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Title: **Status Report, Sandia/Mortandad Watershed
July 1–November 30, 2012**

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Intended for: Public

Purpose: This *Status Report* has been prepared to facilitate public review of activities under the Individual Storm Water Permit (National Pollutant Discharge Elimination System Permit No. NM0030759) (IP). This report, not required by the IP, updates the 2011 Annual Report (published on March 1, 2012). Further, it summarizes precipitation, monitoring, inspection and maintenance, corrective action, and compliance status at specific solid waste management units and areas of concern listed in the IP. The report will be available on Los Alamos National Laboratory's public website established as required under Part 1.1 (7) of the IP.



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STATUS REPORT

Sandia/Mortandad Watershed July 1–November 30, 2012

**INDIVIDUAL STORM WATER
NPDES PERMIT No. NM0030759**



OVERVIEW

Los Alamos National Security, LLC, under the direction of the National Nuclear Security Administration, has prepared this *Status Report* to facilitate public review of activities under the Individual Storm Water Permit (National Pollutant Discharge Elimination System Permit No. NM0030759) (IP). This report, not required by the IP, updates the 2011 Annual Report published on March 1, 2012. Further, for the July 1–November 30, 2012, time period, it summarizes precipitation, monitoring, inspection and maintenance, corrective action, and compliance status at specific solid waste management units and areas of concern, commonly referred to as “Sites.” A previous report was prepared summarizing these activities from January 1–June 30, 2012. Both reports will be available on Los Alamos National Laboratory’s public website established as required under Part 1.I (7) of the IP. This website may be found at <http://www.lanl.gov/community-environment/environmental-stewardship/protection/compliance/individual-permit-stormwater/index.php>.

Within the Sandia/Mortandad watershed, 119 Sites are monitored at 64 site monitoring areas (SMAs). Highlights of the work performed from July 1–November 30, 2012, include the following:

- Additional controls were installed at 4 SMAs (18 Sites), baseline controls were replaced at 9 SMAs, and enhanced controls were certified as corrective action measures at 4 SMAs.
- Forty-eight samplers were activated. Four confirmatory samples were collected as a result of 17 measureable storm events. A total of 123 storm event inspections were required.
- As of November 30, baseline monitoring is continuing at 45 SMAs, corrective action was initiated at 19 SMAs (38 Sites), and 5 Sites were issued Certificates of Completion under the Compliance Order on Consent (the Consent Order).
- There were no incidents of noncompliance that could potentially endanger health or the environment during this time period, July 1–November 30, 2012.

Table 1
Precipitation Activity for
July 1–November 30, 2012

Rain Gage	Related SMAs	Measurable Storm Events	Storm Event Inspections Conducted
RG-TA-06	2	07/11/2012	2
		09/10/2012	2
		09/28/2012	2
		10/12/2012	2
RG-TA-53	5	08/05/2012	5
		08/24/2012	5
		09/27/2012	5
		10/12/2012	5
RG-TA-54	1	07/02/2012	1
		08/01/2012	1
RG121.9	13	07/11/2012	13
		10/12/2012	13
RG200.5	23	10/12/2012	23
RG203	12	07/07/2012	12
		08/05/2012	12
		10/12/2012	12
RG245.5	8	08/22/2012	8

PRECIPITATION

Within the watershed, 7 precipitation gages monitor and report precipitation activity during the field season. These gages and their activity levels from July 1–November 30, 2012, are shown in Table 1. There were 17 measurable storm events (an event with precipitation intensity of 0.25 in. within 30 min).

Adverse Weather

No adverse weather events affected IP activities.

MONITORING

Samplers Activated

Forty-eight samplers were activated on July 1, 2012, and an additional 4 samplers were activated after July 1 and

prior to November 30, 2012. Three of these samplers were deactivated after a baseline monitoring sample was collected, leaving 49 samplers activated on November 30, 2012. The remaining samplers were shut down for the winter in early December 2012.

Samples Collected

A single baseline monitoring sample was collected at M-SMA-7 on July 20, 2012; at T-SMA-3 on September 9, 2012; and at M-SMA-6 on October 12, 2012. The first confirmation monitoring sample was collected from M-SMA-10.01 on October 17, 2012.

