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DEC 15 2015



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Date: DEC 17 2015

Refer To: ADESH-15-183

LAUR: 15-29400

Locates Action No.: n/a

Paulette Johnsey, Chief  
Water Enforcement Branch (6EN-W)  
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 Analytical Results for Site Monitoring Area S-SMA-6 Following Analytical Results from the First Measurable Storm Event after Certification of Installation of Enhanced Controls**

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(c):

Permittees shall certify completion of installation of control measures under this subsection to EPA within 30 days of completion of all such measures at the Site and, where applicable shall provide sampling results within 30 days of receipt of analytical results from the first measurable storm event after completion of such measures.


Accordingly, the analytical results from a sample collected during the first measurable storm event received at one site monitoring area (S-SMA-6) in the last 30 days are enclosed (Attachment 1). The analytical results can be accessed at the following website: <http://www.lanl.gov/community-environment/environmental-stewardship/protection/compliance/individual-permit-stormwater/index.php>.

**Table 1**  
**Confirmation Sample Collected at One Site from the First Measurable Storm Event**  
**after Certification of Installation of Enhanced Controls**

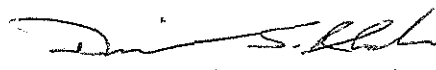
Site Number	SMA Number	Permitted Feature	Sample Collection Date	Data Receipt and Validation Date
72-001	S-SMA-6	S016	October 21, 2015	November 30, 2015

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,

  
 David S. Rhodes, Supervisor  
 Environmental Management  
 Los Alamos Field Office

AD/DH/BR/SV:sm

Attachment: Analytical Results from the First Measurable Storm Event Following Certification of Enhanced Control Measures at S-SMA-6

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  
 PRS Database

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

Everett Spencer, EPA Region 6  
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 Kimberly Davis Lebak, DOE-NA-LA  
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 Steve Veenis, ADEP ER Program  
 Bruce Robinson, ADEP ER Program  
 Terrill Lemke, ADESH-ENV-CP  
 Alison Dorries, ADESH-ENV-DO  
 Michael Brandt, ADESH  
 Amy De Palma, PADOPS  
 Craig Leasure, PADOPS

# **Attachment 1**

## **Analytical Results from the First Measurable Storm Event Following Certification of Enhanced Control Measures at S-SMA-6**

**December 15, 2015**

**Fulfills Part I, Section E.1(c) of  
NPDES Permit No. NM0030759**

**LA-UR-15-29400**



**LOS ALAMOS NATIONAL LABORATORY  
ANALYTICAL RESULTS FROM THE FIRST MEASURABLE STORM EVENT**

PF: S016

S-SMA-6

Site: 72-001

Tables 1, 2 and 3 present the analytical results received from the confirmation monitoring samples collected from the first measurable storm event following the installation and subsequent certification of enhanced controls at site monitoring area (SMA) S-SMA-6. The analytical results were received and validated on November 30, 2015. The descriptions and photographs of each enhanced control installed at S-SMA-6 were provided to the U.S. Environmental Protection Agency on October 16, 2015 (ADESH-15-147/LA-UR-15-27151). Table 4 presents each applicable target action levels (TALs) for the analytes monitored.

**Table 1  
Radiochemical Analytical Results from the First Measurable Storm Event  
Collected on October 21, 2015, Following Installation of Enhanced Controls at S-SMA-6**

Sample ID	Analyte	Field Prep	Detect Status	Result (pCi/L)	TAL Exceedance Ratio	Minimum Detectable Activity (pCi/L)	Uncertainty (pCi/L)	Qualifier*	Data Receipt and Validation Date
WT_IPC-15-106555	Gross alpha	Unfiltered	Detect	61.7	4.11	4.23	3.02	NQ	11/30/15
WT_IPC-15-106555	Radium-226 and Radium-228	Unfiltered	Detect	8.29	0.276	1.037	0.67	NQ	11/30/15

Note: TAL Exceedance Ratio is a preliminary average from the first of at least two confirmation samples.

\* Qualifier: NQ = Result is not qualified.

**LOS ALAMOS NATIONAL LABORATORY  
ANALYTICAL RESULTS FROM THE FIRST MEASURABLE STORM EVENT**

PF: S016

S-SMA-6

Site: 72-001

Table 2

**Metals and Inorganic Analytical Results from the First Measurable Storm Event  
Collected on October 21, 2015, Following Installation of Enhanced Controls at S-SMA-6**

