LA-UR-12-25389

Approved for public release; distribution is unlimited.

Title:	Status Report, Sandia/Mortandad Watershed January 1–June 30, 2012
Author(s):	Steve Veenis
Intended for:	Public
Purpose:	This <i>Status Report</i> 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.I (7) of the IP.



Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by the Los Alamos National Security, LLC for the National Nuclear Security Administration of the U.S. Department of Energy under contract DE-AC52-06NA25396. By acceptance of this article, the publisher recognizes that the U.S. Government retains a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

LA-UR-12-25389 December 2012 EP2012-0218

STATUS REPORT

Sandia/Mortandad Watershed January 1–June 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 (STRIP) 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, commonly referred to as "Sites." A second report will be prepared that summarizes these activities from July 1–November 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 January 1–June 30, 2012, include the following:

- Additional controls were installed at 10 SMAs (18 Sites), and enhanced controls were installed as corrective action measures at 1 SMA.
- Fifty samplers were activated. There were two measureable storm events; however, no confirmatory samples were collected. Thirteen storm event inspections were required.
- As of June 30, baseline monitoring is continuing at 48 SMAs, and corrective action was initiated at 16 SMAs (35 Sites). No 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, January 1–June 30, 2012.

PRECIPITATION

Within the watershed, seven precipitation gages monitor and report precipitation activity during the field season. These gages and their activity levels from January 1–June 30, 2012, are shown in Table 1. There were two 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

Table 1Precipitation Activity forJanuary 1–June 30, 2012

Rain Gage	Related SMAs	Measurable Storm Events	Storm Event Inspections Conducted
RG-TA-06	2	None	0
RG-TA-53	5	None	0
RG-TA-54	1	05/08/2012	1
RG121.9	13	None	0
RG200.5	23	None	0
RG203	12	04/26/2012	12
RG245.5	8	None	0

Fifty samplers were activated at the beginning of this

field season (April 1). Two of these samplers were deactivated as the SMAs moved into corrective action status in May 2012. These two SMAs had a single sample collected in 2011 and remained in the baseline sampling timeline until May 1, 2012. A second confirmatory sample could not be collected because there were no measurable storm events. Based on the analytical results from the single sample that was

collected, the initial confirmation sampling requirements for these SMAs have been completed. These SMAs are CDB-SMA-0.25 and CDB-SMA-1.

These samplers will be reactivated upon certification that enhanced controls have been installed.

Samples Collected

No confirmation samples were collected.

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 1, (SDPPP, R1, V1).

INSPECTION AND MAINTENANCE

Post-Storm Inspections

Thirteen post-storm inspections were required for the Sites as a result of two measurable storm events.

Visual Inspections

Thirteen 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

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

Control Maintenance

Forty-one control maintenance activities were conducted.

CORRECTIVE ACTION

Augmented Control Installations

Additional controls were installed at eight 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.

Enhanced Control Installations

When a sample that exceeds TALs is collected from a SMA, those Sites advance to corrective action. One of the corrective action options is to construct enhanced controls. This option was selected for one SMA, CDB-SMA-0.25. Prior to construction, a visual inspection was conducted at this SMA. The results of the inspection are presented in the SDPPP, R1, V1. The inspection was conducted on March 26, 2012. 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 Environmental Department (NMED) and will be made available on the IP website.

COMPLIANCE STATUS

Baseline Confirmation Is Complete

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

Baseline Monitoring Is Extended

As of June 30, baseline monitoring is continuing at 48 SMAs. A confirmation monitoring sample has 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 June 30, corrective action has been initiated at 16 SMAs (35 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 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:
 - 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
 - Control measures that totally retain and prevent the discharge of stormwater have been installed at the Site; or
 - Control measures that totally eliminate exposure of pollutants to stormwater 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 June 30, enhanced control corrective action monitoring has not started at any SMAs.

Corrective Action Complete

No Certificates of Completion under the Consent Order were issued for any Sites within the watershed from January 1–June 30, 2012.

DOCUMENTS SUBMITTED

From January 1–June 30, 2012, three IP Program documents were submitted to EPA Region 6 and are listed below.

- 2011 Storm Water Individual Permit Annual Report, March 1, 2012
- 2011 Storm Water Individual Permit Compliance Status Reports (Discharge Monitoring Reports), March 1, 2012
- SDPPP, R1, Volumes 1–5, May 1, 2012

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

APPENDIX A Additional Controls Installed between January 1–June 30, 2012

Site Monitoring Area	Additional Control	Install Date	
S-SMA-2.8	S004-03-06-0006 Berms–Straw Wattles	05/23/2012	
T-SMA-3	T005-06-02-0009 Check Dam–Log	05/23/2012	
	T005-06-02-0010 Check Dam–Log		
S-SMA-2	S003-04-06-0011 Channel/Swale–Rip Rap	05/29/2012	
CDB-SMA- 0.25	C002-03-01-0017 Berms–Earthen	05/31/2012	
	C002-03-01-0018 Berms–Earthen		
M-SMA-6	M008-06-01-0021 Check Dam–Rock	06/06/2012	
	M008-06-01-0022 Check Dam–Rock		
	M008-06-01-0023 Check Dam–Rock		
S-SMA-4.5	S012-03-06-0006 Berms–Straw Wattles	06/12/2012	
M-SMA-11.1	M014-03-10-0007 Berms– Gravel Bags	06/12/2012	
M-SMA-7	M009-03-06-0006 Berms–Straw Wattles	06/13/2012	

APPENDIX B

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

Site Monitoring Area	Site
CDB-SMA-0.25	46-004(c2)
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 46-004(m)
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-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)
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