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Environmental Management Los Alamos Field Office P.O. Box 1663, MS M984 Los Alamos, New Mexico 87545 (505) 257-7950/FAX (505) 606-2132

Date:

NOV 2 7 2019

Refer To: N3B-19-0362

Esteban Herrera, Chief Water Enforcement Branch (6EN-WS) Compliance Assurance and Enforcement Division U.S. Environmental Protection Agency, Region 6 1201 Elm Street, Suite 500 Dallas, Texas 75270-2102

Subject: NPDES Permit No. NM0030759 – Completion of Corrective Action for Three Sites

in 2M-SMA-3 Following Analytical Results Below Target Action Levels

Dear Mr. Herrera:

This letter and the enclosure are 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 (Permit) 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).

As specified in Part I, Section E.2(a), Completion of Corrective Action under the Permit includes the following:

Analytical results from confirmation sampling show pollutant concentrations for all pollutants of concern at the Site to be at or below applicable target action levels.

Enclosure 1 is the certification that corrective action is complete following analytical results below target action levels (TALs) from two confirmation samples collected from two measurable storm events occurring at least 15 days apart for Sites 07-001(a), 07-001(b), and 07-001(d) within 2M-SMA-3. Table 1 identifies the sites, site monitoring area (SMA), and corrective action sample collection dates applicable to the certification. The certification that corrective action is complete was prepared in accordance with 40 Code of Federal Regulations 122.22(b).

The enclosed certified document will also be posted to the Individual Permit public website (https://ext.em-la.doe.gov/IPS/Home).

Table 1
Confirmation Samples Collected with Results below TALs

		SMA		•
	Site Numbers	Number	Permitted Feature	Sample Collection Dates
	07-001(a)	2M-SMA-3	E014	July 26, 2017 (Corrective Action)
7	07-001(b)			October 4, 2017 (Corrective Action)
	07-001(d)			

If you have any questions, please contact Steve Veenis at (505) 309-1362 (steve.veenis@em-la.doe.gov) or David Nickless at (505) 257-7933 (david.nickless@em.doe.gov).

Sincerely,

Élizabeth Lowes

Program Manager

Environment, Safety and Health

N3B-Los Alamos

Sincerely,

David Nickless, Acting Director

Office of Quality and Regulatory Compliance

Environmental Management

Los Alamos Field Office

Enclosure(s): One hard copy with electronic files:

1. Completion of Corrective Action at Sites 07-001(a), 07-001(b), and 07-001(d) Following Analytical Results Below Target Action Levels at 2M-SMA-3 (EM2019-0395)

cc (letter with enclosure[s]):
Sarah Holcomb, NMED-SWQB

cc (letter and enclosure[s] emailed):

Carol Johnson, EPA Region 6

Curry Jones, EPA Region 6

Laurie King, EPA Region 6

Brent Larsen, EPA Region 6

Steve Yanicak, NMED-DOE-OB

Arturo Duran, EM-LA

David Nickless, EM-LA

Cheryl Rodriguez, EM-LA

William Alexander, N3B

Don Carlson, N3B

Emily Day, N3B

Mary Erwin, N3B

Erich Evered, N3B

Debby Holgerson, N3B

Kim Lebak, N3B

Joseph Legare, N3B

Dana Lindsay, N3B



Frazer Lockhart, N3B Elizabeth Lowes, N3B Pamela Maestas, N3B Jason Moore, N3B Glenn Morgan, N3B Lester Patten, N3B Gary Pool, N3B Bruce Robinson, N3B Karly Rodriguez, N3B Steve Veenis, N3B Tashia Vigil, N3B Amanda White, N3B Jeff Yarbrough, N3B emla.docs@em.doe.gov N3Brecords@em-la.doe.gov Public Reading Room (EPRR) PRS Website

# Completion of Corrective Action at Sites 07-001(a), 07-001(b), and 07-001(d) in 2M-SMA-3 Following Analytical Results Below Target Action Levels at 2M-SMA-3

November 26, 2019

NPDES PERMIT NO. NM0030759 EM2019-0395

PF: E014

2M-SMA-3

Sites: 07-001(a)

07-001(b) 07-001(d)

The following certification was performed in accordance with 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."

Elizabeth Lowes, Program Manager

Environment, Safety and Health

Newport News Nuclear BWXT-Los Alamos, LLC

David Nickless, Acting Director

Office of Quality and Regulatory Compliance

**Environmental Management** 

Los Alamos Field Office

PF: E014 2M-SMA-3 Sites: 07-001(a)

07-001(b) 07-001(d)

Tables 1 and 2 present the analytical results received from the confirmation samples collected from two measurable storm events occuring at least 15 days apart following the installation of enhanced controls at site monitoring area (SMA) 2M-SMA-3. Table 3 presents each applicable target action level (TAL) for the analytes monitored.

