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: November 30, 2021
Refer To: N3B-2021-0385

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 – Analytical Results for Sites 54-013(b), 54-017, and 54-020 in Site Monitoring Area PJ-SMA-19 and Site 50-009 in Site Monitoring Area T-SMA-1 after Certification of a No Exposure Condition

Dear Ms. Johnson:

This letter and enclosures are being submitted in accordance with the requirements of the U.S. Environmental Protection Agency (EPA) 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 (DOE), effective November 1, 2010, and 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.l(c):

> 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 samples collected following the completion of corrective action by certification of a no exposure condition at Sites 54-013(b), 54-017, and 54-020 in Site Monitoring Area (SMA) PJ-SMA-19 and Site 50-009 in SMA T-SMA-1 are enclosed. The reports provide references to the certificates of completion of corrective action. Table 1 includes information about the confirmation samples collected at the SMAs. The enclosed certified documents can be accessed at the following website: https://ext.em-la.doe.gov/ips.

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

Watershed	Priority	Site Number	SMA Number	Permitted Feature
Pajarito	Moderate	54-013(b) 54-017 54-020	PJ-SMA-19	J025
Mortandad	High	50-009	T-SMA-1	T002

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) 218-4460 (lee.bishop@em.doe.gov).

Sincerely,

Troy Thomson
Program Manager
Environmental Remediation
N3B-Los Alamos

Sincerely,

M Lee Bishop Digitally signed by M Lee Bishop Date: 2021.11.30 12:29:47 -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): One hard copy with electronic files:
1. Analytical Results for Sites 54-013(b), 54-017, and 54-020 in Site Monitoring Area PJ-SMA-19 after Certification of a No Exposure Condition (EM2021-0734)
2. Analytical Results for Site 50-009 in Site Monitoring Area T-SMA-1 after Certification of a No Exposure Condition (EM2021-0735)

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

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
Sharon Brady, N3B
Don Carlson, N3B
Emily Day, N3B
Thomas Harrison, N3B
Debby Holgerson, N3B
Jeff Holland, N3B
Audrey Krehlik, N3B
Kim Lebak, N3B
Joseph Legare, N3B
Dana Lindsay, N3B
Pamela Maestas, N3B
Jason Moore, N3B
Joseph Murdock, N3B
Joseph Noll, N3B
Gerald O'Leary III, N3B
Tashia Owen, N3B
Karly Rodriguez, N3B
Joseph Sena, N3B
Troy Thomson, N3B
Steve Veenis, N3B
Amanda White, N3B
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n3brecords@em-la.doe.gov
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Carol Johnson Enforcement and Compliance Assurance Division U.S. EPA Region 6
Street and Apt. No., or PO Box No.
1201 Elm street, Suite 500 (6ECD-WR)
City, State, ZIP+4®
Dallas, TX 75270-2102
PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions
7021 0950 0000 4460 6402

Analytical Results for Sites 54-013(b), 54-017, and 54-020 in Site Monitoring Area PJ-SMA-19 after Certification of a No Exposure Condition

November 30, 2021

NPDES PERMIT NO. NM0030759

EM2021-0734

NPDES PERMIT NO. NM0030759 **EM2021-0734**

NEWPORT NEWS NUCLEAR BWXT-LOS ALAMOS, LLC
CERTIFICATION OF ANALYTICAL RESULTS

PF: J025 **PJ-SMA-19** **Sites: 54-013(b)**
54-017
54-020

The following certification was performed in accordance with the 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 Veenis 11/17/21

Steve Veenis, Water Program Director — Date
Environmental Remediation
Newport News Nuclear BWXT-Los Alamos, LLC

M Lee Bishop Digitally signed by M Lee Bishop Date: 2021.11.30 12:31:42 -07'00'

M. Lee Bishop, Director — Date
Office of Quality and Regulatory Compliance
U.S. Department of Energy
Environmental Management
Los Alamos Field Office

