LA-UR-13-26610

Approved for public release; distribution is unlimited.

Title:

Status Report, Water/Cañon de Valle Watershed January 1–June 30, 2013

Author(s):

Steve Veenis

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.



Los Alamos National Laboratory, an affirmative action/equal opportunity employer, is operated by the Los Alamos National Security, LLC for the National Nuclear Security Administration of the U.S. Department of Energy under contract DE-AC52-06NA25396. By acceptance of this article, the publisher recognizes that the U.S. Government retains a nonexclusive, royalty-free license to publish or reproduce the published form of this contribution, or to allow others to do so, for U.S. Government purposes. Los Alamos National Laboratory requests that the publisher identify this article as work performed under the auspices of the U.S. Department of Energy. Los Alamos National Laboratory strongly supports academic freedom and a researcher's right to publish; as an institution, however, the Laboratory does not endorse the viewpoint of a publication or guarantee its technical correctness.

STATUS REPORT

Water/Cañon de Valle 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 summarizing 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 Water/Cañon de Valle watershed, 89 Sites are monitored at 50 SMAs. Highlights of work performed from January 1–June 30, 2013, include the following items.

- Additional controls were installed at 47 SMAs, and no augmented controls were installed at any SMAs. Baseline control replacements were completed at 47 SMAs, and enhanced controls were installed as corrective action measures at 3 SMAs.
- Forty-four samplers were activated. There was one measureable storm event; however, no
 confirmation samples were collected and no storm event inspections were completed during the
 reporting period.
- As of June 30, 2013, baseline monitoring is continuing at 30 SMAs, and corrective action was initiated at 20 SMAs (42 Sites). Two Sites have been 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, four precipitation gages monitor and report precipitation activity during the field season. These gages and their activity levels from January 1–June 30, 2013, are shown in Table 1. There was one measurable storm event (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
RG253	8	None	0
RG257	27	06/30/2013	0
RG262.4	12	None	0
RG267.4	3	None	0

MONITORING

Samplers Activated

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

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 4 (SDPPP, R1, V4). Sampler locations were modified at 2 SMAs. The W-SMA-1 sampler was moved to a more representative location after enhanced control measure certification. The PT-SMA-1.7 sampler was moved to a more representative location after enhanced control measure certification.

INSPECTION AND MAINTENANCE

Post-Storm Inspections

No post-storm inspections were required to be conducted 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 50 SMAs as required under Part I.G.1 of the IP.

Construction Inspection

Construction inspections were conducted at 2 SMAs.

Control Maintenance

No control maintenance activities were conducted.

CORRECTIVE ACTION

Augmented Control Installations

No additional controls were installed at any SMAs. Additional controls are installed at 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 47 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 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 1 SMA:

W-SMA-1 on May 2, 2013

COMPLIANCE STATUS

Baseline Confirmation Complete

No SMAs have successfully completed

baseline monitoring; therefore, corrective action is required at each of the associated Sites.

Baseline Monitoring Extended

As of June 30, 2013, baseline monitoring is continuing at 30 SMAs (50 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.

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 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 as 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.

Corrective Action Initiated, Planning Started

As of June 30, 2013, corrective action has been initiated at 20 SMAs (42 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 15 SMAs (30 Sites).

Corrective Action Complete

One Site was issued a Certificate of Completion under the Consent Order and has completed corrective action and is presented in Appendix B. Documentation certifying completion of corrective action for this Site 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 for 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
CDV-SMA-1.2	V00102040012 Established Vegetation	05/03/2013	Replaced Baseline Control
CDV-SMA-1.3	V00202040003 Established Vegetation	05/03/2013	Replaced Baseline Control
CDV-SMA-1.45	V00402040005 Established Vegetation	05/03/2013	Replaced Baseline Control
CDV-SMA-1.7	V00502040016 Established Vegetation	05/16/2013	Replaced Baseline Control
CDV-SMA-2	V00602040013 Established Vegetation	05/16/2013	Replaced Baseline Control
CDV-SMA-2.3	V00702040021 Established Vegetation	05/03/2013	Replaced Baseline Control
CDV-SMA-2.41	V00802040015 Established Vegetation	05/03/2013	Replaced Baseline Control
CDV-SMA-2.42	V008A02040020 Established Vegetation	05/03/2013	Replaced Baseline Control
CDV-SMA-2.5	V00902040029 Established Vegetation	05/03/2013	Replaced Baseline Control
CDV-SMA-2.51	V009A02040020 Established Vegetation	05/03/2013	Replaced Baseline Control
CDV-SMA-3	V01002040013 Established Vegetation	04/29/2013	Replaced Baseline Control
CDV-SMA-4	V01102040006 Established Vegetation	04/29/2013	Replaced Baseline Control
CDV-SMA-6.01	V01202040013 Established Vegetation	04/29/2013	Replaced Baseline Control
CDV-SMA-7	V01302040008 Established Vegetation	05/07/2013	Replaced Baseline Control
CDV-SMA-8	V01402040009 Established Vegetation	05/08/2013	Replaced Baseline Control
CDV-SMA-8.5	V01502040006 Established Vegetation	04/03/2013	Replaced Baseline Control
CDV-SMA-9.05	V01602040005 Established Vegetation	04/03/2013	Replaced Baseline Control
F-SMA-2	F00102040018 Established Vegetation	05/08/2013	Replaced Baseline Control
PT-SMA-0.5	I00102040009 Established Vegetation	05/08/2013	Replaced Baseline Control
PT-SMA-1	I00202040034 Established Vegetation	05/08/2013	Replaced Baseline Control
PT-SMA-1.7	I00302040017 Established Vegetation	04/03/2013	Replaced Baseline Control

