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Title: **Status Report, Sandia/Mortandad Watershed
July 1–December 31, 2013**

Author(s): Steve Veenis

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 2012 Annual Report (published on March 1, 2013). 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 I.I.7 of the IP.



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STATUS REPORT

**Sandia/Mortandad Watershed
July 1–December 31, 2013**

**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 2012 Annual Report published on March 1, 2013. Further, for the July 1–December 31, 2013, 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 that summarizes these activities from January 1–June 30, 2013. Both reports will be available on Los Alamos National Laboratory’s (the Laboratory’s) public website established as required under Part I.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>.

The site monitoring area (SMA) maps are available on the web (<http://www.lanl.gov/community-environment/environmental-stewardship/protection/compliance/individual-permit-stormwater/site-monitoring-area-maps.php>) and are updated when any change is made.

Within the Sandia/Mortandad watershed, 119 Sites are monitored at 64 SMAs. Highlights of the work performed from July 1–December 31, 2013, include the following:

- Additional controls were installed at 6 SMAs, and no augmented controls were installed at any SMAs. No baseline control replacements were completed at any SMAs, and enhanced controls were installed as corrective action measures at 1 SMA.
- Fifty-five samplers were activated. There were 39 measureable storm events, and 21 confirmation samples were collected. One hundred sixty-five storm event inspections were completed during the reporting period.
- As of December 31, 2013, baseline monitoring is continuing at 41 SMAs, and corrective action was initiated at 23 SMAs (54 Sites). Four Sites have been issued Certificates of Completion under the Compliance Order on Consent (the Consent Order).
- There were no incidents of noncompliance that could potentially endanger human health or the environment during this time period (July 1–December 31, 2013).

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–December 31, 2013, are shown in Table 1. There were 39 measurable storm events (an event with precipitation intensity of 0.25 in. within 30 min).

**Table 1
Precipitation Activity for
July 1–December 31, 2013**

Rain Gage	Related SMAs	Measurable Storm Events	Storm Event Inspections Conducted
RG-TA-06	2	07/11/2013	2
		07/12/2013	0
		09/12/2013	2
		09/13/2013	0
		09/17/2013	0
RG-TA-53	5	07/25/2013	5
		09/12/2013	5
		09/13/2013	0
		09/17/2013	0
		09/21/2013	0
		11/04/2013	4

Adverse Weather

During the week of September 10, 2013, the Pajarito Plateau and much of New Mexico and Colorado were inundated with unprecedented rainfall. Rainfall totals in some areas of the Laboratory exceeded 7 in. in a 1-wk time period, and much of the rain fell during an extremely large event that occurred between September 12 and 13, 2013. These storm events were accompanied by record runoff, flooding, and erosion, resulting in a notification of Force Majeure.

MONITORING

Samplers Activated

Sixteen samplers were shut down and reactivated between July and September 2013. From these samplers, 7 samples were collected. Following sample collection, the samplers were shut down. The remaining samplers were shut down for the winter in December 2013.

Samples Collected

Twenty-one confirmation samples were collected during the reporting period.

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).

**Table 1 (continued)
Precipitation Activity for
July 1–December 31, 2013**

Rain Gage	Related SMAs	Measurable Storm Events	Storm Event Inspections Conducted
RG-TA-54	1	07/03/2013 07/11/2013 07/14/2013 07/25/2013 07/26/2013 08/05/2013 08/08/2013 09/12/2013 09/13/2013 09/22/2013 11/04/2013	0 1 0 1 0 0 1 1 0 0 1
RG121.9	13	07/12/2013 09/12/2013 09/13/2013	13 13 0
RG200.5	23	07/12/2013 07/26/2013 09/13/2013 09/17/2013 09/22/2013	22 23 23 0 0
RG203	12	07/26/2013 09/10/2013 09/12/2013 09/13/2013	12 12 12 12
RG245.5	8	07/09/2013 07/25/2013 07/26/2013 09/12/2013 09/13/2013	8 8 0 8 0

INSPECTION AND MAINTENANCE

Post-Storm Inspections

One hundred sixty-five post-storm inspections were required for the Sites because of the 39 measurable storm events that were observed during the reporting period.

Visual Inspections

No visual inspections were required to be conducted during the reporting period.

Significant Event Inspections

One significant event that could impact control measures and environmental conditions occurred during the reporting period and is discussed under Adverse Weather.

Annual Erosion Inspections

Annual erosion reevaluation inspections were conducted at all 64 SMAs as required under Part I.G.1 of the IP.

Construction Inspections

No construction inspections were conducted.

Control Maintenance

Forty-one control maintenance activities were conducted.

CORRECTIVE ACTION

Augmented Control Installations

Additional controls were installed at 6 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 target action level (TAL) exceedance.

Baseline Control Replacements

No baseline control replacements were completed. 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, the associated 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 is submitted to the U.S. Environmental Protection Agency (EPA) and New Mexico Environment Department (NMED) and is made available on the IP website. Enhanced controls were certified at 1 SMA:

- S-SMA-2 on July 8, 2013

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 TALs, 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 a 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.
 2. Control measures that totally retain and prevent the discharge of storm water have been installed at the Site.
 3. Control measures that totally eliminate exposure of pollutants to storm water have been installed at the Site.
 4. The Site has achieved Resource Conservation and Recovery Act “no further action” status or a Certificate of Completion from NMED.