NPDES PERMIT NO. NM0030759 **EM2021-0734**

NEWPORT NEWS NUCLEAR BWXT-LOS ALAMOS, LLC
CERTIFICATION OF ANALYTICAL RESULTS

PF: J025 **PJ-SMA-19** **Sites: 54-013(b)**
54-017
54-020

Tables 1 and 2 present the analytical results received from the confirmation monitoring sample collected from the first measurable storm event following the completion of corrective action by certification of a no exposure condition at Sites 54-013(b), 54-017, and 54-020 in site monitoring area (SMA) PJ-SMA-19. The certification of a no exposure condition with as-built drawings was provided to the U.S. Environmental Protection Agency on August 28, 2014 (EP2014-0421, LA-UR-14-26475). Table 3 presents each applicable target action level (TAL) for the analytes monitored.

Table 1
Radiochemical Analytical Results from the First Measurable Storm Event
Collected on August 22, 2021, Following Completion of Corrective Action at PJ-SMA-19

Sample ID	Analyte	Field Preparation	Detection Status	Result (pCi/L)	TAL Exceedance Ratio	Minimum Detectable Activity (pCi/L)	Uncertainty (pCi/L)	Qualifier[a]	Data Receipt Date
WT_IPC-21-221539	Radium-226 and radium-228	Unfiltered	Detect	3.59	0.12	n/a[b]	0.541	J	9/28/2021
WT_IPC-21-221539	Gross alpha	Unfiltered	Detect	44.7	2.98	2.52	1.98	J	9/28/2021

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

[a] Qualifier: J = Result is estimated.

[b] n/a = Value is not applicable.

Table 2
Metals and Organic Analytical Results from the First Measurable Storm Event
Collected on August 22, 2021, Following Completion of Corrective Action at PJ-SMA-19

Sample ID	Analyte	Field Preparation	Detection Status	Result (µg/L)	TAL Exceedance Ratio	Method Detection Limit	Quantitation Limit	Qualifier[a]	Data Receipt Date
WT_IPC-21-221540	Aluminum	Filtered	Detect	593	0.791	19.3	50	NQ	9/28/2021
WT_IPC-21-221540	Antimony	Filtered	Nondetect	1	0.00156	1	3	U	9/28/2021
WT_IPC-21-221540	Arsenic	Filtered	Nondetect	2	0.222	2	5	U	9/28/2021
WT_IPC-21-221540	Boron	Filtered	Detect	22.2	0.00444	15	50	J	9/28/2021
WT_IPC-21-221540	Cadmium	Filtered	Nondetect	0.3	0.3	0.3	1	U	9/28/2021

NEWPORT NEWS NUCLEAR BWXT-LOS ALAMOS, LLC
CERTIFICATION OF ANALYTICAL RESULTS

PF: J025 **PJ-SMA-19** **Sites: 54-013(b)**
54-017
54-020

Table 2 (continued)

Sample ID	Analyte	Field Preparation	Detection Status	Result (µg/L)	TAL Exceedance Ratio	Method Detection Limit	Quantitation Limit	Qualifier[a]	Data Receipt Date
WT_IPC-21-221540	Chromium	Filtered	Nondetect	3	0.0143	3	10	U	9/28/2021
WT_IPC-21-221540	Cobalt	Filtered	Nondetect	1	0.001	1	5	U	9/28/2021
WT_IPC-21-221540	Copper	Filtered	Detect	2.42	0.563	0.3	2	NQ	9/28/2021
WT_IPC-21-221540	Lead	Filtered	Nondetect	0.5	0.0294	0.5	2	U	9/28/2021
WT_IPC-21-221539	Mercury	Unfiltered	Detect	0.107	0.139	0.067	0.2	J	9/28/2021
WT_IPC-21-221540	Nickel	Filtered	Detect	1.62	0.00953	0.6	2	J	9/28/2021
WT_IPC-21-221539	Selenium	Unfiltered	Detect	3.9	0.78	2	5	J	9/28/2021
WT_IPC-21-221540	Silver	Filtered	Nondetect	0.3	0.6	0.3	1	U	9/28/2021
WT_IPC-21-221540	Thallium	Filtered	Nondetect	0.6	0.0952	0.6	2	U	9/28/2021
WT_IPC-21-221540	Vanadium	Filtered	Detect	2.67	0.0267	1	5	J	9/28/2021
WT_IPC-21-221540	Zinc	Filtered	Detect	6.19	0.147	3.3	20	J	9/28/2021
WT_IPC-21-221539	Cyanide, weak acid dissociable	Unfiltered	Nondetect	1.67	0.167	1.67	5	U	9/28/2021
WT_IPC-21-221539	Total PCB[b]	Unfiltered	Detect	0.00325	5.08	n/a[c]	0.000121	J	10/5/2021