Sampler Placement

Samplers associated with monitoring locations for Sites were placed in accordance with coordinate locations provided in the Site Discharge Pollution Prevention Plan, Revision 1, Volume 2, (SDPPP, R1, V2).

INSPECTION AND MAINTENANCE

Post-Storm Inspections

A total of 123 post-storm inspections were required for the Sites as a result of 17 measurable storm events.

Visual Inspections

Three visual inspections were conducted where a target action level (TAL) was exceeded.

Significant Event Inspections

No significant events that could impact the control measures and environmental conditions occurred that required a Site to be reevaluated and inspected under Part 1.G (1) of the IP.

Annual Erosion Inspections

No annual erosion reevaluation inspections were conducted during the July 1–November 30, 2012, time period. All annual erosion inspections for the 64 SMAs in the watershed were completed prior to July 1, 2012.

Control Maintenance

Fifty-two control maintenance activities were conducted.

CORRECTIVE ACTION

Augmented Control Installations

Additional controls were installed at 4 SMAs and are presented in Appendix A. The additional controls were installed at these Sites to “augment” baseline controls. These Sites are not in corrective action because monitoring has not shown a TAL exceedance.

Baseline Control Replacements

Baseline control replacements were completed at 9 SMAs and are presented in Appendix A. The purpose of a control replacement is to maintain or upgrade the existing certified baseline controls at an SMA.

Enhanced Control Installations

When a sample that exceeds TALs is collected from an SMA, these Sites advance to corrective action. One of the corrective action options is to construct enhanced controls.

When all the enhanced controls are installed, a certification of the installed controls will be submitted to the U.S. Environmental Protection Agency (EPA) and New Mexico Environment Department (NMED) and will be made available on the IP website. Enhanced controls were certified at 4 SMAs:

- CDB-SMA-0.25 on July 19, 2012
- CDB-SMA-1 on July 30, 2012
- S-SMA-4.1 and M-SMA-10.01 on September 25, 2012

COMPLIANCE STATUS

Baseline Confirmation Is Complete

All confirmation monitoring to assess baseline controls was above TALs; therefore, corrective action is required at the Sites.

Baseline Monitoring Is Extended

As of November 30, baseline monitoring is continuing at 45 SMAs. Confirmation monitoring samples have not been collected at these SMAs. Baseline monitoring will be extended under the IP until analytical results are received from the first confirmation sample collected.

Corrective Action Is Initiated

As of November 30, corrective action has been initiated at 19 SMAs (38 Sites). See Appendix B for a list of these Sites and associated SMAs.

Compliance Status Categories

Compliance status is tracked for each Site throughout the year. The categories used for tracking include the following:

- *Baseline Confirmation Complete*—All confirmation monitoring results for all pollutants of concern at the SMA are at or below TALs, and corrective action is not required at the Sites. No further sampling is required.
- *Baseline Monitoring Extended*—Baseline confirmation monitoring is in progress, and no storm water from a measurable storm event has been collected. There has been no TAL exceedance.
- *Corrective Action Initiated*—A sample was collected during baseline confirmation monitoring, and analytical results show at least one pollutant concentration is above TAL, resulting in initiation of corrective action. Corrective action may include
 - ❖ installing enhanced control measures,
 - ❖ installing control measures that totally retain storm water,
 - ❖ installing control measures that totally eliminate the exposure of pollutants, or
 - ❖ receiving a Certificate of Completion from NMED.
- *Enhanced Control Corrective Action Monitoring*—Confirmation monitoring at an SMA is initiated to determine how well enhanced controls are performing. This monitoring occurs after certification that the enhanced control measures have been installed and are complete.
- *Corrective Action Complete*—Completion of corrective action is demonstrated by one of the following:
 1. Analytical results from enhanced control monitoring show pollutant concentrations for all pollutants of concern at the Site to be at or below applicable TALs; or
 2. Control measures that totally retain and prevent the discharge of storm water have been installed at the Site; or
 3. Control measures that totally eliminate exposure of pollutants to storm water have been installed at the Site; or
 4. The Site has achieved Resource Conservation and Recovery Act "no further action" status or a Certificate of Completion from NMED.

Enhanced Control Corrective Actions Are Monitored

As of November 30, enhanced control corrective action monitoring has started at 8 SMAs (16 Sites).

