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*Date*: NOV 21 2017
*Refer To*: ADESH-17-090
*LAUR*: 17-30372

Esteban Herrera, Chief
Water Enforcement Branch (6EN-WS)
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 - Analytical Results for Site 00-017 in Site Monitoring Area LA-SMA-1 after Certification of a No Exposure Condition**

Dear Mr. Herrera:

This document is 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. As specified in Part I, Section E.l(b):

> If the Permittees decide to achieve corrective action under this Section through installation of measures to totally eliminate exposure of pollutants to stormwater at a Site, Permittees will be in compliance with this Permit at that Site once they have certified and demonstrated to [the U.S. Environmental Protection Agency], through submission of certified as-built drawings, that such measures have been properly installed to perform their function to totally eliminate exposure of pollutants to stormwater, and no further confirmation sampling is required, unless required by Section E.5(c). Thereafter, Permittees shall collect one sample and make the analytical results available via email notification and on the public website pursuant to Section I.7 of the Permit.

Accordingly, the analytical results from the sample collected following the completion of corrective action by certification of a no exposure condition at Site 00-017 in site monitoring area LA-SMA-1 are enclosed. The attached certified document provides the reference to the certificate of completion of the installation of the control measures. This document can be accessed at the following website: http://www.lanl.gov and searching under the key words "Individual Permit."

**Table 1**
**Results from the First Measurable**
**Storm Event after Certification of a No Exposure Condition**

| Watershed | Site Number | SMA Number | Permitted Feature |
|---|---|---|---|
| Los Alamos/Pueblo | 00-017 | LA-SMA-1 | L003 |

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,

for

John C. Bretzke, Division Leader
Environmental Protection & Compliance
Los Alamos National Laboratory

Sincerely,

for

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

JB/DR/BR/SV:sm

Attachments: One hard copy with electronic files – Analytical Results for Site 00-017 in Site Monitoring Area LA-SMA-1 after Certification of a No Exposure Condition (see individual document for LA-UR number)

Cy: (w/att.)
Sarah Holcomb, NMED-SWQB, P.O. Box 5469, Santa Fe, NM 87502

Cy: (date-stamped letter and attachment emailed)
Robert Houston, EPA Region 6
Brent Larsen, EPA Region 6
Laurie King, EPA Region 6
Steve Yanicak, NMED-DOE-OB, MS M894
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Don Carlson, ADEM ER Program
Public Reading Room (EPRR)
ADESH Records
PRS Database

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William Mairson, PADOPS
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# Analytical Results for Site 00-017 in Site Monitoring Area LA-SMA-1 after Certification of a No Exposure Condition

**November 21, 2017**

**NPDES PERMIT NO. NM0030759**

**LA-UR-17-30372**

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

**PF: L003** **LA-SMA-1** **Site: 00-017**

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.

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## CERTIFICATION STATEMENT OF AUTHORIZATION

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

11/14/2017

Environmental Programs
Environmental Remediation Program
Los Alamos National Laboratory

Date

for DR

11/20/2017

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

Date

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

**PF: L003** **LA-SMA-1** **Site: 00-017**

Tables 1 and 2 present the analytical results received from the confirmation monitoring sample collected following the completion of corrective action by certification of a no exposure condition at Site 00-017 in site monitoring area (SMA) LA-SMA-1. The certification of a no exposure condition with as-built drawings was provided to the U.S. Environmental Protection Agency on September 29, 2015 (ADESH-15-128/LA-UR-15-26013). Table 3 presents each applicable target action level (TAL) for the analytes monitored.

**Table 1**
**Radiochemical Analytical Results Collected on July 26, 2017,**
**Following Completion of Corrective Action at Site 00-017 in SMA LA-SMA-1**

| Sample ID | Analyte | Field Preparation | Detect Status | Result (pCi/L) | TAL Exceedance Ratio | Minimum Detectable Activity (pCi/L) | Uncertainty (pCi/L) | Qualifier[a] | Data Validation Date |
|---|---|---|---|---|---|---|---|---|---|
| WT_IPC-17-135148 | Gross alpha | Unfiltered | Detect | 31.1 | 2.1 | 5.89 | 2.63 | NQ | 09/06/2017 |
| WT_IPC-17-135148 | Radium-226 and Radium-228 | Unfiltered | Detect | 5.26 | 0.18 | 1.4 | n/a[b] | NQ | 09/06/2017 |

Note: TAL exceedance ratio is the analytical result divided by the applicable TAL.
[a] Qualifier: NQ = Result is not qualified.
[b] n/a = Not applicable.

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

**PF: L003** **LA-SMA-1** **Site: 00-017**

## Table 2
## Metals and Organic Analytical Results on July 26, 2017, Following Completion of Corrective Action at Site 00-017 in SMA LA-SMA-1