Notes: 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; U = result is not detected; J = result is estimated.

[b] PCB = Polychlorinated biphenyl.

[c] n/a = Value is not applicable.

NEWPORT NEWS NUCLEAR BWXT-LOS ALAMOS, LLC
CERTIFICATION OF ANALYTICAL RESULTS

PF: J025 **PJ-SMA-19** **Sites: 54-013(b)**
54-017
54-020

Table 3
Applicable TALs

Analyte	Unit	CAS No.	MQL	ATAL	MTAL
Radium-226 and radium-228	pCi/L	n/a[a]	n/a	30	n/a
Gross alpha	pCi/L	n/a	n/a	15	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	µg/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.

Analytical Results for Site 50-009 in Site Monitoring Area T-SMA-1 after Certification of a No Exposure Condition

November 30, 2021

NPDES PERMIT NO. NM0030759

EM2021-0735

NPDES PERMIT NO. NM0030759 **EM2021-0735**

NEWPORT NEWS NUCLEAR BWXT-LOS ALAMOS, LLC
CERTIFICATION OF ANALYTICAL RESULTS

PF: T002 **T-SMA-1** **Site: 50-009**

The following certification was performed in accordance with the 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 Veenis

11/17/21

Steve Veenis, Water Program Director
Environmental Remediation
Newport News Nuclear BWXT-Los Alamos, LLC

Date

M Lee Bishop

Digitally signed by M Lee Bishop
Date: 2021.11.30 12:32:03 -07'00'

M. Lee Bishop, Director
Office of Quality and Regulatory Compliance
U.S. Department of Energy
Environmental Management
Los Alamos Field Office

Date

NPDES PERMIT NO. NM0030759 **EM2021-0735**

NEWPORT NEWS NUCLEAR BWXT-LOS ALAMOS, LLC
CERTIFICATION OF ANALYTICAL RESULTS

PF: T002 **T-SMA-1** **Site: 50-009**

Tables 1 and 2 present the analytical results received from the confirmation monitoring sample collected from the first measurable storm event following the completion of corrective action by certification of a no exposure condition at Site 50-009 in site monitoring area (SMA) T-SMA-1. The certification of a no exposure condition with as-built drawings was provided to the U.S. Environmental Protection Agency on October 31, 2013 (EP2013-0246, LA-UR-13-28345). Table 3 presents each applicable target action level (TAL) for the analytes monitored.

Table 1
Radiochemical Analytical Results from the First Measurable Storm Event
Collected on August 26, 2021, Following Completion of Corrective Action at T-SMA-1

Sample ID	Analyte	Field Preparation	Detection Status	Result (pCi/L)	TAL Exceedance Ratio	Minimum Detectable Activity (pCi/L)	Uncertainty (pCi/L)	Qualifier [a]	Data Receipt Date
WT_IPC-21-221542	Radium-226 and radium-228	Unfiltered	Detect	6.58	0.219	n/a[b]	0.644	NQ	10/5/2021
WT_IPC-21-221542	Gross alpha	Unfiltered	Detect	93.5	6.23	10.6	6.49	NQ	10/5/2021

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

[a] Qualifier: NQ = Result is not qualified.

