

**Analytical Results from the First Measurable  
Storm Event Following Installation of Control  
Measures at S-SMA-2**

**September 13, 2013**

**NPDES PERMIT NO. NM0030759**

**LA-UR-13-27039**



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

PF: S003

S-SMA-2

Sites: 03-012(b)  
03-045(b)  
03-045(c)  
03-056(c)

Table 1 presents the analytical results received from the confirmation monitoring samples collected from the first measurable storm event following the installation of enhanced controls at site monitoring area (SMA) S-SMA-2. The descriptions and photographs of each enhanced control installed at S-SMA-2 were provided to the U.S. Environmental Protection Agency on July 9, 2013 (EP2013-0137/LA-UR-13-23683). Table 2 presents each applicable target action level (TAL) for the analytes monitored.

**Table 1  
Metals and Organic Analytical Results from the First Measurable Storm Event  
Collected on July 11, 2013, Following Installation of Enhanced Controls, SMA S-SMA-2**

Sample ID	Analyte	Field Prep	Detect Status	Result (µg/L)	TAL Exceedance Ratio	Method Detection Limit	Quantitation Limit	Qualifier <sup>a</sup>	Data Receipt Date
WT_IPC-13-39143	Copper	Filtered	Detect	4.43	1.03	0.35	1.0	NQ	8/26/2013
WT_IPC-13-39143	Zinc	Filtered	Detect	54	1.3	3.3	10.0	NQ	8/26/2013
WT_IPC-13-39141	Total polychlorinated biphenyls (PCBs)	Unfiltered	Detect	0.22	344 <sup>b</sup>	n/a <sup>c</sup>	n/a	NQ	8/27/2013

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

<sup>b</sup> Preliminary Average TAL (ATAL) exceedance ratio from first of two possible samples.

<sup>c</sup> n/a = Value is not applicable.

**Table 2  
Applicable TALs**

Analyte	Units	CAS No.	MLQ	ATAL	MTAL
Copper, dissolved	µg/L	7440-40-8	0.5	n/a*	4.3
Zinc, dissolved	µg/L	7440-66-6	20	n/a	42
Total PCBs	µg/L	1336-36-3	n/a	0.00064	n/a

Notes: CAS = Chemical Abstracts Service; MLQ = minimum quantification level;  
MTAL = maximum TAL.

**Analytical Results from the First Measurable  
Storm Event Following Installation of Control  
Measures at STRM-SMA-1.05**

**September 13, 2013**

**NPDES PERMIT NO. NM0030759**

**LA-UR-13-27040**



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

PF: J028

STRM-SMA-1.05

Site: 08-009(f)

Table 1 presents the analytical results received from the confirmation monitoring sample collected from the first measurable storm event following the installation of enhanced controls at site monitoring area (SMA) STRM-SMA-1.05. The descriptions and photographs of each enhanced control installed at STRM-SMA-1.05 were provided to the U.S. Environmental Protection Agency on June 4, 2013 (EP2013-0104/LA-UR-13-22866). Table 2 presents the applicable target action level (TAL) for the analyte monitored.

**Table 1  
Metals Analytical Results from the First Measurable Storm Event  
Collected on July 12, 2013, Following Installation of Enhanced Controls, SMA STRM-SMA-1.05**

Sample ID	Analyte	Field Prep	Detect Status	Result (µg/L)	TAL Exceedance Ratio	Method Detection Limit	Quantitation Limit	Qualifier*	Data Receipt Date
WT_IPC-13-34615	Copper	Filtered	Detect	10.8	2.5	0.35	1.0	NQ	8/26/2013

\* Qualifier: NQ = Result is not qualified.

**Table 2  
Applicable TALs**

Analyte	Units	CAS No.	MQL	ATAL	MTAL
Copper, dissolved	µg/L	7440-40-8	0.5	n/a	4.3

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

\*n/a = Value is not applicable.

**Analytical Results from the First Measurable  
Storm Event Following Installation of Control  
Measures at DP-SMA-0.3**

**September 13, 2013**

**NPDES PERMIT NO. NM0030759**

**LA-UR-13-27038**





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

PF: D001

DP-SMA-0.3

Site: 21-029

Table 1 presents the analytical results received from the confirmation monitoring sample collected from the first measurable storm event following the installation of enhanced controls at site monitoring area (SMA) DP-SMA-0.3. The descriptions and photographs of each enhanced control installed at DP-SMA-0.3 were provided to the U.S. Environmental Protection Agency on July 9, 2013 (EP2013-0137/LA-UR-12-26394). Table 2 presents each applicable target action level (TAL) for the analytes monitored.

**Table 1  
Radioactivity Results from the First Measurable Storm Event  
Collected on July 12, 2013, Following Installation of Enhanced Controls, SMA DP-SMA-0.3**

Sample ID	Analyte	Field Prep	Detect Status	Result (pCi/L)	TAL Exceedance Ratio	Minimum Detectable Activity	Uncertainty	Qualifier <sup>a</sup>	Data Receipt Date
WT_IPC-13-39145	Gross alpha	Unfiltered	Detect	87.8	5.9 <sup>b</sup>	4.56	4.25	NQ	8/26/2013
WT_IPC-13-39145	Radium-226 and Radium-228	Unfiltered	Detect	16.5	0.55 <sup>b</sup>	2.045	1.42	NQ	8/26/2013

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

<sup>b</sup> Preliminary Average TAL (ATAL) exceedance ratio from first of two possible samples.