| Sample ID | Analyte | Field Preparation | Detect Status | Result (µg/L) | TAL Exceedance Ratio | Report Method Detection Limit (µg/L) | Report Detection Limit (µg/L) | Validation Qualifier[a] | Data Validation Date |
|---|---|---|---|---|---|---|---|---|---|
| WT_IPC-17-135141 | Aluminum | Filtered | Detect | 248 | 0.33 | 19.3 | 50 | NQ | 09/06/2017 |
| WT_IPC-17-135141 | Antimony | Filtered | Detect | 1.14 | 0.0018 | 1 | 3 | J | 09/06/2017 |
| WT_IPC-17-135141 | Arsenic | Filtered | Nondetect | 2 | n/a[b] | 2 | 5 | U | 09/06/2017 |
| WT_IPC-17-135141 | Boron | Filtered | Detect | 34.4 | 0.0069 | 15 | 50 | J | 09/06/2017 |
| WT_IPC-17-135141 | Cadmium | Filtered | Nondetect | 0.3 | n/a | 0.3 | 1 | U | 09/06/2017 |
| WT_IPC-17-135141 | Chromium | Filtered | Nondetect | 3 | n/a | 3 | 10 | U | 09/06/2017 |
| WT_IPC-17-135141 | Cobalt | Filtered | Nondetect | 1 | n/a | 1 | 5 | U | 09/06/2017 |
| WT_IPC-17-135141 | Copper | Filtered | Detect | 3.03 | 0.7 | 0.3 | 1 | NQ | 09/06/2017 |
| WT_IPC-17-135141 | Lead | Filtered | Nondetect | 0.5 | n/a | 0.5 | 2 | U | 09/06/2017 |
| WT_IPC-17-135148 | Mercury | Unfiltered | Nondetect | 0.067 | n/a | 0.067 | 0.2 | U | 09/06/2017 |
| WT_IPC-17-135141 | Nickel | Filtered | Detect | 1.49 | 0.0088 | 0.6 | 2 | J | 09/06/2017 |
| WT_IPC-17-135148 | Selenium | Unfiltered | Nondetect | 2 | n/a | 2 | 5 | U | 09/06/2017 |
| WT_IPC-17-135141 | Silver | Filtered | Nondetect | 0.3 | n/a | 0.3 | 1 | U | 09/06/2017 |
| WT_IPC-17-135141 | Thallium | Filtered | Nondetect | 0.6 | n/a | 0.6 | 2 | U | 09/06/2017 |
| WT_IPC-17-135141 | Vanadium | Filtered | Detect | 6.41 | 0.064 | 1 | 5 | NQ | 09/06/2017 |
| WT_IPC-17-135141 | Zinc | Filtered | Nondetect | 3.3 | n/a | 3.3 | 10 | U | 09/06/2017 |
| WT_IPC-17-135148 | Cyanide, weak acid dissociable | Unfiltered | Nondetect | 1.67 | n/a | 1.67 | 5 | R | 09/06/2017 |
| WT_IPC-17-135148 | Total PCB[c] | Unfiltered | Detect | 0.0232 | 36 | n/a | n/a | NQ | 09/27/2017 |

Note: TAL exceedance ratio is the result divided by the smallest applicable TAL. Applicable TALs are the larger of the maximum TAL and minimum quantification level (MQL) or the larger of the average TAL or MQL.

[a] Qualifier: NQ = Result is not qualified; J = Result is estimated; U = Result is not detected; R = Result is rejected.

[b] n/a = Not applicable.

[c] PCB = Polychlorinated biphenyl.

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

**PF: L003** **LA-SMA-1** **Site: 00-017**

## Table 3
## Applicable TALs

| Analyte | Units | CAS No. | MQL | ATAL | MTAL |
|---|---|---|---|---|---|
| Gross alpha | pCi/L | n/a[a] | n/a | 15 | n/a |
| Radium-226 and Radium-228 | pCi/L | n/a | n/a | 30 | n/a |
| Aluminum | µg/L | 7429-90-5 | 2.5 | n/a | 750 |
| Antimony | µg/L | 7440-36-0 | 60 | 640 | n/a |
| Arsenic | µg/L | 7440-38-2 | 0.5 | 9 | 340 |
| Boron | µg/L | 7440-42-8 | 100 | 5000 | n/a |
| Cadmium | µg/L | 7440-43-9 | 1 | n/a | 0.6 |
| Chromium | µg/L | 7440-47-3 | 10 | n/a | 210 |
| Cobalt | µg/L | 7440-48-4 | 50 | 1000 | n/a |
| Copper | µg/L | 7440-50-8 | 0.5 | n/a | 4.3 |
| Lead | µg/L | 7439-92-1 | 0.5 | n/a | 17 |
| Mercury | µg/L | 7439-97-6 | 0.005 | 0.77 | 1.4 |
| Nickel | µg/L | 7440-02-0 | 0.5 | n/a | 170 |
| Selenium | µg/L | 7782-49-2 | 5 | 5 | 20 |
| Silver | µg/L | 7440-22-4 | 0.5 | n/a | 0.4 |
| Thallium | µg/L | 7440-28-0 | 0.5 | 6.3 | n/a |
| Vanadium | µg/L | 7440-62-2 | 50 | 100 | n/a |
| Zinc | µg/L | 7440-66-6 | 20 | n/a | 42 |
| Cyanide, weak acid dissociable | ug/L | 57-12-5 | 10 | 5.2 | 22 |
| Total PCB[b] | µg/L | 1336-36-3 | n/a | 0.00064 | n/a |

Notes: CAS = Chemical Abstracts Service; MQL = minimum quantification level; ATAL = average TAL; MTAL = maximum TAL. As allowed by Part I.D. of the Individual Permit, analytical results are compared with either the corresponding MTAL/ATAL (as applicable) or the MQL, whichever value is greater, for the purpose of determining the effectiveness of storm water control measures.

[a] n/a = Not applicable.

[b] PCB = Polychlorinated biphenyl.

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# CERTIFICATION OF COMPLETION OF CORRECTIVE ACTION

**PF: L003** **LA-SMA-1** **Site: 00-017**