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Title: Status Report, Pajarito Watershed
January 1–June 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 1.1 (7) of the IP.



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STATUS REPORT

**Pajarito 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* 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 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 Pajarito watershed, 60 Sites are monitored at 51 site monitoring areas (SMAs). Highlights of 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 8 SMAs.
- Forty-one samplers were activated. There were three measureable storm events; however, no confirmatory samples were collected. Six storm event inspections were required.
- As of June 30, baseline monitoring is continuing at 34 SMAs; corrective action was initiated at 13 SMAs; no corrective action was required at 1 SMA; and 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, eight 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 three measurable storm events, (an event with precipitation intensity of 0.25 in. within 30 min).

Table 1
Precipitation Activity for
January 1–June 30, 2012

Rain Gage	Related SMAs	Measurable Storm Events	Storm Event Inspections Conducted
RG-TA-06	21	None	0
RG-TA-54	5	05/08/2012	5
RG121.9	4	None	0
RG240	5	None	0
RG245.5	11	None	0
RG253	1	05/13/2012 06/28/2012	1 0
RG257	2	None	0
RG262.4	2	None	0

Adverse Weather

No adverse weather events affected IP activities.

MONITORING

Samplers Activated

Forty-one samplers were activated at the beginning of this field season (April 1). Seven of these samplers were deactivated as the SMAs moved into corrective action status in May 2012. These seven 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 2M-SMA-1.44, 2M-SMA-1.45, 2M-SMA-1.65, 2M-SMA-1.67, PJ-SMA-3.05, PJ-SMA-13.7, and PJ-SMA-20. 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

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

Visual Inspections

Five 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 51 SMAs as required under Part 1.G (1) of the IP.

Control Maintenance

Thirty-five control maintenance activities were conducted.

CORRECTIVE ACTION

Augmented Control Installations

Additional controls were installed at 10 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 eight SMAs: 2M-SMA-1, 2M-SMA-1.42, 2M-SMA-1.44, 2M-SMA-1.45, 2M-SMA-1.65, PJ-SMA-3.05, PJ-SMA-5.1, and STRM-SMA-5.05. Prior to construction, a visual inspection was conducted at these eight SMAs. The results of the inspection are presented in the SDPPP, R1, V1. The inspection of 2M-SMA-1 was conducted on March 27, 2012. Enhanced controls were certified at 2M-SMA-1.42, 2M-SMA-1.44 and STRM-SMA-5.05 on June 27, 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 PJ-SMA-14.8 [1 associated Site: 18-012(a)]. 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 34 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 13 SMAs (14 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 measurable storm events 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 storm water have been installed at the Site; or
 3. 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.

Enhanced Control Corrective Actions Are Monitored

As of June 30, enhanced control corrective action monitoring has started at three SMAs: 2M-SMA-1.42, 2M-SMA-1.44, and STRM-SMA-5.05.

Corrective Action Complete

No Certificates of Completion under the Consent Order have been issued for any Sites within the watershed.

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 between January 1–June 30, 2012

Site Monitoring Area	Additional Control	Install Date
PJ-SMA-1.05	J001-03-01-0017 Berms–Earthen	05/09/2012
2M-SMA-1.44	E004-01-01-0007 Seed & Wood Mulch	05/14/2012
STRM-SMA-5.05	J031-01-04-0011 Seed & Mulch–Seeding	05/14/2012
2M-SMA-1.42	E002-03-01-0014 Berms–Earthen	05/14/2012
2M-SMA-1.65	E007-03-01-0010 Berms–Earthen	05/30/2012
	E007-06-01-0006 Check Dam–Rock	
	E007-06-01-0007 Check Dam–Rock	
	E007-06-01-0008 Check Dam–Rock	
	E007-06-01-0009 Check Dam–Rock	
PJ-SMA-3.05	J003-03-01-0010 Berms–Earthen	06/11/2012
	J003-03-01-0011 Berms–Earthen	
2M-SMA-2	E012-03-06-0011 Berms–Straw Wattles	06/12/2012
	E012-03-06-0012 Berms–Straw Wattles	
	E012-03-06-0013 Berms–Straw Wattles	
2M-SMA-1	E001-03-01-0014 Berms–Earthen	06/19/2012
	E001-03-11-0015 Berms–Eco-Block	
	E001-05-02-0013 Sediment Traps and Basins–Sediment Basin	
	E001-06-01-0016 Check Dam–Rock	
	E001-06-01-0017 Check Dam–Rock	
	E001-06-01-0018 Check Dam–Rock	
	E001-06-01-0019 Check Dam–Rock	
	E001-06-01-0020 Check Dam–Rock	
	E001-06-01-0021 Check Dam–Rock	
	E001-06-01-0022 Check Dam–Rock	

Site Monitoring Area	Additional Control	Install Date
2M-SMA-1	E001-06-01-0023 Check Dam–Rock	06/19/2012
	E001-06-01-0024 Check Dam–Rock	
	E001-06-01-0025 Check Dam–Rock	
2M-SMA-1.45	E005-03-01-0016 Berms–Earthen	06/25/2012
	E005-03-01-0017 Berms–Earthen	
PJ-SMA-5.1	J006-03-01-0009 Berms–Earthen	06/25/2011

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

Site Monitoring Area	Site
2M-SMA-1	03-010(a)
2M-SMA-1.42	06-001(a)
2M-SMA-1.44	06-001(b)
2M-SMA-1.45	06-006
2M-SMA-1.65	40-005
2M-SMA-1.7	03-055(a)
2M-SMA-1.8	03-001(k)
2M-SMA-2	03-050(d) 03-054(b)
2M-SMA-2.2	03-003(k)
PJ-SMA-3.05	09-004(o)
PJ-SMA-5.1	22-016
PJ-SMA-13.7	18-010(b)
PJ-SMA-20	54-017
STRM-SMA-1.05	08-009(f)
STRM-SMA-4.2	09-008(b)
STRM-SMA-5.05	09-013