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Title:

Status Report, Los Alamos/Pueblo Watershed January 1–June 30, 2013

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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 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

Los Alamos/Pueblo Watershed January 1–June 30, 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 January 1–June 30, 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 second report will be prepared that summarizes these activities from July 1–December 30, 2013. Both reports will be available on Los Alamos National 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) map format has been updated to make the maps easier to understand and to provide more information, such as the location of established vegetation. The updated 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 Los Alamos/Pueblo watershed, 101 Sites are monitored at 64 SMAs. Highlights of the work performed from January 1–June 30, 2013, include the following:

- Additional controls were installed at 61 SMAs, and augmented controls were installed at 8 SMAs.
 Baseline control replacements were completed at 60 SMAs, and no enhanced controls were certified as corrective action measures.
- Fifty samplers were activated. There were four measureable storm events, and two confirmation samples were collected. Thirty-one storm event inspections were completed.
- As of June 30, baseline monitoring is continuing at 44 SMAs, corrective action was initiated at 19 SMAs (28 Sites), and no corrective action was required at 1 SMA. Nine 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 human health or the environment during this time period (January 1–June 30, 2013).

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 Table 1. There were four measurable storm events (an event with precipitation intensity of 0.25 in. within 30 min).

Adverse Weather

Severe fire hazard conditions resulted in a stand-down of field activities that occurred from June 24 to July 8, 2013, preventing field crews from accessing most SMA locations.

Table 1
Precipitation Activity for
January 1–June 30, 2013

Rain Gage	Related SMAs	Measurable Storm Events	Storm Event Inspections Conducted
RG-NCOM	3	01/26/2013 06/14/2013 06/30/2013	12 3 0
RG-TA-53	6	None	0
RG038	34	None	0
RG055.5	16	06/14/2013	16
RG121.9	5	None	0

MONITORING

Samplers Activated

Fifty samplers were activated at the beginning of this field season (April 1, 2013).

Samples Collected

Two confirmation samples were collected during the reporting period. An enhanced control corrective action monitoring sample was collected at LA-SMA-0.85 on May 15, 2013, and a baseline monitoring extended sample was collected at R-SMA-2.3 on June 14, 2013.

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). Sampler locations were modified at 2 SMAs. The LA-SMA-5.54 sampler was moved to a more representative location because of a change in the solid waste management unit boundary. The LA-SMA-5.2 sampler was moved to a more representative location because of a change in site conditions observed during the annual inspection.

INSPECTION AND MAINTENANCE

Post-Storm Inspections

Thirty-one post-storm inspections were required for the Sites because of the four 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

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

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

A construction inspection was conducted at 1 SMA.

Control Maintenance

Eight control maintenance activities were conducted.

CORRECTIVE ACTION

Augmented Control Installations

Additional controls were installed at 8 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

Baseline control replacements were completed at 60 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, 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 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. There were no enhanced control certifications completed during the reporting period.

COMPLIANCE STATUS

Baseline Confirmation Complete

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

Compliance Status Categories

- 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 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:
 - Analytical results from enhanced control monitoring show pollutant concentrations for all pollutants of concern at the Site to be at or below applicable TALs.
 - Control measures that totally retain and prevent the discharge of storm water have been installed at the Site.
 - Control measures that totally eliminate exposure of pollutants to storm water have been installed at the Site.
 - The Site has achieved Resource Conservation and Recovery Act "no further action" status or a Certificate of Completion from NMED.

Baseline confirmation monitoring was completed on August 21, 2011, for ACID-SMA-1.05 [1 associated Site: 00-030(g)]. No TAL exceedances were observed per Part I.D.4 (b) of the IP. For this reason, corrective action is not required for this Site, and monitoring is no longer required for the duration of the IP.

Baseline Monitoring Extended

As of June 30, 2013, baseline monitoring is continuing at 44 SMAs (92 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 June 30, 2013, corrective action has been initiated at 14 SMAs (19 Sites). See Appendix B for a list of these Sites and associated SMAs.

Enhanced Control Corrective Action Monitoring

As of June 30, 2013, enhanced control corrective action monitoring has started at 8 SMAs (10 Sites).

Corrective Action Complete

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

DOCUMENTS SUBMITTED

From January 1–June 30, 2013, three IP Program documents were submitted to EPA Region 6 and are listed below.

- 2012 Storm Water Individual Permit Annual Report, March 1, 2013
- 2012 Storm Water Individual Permit Compliance Status Reports (Discharge Monitoring Reports), March 1, 2013
- Updates to the SDPPP, R1, Volumes 1–5, May 1, 2013

IP documents submitted in 2013 can be found on the IP website at http://www.lanl.gov/community-environmental-stewardship/protection/compliance/individual-permit-stormwater/index.php.

