

LA-UR-12-25390

Approved for public release;
distribution is unlimited.

Title: **Status Report, Los Alamos Watershed
January 1–June 30, 2012**

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 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.



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 strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

LA-UR-12-25390
December 2012
EP2012-0217

STATUS REPORT

**Los Alamos/Pueblo 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 1.1 (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 Los Alamos/Pueblo watershed, 101 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, and enhanced controls were installed as corrective action measures at 2 SMAs.
- Forty-nine samplers were activated; however, there was no measureable storm event, so no confirmatory samples were collected and no storm event inspections were required.
- As of June 30, baseline monitoring is continuing at 46 SMAs; corrective action was initiated at 26 Sites; no corrective action was required at 1 SMA; and 16 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, five precipitation gages monitor and report precipitation activity during the field season. These gages and their activity levels for the reporting period are shown in the Table 1. There were no qualifying storm events or events with precipitation intensity of 0.25 in. within 30 min.

Table 1
Precipitation Activity for Reporting Period

Rain Gage	Related SMAs	Measurable Storm Events	Storm Event Inspections Conducted
RG-NCOM	3	None	0
RG-TA-53	6	None	0
RG038	34	None	0
RG055.5	16	None	0
RG121.9	5	None	0

Adverse Weather

No adverse weather events affected IP activities.

MONITORING

Samplers Activated

Forty-nine samplers were activated at the beginning of this field season (April 1). Six of these samplers were deactivated as the SMAs moved into corrective action status in May 2012. These six 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 was no measurable storm event. 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 R-SMA-1.95, LA-SMA-5.31, LA-SMA-5.33, LA-SMA-10.12, DP-SMA-0.3, and DP-SMA-3.

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 SDPPP, R1, V1.

INSPECTION AND MAINTENANCE

Post-Storm Inspections

No post-storm inspections were required to be conducted for the Sites because there was no measurable storm event.

Visual Inspections

Ten visual inspections were conducted at SMAs 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 101 Sites, as required under Part 1.G (1) of the IP.

Control Maintenance

Forty-nine control maintenance activities were conducted.

CORRECTIVE ACTION

Augmented Control Installations

Additional controls were installed at 10 SMAs and are shown 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 an SMA, those Sites advance to corrective action. One of the corrective action options is to construct enhanced controls. This option was selected for two SMAs, DP-SMA-3 and LA-SMA-5.33. Prior to construction, a visual inspection was conducted at these two SMAs. The results of the inspection for DP-SMA-3 are presented in the SDPPP, R1, V1. The inspection of LA-SMA-5.33 was conducted on March 28, 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

Baseline confirmation monitoring was completed for ACID-SMA-1.05 [1 associated Site: 00-030(g)]. No TAL exceedances were observed per Part 1.D.4 (b) of the IP. For this reason, this Site is not required to initiate corrective action, and no more monitoring is required for the duration of the IP.

Baseline Monitoring Is Extended

As of June 30, baseline monitoring is continuing at 46 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 26 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 stormwater have been installed at the Site; or
 3. 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

Two Sites, C-00-020 (R-SMA-0.5) and 00-011(c) (R-SMA-2.05) were issued a Certificate of Completion under the Consent Order on May 16, 2012, and have completed corrective actions. Documentation certifying completion of corrective action for these Sites will be submitted to EPA.

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 <http://www.lanl.gov/community-environment/environmental-stewardship/protection/compliance/individual-permit-stormwater/index.php>.

APPENDIX A
Additional Controls Installed during the Reporting Period

SMA	Additional Control	Install Date
LA-SMA-5.02	L012A-03-06-0010 Berms–Straw Wattles	4/20/2012
	L012A-03-06-0011 Berms–Straw Wattles	
LA-SMA-1	L003-03-10-0015 Berms–Gravel Bags	5/15/2012
LA-SMA-5.33	L016-01-04-0013 Seed and Mulch–Seeding	5/21/2012
P-SMA-3.05	P009-01-01-0011 Seed and Mulch–Seed and Wood Mulch	5/23/2012
LA-SMA-3.9	L009-03-06-0004 Berms–Straw Wattles	6/04/2012
LA-SMA-6.32	L023-03-06-0005 Berms–Straw Wattles	6/04/2012
LA-SMA-6.38	L026-03-06-0009 Berms–Straw Wattles	6/04/2012
	L026-03-06-0010 Berms–Straw Wattles	
LA-SMA-6.5	L028-01-01-0007 Seed and Mulch–Seed and Wood Mulch	6/04/2012
LA-SMA-2.1	L006-01-06-0009 Seed and Mulch–Erosion Control Blankets	6/05/2012
DP-SMA-3	D007-03-01-0016 Berms–Earthen	6/07/2012
	D007-03-01-0017 Berms–Earthen	
	D007-03-01-0018 Berms–Earthen	
	D007-03-01-0019 Berms–Earthen	
	D007-03-01-0020 Berms–Earthen	
	D007-03-01-0021 Berms–Earthen	
	D007-03-01-0022 Berms–Earthen	

APPENDIX B
Sites and Site Monitoring Areas in Corrective
Action Status Initiated as of June 30, 2012
within the Los Alamos/Pueblo Watershed

Site Monitoring Area	Site
ACID-SMA-2	01-002(b)-00 45-001 45-002 45-004
DP-SMA-0.3	21-029
DP-SMA-3	21-013(c) 21-021
LA-SMA-0.85	03-055(c)
LA-SMA-1	00-017 C-00-044
LA-SMA-1.1	43-001(b2)
LA-SMA-1.25	C-43-001
LA-SMA-2.3	01-001(b)
LA-SMA-4.1	01-003(b) 01-006(b)
LA-SMA-5.02	01-003(e)
LA-SMA-5.31	41-002(c)
LA-SMA-5.33	32-004
LA-SMA-5.35	C-41-004
LA-SMA-5.91	21-009 21-021 21-023(c) 21-027(d)
LA-SMA-10.12	53-008
R-SMA-1	C-00-041
R-SMA-1.95	00-015