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> Title: Status Report, Pajarito 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**

## Pajarito 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 summarizing 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/environmentalstewardship/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 July 1-November 30, 2012, include the following:

- Additional controls were installed at 5 SMAs, baseline controls were replaced at 5 SMAs, and enhanced controls were certified as corrective action measures at 7 SMAs.
- Forty-one samplers were activated. Five confirmatory samples were collected as a result of 20 measureable storm events. A total of 141 storm event inspections were completed.
- As of November 30, 2012, baseline monitoring is continuing at 30 SMAs, corrective action was initiated at 19 SMAs, no corrective action was required at 2 SMAs, and no Sites were issued Table 1 Certificates of Completion under the Compliance **Precipitation Activity for** Order on Consent (the Consent Order).
- There were no incidents of noncompliance that could potentially endanger health or the environment from July 1-November 30, 2012.

#### **PRECIPITATION**

Within the watershed, 8 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 20 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**

Thirty-six samplers were activated on July 1, 2012 and an additional 8 samplers were activated after July 1 and

July 1-November 30, 2012

Rain Gage	Related SMAs	Measurable Storm Events	Storm Event Inspections Conducted
RG-TA-06	21	07/11/2012 09/10/2012 09/28/2012 10/12/2012	21 21 21 21
RG-TA-54	5	07/02/2012 08/01/2012	5 5
RG121.9	4	07/11/2012 10/12/2012	4
RG240	5	07/04/2012 08/16/2012 09/28/2012	5 5 5
RG245.5	11	08/22/2012	11
RG253	1	07/24/2012 08/16/2012 10/12/2012	1 1 1
RG257	2	07/04/2012 09/28/2012	2 2
RG262.4	2	07/04/2012 07/25/2012 09/10/2012	2 2 2

prior to November 30, 2012. One sampler was deactivated following the collection of a second confirmation monitoring sample, 4 samplers were shut down following the collection of an extended baseline sample, and 10 samplers were shut down for the winter, leaving 29 samplers activated on November 30, 2012. The remaining samplers were shut down for the winter in early December 2012.

#### **Samples Collected**

Two confirmation monitoring samples were collected from 2M-SMA-1: the first was collected on July 25, 2012, and another was collected on September 12, 2012. A single extended baseline monitoring sample was collected from 2M-SMA-1.9 on July 11, 2012; from STRM-SMA-1.5 on July 11, 2012; from 2M-SMA-2.5 on September 10, 2012; and from PJ-SMA-5 on October 12, 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 3 (SDPPP, R1,

#### INSPECTION AND MAINTENANCE

#### **Post-Storm Inspections**

A total of 141 post-storm inspections were required for the Sites as a result of 20 measurable storm events.

#### **Visual Inspections**

Four 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 inspections for the 51 SMAs in the watershed were completed prior to July 1, 2012.

#### **Control Maintenance**

Fifty-seven control maintenance activities were conducted.

#### CORRECTIVE ACTION

#### **Augmented Control Installations**

Additional controls were installed at 5 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 5 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 is submitted to the U.S. Environmental Protection Agency (EPA) and New Mexico Environment Department (NMED) and is made available on the IP website. Enhanced controls were certified at 7 SMAs:

- PJ-SMA-5.1 and PJ-SMA-3.05 on July 18, 2012
- 2M-SMA-1.65 on July 19, 2012
- 2M-SMA-1 on July 20, 2012
- 2M-SMA-1.7 on July 27, 2012
- 2M-SMA-1.45 on August 20, 2012
- STRM-SMA-4.2 on August 21, 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 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:
  - 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
  - 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 PJ-SMA-14.8 [1 associated Site: 18-012(a)] and for 2M-SMA-2.5 [1 associated Site: 40-001(c)]. No TAL exceedances were observed per Part 1.D.4 (b) of the

IP. For this reason, these Sites are 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, 2012, baseline monitoring is continuing at 30 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 November 30, corrective action has been initiated at 19 SMAs (20 Sites). See Appendix B for a list of these Sites and associated SMAs.

#### **Enhanced Control Corrective Actions Are Monitored**

As of November 30, 2012, enhanced control corrective action monitoring has started at 10 SMAs.

#### **Corrective Action Complete**

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

#### **DOCUMENTS SUBMITTED**

From July 1-November 30, 2012, no new IP Program documents were submitted to EPA Region 6.

IP documents for the IP Program can be found on the IP website at <a href="http://www.lanl.gov/community-environment/environmental-stewardship/protection/compliance/individual-permit-stormwater/index.php">http://www.lanl.gov/community-environmental-stewardship/protection/compliance/individual-permit-stormwater/index.php</a>.

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

Site Monitoring Area	Control Description	Install Date	Control Category	
STRM-SMA-5.05	J031-03-01-0012 07/27/2012 Berm–Earthen			
PJ-SMA-2	J002-03-01-0015 Berm–Earthen	08/01/2012	Additional control	
	J002-03-06-0016 Berm–Straw Wattles	10/10/2012	Additional control	
	J002-03-06-0017 Berm-Straw Wattles	10/10/2012	Additional control	
	J002-06-01-0018 Check Dam-Rock	10/10/2012	Additional control	
	J002-06-01-0019 Check Dam-Rock	10/10/2012	Additional control	
	J002-06-01-0020 Check Dam-Rock	10/10/2012	Additional control	
	J002-06-01-0021 Check Dam-Rock	10/10/2012	Additional control	
PJ-SMA-14.6	J021-04-06-0007 Channel/Swale-Rip Rap	09/11/2012	Additional control	
2M-SMA-1.5	E006-03-06-0004 Berm-Straw Wattles	10/11/2012	Additional control	
PJ-SMA-6	J007-01-01-0017 Seed and Mulch- Wood	11/07/2012	Additional control	
	J007-03-06-0013 Berm-Straw Wattles	11/07/2012	Additional control	
	J007-03-06-0014 Berm-Straw Wattles	11/07/2012	Additional control	
	J007-03-06-0015 Berm-Straw Wattles	11/07/2012	Additional control	
	J007-03-06-0016 Berm-Straw Wattles	11/07/2012	Additional control	
STRM-SMA-1.05	J028-06-01-0007 Check Dam-Rock	07/25/2012	Replaced baseline control	
PJ-SMA-1.05	J001-03-01-0018 Berm-Earthen	08/27/2012	Replaced baseline control	
PJ-SMA-11	J013-03-06-0017 Berm-Straw Wattles	10/03/2012	Replaced baseline control	
PJ-SMA-16	J023-03-06-0003 Berm-Straw Wattles	10/03/2012	Replaced baseline control	
2M-SMA-3	E014-03-06-0012 Berm-Straw Wattles	11/06/2012	Replaced baseline control	

# APPENDIX B Sites and Site Monitoring Areas in Corrective Action Initiated Status as of November 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
2M-SMA-1.9	03-003(a)
PJ-SMA-5	22-015(c)
STRM-SMA-1.5	08-009(d)