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*Title:* **Status Report, Pajarito Watershed  
July 1–December 31, 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**

**Pajarito Watershed  
July 1–December 31, 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 July 1–December 31, 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 previous report was prepared that summarizes these activities from January 1–June 30, 2013. Both reports will be available on Los Alamos National Laboratory’s (the Laboratory’s) public website 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) 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 Pajarito watershed, 60 Sites are monitored at 51 SMAs. Highlights of the work performed from July 1–December 31, 2013, include the following items.

- Additional controls were installed at 8 SMAs, and no augmented controls were installed at any SMAs. No baseline control replacements were completed at any SMAs, and enhanced controls were installed as corrective action measures at 3 SMAs.
- Forty-one samplers were activated. There were 52 measurable storm events, and 18 confirmation samples were collected. One hundred forty-eight storm event inspections were completed during the reporting period.
- As of December 31, 2013, baseline monitoring is continuing at 19 SMAs, corrective action was initiated at 17 SMAs (24 Sites), and no corrective action was required at 2 SMAs. One Site was issued a Certificate 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 (July 1–December 31, 2013).

**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–December 31, 2013, are shown in Table 1. There were 52 measurable storm events, (an event with precipitation intensity of 0.25 in. within 30 min).

**Table 1  
Precipitation Activity for  
July 1–December 31, 2013**

Rain Gage	Related SMAs	Measurable Storm Events	Storm Event Inspections Conducted
RG-TA-06	21	07/11/2013	21
		07/12/2013	0
		09/12/2013	21
		09/13/2013	0
		09/17/2013	0
RG-TA-54	5	07/03/2013	1
		07/11/2013	4
		07/14/2013	0
		07/25/2013	5
		07/26/2013	0
		08/05/2013	0
		08/08/2013	5
		09/12/2013	5
		09/13/2013	0
		09/22/2013	0
		11/04/2013	5

**Adverse Weather**

During the week of September 10, 2013, the Pajarito Plateau and much of New Mexico and Colorado were inundated with unprecedented rainfall. Rainfall totals in some areas of the Laboratory exceeded 7 in. in a 1-wk time period, and much of the rain fell during an extremely large event that occurred between September 12 and 13, 2013. These storm events were accompanied by record runoff, flooding, and erosion. Resulting in a notification of Force Majeure.

**MONITORING**

**Samplers Activated**

Twenty-five samplers were shut down and reactivated between July and September 2013. From these samplers, 4 samples were collected. Following sample collection, the samplers were shut down. The remaining samplers were shut down for the winter in December 2013.

**Samples Collected**

Eighteen confirmation samples were collected during the reporting period.

**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, V3).

**INSPECTION AND MAINTENANCE**

**Post-Storm Inspections**

One hundred forty-eight post-storm inspections were required for the Sites because of the 52 measurable storm events that were observed during the reporting period.

**Visual Inspections**

No visual inspections were required to be conducted during the reporting period.

**Table 1 (continued)  
Precipitation Activity for  
July 1–December 31, 2013**

Rain Gage	Related SMAs	Measurable Storm Events	Storm Event Inspections Conducted
RG121.9	4	07/12/2013 09/12/2013 09/13/2013	4 4 0
RG240	5	07/12/2013 07/13/2013 08/04/2013 08/20/2013 09/01/2013 09/13/2013	5 0 5 5 5 2
RG245.5	11	07/09/2013 07/25/2013 07/26/2013 09/12/2013 09/13/2013	11 11 0 11 0
RG253	1	07/12/2013 07/13/2013 07/26/2013 08/05/2013 09/12/2013 09/13/2013 09/17/2013	1 0 1 1 1 0 0
RG257	2	07/11/2013 07/12/2013 07/22/2013 08/05/2013 09/12/2013 09/13/2013 09/17/2013	0 0 2 2 2 0 0
RG262.4	2	07/05/2013 07/12/2013 07/14/2013 07/25/2013 08/04/2013 09/12/2013 09/13/2013 09/14/2013	2 2 0 2 0 2 0 0

**Significant Event Inspections**

One significant event that could impact control measures and environmental conditions occurred during the reporting period and is discussed under Adverse Weather.

**Annual Erosion Inspections**

Annual erosion reevaluation inspections were conducted at all 51 SMAs as required under Part I.G.1 of the IP.

**Construction Inspections**

No construction inspections were conducted.

**Control Maintenance**

Twenty-two 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**

No baseline control replacements were completed. 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.

**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 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:
  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.
  2. Control measures that totally retain and prevent the discharge of storm water have been installed at the Site.
  3. Control measures that totally eliminate exposure of pollutants to storm water have been installed at the Site.
  4. The Site has achieved Resource Conservation and Recovery Act “no further action” status or a Certificate of Completion from NMED.