APPENDIX A Additional Controls Installed and Baseline Controls Replaced between January 1–June 30, 2013

Site Monitoring Area	Control Description	Install Date	Control Category
R-SMA-0.5	R00102040025 Established Vegetation	05/06/2013	Replaced Baseline Control
R-SMA-1	R00202040008 Established Vegetation	05/06/2013	Replaced Baseline Control
R-SMA-1.95	R00302040008 Established Vegetation	05/06/2013	Replaced Baseline Control
R-SMA-2.05	R00402040005 Established Vegetation	05/06/2013	Replaced Baseline Control
R-SMA-2.3	R00502040004 Established Vegetation	05/06/2013	Replaced Baseline Control
R-SMA-2.5	R00602040007 Established Vegetation	05/06/2013	Replaced Baseline Control
B-SMA-0.5	B00102040012 Established Vegetation	05/14/2013	Replaced Baseline Control
B-SMA-1	B00202040008 Established Vegetation	05/06/2013	Replaced Baseline Control
ACID-SMA-2	P00202040018 Established Vegetation	05/08/2013	Replaced Baseline Control
ACID-SMA-2.01	P002A02040007 Established Vegetation	05/08/2013	Replaced Baseline Control
ACID-SMA-2.1	P00502040019 Established Vegetation	05/08/2013	Replaced Baseline Control
P-SMA-0.3	P00402040008 Established Vegetation	05/07/2013	Replaced Baseline Control
P-SMA-1	P00502040040 Established Vegetation	05/07/2013	Replaced Baseline Control
P-SMA-2	P00602040011 Established Vegetation	05/07/2013	Replaced Baseline Control
P-SMA-2.15	P00702040007 Established Vegetation	05/07/2013	Replaced Baseline Control
P-SMA-2.2	P00802040025 Established Vegetation	05/07/2013	Replaced Baseline Control
P-SMA-3.05	P00902040012 Established Vegetation	05/07/2013	Replaced Baseline Control
LA-SMA-0.85	L00102040009 Established Vegetation	05/09/2013	Replaced Baseline Control
LA-SMA-0.9	L00202040020 Established Vegetation	05/16/2013	Replaced Baseline Control
LA-SMA-1	L00302040025 Established Vegetation	05/09/2013	Replaced Baseline Control
LA-SMA-1.1	L00402040007 Established Vegetation	05/09/2013	Replaced Baseline Control

Site Monitoring Area	Control Description	Install Date	Control Category
LA-SMA-1.25	L00502040008 Established Vegetation	05/09/2013	Replaced Baseline Control
LA-SMA-2.1	L00602040011 Established Vegetation	05/13/2013	Replaced Baseline Control
LA-SMA-2.3	L00702040006 Established Vegetation	05/13/2013	Replaced Baseline Control
LA-SMA-2.3	L00703060007 Straw Wattles	05/22/2013	Additional Control
LA-SMA-3.1	L00803060008 Straw Wattles	05/22/2013	Additional Control
	L00802040007 Established Vegetation	05/14/2013	Replaced Baseline Control
LA-SMA-3.9	L00902040005 Established Vegetation	05/14/2013	Replaced Baseline Control
LA-SMA-4.1	L01002040010 Established Vegetation	04/02/2013	Replaced Baseline Control
LA-SMA-4.2	L01102040008 Established Vegetation	04/02/2013	Replaced Baseline Control
LA-SMA-5.01	L01202040012 Established Vegetation	04/02/2013	Replaced Baseline Control
LA-SMA-5.02	L012A02040012 Established Vegetation	04/02/2013	Replaced Baseline Control
LA-SMA-5.2	L01302040005 Established Vegetation	05/16/2013	Replaced Baseline Control
	L01306020006 Log Check Dam	05/29/2013	Additional Control
	L01306020007 Log Check Dam	05/29/2013	Additional Control
LA-SMA-5.31	L01501010015 Seed and Wood Mulch	05/16/2013	Additional Control
LA-SMA-5.33	L01603010015 Earthen Berm	05/14/2013	Additional Control
	L01602040014 Established Vegetation	05/14/2013	Replaced Baseline Control
LA-SMA-5.361	L01703010011 Earthen Berm	04/17/2013	Additional Control
	L01702040010 Established Vegetation	04/17/2013	Replaced Baseline Control
LA-SMA-5.362	L017A03010011 Earthen Berm	04/26/2013	Additional Control
	L017A02040010 Established Vegetation	04/17/2013	Replaced Baseline Control
LA-SMA-5.51	L01802040009 Established Vegetation	04/11/2013	Replaced Baseline Control
LA-SMA-5.52	L018A02040007 Established Vegetation	04/11/2013	Replaced Baseline Control

