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Date: SEP 1 8 2018

Refer To: N3B-18-0210

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 Monitoring Areas

CDV-SMA-7, CHQ-SMA-1.02, and CHQ-SMA-2 from the First Measurable Storm

Event Following Certification of Enhanced Control Measures

Dear Mr. Herrera:

This letter and enclosures are being 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 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, and on April 30, 2018, responsibilities, coverage, and liability transferred from LANS to Newport Nuclear News BWXT – Los Alamos, LLC (N3B). As specified in Part I, Section E.I(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 samples collected during the first measurable storm event received at three site monitoring areas (CDV-SMA-7, CHQ-SMA-1.02, and CHQ-SMA-2) in the last 30 days are enclosed. The reports provide references to the certificates of completion of the installation of the control measures. Table 1 includes information about the confirmation samples collected at the site monitoring areas. The enclosed certified documents can also be accessed at the following website: http://www.lanl.gov/. Then search under the key words "Individual Permit."

Table 1
Confirmation Samples Collected at CDV-SMA-7, CHQ-SMA-1.02, and CHQ-SMA-2 from the First Measurable Storm Event after Certification of Installation of Enhanced Controls

2

		Site		Permitted	Sample Collection	Final Validation
Watershed	Priority	Number	SMA Number	Feature	Date	Date
Water/	Moderate	15-008(d)	CDV-SMA-7	V013	7/17/2018	8/20/2018
Cañon de Valle					•	
Ancho/	Moderate	33-004(h)	CHQ-SMA-1.02	Q002A	7/23/2018	8/23/2018
Chaquehui		33-008(c)	7			
· -		33-011(d)				
		33-015				
Ancho/	Moderate	33-004(d)	CHQ-SMA-2	Q003	7/23/2018	8/23/2018
Chaquehui		33-007(c)	-	-		
		C-33-003				

If you have any questions, please contact Steve Veenis at (505) 309-1362 (steve.veenis@em-la.doe.gov) or David Rhodes at (505) 665-5325 (david.rhodes@em.doe.gov).

Sincerely,

Nicholas Lombardo Program Manager N3B – Los Alamos Sincerely,

David S. Rhodes, Director

Office of Quality and Regulatory Compliance

Environmental Management

Los Alamos Field Office

FL/DR/SV

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

- 1. Analytical Results from the First Measurable Storm Event Following Certification of Enhanced Control Measures at CDV-SMA-7 (EM2018-0047)
- 2. Analytical Results from the First Measurable Storm Event Following Certification of Enhanced Control Measures at CHQ-SMA-1.02 (EM2018-0046)
- 3. Analytical Results from the First Measurable Storm Event Following Certification of Enhanced Control Measures at CHQ-SMA-2 (EM2018-0045)

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

Cy: (letter and enclosure[s] emailed)
Robert Houston, EPA Region 6
Brent Larsen, EPA Region 6

Laurie King, EPA Region 6 Steve Yanicak, NMED-DOE-OB David Rhodes, DOE-EM-LA David Nickless, DOE-EM-LA Nick Lombardo, N3B Joe Legare, N3B Frazer Lockhart, N3B Bruce Robinson, N3B Emily Day, N3B Steve Veenis, N3B Karen Velarde-Lashley, N3B Don Carlson, N3B emla.docs@em.doe.gov N3B Records Public Reading Room (EPRR) PRS Database



Analytical Results from the First Measurable Storm Event Following Certification of Enhanced Control Measures at CDV-SMA-7

September 18, 2018

NPDES PERMIT NO. NM0030759 EM2018-0047

PF: V013 CDV-SMA-7 Site: 15-008(d)

The following certification of analytical results received from the confirmation monitoring samples collected after the completion of the installation of enhanced controls was performed in accordance with NPDES Permit No. NM0030759, Part I.E.1.

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."