[b] n/a = Value is not applicable.

Table 2
Metals and Organic Analytical Results from the First Measurable Storm Event
Collected on August 26, 2021, Following Completion of Corrective Action at T-SMA-1

Sample ID	Analyte	Field Preparation	Detection Status	Result (µg/L)	TAL Exceedance Ratio	Method Detection Limit	Quantitation Limit	Qualifier [a]	Data Receipt Date
WT_IPC-21-221543	Aluminum	Filtered	Detect	1390	1.85	19.3	50	NQ	10/5/2021
WT_IPC-21-221543	Antimony	Filtered	Nondetect	1	0.00156	1	3	U	10/5/2021
WT_IPC-21-221543	Arsenic	Filtered	Nondetect	2	0.222	2	5	U	10/5/2021
WT_IPC-21-221543	Boron	Filtered	Detect	17.1	0.00342	15	50	J	10/5/2021
WT_IPC-21-221543	Cadmium	Filtered	Nondetect	0.3	0.3	0.3	1	U	10/5/2021

NEWPORT NEWS NUCLEAR BWXT-LOS ALAMOS, LLC
CERTIFICATION OF ANALYTICAL RESULTS

PF: T002 **T-SMA-1** **Site: 50-009**

Table 2 (continued)

Sample ID	Analyte	Field Preparation	Detection Status	Result (µg/L)	TAL Exceedance Ratio	Method Detection Limit	Quantitation Limit	Qualifier[a]	Data Receipt Date
WT_IPC-21-221543	Chromium	Filtered	Nondetect	3	0.0143	3	10	U	10/5/2021
WT_IPC-21-221543	Cobalt	Filtered	Detect	2.69	0.00269	1	5	J	10/5/2021
WT_IPC-21-221543	Copper	Filtered	Detect	5.13	1.19	0.3	2	NQ	10/5/2021
WT_IPC-21-221543	Lead	Filtered	Detect	6.99	0.411	0.5	2	NQ	10/5/2021
WT_IPC-21-221542	Mercury	Unfiltered	Detect	0.075	0.0974	0.067	0.2	J	10/5/2021
WT_IPC-21-221543	Nickel	Filtered	Detect	2.88	0.0169	0.6	2	NQ	10/5/2021
WT_IPC-21-221542	Selenium	Unfiltered	Detect	8.15	1.63	2	5	NQ	10/5/2021
WT_IPC-21-221543	Silver	Filtered	Nondetect	0.3	0.6	0.3	1	U	10/5/2021
WT_IPC-21-221543	Thallium	Filtered	Nondetect	0.6	0.0952	0.6	2	U	10/5/2021
WT_IPC-21-221543	Vanadium	Filtered	Detect	9.03	0.0903	1	5	NQ	10/5/2021
WT_IPC-21-221543	Zinc	Filtered	Detect	17	0.405	3.3	20	J	10/5/2021
WT_IPC-21-221542	Cyanide, weak acid dissociable	Unfiltered	Nondetect	1.67	0.167	1.67	5	U	10/5/2021
WT_IPC-21-221542	Total PCB[b]	Unfiltered	Detect	0.00434	6.78	n/a[c]	0.000122	J	10/5/2021

Notes: 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; U = result is not detected; J = result is estimated.

[b] PCB = Polychlorinated biphenyl.

[c] n/a = Value is not applicable.

NEWPORT NEWS NUCLEAR BWXT-LOS ALAMOS, LLC
CERTIFICATION OF ANALYTICAL RESULTS

PF: T002 **T-SMA-1** **Site: 50-009**

Table 3
Applicable TALs

Analyte	Unit	CAS No.	MQL	ATAL	MTAL
Radium-226 and radium-228	pCi/L	n/a[a]	n/a	30	n/a
Gross alpha	pCi/L	n/a	n/a	15	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	µg/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.