Table 1

Radiochemical Analytical Results from

Two Measurable Storm Events Following Installation of Enhanced Controls, 2M-SMA-3

Sample ID	Analyte	Field Preparation	Detect Status	Result (pCi/L)	Minimum Detectable Activity (pCi/L)	Lab Uncertainty	Oualifier <sup>a</sup>	Data Receipt Date
WT_IPC-17-135506	Radium-226 and radium-228	Unfiltered	Detect	1.11	0.672	n/a <sup>b</sup>	NQ	8/25/2017
WT_IPC-17-135506	Gross alpha	Unfiltered	Detect	1.83	1.38	0.641	NQ	8/25/2017
WT_IPC-17-135513	Radium-226 and radium-228	Unfiltered	Nondetect	1.26	1.402	n/a	U	11/7/2017
WT_IPC-17-135513	Gross alpha	Unfiltered	Detect	16.2	2.89	1.48	NQ	11/7/2017

<sup>&</sup>lt;sup>a</sup> Qualifier: NQ = result is not qualified, U = result is not detected.

<sup>&</sup>lt;sup>b</sup> n/a = Not applicable.

PF: E014 2M-SMA-3 Sites: 07-001(a)

07-001(b) 07-001(d)

Table 2

Metals and Organic Analytical Results from

Two Measurable Storm Events Following Installation of Enhanced Controls, 2M-SMA-3

Sample ID	Analyte	Field Preparation	Detect Status	Result (µg/L)	Method Detection Limit (µg/L)	Report Detection Limit (µg/L)	Qualifier <sup>a</sup>	Data Receipt Date
WT_IPC-17-135394	Aluminum	Filtered	Detect	105	19.3	50.0	NQ	8/25/2017
WT_IPC-17-135394	Antimony	Filtered	Nondetect	1.00	1.00	3.00	U	8/25/2017
WT_IPC-17-135394	Arsenic	Filtered	Nondetect	2.00	2.00	5.00	U	8/25/2017
WT_IPC-17-135394	Boron	Filtered	Nondetect	15.0	15.0	50.0	U	8/25/2017
WT_IPC-17-135394	Cadmium	Filtered	Nondetect	0.300	0.300	1.00	U	8/25/2017
WT_IPC-17-135394	Chromium	Filtered	Nondetect	3.00	3.00	10.0	U	8/25/2017
WT_IPC-17-135394	Cobalt	Filtered	Nondetect	1.00	1.00	5.00	U	8/25/2017
WT_IPC-17-135394	Copper	Filtered	Detect	1.56	0.300	1.00	NQ	8/25/2017
WT_IPC-17-135506	Cyanide, weak acid dissociable	Unfiltered	Nondetect	0.00167	1.67	0.005	U	8/25/2017
WT_IPC-17-135394	Lead	Filtered	Nondetect	0.500	0.500	2.00	U	8/25/2017
WT_IPC-17-135506	Mercury	Unfiltered	Nondetect	0.067	0.067	0.200	U	8/25/2017
WT_IPC-17-135394	Nickel	Filtered	Detect	0.673	0.600	2.00	J	8/25/2017
WT_IPC-17-135506	RDX <sup>b</sup>	Unfiltered	Nondetect	0.0952	0.0952	0.298	U	8/25/2017
WT_IPC-17-135506	Selenium	Unfiltered	Nondetect	2.00	2.00	5.00	U	8/25/2017
WT_IPC-17-135394	Silver	Filtered	Nondetect	0.300	0.300	1.00	U	8/25/2017
WT_IPC-17-135394	Thallium	Filtered	Nondetect	0.600	0.600	2.00	U	8/25/2017
WT_IPC-17-135506	Trinitrotoluene[2,4,6-]	Unfiltered	Nondetect	0.0952	0.0952	0.298	U	8/25/2017
WT_IPC-17-135394	Vanadium	Filtered	Nondetect	1.00	1.00	5.00	U	8/25/2017
WT_IPC-17-135394	Zinc	Filtered	Nondetect	3.30	3.30	10.0	U	8/25/2017
WT_IPC-17-135424	Aluminum	Filtered	Detect	539	19.3	50.0	NQ	11/7/2017
WT_IPC-17-135424	Antimony	Filtered	Nondetect	1.00	1.00	3.00	U	11/7/2017
WT_IPC-17-135424	Arsenic	Filtered	Nondetect	2.00	2.00	5.00	U	11/7/2017

PF: E014 2M-SMA-3 Sites: 07-001(a)

