



*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

OCT 25 16 PM 2:15



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

*Date:* OCT 25 2016

*Refer To:* ADESH-16-126

*LAUR:* 16-27800

*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 – Analytical Results Following Completion of Corrective Action by Certification of a No Exposure Condition at Site 48-005 in M-SMA-4**

Dear Ms. Johnsey:

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.1(b):

If the Permittees decide to achieve corrective action under this Section through installation of measures to totally eliminate exposure of pollutants to storm water at a Site, Permittees will be in compliance with this Permit at that Site once they have certified and demonstrated to EPA [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 storm water, 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 from the first measurable storm event following the completion of corrective action by certification of a no exposure condition at Site 48-005 in site monitoring area M-SMA-4 (Table 1) are presented in the attachment. This certified document can be accessed at the following website <http://www.lanl.gov/>, searching under the key words "Individual Permit."

**Table 1**  
**Site/SMA Identification for Results from the First Measurable Storm Event**  
**after Certification of a No Exposure Condition**

<b>Watershed</b>	<b>Priority</b>	<b>Site Number</b>	<b>SMA Number</b>	<b>Permitted Feature</b>
Mortandad	Moderate	48-005	M-SMA-4	M006

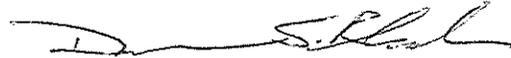
If you have any questions, please contact Terrill Lemke at (505) 665-2397 (tlemke@lanl.gov) or David Rhodes at (505) 665-5325 (david.rhodes@em.doe.gov).

Sincerely,



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

Sincerely,



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 Following Completion of Corrective Action by Certification of a No Exposure Condition at Site 48-005 in M-SMA-4 (see individual document for LA-UR number)

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  
 Terrill Lemke, ADESH-EPC-CP  
 Public Reading Room (EPRR)  
 ADESH Records  
 PRS Database

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

Everett Spencer, EPA Region 6  
 Issac Chen, EPA Region 6  
 Brent Larsen, EPA Region 6  
 lasomailbox@mnsa.doe.gov  
 Kimberly Davis Lebak, DOE-NA-LA  
 Peter Maggiore, DOE-NA-LA  
 Jennifer von Rohr, DOE-EM-LA  
 David Rhodes, DOE-EM-LA  
 Steve Veenis, ADEM ER Program  
 Bruce Robinson, ADEM ER Program  
 Mike Saladen, ADESH-EPC-CP  
 John Bretzke, ADESH-EPC-DO  
 Michael Brandt, ADESH  
 William Mairson, PADOPS  
 Craig Leasure, PADOPS

**Analytical Results Following Completion of  
Corrective Action by Certification  
of a No Exposure Condition  
at Site 48-005 in M-SMA-4**

**October 25, 2016**

**NPDES PERMIT NO. NM0030759**

**LA-UR-16-27800**



**LOS ALAMOS NATIONAL LABORATORY  
CERTIFICATION OF COMPLETION OF CORRECTIVE ACTION****PF: M006****M-SMA-4****Site: 48-005**

The following certification of analytical results received from the confirmation monitoring samples collected following the completion of corrective action by certification of a no exposure condition was performed in accordance with NPDES Permit No. NM0030759, Part III.11, which requires the Permittees (i.e., DOE and LANS) to certify information submitted to EPA.

---

**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

10/13/2016

Date



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

10-25-2016

Date



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

PF: M006

M-SMA-4

Site: 48-005

Tables 1 and 2 present the analytical results received from the confirmation monitoring samples collected following the completion of corrective action by certification of a no exposure condition at Site 48-005 in site monitoring area (SMA) M-SMA-4. 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-15-26014). Table 3 presents each applicable target action level (TAL) for the analytes monitored.

