documented in the Los Alamos and Pueblo Canyons Investigation Report (2004) which was approved by NMED on May 11, 2005. The Report indicated that the constituents in sediment downstream of SWMU 21-029 did not pose an unacceptable risk to human health and the environment.

NMED has determined that the above mentioned sites qualify for certificates of completion. 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 potentially pose a risk to human health or the environment, NMED may require additional corrective action at these sites.

The Permittees must provide additional information for the following two sites before a corrective action complete determination can be made.

SWMU 21-027(c) is a 4 inch vitrified clay pipe that exited a former machine shop and cafeteria and discharged south on DP Mesa. The building was removed in 1966 and the pipe was left in place. The Request incorrectly states that the Direction to Modify (DTM) letter did not identify any deficiencies at SWMU 21-027(c), please refer to 'Comment 15 Response' on page 3 of the DTM (October 19, 2010). The NOD (i.e., Comment #15) stated that NMED did not consider that the extent of lead contamination was defined at the site. In responding to the NOD comment, the Permittees utilized data from down-canyon reach LA-2W of the Los Alamos Canyon to define the lateral extent of lead. NMED stated in the DTM that "[R]each LA-2W does not provide data acceptable for use in determining the extent of lead contamination specifically related to SWMU 21-027(c)." The Request does not provide any information on whether the Permittees were subsequently able to demonstrate that the extent of lead contamination is defined at this site. NMED cannot evaluate the site for corrective action complete until the nature and extent of contamination is defined for the site and it is demonstrated that the site does not pose an unacceptable risk to human health and the environment.

**SWMU 21-027(d)** is an outfall from the storage tank secondary containment system located on the slope below material disposal area B. A voluntary corrective measure (VCM) was conducted at consolidated unit (CU) 21-027(d)-99 (consisting of SWMU 21-027(d) and AOC C-21-028) in 1999 to remediate petroleum contamination at the location of former storage tank, AOC C-21-

028. The VCM report was approved by NMED (September 10, 2002) and the approval stated that the nature and extent was not adequately defined for this site. Because the areas of investigations for SWMU 21-027(d) and MDA V overlap, the Permittees were directed to combine further characterization of this site with future investigations at MDA V. The Permittees did not address SWMU 21-027 in the MDA V investigation report; however, the data relevant to 21-027(d) from MDA V investigations is provided in Attachment A of the Request. Review of the information provided in Attachment A (Figure B-1.1-2) indicates that no samples were collected from the upper approximately 60 feet of the drainage. It is not clear if data from this area of the drainage is available from previous investigations. The Permittees must demonstrate that the nature and extent of contamination is defined for all of SWMU 21-027(d) and the site does not pose an unacceptable threat to human health and the environment before the site can be evaluated for a certificate of completion.

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
- J. Buckely, ADESH-ENV-CP, MS K490

File: 2016 LANL, Certificates of Completion for SWMUs in TA-21, DP Canyon

LANL 15-032



SUSANA MARTINEZ Governor JOHN A. SANCHEZ Lieutenant Governor

#### NEW MEXICO ENVIRONMENT DEPARTMENT

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RYAN FLYNN Cabinet Secretary BUTCH TONGATE Deputy Secretary

#### CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 22, 2016

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: CERTIFICATE OF COMPLETION

ONE AREA OF CONCERN C-00-041, IN THE GUAJE/BARRANCAS/RENDLJA

**CANYONS AGGREGATE AREA** 

EPA ID #NM0890010515 HWB-LANL-15-039

Dear Messrs. Hintze and Brandt:

The New Mexico Environment Department (Department) has received the United States Department of Energy's (DOE) and Los Alamos National Security, LLC (collectively the Permittees) Request for Certificate of Completion for One Area of Concern in the Guaje/Barrancas/Rendija Aggregate Area (Request), dated August 13, 2015, and referenced by ADESH-15-107.

This area of concern (AOC) was recommended for corrective action complete in the Response to the Notice of Disapproval for the Investigation Report for Guaje/Barrancas/Rendija Canyons Aggregate Area at Technical Area 00 and Revision 1 (Report), dated November 29, 2007 (EP2007-0719). The Department issued an Approval with Direction in response to the Report on December 20, 2007, requiring the Permittees to collect samples from four separate storm events to evaluate potential contaminant transport by stormwater in the Aggregate Area, and to biennially inspect and remove any asphalt or tar-like substance that may be unearthed by storm or other erosional events.

The Department has completed its review of the Request, and hereby issues this certificate of completion with controls for AOC C-00-041 pursuant to Section XXI.E of the 2016 Consent Order.

AOC C-00-041 is a former asphalt batch plant located in a 600-ft-long portion of a side slope and drainage channel that flows into Rendija Canyon on United States Forest Service (USFS) land. Based on evidence from historic aerial photography, the plant operated from the late 1940's through 1958. The plant was removed, and the land was transferred to the USFS in 1969. The AOC was investigated in 1995, 1999, and 2006-2007. The investigations indicated that the site does not pose unacceptable risk under residential land use scenarios. The results of the ecological risk-screening assessment indicate no potential unacceptable risk to ecological receptors at the site.

However, the Department's Approval with Direction letter (dated December 20, 2007) directed the Permittees to conduct biennial inspections "to remove any additional asphalt and tar that may be unearthed by storm events or other erosion". The Permittees performed biennial inspections and removal of tar and asphalt in 2009, 2013, 2011, 2013, and 2015. The controls for AOC C-00-041 are the continuation of biennial inspections and removal of exposed tar and asphalt and the submittal of reports summarizing the inspection and removal activities to the Department by December 31<sup>st</sup> of each year that inspections are conducted. Next inspection report is due on December 31, 2017.

The Department has determined that AOC C-00-041 qualifies for a certificate of completion with controls. 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 potentially pose a risk to human health or the environment, the Department may require additional corrective action at this site.

Please contact Siona Briley at (505) 476-6049, 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-EM-LA, MS A316 T. Haagenstad, EPC-CP, MS M992

J. Buckely, ADESH-EPC-CP, MS K490

S. Martinez, ADEM, MS-992

File: 2016 LANL, Certificate of Completion for AOC C-00-041, Guaje/Barrancas/Rendija

Aggregate Area LANL 15-039