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Title: Status Report, Los Alamos/Pueblo 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.I (7) of the IP.



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STATUS REPORT

Los Alamos/Pueblo 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 that summarizes 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 Los Alamos/Pueblo watershed, 101 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 3 SMAs, baseline controls were replaced at 10 SMAs, and enhanced controls were certified as corrective action measures at 5 SMAs.
- Forty-six samplers were activated. Four confirmatory and 2 baseline samples were collected as a result of 11 measureable storm events. A total of 124 storm event inspections were required.
- As of November 30, baseline monitoring is continuing at 44 SMAs, corrective action was initiated at 19 SMAs (26 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.

PRECIPITATION

Within the watershed, 5 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 11 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-six samplers were activated on July 1, 2012, and an additional 8 samplers were activated after July 1 and prior to November 30, 2012. Two of these samplers were deactivated after an extended baseline sample

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

Rain Gage	Related SMAs	Measurable Storm Events	Storm Event Inspections Conducted
RG-NCOM	3	08/03/2012 10/12/2012	3
RG-TA-53	6	08/05/2012 08/24/2012 09/27/2012 10/12/2012	6 6 6 6
RG038	34	07/07/2012 10/12/2012	34 34
RG055.5	16	10/12/2012	16
RG121.9	5	07/11/2012 10/12/2012	5 5

was collected on August 3, 2012. A second confirmatory sample could not be collected because there was no measurable storm event. Following the collection of a second confirmation monitoring sample, 3 samplers were deactivated, leaving 49 samplers activated on November 30, 2012. The remaining samplers were shut down for the winter in early December 2012.

Samples Collected

A total of six samples were collected during the July 1–November 30, 2012, time period. A single confirmation sample was collected at LA-SMA-1.1 on September 20, 2012 and at LA-SMA-0.85 on October 9, 2012. Two confirmation samples were collected at LA-SMA-1.25: the first was collected on September 10, 2012, and another was collected on October 12, 2012. A single extended baseline sample was collected at ACID-SMA-2.1 and at R-SMA-0.5 on August 3, 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 1 (SDPPP, R1, V1).

INSPECTION AND MAINTENANCE

Post-Storm Inspections

A total of 124 post-storm inspections were required to be conducted for the Sites as a result of 11 measurable storm events.

Visual Inspections

Three 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

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

Eighty-one control maintenance activities were conducted.

CORRECTIVE ACTION

Augmented Control Installations

Additional controls were installed at 3 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 10 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 the following 5 SMAs:

- LA-SMA-5.31 on July 27, 2012
- LA-SMA-5.33 on July 30, 2012
- LA-SMA-1.25 and DP-SMA-3 on August 30, 2012
- LA-SMA-0.85 on October 23, 2012

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:
 - 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 storm water have been installed at the Site; or
 - 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.

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 November 30, baseline monitoring is continuing at 44 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 (26 Sites). See Appendix B for a list of these Sites and associated SMAs.

Enhanced Control Corrective Actions Are Monitored

As of November 30, enhanced control corrective action monitoring has started at 6 SMAs (8 Sites).

Corrective Action Complete

Five Sites were issued a Certificate of Completion under the Consent Order and have completed corrective actions including Sites 43-001(b2), 01-001(b), 01-003(e), 21-023(c), and C-00-020. 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-environmental-stewardship/protection/compliance/individual-permit-stormwater/index.php.