Nicholas Lombardo, Program Manager

Newport News Nuclear BWXT - Los Alamos, LLC

David S. Rhodes, Director

Office of Quality and Regulatory Compliance

Environmental Management Los Alamos Field Office Date

PF: V013 CDV-SMA-7 Site: 15-008(d)

Tables 1 and 2 present the analytical results received from confirmation monitoring samples collected from the first measurable storm event following the installation and subsequent certification of enhanced controls at site monitoring area CDV-SMA-7. Final analytical results were received and validated on August 23, 2018. The descriptions and photographs of each enhanced control installed at CDV-SMA-7 were provided to the U.S. Environmental Protection Agency on September 10, 2015 (ESHID-600909/LA-UR-15-25197). Table 3 presents each applicable target action levels (TALs) for the analytes monitored.

Table 1
Radiochemical Analytical Results from the First Measurable Storm Event
Collected on July 17, 2018, Following Installation of Enhanced Controls at CDV-SMA-7

Sample ID	Analyte	Field Preparation	Detect Status	Result (pCi/L)	TAL Exceedance Ratio	Minimum Detectable Activity (pCi/L)	Uncertainty (pCi/L)	Qualifiera	Data Validation Date
WT_IPC-18-154615	Radium-226 and radium-228	Unfiltered	Detected	3.5	0.12	1.107	n/a ^b	NQ	08/23/2018
WT_IPC-18-154615	Gross alpha	Unfiltered	Detected	36.8	2.5	4.29	2.56	NQ	08/23/2018

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

^a NQ = Result is not qualified.

^b n/a = Not applicable.

PF: V013 CDV-SMA-7 Site: 15-008(d)

Table 2
Metals, Inorganic, and Organic Analytical Results from the First Measurable Storm Event
Collected on July 17, 2018, Following the Installation of Enhanced Controls at CDV-SMA-7

Sample ID	Analyte	Field Preparation	Detect Status	Result (µg/L)	TAL Exceedance Ratio	Report Method Detection Limit (µg/L)	Report Quantitation Limit (µg/L)	Validation Qualifier*	Notification of Data Validation Date
WT_IPC-18-154512	Aluminum	Filtered	Detect	228	0.3	19.3	50	NQ	08/20/2018
WT_IPC-18-154512	Antimony	Filtered	Nondetect	1	0.0016	1	3	U	08/20/2018
WT_IPC-18-154512	Arsenic	Filtered	Nondetect	2	0.22	2	5	U	08/20/2018
WT_IPC-18-154512	Boron	Filtered	Nondetect	15	0.003	15	50	U	08/20/2018
WT_IPC-18-154512	Cadmium	Filtered	Nondetect	0.3	0.3	0.3	1	U	08/20/2018
WT_IPC-18-154512	Chromium	Filtered	Nondetect	3	0.014	3	10	U	08/20/2018
WT_IPC-18-154512	Cobalt	Filtered	Nondetect	1	0.001	1	5	U	08/20/2018
WT_IPC-18-154512	Copper	Filtered	Detect	1.14	0.27	0.3	1	NQ	08/20/2018
WT_IPC-18-154512	Lead	Filtered	Nondetect	0.5	0.029	0.5	2	U	08/20/2018
WT_IPC-18-154591	Mercury	Unfiltered	Detect	0.114	0.15	0.067	0.2	J	08/20/2018
WT_IPC-18-154512	Nickel	Filtered	Nondetect	0.6	0.0035	0.6	2	U	08/20/2018
WT_IPC-18-154591	Selenium	Unfiltered	Nondetect	2	0.4	2	5	U	08/20/2018
WT_IPC-18-154512	Silver	Filtered	Nondetect	0.3	0.6	0.3	1	U	08/20/2018
WT_IPC-18-154512	Thallium	Filtered	Nondetect	0.6	0.095	0.6	2	U	08/20/2018
WT_IPC-18-154512	Vanadium	Filtered	Detect	1.08	0.011	1	5	J	08/20/2018
WT_IPC-18-154512	Zinc	Filtered	Detect	5.99	0.14	3.3	10	J	08/20/2018
WT_IPC-18-154591	Cyanide, weak acid dissociable	Unfiltered	Nondetect	1.67	0.32	1.67	5	U	08/20/2018

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

^{*} NQ = Result is not qualified; J = result is estimated; U = result is not detected.