Site Monitoring Area	Control Description	Install Date	Control Category
PT-SMA-2	I00402040010 Established Vegetation	05/08/2013	Replaced Baseline Control
PT-SMA-2.01	I004A02040005 Established Vegetation	05/08/2013	Replaced Baseline Control
PT-SMA-3	I00502040009 Established Vegetation	05/08/2013	Replaced Baseline Control
PT-SMA-4.2	I00702040008 Established Vegetation	05/08/2013	Replaced Baseline Control
W-SMA-1	W00102040019 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-1.5	W00202040017 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-2.05	W00302040010 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-3.5	W00402040008 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-4.1	W00502040006 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-5	W00602040029 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-7	W00802040014 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-7.8	W00902040009 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-7.9	W01002040004 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-8	W01102040009 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-8.7	W01202040011 Established Vegetation	05/03/2013	Replaced Baseline Control
W-SMA-8.71	W012A02040006 Established Vegetation	05/03/2013	Replaced Baseline Control
W-SMA-9.05	W01302040013 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-9.5	W01402040008 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-9.7	W01502040008 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-9.8	W01602040012 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-9.9	W01702040022 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-10	W01802040025 Established Vegetation	05/07/2013	Replaced Baseline Control
W-SMA-11.7	W01902040052 Established Vegetation	05/09/2013	Replaced Baseline Control

Site Monitoring Area	Control Description	Install Date	Control Category
W-SMA-12.05	W02002040018 Established Vegetation	05/09/2013	Replaced Baseline Control
W-SMA-14.1	W02102040021 Established Vegetation	04/03/2013	Replaced Baseline Control
W-SMA-15.1	W00202040006 Established Vegetation	05/09/2013	Replaced Baseline Control

APPENDIX B

Corrective Action Status for Site Monitoring Areas and
Sites as of June 30, 2013, within the Water/Cañon de Valle Watershed

Site Monitoring Area	Site	Corrective Action Status*
CDV-SMA-1.4	16-020 16-026(I) 16-028(c)	CAI
	16-030(c)	CACompD
CDV-SMA-1.45	16-026(i)	CAM5
CDV-SMA-2.41	16-018	CAI
CDV-SMA-3	14-009	CAM5
CDV-SMA-6.02	14-002(c)	New Site
	14-002(d) 14-002(e)	CAM5
F-SMA-2	36-004(c)	CAI
PT-SMA-0.5	C-15-004 15-009(e)	CAM5
PT-SMA-1	15-004(f) 15-008(a)	CAM5
PT-SMA-1.7	15-006(a)	CAI
PT-SMA-2.01	C-36-001 C-36-006(e)	CAM5
W-SMA-1	16-017(j)-99 16-026(c2) 16-026(v)	CAM5
W-SMA-1.5	16-026(b2) 16-028(d)	CAM5
W-SMA-2.05	16-028(e)	CAM5
W-SMA-5	16-001(e) 16-003(f) 16-026(b) 16-026(c) 16-026(d) 16-026(e)	CAI
W-SMA-8.71	16-004(c)	CAM5
W-SMA-9.9	11-006(b)	CAM5
W-SMA-10	11-002 11-003(b) 11-005(a) 11-005(b) 11-006(c) 11-006(d) 11-011(d)	CAM5
W-SMA-11.7	49-008(c)	CAM5

Site Monitoring Area	Site	Corrective Action Status*
W-SMA-14.1	15-004(h) 15-014(l)	CAM5
W-SMA-15.1	49-005(a)	CAM5

^{*}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.