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 3 SMAs:

- PJ-SMA-13.7 on July 8, 2013
- STRM-SMA-1.05 on July 8, 2013
- STRM-SMA-1.5 on July 8, 2013

## **COMPLIANCE STATUS**

### **Baseline Confirmation Complete**

Baseline confirmation monitoring was completed on August 18, 2011, for PJ-SMA-14.8 [1 associated Site: 18-012(a)]; on September 9, 2012, for 2M-SMA-2.5 [1 associated Site: 40-001(c)]; and on August 8, 2013, for PJ-SMA-16 [1 associated Site: 27-002]. No TAL exceedances were observed per Part I.D.4(b) of the IP. For this reason, corrective action is not required for these Sites, and monitoring is no longer required for the duration of the IP.

### **Baseline Monitoring Extended**

As of December 31, 2013, baseline monitoring is continuing at 19 SMAs (23 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 December 31, 2013, corrective action has been initiated at 17 SMAs (24 Sites). See Appendix B for a list of these SMAs and associated Sites.

### **Enhanced Control Corrective Action Monitoring**

As of December 31, 2013, enhanced control corrective action monitoring has started at 11 SMAs (12 Sites).

### **Corrective Action Complete**

Corrective action has been completed at PJ-SMA-20 (Site 54-017). Installed control measures have totally eliminated exposure of pollutants to storm water. Documentation certifying completion of corrective action for this Site will be submitted to EPA.

## **DOCUMENTS SUBMITTED**

From July 1–December 31, 2013, no new IP Program documents were submitted to EPA Region 6.

IP documents submitted in 2013 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 July 1–December 31, 2013**

Site Monitoring Area	Control Description	Install Date	Control Category
2M-SMA-3	E01403060014 Straw Wattles	07/25/2013	Additional Control
	E01403060015 Straw Wattles		Additional Control
	E01403060017 Straw Wattles	11/07/2013	Additional Control
	E01403060018 Straw Wattles		Additional Control
PJ-SMA-10	J01206010008 Rock Check Dam	07/25/2013	Additional Control
	J01206010009 Rock Check Dam		Additional Control
	J01206010010 Rock Check Dam		Additional Control
PJ-SMA-11	J01303060019 Straw Wattles	08/13/2013	Additional Control
	J01301010020 Seed and Wood Mulch		Additional Control
	J01303060021 Straw Wattles	11/20/2013	Additional Control
PJ-SMA-11.1	J01403060016 Straw Wattles	11/20/2013	Additional Control
PJ-SMA-14.2	J01803060006 Straw Wattles	07/16/2013	Additional Control
PJ-SMA-14.3	J01903060005 Straw Wattles	11/06/2013	Additional Control
PJ-SMA-14.8	J02203060008 Straw Wattles	11/06/2013	Additional Control
PJ-SMA-8	J00906010011 Rock Check Dam	11/07/2013	Additional Control

**APPENDIX B**  
**Corrective Action Status for Site Monitoring Areas and**  
**Sites as of December 31, 2013, within the Pajarito Watershed**

Site Monitoring Area	Site	Corrective Action Status*
2M-SMA-1	03-010(a)	CAI2
2M-SMA-1.42	06-001(a)	CAM5
2M-SMA-1.43	22-014(a) 22-015(a)	CAI
2M-SMA-1.44	06-001(b)	CAM5
2M-SMA-1.45	06-006	CAM5
2M-SMA-1.65	40-005	CAM5
2M-SMA-1.7	03-055(a)	CAM5
2M-SMA-1.8	03-001(k)	CAI
2M-SMA-1.9	03-003(a)	CAI
2M-SMA-2	03-050(d) 03-054(b)	CAI2
2M-SMA-2.2	03-003(k)	CAI
2M-SMA-3	07-001(a) 07-001(b) 07-001(c) 07-001(d)	CAI
3M-SMA-0.4	15-006(b)	CAI
PJ-SMA-1.05	09-013	CAI
PJ-SMA-3.05	09-004(o)	CAM5
PJ-SMA-4.05	09-004(g)	CAI
PJ-SMA-5	22-015(c)	CAI
PJ-SMA-5.1	22-016 22-010(b)	CAM5
PJ-SMA-11	40-003(a)	CAI
PJ-SMA-11.1	40-003(b)	CAI
PJ-SMA-13.7	18-010(b)	CAM5
PJ-SMA-17	54-018	CAI
PJ-SMA-18	54-014(d) 54-017	CAI
PJ-SMA-19	54-013(b) 54-017 54-020	CAI
PJ-SMA-20	54-017	CACompC
STRM-SMA-1.05	08-009(f)	CAI2
STRM-SMA-1.5	08-009(d)	CAM5



Site Monitoring Area	Site	Corrective Action Status*
STRM-SMA-4.2	09-008(b)	CAM5
STRM-SMA-5.05	09-013	CAM5

\*CACompC: From the Individual Storm Water Permit (IP), Part E2(c)—Control measures installed to totally eliminate exposure of pollutants to storm water. Collect 1 informational sample.

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.

CAM3 and CAM5: From the 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.