Site Monitoring Area	Control Description	Install Date	Control Category
LA-SMA-5.53	L018B02040007 Established Vegetation	04/11/2013	Replaced Baseline Control
LA-SMA-5.54	L018C03060007 Straw Wattles	04/30/2013	Additional Control
	L018C03060005 Straw Wattles	05/01/2013	
LA-SMA-5.54	L018C02040004 Established Vegetation	04/11/2013	Replaced Baseline Control
	L018C03060006 Straw Wattles	04/30/2013	
LA-SMA-5.91	L01902040010 Established Vegetation	05/14/2013	Replaced Baseline Control
LA-SMA-5.92	L019A02040007 Established Vegetation	05/14/2013	Replaced Baseline Control
LA-SMA-6.25	L02002040007 Established Vegetation	04/17/2013	Replaced Baseline Control
LA-SMA-6.27	L02102040011 Established Vegetation	04/17/2013	Replaced Baseline Control
LA-SMA-6.3	L02202040009 Established Vegetation	04/17/2013	Replaced Baseline Control
LA-SMA-6.31	L022A02040008 Established Vegetation	04/17/2013	Replaced Baseline Control
LA-SMA-6.32	L02302040006 Established Vegetation	04/17/2013	Replaced Baseline Control
LA-SMA-6.34	L02402040006 Established Vegetation	04/17/2013	Replaced Baseline Control
LA-SMA-6.36	L02502040010 Established Vegetation	04/17/2013	Replaced Baseline Control
LA-SMA-6.38	L02602040011 Established Vegetation	04/17/2013	Replaced Baseline Control
LA-SMA-6.395	L02702040008 Established Vegetation	04/17/2013	Replaced Baseline Control
LA-SMA-6.5	L02802040008 Established Vegetation	04/17/2013	Replaced Baseline Control
LA-SMA-9	L02902040015 Established Vegetation	05/14/2013	Replaced Baseline Control
LA-SMA-10.12	L030A02040032 Established Vegetation	04/26/2013	Replaced Baseline Control
DP-SMA-0.3	D00102040025 Established Vegetation	04/17/2013	Replaced Baseline Control
DP-SMA-0.4	D00202040009 Established Vegetation	04/17/2013	Replaced Baseline Control
DP-SMA-0.6	D00302040015 Established Vegetation	04/17/2013	Replaced Baseline Control
DP-SMA-1	D00402040015 Established Vegetation	04/17/2013	Replaced Baseline Control

Site Monitoring Area	Control Description	Install Date	Control Category
DP-SMA-2	D00502040012 Established Vegetation	04/17/2013	Replaced Baseline Control
DP-SMA-2.35	D00602040007 Established Vegetation	04/17/2013	Replaced Baseline Control
DP-SMA-3	D00702040023 Established Vegetation	04/17/2013	Replaced Baseline Control
DP-SMA-4	D00802040009 Established Vegetation	04/17/2013	Replaced Baseline Control

APPENDIX B

Corrective Action Status for Site Monitoring Areas and
Sites as of June 30, 2013, within the Los Alamos/Pueblo Watershed

Site Monitoring Area	Site	Corrective Action Status*
ACID-SMA-2	01-002(b)-00	CAI
	45-001 45-002 45-004	CACompD
ACID-SMA-2.1	01-002(b)-00	CAI
DP-SMA-0.3	21-029	CAI
DP-SMA-3	21-013(c) 21-021	CAM5
LA-SMA-0.85	03-055(c)	CAI2
LA-SMA-1	00-017 C-00-044	CAM5
LA-SMA-1.1	43-001(b2)	CA CompD
LA-SMA-1.25	C-43-001	CAI2
LA-SMA-2.3	01-001(b)	CA CompD
LA-SMA-4.1	01-003(b) 01-006(b)	CAI
LA-SMA-5.02	01-003(e)	CA CompD
LA-SMA-5.31	41-002(c)	CAM5
LA-SMA-5.33	32-004	CA CompD
LA-SMA-5.35	C-41-004	CAM5
LA-SMA-5.91	21-009 21-021	CAI
	21-023(c)	CA CompD
	21-027(d)	CAI
LA-SMA-10.12	53-008	CAM5
R-SMA-0.5	C-00-020	CA CompD
R-SMA-1	C-00-041	CAI
R-SMA-1.95	00-015	CAI

^{*}CAM3 and CAM5: From the Individual Storm Water Permit (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.

CACompD: From the 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.