Corrective Action Complete

Five Sites were issued a Certificate of Completion under the Consent Order and have completed corrective actions including Sites 03-056(c), 48-007(d), 48-010, 48-007(a), and C-46-001. Documentation certifying completion of corrective action for these Sites will be submitted to EPA.

DOCUMENTS SUBMITTED

From July 1–November 30, 2012, no new IP Program documents were submitted to EPA Region 6.

IP documents submitted in 2012 can be found on the IP website at <http://www.lanl.gov/community-environment/environmental-stewardship/protection/compliance/individual-permit-stormwater/index.php>.

APPENDIX A
Additional Controls Installed and
Baseline Controls Replaced between July 1–November 30, 2012

Site Monitoring Area	Control Description	Install Date	Control Category
M-SMA-12.9	M020-03-06-0010 Berm–Straw Wattles	07/24/2012	Replaced baseline control
M-SMA-12.6	M017-03-06-0012 Berm–Straw Wattles	07/26/2012	Replaced baseline control
M-SMA-12.7	M018-03-06-0011 Berm–Straw Wattles	08/13/2012	Replaced baseline control
M-SMA-12.8	M019-03-06-0009 Berm–Straw0 Wattles	08/13/2012	Replaced baseline control
M-SMA-12.9	M020-03-06-0011 Berm–Straw Wattles	08/13/2012	Replaced baseline control
T-SMA-3	T005-06-02-0011 Check Dam–Log	08/30/2012	Additional control
M-SMA-7	M009-03-06-0008 Berm–Straw Wattles	10/24/2012	Replaced baseline control
T-SMA-1	T002-03-06-0007 Berm–Straw Wattles	11/01/2012	Replaced baseline control
	T002-03-06-0008 Berm–Straw Wattles	11/01/2012	Replaced baseline control
	T002-03-06-0009 Berm–Straw Wattles	11/01/2012	Replaced baseline control
	T002-03-06-0010 Berm–Straw Wattles	11/01/2012	Replaced baseline control
	T002-03-06-0011 Berm–Straw Wattles	11/01/2012	Replaced baseline control
	T002-03-06-0012 Berm–Straw Wattles	11/01/2012	Additional control
S-SMA-0.25	S001-04-06-0010 Channel/Swale–Rip Rap	08/01/2012	Additional control
S-SMA-5.2	S014-03-06-0014 Berm–Straw Wattles	08/16/2012	Replaced baseline control
	S014-03-06-0015 Berm–Straw Wattles	08/16/2012	Replaced baseline control
S-SMA-4.1	S011-03-06-0010 Berm–Straw Wattles	10/11/2012	Additional control
	S011-03-06-0011 Berm–Straw Wattles	10/11/2012	Additional control
S-SMA-3.95	S010-03-06-0005 Berm–Straw Wattles	10/24/2012	Replaced baseline control
	S010-03-06-0006 Berm–Straw Wattles	10/24/2012	Replaced baseline control

**APPENDIX B
 Sites and Site Monitoring Areas in
 Corrective Action Initiated Status
 as of November 30, 2012,
 within the Sandia/Mortandad Watershed**

Site Monitoring Area	Site
CDB-SMA-0.25	46-004(c2) 46-004(e2)
CDB-SMA-1	46-003(c) 46-004(d2) 46-004(f) 46-004(t) 46-004(w) 46-008(g) 46-009(a) C-46-001
M-SMA-1	03-050(a) 03-054(e)
M-SMA-1.22	03-045(h)
M-SMA-4	48-001 48-005 48-007(a) 48-007(d) 48-010
M-SMA-6	35-016(h)
M-SMA-7	36-016(g)
M-SMA-10.01	35-016(e)
M-SMA-10.3	35-014(e2) 35-016(i)
S-SMA-0.25	03-013(a) 03-052(f)
S-SMA-1.1	03-029
S-SMA-2	03-012(b) 03-045(b) 03-045(c) 03-056(c)
S-SMA-2.01	03-052(b)
S-SMA-3.53	03-014(b2)
S-SMA-3.6	60-007(b)
S-SMA-4.1	53-014
S-SMA-6	72-001
T-SMA-1	50-006(a) 50-009
T-SMA-3	35-016(b)