PF: V013 CDV-SMA-7 Site: 15-008(d)

Table 3
Applicable TALs

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

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.

^{*} n/a = Not applicable.

Analytical Results from the First Measurable Storm Event Following Certification of Enhanced Control Measures at CHQ-SMA-1.02

September 18, 2018

NPDES PERMIT NO. NM0030759 EM2018-0046

PF: Q002A CHQ-SMA-1.02 Sites: 33-004(h)

33-008(c) 33-011(d) 33-015

The following certification of analytical results received from the confirmation monitoring samples collected after the completion of the installation of enhanced controls was performed in accordance with NPDES Permit No. NM0030759, Part I.E.1.

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."

Micholas Lombardo, Program Manager

Newport News Nuclear BWXT - Los Alamos, LLC

David S. Rhodes, Director

Office of Quality and Regulatory Compliance

Environmental Management Los Alamos Field Office Date

PF: Q002A CHQ-SMA-1.02 Sites: 33-004(h)

33-008(c) 33-011(d) 33-015

Table 1 presents the analytical results received from confirmation monitoring samples collected from the first measurable storm event following the installation and subsequent certification of enhanced controls at site monitoring area CHQ-SMA-1.02. Final analytical results were received and validated on August 22 and 23, 2018. The descriptions and photographs of each enhanced control installed at CHQ-SMA-1.02 were provided to the U.S. Environmental Protection Agency on September 10, 2015 (ESHID-600909/LA-UR-15-21555). Table 2 presents each applicable target action level (TAL) for the analytes monitored.

Table 1

Metals, Inorganic, and Organic Analytical Results from the First Measurable Storm Event
Collected on July 23, 2018, Following the Installation of Enhanced Controls at CHQ-SMA-1.02

Sample ID	Analyte	Field Preparation	Detect Status	Result (µg/L)	TAL Exceedance Ratio	Report Method Detection Limit (µg/L)	Report Quantitation Limit (µg/L)	Validation Qualifier ^a	Notification of Data Validation Date
WT_IPC-18-154688	Copper	Filtered	Detect	3.38	0.79	0.3	1	Q	08/22/2018
WT_IPC-18-154690	Total PCBb	Unfiltered	Nondetect	0	0	n/a ^c	n/a	U	08/23/2018

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

Table 2
Applicable TALs

Analyte	Field Preparation	Unit	CAS No.	MQL	ATAL	MTAL
Copper	Filtered	μg/L	7440-50-8	0.5	n/a ^a	4.3
Total PCB ^b	Unfiltered	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 NQ = Result is not qualified; U = result is not detected.

^b PCB = Polychlorinated biphenyl.

c n/a = Not applicable.

^a n/a = Not applicable.

^b PCB = Polychlorinated biphenyl.

Analytical Results from the First Measurable Storm Event Following Certification of Enhanced Control Measures at CHQ-SMA-2

September 18, 2018

NPDES PERMIT NO. NM0030759 EM2018-0045

PF: Q003 CHQ-SMA-2 Sites: 33-004(d)

33-007(c) C-33-003

The following certification of analytical results received from the confirmation monitoring samples collected after the completion of the installation of enhanced controls was performed in accordance with NPDES Permit No. NM0030759, Part I.E.1.

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."

Hicholas Lombardo, Program Manager

Newport News Nuclear BWXT – Los Alamos, LLC

9-17-2018

Office of Quality and Regulatory Compliance

Environmental Management Los Alamos Field Office

David S. Rhodes, Director

PF: Q003 CHQ-SMA-2 Sites: 33-004(d)

33-007(c) C-33-003

Tables 1 and 2 present the analytical results received from confirmation monitoring samples collected from the first measurable storm event following the installation and subsequent certification of enhanced controls at site monitoring area CHQ-SMA-2. Final analytical results were received and validated on August 23, 2018. The descriptions and photographs of each enhanced control installed at CHQ-SMA-2 were provided to the U.S. Environmental Protection Agency on October 30, 2015 (ESHID-600980/LA-UR-15-27943). 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 July 23, 2018, Following Installation of Enhanced Controls at CHQ-SMA-2