Sample ID	Analyte	Field Prep	Detect Status	Result (µg/L)	TAL Exceedance Ratio	Method Detection Limit	Quantitation Limit	Qualifier*	Data Receipt and Validation Date
WT_IPC-15-106555	Aluminum	Filtered	Detect	1540	2.053	15	50	NQ	11/30/15
WT_IPC-15-106555	Antimony	Filtered	Nondetect	1	<1	1	3	U	11/30/15
WT_IPC-15-106555	Arsenic	Filtered	Nondetect	1.7	<1	1.7	5	U	11/30/15
WT_IPC-15-106555	Boron	Filtered	Nondetect	15	<1	15	50	U	11/30/15
WT_IPC-15-106555	Cadmium	Filtered	Nondetect	0.11	0.110	0.11	1	U	11/30/15
WT_IPC-15-106555	Chromium	Filtered	Detect	2.79	0.013	2	10	J	11/30/15
WT_IPC-15-106555	Cobalt	Filtered	Nondetect	1	<1	1	5	U	11/30/15
WT_IPC-15-106555	Copper	Filtered	Detect	5.87	1.365	0.35	1	NQ	11/30/15
WT_IPC-15-106553	Cyanide, weak acid dissociable	Unfiltered	Nondetect	2.14	0.097	2.14	5	U	11/30/15
WT_IPC-15-106555	Lead	Filtered	Detect	1.73	0.102	0.5	2	J	11/30/15
WT_IPC-15-106555	Nickel	Filtered	Detect	1.88	0.011	0.5	2	J	11/30/15
WT_IPC-15-106555	Silver	Filtered	Nondetect	0.1	0.200	0.1	1	U	11/30/15
WT_IPC-15-106555	Thallium	Filtered	Nondetect	0.45	<1	0.45	2	U	11/30/15
WT_IPC-15-106555	Vanadium	Filtered	Detect	4.13	0.041	1	5	J	11/30/15
WT_IPC-15-106555	Zinc	Filtered	Detect	11.9	0.283	3.3	10	NQ	11/30/15

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

\*Qualifier: U = Result is not detected; NQ = result is not qualified; J = result is estimated.

**LOS ALAMOS NATIONAL LABORATORY  
ANALYTICAL RESULTS FROM THE FIRST MEASURABLE STORM EVENT**

PF: S016

S-SMA-6

Site: 72-001

**Table 3  
Organic Analytical Results from the First Measurable Storm Event  
Collected on October 21, 2015, Following Installation of Enhanced Controls at S-SMA-6**

Sample ID	Analyte	Field Prep	Detect Status	Result (µg/L)	TAL Exceedance Ratio	Method Detection Limit	Quantitation Limit	Qualifier <sup>a</sup>	Data Receipt and Validation Date
WT_IPC-15-106553	RDX	Unfiltered	Nondetect	0.273	<1	0.0874	0.273	UJ	11/30/15
WT_IPC-15-106553	Total PCB	Unfiltered	Detect	0.0195	30.50	NA	NA	NQ	11/30/15
WT_IPC-15-106553	Trinitrotoluene[2,4,6-]	Unfiltered	Nondetect	0.273	<1	0.0874	0.273	UJ	11/30/15

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

<sup>a</sup> Qualifier: NQ = result is not qualified; UJ = result is estimated.<sup>b</sup> n/a = Value is not applicable.

**Table 4  
Applicable TALs**

Analyte	Units	CAS No.	MQL	ATAL	MTAL
Aluminum, Dissolved	µg/L	7429-90-5	2.5	n/a*	750
Antimony, Dissolved	µg/L	7440-36-0	60	640	n/a
Arsenic, Dissolved	µg/L	7440-38-2	0.5	9	340
Boron, Dissolved	µg/L	7440-72-8	100	5000	n/a
Cadmium, Dissolved	µg/L	7440-43-9	1	n/a	1
Chromium, Dissolved	µg/L	7440-47-3	10	n/a	210
Cobalt, Dissolved	µg/L	7440-48-4	50	1000	n/a
Copper, Dissolved	µg/L	7440-40-8	0.5	n/a	4.3
Cyanide, weak acid dissociable	mg/L	57-12-5	10	10	22
Lead, Dissolved	µg/L	7439-92-1	0.5	n/a	17
Nickel, Dissolved	µg/L	7440-02-0	0.5	n/a	170
Silver, Dissolved	µg/L	7440-22-4	0.5	n/a	0.5
Thallium, Dissolved	µg/L	7440-28-0	0.5	6.3	n/a
Vanadium, Dissolved	µg/L	7440-62-2	50	100	n/a
Zinc, Dissolved	µg/L	7440-66-6	20	n/a	42
RDX	µg/L	121-32-4	n/a	200	n/a
Total PCB	µg/L	1336-36-3	n/a	0.00064	n/a
TNT	µg/L	118-96-7	n/a	20	n/a
Gross alpha	pCi/L	n/a	n/a	15	n/a
Radium-226 and Radium-228	pCi/L	n/a	n/a	30	n/a

Notes: CAS = Chemical Abstracts Service; MQL = minimum quantification level; ATAL = average TAL; MTAL = maximum TAL.

\*n/a = Value is not applicable.