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

Control Description	Install Date	Control Category
R001-01-01-0015 Seed and Mulch-Wood	08/23/2012	Additional control
R001-01-01-0016 Seed and Mulch-Wood		
R001-03-06-0017 Berm–Straw Wattles		
R001-03-06-0018 Berm–Straw Wattles		
R001-03-06-0019 Berm–Straw Wattles		
R001-03-06-0020 Berm–Straw Wattles		
R001-03-06-0021 Berm–Straw Wattles		
R001-03-06-0022 Berm–Straw Wattles	08/23/2012	Replaced baseline control
R001-03-06-0023 Berm–Straw Wattles		
R001-03-06-0024 Berm–Straw Wattles		
B001-04-06-0009 Channel/Swale-Rip Rap	08/27/2012	Additional control
B001-01-01-0010 11/08/2012 Berm–Straw Wattles		Additional control
B001-03-06-0011 Seed and Mulch-Wood		
L003-03-06-0016 Berm–Straw Wattles	07/26/2012	Replaced baseline control
L003-03-06-0017 Berm–Straw Wattles		
L003-03-12-0018 Berm–Rock	08/02/2012	
L003-04-06-0023 Channel/Swale-Rip Rap	10/31/2012	Additional Control
L003-04-06-0024 Channel/Swale-Rip Rap	10/31/2012	
L021-03-06-0010 Berm–Straw Wattles	07/23/2012	Replaced baseline control
	R001-01-01-0015 Seed and Mulch-Wood R001-01-01-01-0016 Seed and Mulch-Wood R001-03-06-0017 Berm—Straw Wattles R001-03-06-0018 Berm—Straw Wattles R001-03-06-0019 Berm—Straw Wattles R001-03-06-0020 Berm—Straw Wattles R001-03-06-0021 Berm—Straw Wattles R001-03-06-0022 Berm—Straw Wattles R001-03-06-0022 Berm—Straw Wattles R001-03-06-0023 Berm—Straw Wattles R001-03-06-0024 Berm—Straw Wattles B001-04-06-0009 Channel/Swale—Rip Rap B001-01-01-010 Berm—Straw Wattles B001-03-06-0011 Seed and Mulch-Wood L003-03-06-0016 Berm—Straw Wattles L003-03-06-0017 Berm—Straw Wattles L003-03-12-0018 Berm—Rock L003-04-06-0023 Channel/Swale—Rip Rap L003-04-06-0024 Channel/Swale—Rip Rap	R001-01-01-0015 Seed and Mulch-Wood R001-01-01-01016 Seed and Mulch-Wood R001-03-06-0017 Berm—Straw Wattles R001-03-06-0018 Berm—Straw Wattles R001-03-06-0019 Berm—Straw Wattles R001-03-06-0020 Berm—Straw Wattles R001-03-06-0021 Berm—Straw Wattles R001-03-06-0022 Berm—Straw Wattles R001-03-06-0022 Berm—Straw Wattles R001-03-06-0023 Berm—Straw Wattles R001-03-06-0024 Berm—Straw Wattles B001-04-06-0009 Channel/Swale—Rip Rap B001-03-06-0011 Seed and Mulch-Wood L003-03-06-0017 Berm—Straw Wattles L003-03-12-0018 Berm—Rock L003-04-06-0023 Channel/Swale—Rip Rap L003-04-06-0024 Channel/Swale—Rip Rap L003-04-06-0023 Channel/Swale—Rip Rap L003-04-06-0024 Channel/Swale—Rip Rap L003-04-06-0024 Channel/Swale—Rip Rap L003-04-06-0024 Channel/Swale—Rip Rap L021-03-06-0010 07/23/2012

Site Monitoring Area	Control Description	Install Date	Control Category
ACID-SMA-2	P002-03-06-0015 Berm–Straw Wattles	10/11/2012	Replaced baseline control
	P002-03-06-0016 Berm–Straw Wattles		
	P002-03-06-0017 Berm–Straw Wattles		
ACID-SMA-2.1	P003-03-06-0016 Berm–Straw Wattles	10/11/2012	Replaced baseline control
	P003-03-06-0017 Berm–Straw Wattles		
	P003-03-06-0018 Berm–Straw Wattles		
DP-SMA-0.4	D002-03-06-0008 Berm–Straw Wattles	10/24/2012	Replaced baseline control
LA-SMA-2.3	L007-03-06-0005 Berm–Straw Wattles	10/24/2012	Replaced baseline control
LA-SMA-5.01	L012-03-06-0011 Berm–Straw Wattles	10/24/2012	Replaced baseline control
ACID-SMA-2.01	P002A-03-06-0006 Berm–Straw Wattles	11/01/2012	Replaced baseline control
R-SMA-1.95	R003-03-06-0007 Berm–Straw Wattles	11/05/2012	Replaced baseline control

APPENDIX B Sites and Site Monitoring Areas in Corrective Action Status Initiated as of November 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
ACID-SMA-2.1	01-002(b)-00
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-0.5	C-00-020
R-SMA-1	C-00-041
R-SMA-1.95	00-015