Sample ID	Analyte	Field Preparation	Detect Status	Result (pCi/L)	TAL Exceedance Ratio	Minimum Detectable Activity (pCi/L)	Uncertainty (pCi/L)	Oualifier ^a	Data Validation Date
WT_IPC-18-154615	Radium-226 and radium-228	UFb	Detect	3.5	0.12	1.107	n/a ^c	NQ	08/23/2018
WT_IPC-18-154615	Gross alpha	UF	Detect	36.8	2.5	4.29	2.56	NQ	08/23/2018

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

^a NQ = Result is not qualified.

^b UF = Unfiltered.

^c n/a = Not applicable.

PF: Q003 CHQ-SMA-2 Sites: 33-004(d)

33-007(c) C-33-003

Table 2
Metals, Inorganic, and Organic Analytical Results from the First Measurable Storm Event
Collected on July 23, 2018, Following the Installation of Enhanced Controls at CHQ-SMA-2

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Sample ID	Analyte	Field Preparation	Detect Status	Result (µg/L)	TAL Exceedance Ratio	Report Method Detection Limit (µg/L)	Report Quantitation Limit (µg/L)	Validation Qualifier ^a	Notification of Data Validation Date
WT_IPC-18-154514	Aluminum	Filtered	Detect	473	0.63	19.3	50	NQ	08/23/2018
WT_IPC-18-154514	Antimony	Filtered	Detect	2.05	0.0032	1	3	J	08/23/2018
WT_IPC-18-154514	Arsenic	Filtered	Nondetect	2	0.22	2	5	U	08/23/2018
WT_IPC-18-154514	Boron	Filtered	Nondetect	15	0.003	15	50	U	08/23/2018
WT_IPC-18-154514	Cadmium	Filtered	Nondetect	0.3	0.3	0.3	1	U	08/23/2018
WT_IPC-18-154514	Chromium	Filtered	Nondetect	3	0.014	3	10	U	08/23/2018
WT_IPC-18-154514	Cobalt	Filtered	Nondetect	1	0.001	1	5	U	08/23/2018
WT_IPC-18-154514	Copper	Filtered	Detect	3.2	0.74	0.3	1	NQ	08/23/2018
WT_IPC-18-154514	Lead	Filtered	Nondetect	0.5	0.029	0.5	2	U	08/23/2018
WT_IPC-18-154615	Mercury	Unfiltered	Detect	0.114	0.15	0.067	0.2	J	08/23/2018
WT_IPC-18-154514	Nickel	Filtered	Detect	1.45	0.0085	0.6	2	J	08/23/2018
WT_IPC-18-154615	Selenium	Unfiltered	Nondetect	2	0.4	2	5	U	08/23/2018
WT_IPC-18-154514	Silver	Filtered	Nondetect	0.3	0.6	0.3	1	U	08/23/2018
WT_IPC-18-154514	Thallium	Filtered	Nondetect	0.6	0.095	0.6	2	U	08/23/2018
WT_IPC-18-154514	Vanadium	Filtered	Detect	3.63	0.036	1	5	J	08/23/2018
WT_IPC-18-154514	Zinc	Filtered	Detect	9.14	0.22	3.3	10	J	08/23/2018
WT_IPC-18-154615	Cyanide, weak acid dissociable	Unfiltered	Nondetect	1.67	0.32	1.67	5	U	08/23/2018
WT_IPC-18-154615	Total PCB ^b	Unfiltered	Nondetect	0	0	n/a ^c	n/a	U	08/23/2018

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

^a NQ = Result is not qualified; J = result is estimated; U = result is not detected.

^b PCB = Polychlorinated biphenyl.

^c n/a = Not applicable.

PF: Q003 CHQ-SMA-2 Sites: 33-004(d)

33-007(c) C-33-003

Table 3 Applicable TALs

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