**Table 1  
Radiochemical Analytical Results Collected on August 9, 2016,  
Following Completion of Corrective Action at Site 48-005 in M-SMA-4**

Sample ID	Analyte	Field Preparation	Detect Status	Result (pCi/L)	TAL Exceedance Ratio	Minimum Detectable Activity (pCi/L)	Uncertainty (pCi/L)	Qualifier <sup>a</sup>	Data Validation Date
WT_IPC-16-115845	Radium-226 and Radium-228	Unfiltered	Detect	5.98	0.2	1.333	n/a <sup>b</sup>	NQ	09/12/2016
WT_IPC-16-115845	Gross alpha	Unfiltered	Detect	14.9	0.99	4.87	3.27	NQ	09/12/2016

Note: TAL exceedance ratio is the result divided by the applicable TAL.

<sup>a</sup> Qualifier: NQ = Result is not qualified.

<sup>b</sup> n/a = Not applicable.

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

PF: M006

M-SMA-4

Site: 48-005

**Table 2  
Metals, Inorganic, and Organic Analytical Results Collected on August 9, 2016,  
Following Completion of Corrective Action at Site 48-005 in M-SMA-4**

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 <sup>a</sup>	Data Validation Date
WT_IPC-16-115851	Aluminum	Filtered	Detect	217	0.29	15	50	NQ	09/12/2016
WT_IPC-16-115851	Antimony	Filtered	Nondetect	1	0.0016	1	3	U	09/12/2016
WT_IPC-16-115851	Arsenic	Filtered	Detect	1.74	0.19	1.7	5	J	09/12/2016
WT_IPC-16-115851	Boron	Filtered	Detect	22.3	0.0045	15	50	J	09/12/2016
WT_IPC-16-115851	Cadmium	Filtered	Nondetect	0.11	0.11	0.11	1	U	09/12/2016
WT_IPC-16-115851	Chromium	Filtered	Nondetect	2	0.0095	2	10	U	09/12/2016
WT_IPC-16-115851	Cobalt	Filtered	Nondetect	1	0.001	1	5	U	09/12/2016
WT_IPC-16-115851	Copper	Filtered	Detect	11.5	2.7	0.35	1	NQ	09/12/2016
WT_IPC-16-115851	Lead	Filtered	Nondetect	0.5	0.029	0.5	2	U	09/12/2016
WT_IPC-16-115845	Mercury	Unfiltered	Nondetect	0.067	0.087	0.067	0.2	U	09/12/2016
WT_IPC-16-115851	Nickel	Filtered	Detect	1.58	0.0093	0.5	2	J	09/12/2016
WT_IPC-16-115845	Selenium	Unfiltered	Nondetect	1.5	0.3	1.5	5	U	09/12/2016
WT_IPC-16-115851	Silver	Filtered	Nondetect	0.2	0.4	0.2	1	U	09/12/2016
WT_IPC-16-115851	Thallium	Filtered	Nondetect	0.45	0.071	0.45	2	U	09/12/2016
WT_IPC-16-115851	Vanadium	Filtered	Detect	2.61	0.026	1	5	J	09/12/2016
WT_IPC-16-115851	Zinc	Filtered	Detect	12.9	0.31	3.3	10	NQ	09/12/2016
WT_IPC-16-115845	Cyanide, weak acid dissociable	Unfiltered	Nondetect	1.67	0.32	1.67	5	U	09/12/2016
WT_IPC-16-115845	Total PCB <sup>b</sup>	Unfiltered	Detect	0.00897	14	n/a <sup>c</sup>	n/a	NQ	09/09/2016

Note: TAL exceedance ratio is the result divided by the applicable TAL.

<sup>a</sup> Qualifier: NQ = Result is not qualified; U = result is not detected; J = result is estimated.

<sup>b</sup> PCB = Polychlorinated biphenyl.

<sup>c</sup> n/a = Not applicable.

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

PF: M006

M-SMA-4

Site: 48-005

**Table 3  
Applicable TALs**

Analyte	Unit	CAS No.	MQL	ATAL	MTAL
Radium-226 and Radium-228	pCi/L	n/a <sup>a</sup>	n/a	30	n/a
Gross alpha	pCi/L	n/a	n/a	15	n/a
Aluminum	µg/L	7429-90-5	2.5		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	4.2
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	µg/L	57-12-5	10	5.2	22
Total PCB <sup>b</sup>	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.

<sup>a</sup> n/a – Value is not applicable.

<sup>b</sup> PCB = polychlorinated biphenyl.