

N3B-Los Alamos 1200 Trinity Drive, Suite 150 Los Alamos, New Mexico 87544 (505) 257-7690



Environmental Management Los Alamos Field Office 1200 Trinity Drive, Suite 400 Los Alamos, New Mexico 87544 (240) 562-1122

Date: December 16, 2021 Refer To: N3B-2021-0414

Carol Johnson Enforcement and Compliance Assurance Division U.S. Environmental Protection Agency, Region 6 1201 Elm Street, Suite 500 (6 ECD-WR) Dallas, Texas 75270-2102

Subject: NPDES Permit No. NM0030759 – Completion of Corrective Action at Site 05-001(c)

in M-SMA-13 Following Certification of Completion by the New Mexico

Environment Department

Dear Ms. Johnson:

This letter and enclosure are being submitted in accordance with the requirements of the U.S. Environmental Protection Agency's (EPA's) National Pollutant Discharge Elimination System (NPDES) Permit No. NM0030759 for discharges of storm water at Los Alamos National Laboratory. The permit was issued to Los Alamos National Security, LLC (LANS) and the U.S. Department of Energy, effective November 1, 2010. On April 30, 2018, responsibilities, coverage, and liability transferred from LANS to Newport News Nuclear BWXT-Los Alamos, LLC (N3B).

Completion of corrective action is being certified to EPA as specified in Part 1, Section E.2(d) of the Permit:

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.

Enclosure 1 is a documentation package supporting completion of corrective action for Area of Concern 05-001(c). The package includes the document certifying that corrective action is complete and the corresponding certificate of completion issued under the New Mexico Environment Department's (NMED's) 2016 Compliance Order on Consent (Consent Order). This submittal can also be accessed at the following website: https://ext.em-la.doe.gov/ips.

Table 1 includes information about the Site and site monitoring area (SMA) included in this certification package.

Table 1
Certificate of Completion for One Site in One Site Monitoring Area

Site Number	Associated SMA	Permitted	Watarshad	Site Priority
Number	Number	Feature	Watershed	Site Priority
05-001(c)	M-SMA-13	M022	Mortandad	Moderate

If you have any questions, please contact Emily Day at (505) 695-4243 (emily.day@em-la.doe.gov) or M. Lee Bishop at (702) 218-4660 (lee.bishop@em.doe.gov).

Sincerely,

Troy Thomson Program Manager

Environmental Remediation

N3B-Los Alamos

Sincerely,

M Lee Digitally signed by M Lee Bishop Date: 2021.12.13 13:03:14 - 07'00'

M. Lee Bishop, Director

Office of Quality and Regulatory Compliance

U.S. Department of Energy Environmental Management Los Alamos Field Office

Enclosure(s):

Emily Day, N3B

1. Completion of Corrective Action at Site 05-001(c) in M-SMA-13 (EM2021-0760)

cc (letter with hard-copy enclosure[s]): Susan Lucas-Kamat, NMED-SWOB

Thomas

cc (letter and enclosure[s] emailed): Esteban Herrera, EPA Region 6, Dallas, TX Curry Jones, EPA Region 6, Dallas, TX Laurie King, EPA Region 6, Dallas, TX Brent Larsen, EPA Region 6, Dallas, TX Chris Catechis, NMED-DOE-OB/-RPD Steve Yanicak, NMED-DOE-OB Stephen Hoffman, NA-LA Peter Maggiore, NA-LA M. Lee Bishop, EM-LA Arturo Duran, EM-LA John Evans, EM-LA Michael Mikolanis, EM-LA David Nickless, EM-LA Cheryl Rodriguez, EM-LA Jennifer Payne, LANL William Alexander, N3B Don Carlson, N3B



Debby Holgerson, N3B Jeff Holland, N3B Audrey Krehlik, N3B Kim Lebak, N3B Joseph Legare, N3B Pamela Maestas, N3B Joseph Murdock, N3B Karly Rodriguez, N3B Joseph Sena, N3B Troy Thomson, N3B Steve Veenis, N3B Amanda White, N3B emla.docs@em.doe.gov n3brecords@em-la.doe.gov Public Reading Room (EPRR) PRS website

Completion of Corrective Action at Site 05-001(c) in M-SMA-13

December 16 2021

NPDES PERMIT NO. NM0030759 EM2021-0760

Environmental Management Los Alamos Field Office

NEWPORT NEWS NUCLEAR BWXT-LOS ALAMOS, LLC CERTIFICATION OF COMPLETION OF CORRECTIVE ACTION

PF: M022 M-SMA-13 Site: 05-001(c)

The following certification was performed in accordance with National Pollutant Discharge Elimination System (NPDES) Permit No. NM0030759, Part I.E.2, which requires the Permittees (U.S. Department of Energy and Newport News Nuclear BWXT-Los Alamos, LLC) 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."

Steve Veens	12/7/2021
Steve Veenis, Water Program Director	Date
Environmental Remediation	
Newport News Nuclear BWXT-Los Alamos, LLC	
M Lee Bishop Date: 2021.12.13 13:03:31 -07'00'	
M. Lee Bishop, Director	 Date
Office of Quality and Regulatory Compliance	
U.S. Department of Energy	

NEWPORT NEWS NUCLEAR BWXT-LOS ALAMOS, LLC CERTIFICATION OF COMPLETION OF CORRECTIVE ACTION

PF: M022 M-SMA-13 Site: 05-001(c)

This document certifies completion of corrective action for Site 05-001(c) pursuant to Part 1, E.2(d) of the Individual Permit NM0030759. Accompanying this certification is a copy of the New Mexico Environment Department- (NMED-) issued certificate of completion (COC) for Site 05-001(c), which is designated as Area of Concern 05-001(c) for the purposes of the 2016 Compliance Order on Consent (Consent Order). This site, listed in Table 1, has achieved Resource Conservation and Recovery Act "corrective action complete without controls" status under the Consent Order. This certification that corrective action is complete was prepared in accordance with 40 Code of Federal Regulations 122.22(b).

In August 2021, a baseline confirmation monitoring sample collected at Site Monitoring Area (SMA) M-SMA-13 exceeded the target action levels for aluminum, copper, and gross-alpha activity, causing the Permittees to initiate corrective action. The Permittees are certifying completion of corrective action at Site 05-001(c) through a demonstration that the site has achieved a COC, included with this submission, under Section XXI of the Consent Order. A copy of the COC from NMED is included in Attachment 1.

Table 1

Completion of Corrective Action for One Site in M-SMA-13

Site	Associated SMA Number	Watershed	Site Priority
05-001(c)	M-SMA-13	Mortandad	Moderate

Attachment 1

New Mexico Environment Department Certificate of Completion for Site 05-001(c)



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

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.

Ms. Gelles and Mr. Brandt September 16, 2015 Page 2

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,

Ms. Gelles and Mr. Brandt September 16, 2015 Page 3

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. 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-5, MMTS

LANL 11-068