**Table 2  
Applicable TALs**

Analyte	Units	CAS No.	MQL	ATAL	MTAL
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; MTAL = maximum TAL.

\* n/a = Value is not applicable.

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

**September 13, 2013**

**NPDES PERMIT NO. NM0030759**

**LA-UR-13-27037**



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

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 the confirmation monitoring samples collected from the first measurable storm event following the installation of enhanced controls at site monitoring area (SMA) CHQ-SMA-1.02. The descriptions and photographs of each enhanced control installed at CHQ-SMA-1.02 were provided to the U.S. Environmental Protection Agency on October 25, 2012 (EP2012-0262/LA-UR-12-24872). Table 2 presents each applicable target action level (TAL) for the analytes monitored.

**Table 1  
Metals and Organic Analytical Results from the First Measurable Storm Event  
Collected on July 25, 2013, Following Installation of Enhanced Controls,  
SMA CHQ-SMA-1.02**

Sample ID	Analyte	Field Prep	Detect Status	Result (µg/L)	TAL Exceedance Ratio	Method Detection Limit	Quantitation Limit	Qualifier <sup>a</sup>	Data Receipt Date
WT_IPC-13-32459	Cyanide, weak acid dissociable	Unfiltered	Nondetect	5	n/a <sup>b,c</sup>	1.67	5	U	9/4/2013
WT_IPC-13-32118	Copper	Filtered	Detect	4.46	1.04	0.35	1.0	NQ	9/4/2013
WT_IPC-13-32459	Total polychlorinated biphenyls (PCBs)	Unfiltered	Detect	0.016	25	n/a	n/a	NQ	9/6/2013

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

<sup>b</sup> Preliminary Average TAL (ATAL) exceedance ratio from first of two possible samples.

<sup>c</sup> n/a = Value is not applicable.

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

PF: Q002A

CHQ-SMA-1.02

Sites: 33-004(h)  
33-008(c)  
33-011(d)  
33-015

Table 2  
Applicable TALs

Analyte	Units	CAS No.	MQL	ATAL	MTAL
Copper, dissolved	µg/L	7440-40-8	0.5	n/a*	4.3
Cyanide, weak acid dissociable	µg/L	57-12-5	10	5.2	22
Total PCBs	µg/L	1336-36-3	n/a	0.00064	n/a

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

\*n/a = Value is not applicable.

**Analytical Results from the First Measurable  
Storm Event Following Installation of Control  
Measures at CDB-SMA-0.25**

**September 13, 2013**

**NPDES PERMIT NO. NM0030759**

**LA-UR-13-27036**



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

PF: C002

CDB-SMA-0.25

Sites: 46-004(c2)  
46-004(e2)

Table 1 presents the analytical results received from the confirmation monitoring samples collected from the first measurable storm event following the installation of enhanced controls at site monitoring area (SMA) CDB-SMA-0.25. The descriptions and photographs of each enhanced control installed at CDB-SMA-0.25 were provided to the U.S. Environmental Protection Agency on July 25, 2012 (EP2012-0178/LA-UR-12-22522). Table 2 presents each applicable target action level (TAL) for the analytes monitored.

**Table 1  
Metals and Organic Analytical Results from the First Measurable Storm Event  
Collected on July 26, 2013, Following Installation of Enhanced Controls, SMA CDB-SMA-0.25**

Sample ID	Analyte	Field Prep <sup>a</sup>	Detect Status	Result (µg/L)	TAL Exceedance Ratio	Method Detection Limit	Quantitation Limit	Qualifier <sup>b</sup>	Data Receipt Date
WT_IPC-13-39426	Aluminum	F	Detect	218	0.29	15	50.0	NQ	8/29/2013
WT_IPC-13-39426	Copper	F	Detect	15.2	3.5	0.35	1.0	NQ	8/29/2013
WT_IPC-13-39427	Total polychlorinated biphenyls (PCBs)	UF	Detect	0.00282	4.4 <sup>c</sup>	n/a <sup>d</sup>	n/a	NQ	8/30/2013
WT_IPC-13-39427	Benzo(a)pyrene	UF	Nondetect	1.19	n/a <sup>c</sup>	0.357	1.19	U	8/29/2013
WT_IPC-13-39427	Hexachlorobenzene	UF	Nondetect	11.9	n/a <sup>c</sup>	3.57	11.9	U	8/29/2013
WT_IPC-13-39427	Pentachlorophenol	UF	Nondetect	11.9	n/a <sup>c</sup>	3.57	11.9	U	8/29/2013

<sup>a</sup> Field Prep: F = Sample is filtered; UF = sample is unfiltered.

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

<sup>c</sup> Preliminary average TAL (ATAL) exceedance ratio from first of two possible samples.

<sup>d</sup> n/a = Value is not available.