07-001(b) 07-001(d)

#### Table 2 (continued)

Sample ID	Analyte	Field Preparation	Detect Status	Result (µg/L)	Method Detection Limit (µg/L)	Report Detection Limit (µg/L)	Qualifier <sup>a</sup>	Data Receipt Date
WT_IPC-17-135424	Boron	Filtered	Nondetect	15.0	15.0	50.0	U	11/7/2017
WT_IPC-17-135424	Cadmium	Filtered	Nondetect	0.300	0.300	1.00	U	11/7/2017
WT_IPC-17-135424	Chromium	Filtered	Nondetect	3.00	3.00	10.0	U	11/7/2017
WT_IPC-17-135424	Cobalt	Filtered	Nondetect	1.00	1.00	5.00	U	11/7/2017
WT_IPC-17-135424	Copper	Filtered	Detect	1.36	0.300	1.00	NQ	11/7/2017
WT_IPC-17-135513	Cyanide, weak acid dissociable	Unfiltered	Detect	0.00424	1.67	0.005	J	11/7/2017
WT_IPC-17-135424	Lead	Filtered	Nondetect	0.500	0.500	2.00	U	11/7/2017
WT_IPC-17-135513	Mercury	Unfiltered	Nondetect	0.067	0.067	0.200	U	11/7/2017
WT_IPC-17-135424	Nickel	Filtered	Detect	0.623	0.600	2.00	J	11/7/2017
WT_IPC-17-135513	RDX	Unfiltered	Detect	0.11	0.0964	0.301	J	11/7/2017
WT_IPC-17-135513	Selenium	Unfiltered	Nondetect	2.00	2.00	5.00	U	11/7/2017
WT_IPC-17-135424	Silver	Filtered	Nondetect	0.300	0.300	1.00	U	11/7/2017
WT_IPC-17-135424	Thallium	Filtered	Nondetect	0.600	0.600	2.00	U	11/7/2017
WT_IPC-17-135513	Trinitrotoluene[2,4,6-]	Unfiltered	Nondetect	0.0964	0.0964	0.301	U	11/7/2017
WT_IPC-17-135424	Vanadium	Filtered	Nondetect	1.00	1.00	5.00	U	11/7/2017
WT_IPC-17-135424	Zinc	Filtered	Nondetect	3.30	3.30	10.0	U	11/7/2017

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

<sup>&</sup>lt;sup>b</sup> RDX = Royal Demolition Explosive.

PF: E014 2M-SMA-3 Sites: 07-001(a)

07-001(b) 07-001(d)

Table 3
Results Compared with Applicable TALs

Analyte	Unit	CAS No.	Resulta	MOL	ATAL	MTAL
Aluminum	μg/L	7429-90-5	539	2.5	n/a <sup>b</sup>	750
Antimony	μg/L	7440-36-0	1	60	640	n/a
Arsenic	μg/L	7440-38-2	2	0.5	9	340
Boron	μg/L	7440-42-8	15	100	5000	n/a
Cadmium	μg/L	7440-43-9	0.3	1	n/a	0.6
Chromium	μg/L	7440-47-3	3	10	n/a	210
Cobalt	μg/L	7440-48-4	1	50	1000	n/a
Copper	μg/L	7440-50-8	1.56	0.5	n/a	4.3
Cyanide, weak acid dissociable	μg/L	57-12-5	0.0027	10	5.2	22
Gross alpha	pCi/L	n/a	5.4	n/a	15	n/a
Lead	μg/L	7439-92-1	0.5	0.5	n/a	17
Mercury	μg/L	7439-97-6	0.067	0.005	0.77	1.4
Nickel	μg/L	7440-02-0	0.673	0.5	n/a	170
Radium-226 and radium-228	pCi/L	n/a	1.2	n/a	30	n/a
RDX <sup>c</sup>	μg/L	121-82-4	0.10	n/a	200	n/a
Selenium	μg/L	7782-49-2	0.1	5	5	20
Silver	μg/L	7440-22-4	0.3	0.5	n/a	0.4
Thallium	μg/L	7440-28-0	0.6	0.5	6.3	n/a
Trinitrotoluene[2,4,6-]	μg/L	118-96-7	0.096	n/a	20	n/a
Vanadium	μg/L	7440-62-2	1	50	100	n/a
Zinc	μg/L	7440-66-6	3.3	20	n/a	42

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

<sup>&</sup>lt;sup>a</sup> Result = Reported ATAL result is the geomean of the two collected corrective action samples. Reported MTAL is the greater result of the two collected corrective action samples.

b n/a = Not applicable.

<sup>&</sup>lt;sup>c</sup> RDX = Royal Demolition Explosive.