COMPLIANCE STATUS

Baseline Confirmation Complete

Baseline confirmation monitoring was completed on September 13, 2013, for M-SMA-10.3 [2 associated Sites: 35-014(e2) and 35-016(i)]. No TAL exceedances were observed per Part I.D.4(b) of the IP. For this reason, corrective action is not required for these Sites, and monitoring is no longer required for the duration of the IP.

Baseline Monitoring Extended

As of December 31, 2013, baseline monitoring is continuing at 33 SMAs (55 Sites). A confirmation monitoring sample has not been collected at these SMAs. Baseline monitoring will be extended under the IP until analytical results have been received from the first confirmation sample collected.

Corrective Action Initiated, Planning Started

As of December 31, 2013, corrective action has been initiated at 20 SMAs (41 Sites). See Appendix B for a list of these SMAs and associated Sites.

Enhanced Control Corrective Action Monitoring

As of December 31 2013, enhanced control corrective action monitoring has started at 6 SMAs (12 Sites).

Corrective Action Complete

Two SMAs were issued a Certificate of Completion under the Consent Order and have completed corrective action; the Sites are presented in Appendix B. Documentation certifying completion of corrective action for these Sites will be submitted to EPA.

Alternative Compliance Requested

As of December 31, 2013, alternative compliance has been requested for 2 SMAs (5 Sites). See Appendix B for a list of these SMAs and associated Sites.

DOCUMENTS SUBMITTED

From July 1–December 31, 2013, no new IP Program documents were submitted to EPA Region 6.

IP documents submitted in 2013 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 between July 1–December 31, 2013

Site Monitoring Area	Control Description	Install Date	Control Category
CDB-SMA-0.15	C00103060016 Straw Wattles	11/14/2013	Additional Control
	C00103060017 Straw Wattles	11/14/2013	
	C00103060018 Straw Wattles	11/14/2013	
M-SMA-10.3	M01306010015 Rock Check Dam	08/01/2013	Additional Control
M-SMA-6	M00803100026 Gravel Bags	07/19/2013	Additional Control
S-SMA-3.6	S00603100030 Gravel Bags	09/24/2013	Additional Control
S-SMA-3.95	S01003060008 Straw Wattles	11/06/2013	Additional Control
S-SMA-4.5	S01203060008 Straw Wattles	11/06/2013	Additional Control

APPENDIX B
Corrective Action Status for Site Monitoring Areas and
Sites as of December 31, 2013, within the Sandia/Mortandad Watershed

Site Monitoring Area	Site	Corrective Action Status*
CDB-SMA-0.25	46-004(c2) 46-004(e2)	CAI2
CDB-SMA-0.55	46-004(g) 46-004(m) 46-004(s) 46-006(f)	CAI
CDB-SMA-1	46-003(c) 46-004(d2) 46-004(f) 46-004(t) 46-004(w) 46-008(g) 46-009(a)	CAM5
	C-46-001	CACompD
CDB-SMA-4	54-017 54-018 54-020	CAI
M-SMA-1	03-050(a) 03-054(e)	CAI2
M-SMA-1.2	03-049(a)	CAI
M-SMA-1.22	03-045(h)	CAM5
M-SMA-3	48-001 48-005 48-007(c)	CAI
M-SMA-4	48-001 48-005	CAI
	48-007(a) 48-007(d) 48-010	CACompD
M-SMA-6	35-016(h)	CAI
M-SMA-7	36-016(g)	CAI
M-SMA-7.9	50-006(d)	CAI
M-SMA-10	35-008 35-014(e)	CAI
M-SMA-10.01	35-016(e)	CAM5
M-SMA-10.3	35-014(e2) 35-016(i)	CACompD
M-SMA-12.6	05-004	CAI

Site Monitoring Area	Site	Corrective Action Status*
Pratt-SMA-1.05	35-003(h) 35-003(p) 35-003(r) 35-004(h) 35-009(d) 35-016(k) 35-016(l) 35-016(m)	CAI
S-SMA-0.25	03-013(a) 03-052(f)	AltCompR
S-SMA-1.1	03-029	CAM3
S-SMA-2	03-012(b) 03-045(b) 03-045(c)	AltCompR
	03-056(c)	CACompD
S-SMA-2.01	03-052(b)	CAM3
S-SMA-3.53	03-014(b2)	CAM3
S-SMA-3.6	60-007(b)	CAI2
S-SMA-3.95	20-002(a)	CAI
S-SMA-4.1	53-014	CACompD
S-SMA-6	72-001	CAI
T-SMA-1	50-006(a) 50-009	CAI
T-SMA-2.85	35-014(g) 35-016(n)	CAI
T-SMA-3	35-016(b)	CAI
T-SMA-4	35-004(a) 35-009(a) 35-016(c) 35-016(d)	CAI

*CACompD: From the Individual Storm Water Permit (IP), Part I.E.2(d)—A Site has achieved Resource Conservation and Recovery Act “corrective action complete” status or a Certificate of Completion under the Compliance Order on Consent. Collect no sample.

CAI and CAI2: From the IP, Part I.E.1(a)—Baseline or enhanced control confirmation monitoring has exceeded a target action level, and the corrective action response is being planned.

CAM3 and CAM5: From the IP, Part I.E.4(a)(b)—Collect one or more samples after completion of corrective action control measures at moderate priority sites within 5 yr or at high priority sites within 3 yr of effective date of permit.

AltCompR: From the IP, E.3(b)—Alternative compliance requested.