

# **STATUS REPORT**

## **NPDES PERMIT No. NM0030759**

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### **SITE DISCHARGE POLLUTION PREVENTION PLAN VOLUME 1**

#### **LOS ALAMOS/PUEBLO WATERSHED AGGREGATE**



**Reporting Period: April 1, 2011 – June 30, 2011**

LA-UR-11-11470

## I. OVERVIEW

The Status Report for the Individual Permit (STRIP) summarizes work conducted at Sites permitted and reported in the Site Discharge Pollution Prevention Plan, Volume 1 (V1 SDPPP), Los Alamos/Pueblo Watershed Aggregate area and is prepared in partial fulfillment of requirements set forth in NPDES Permit No. NM0030759 (IP or Permit). The V1 STRIP is one of five documents summarizing ongoing activities that will be reflected in the annual update to the V1 SDPPP. Within the V1 SDPPP, there are 101 Sites monitored in 64 Permitted Features.

On June 26, 2011 the Las Conchas Fire started northwest of the Laboratory. The wildfire burned over 150,000 acres of New Mexico forest ultimately becoming the largest forest fire in the state's history. Impacts from the Las Conchas fire were primarily north of the monitored areas in the watershed. Within this aggregate area, approximately 11% of the watershed above the Los Alamos/Pueblo Watershed Aggregate area was burned.

## II. CONTROL ACTIVITIES

### BASELINE COMPLETIONS

All baseline control measures associated with the V1 SDPPP have been installed and certified in accordance with Part 1.A requirements of the IP. These certification documents were prepared and submitted as control installations were completed.

### PREVENTATIVE MAINTENANCE INSPECTIONS

Following the completion of control installations and the certification of this work, preventative maintenance inspections (PMIs) were conducted in preparation for the 2011 season. These

inspections were voluntary inspections conducted prior to the significant precipitation typically experienced in the latter months of the field season.

PMIs conducted, associated reference numbers, and related maintenance actions, as applicable, are summarized in sections below.

### PREVENTATIVE MAINTENANCE INSPECTIONS CONDUCTED

In the V1 STRIP, 46 PMI inspections were conducted for the reporting period. Appendix A provides the summary details of these inspections, inspection findings, and the corresponding reference numbers for the individual inspection reports.

### PREVENTATIVE REPAIR AND REPLACEMENT

Of the 46 PMI's conducted, 6 inspections noted repair or replacement needed. One maintenance action was conducted on arrival or at the time of inspection.

### ADDITIONAL CONTROL INSTALLATIONS

Based on the results of early informal field reviews, additional controls have been installed at four SMAs within the V1 STRIP.

Table II.A Additional Controls at Sites in V1 STRIP

SMA	Additional Control(s)	Install Date
P-SMA-2.2	04080017 TRM-Lined channel/Swale	4/28/2011
P-SMA-3.05	03010010 Earthen Berm	5/26/2011
DP-SMA-1	03010011 Earthen Berm 03120012 Rock Berm	5/26/2011
DP-SMA-2	03010011 Earthen Berm	5/26/2011

### CORRECTIVE ACTION PLANNING

Planning for corrective action responses have begun at all high priority Sites within the V1 STRIP.

### ADVERSE WEATHER

As described in the introduction, an adverse weather event occurred beginning Sunday, June 26, 2011. All work associated with the IP project was interrupted from June 27 through July 7, 2011 due to the Las Conchas fire. This event mandated the evacuation of Los Alamos and prompted the subsequent closure of the Laboratory. Work resumed at the Laboratory on July 7 although many areas were still inaccessible due to the proximity of the fire.

## III. CONFIRMATION ACTIVITIES

### PRECIPITATION

During the field season (April 1 – November 30), the IP project monitors precipitation through a network of 17 rain gages mapped to specific areas across the Complex. Within the V1 STRIP, 5 precipitation gages monitor and report precipitation activity. These gages and the activity for the reporting period are shown in the table below. For the reporting period, there were no qualifying storm events or events with precipitation intensity of 0.25” in thirty minutes.

Table III.A Precipitation Activity for Reporting Period

Precipitation Gage	Related SMAs	Qualifying Storm Events	Storm Event Inspections Conducted
RG-NCOM	3	0	0
RG-TA-53	6	0	0
RG038	34	0	0
RG055.5	16	0	0
RG121.9	5	0	0

### STORM EVENT INSPECTIONS

No storm-event inspections have been required or conducted in the V1 STRIP

aggregate area through the period ending June 30, 2011.

### VISUAL INSPECTIONS

No Visual Inspections have been required or conducted at Sites/SMAs within the V1 STRIP for the reporting period.

### SAMPLER PLACEMENT

All 64 samplers associated with monitoring locations for Sites in this STRIP have been placed in accordance with coordinate locations provided in the V1 SDPPP. As described in Section 700.2 of the SDPPP, minor adjustments were made to samplers at P-SMA-1, LA-SMA-1.25, and DP-SMA-3. Physical data reported in the SDPPP are reflective of the sampler adjustments. Within the V1 STRIP, eight samplers had marginally incorrect Y-coordinate data published in the SDPPP. These SMAs are noted and corrected values are provided in Appendix B of this report.

2011 sampler-location data and activation dates are provided in Appendix B for clarity. Except as noted above; samplers are located consistent with the locational data provided in the Permit and the SDPPP.

### SAMPLERS ACTIVATED

Samplers within this aggregate area have been activated and are ready for sample collection. Fifty-nine (59) samplers were activated in the second quarter of the calendar year at SMAs within the V1 STRIP.

### SAMPLES COLLECTED

No confirmation samples have been collected at Sites/SMAs within the V1 STRIP for the reporting period.

## IV. CERTIFICATION ACTIVITIES

### BASELINE CERTIFICATIONS

Baseline controls for all Sites monitored in SMAs in the V1 SDPPP have been installed and certified. A crosswalk of these certifications and the relevant documents are provided in Table IV.A, below. Certification documents have been posted to the public reading room (<http://www.lanl.gov/environment/h2o/ip.shtml?2>) and a summary of certification documents relevant to Sites in V1 SDPPP are also provided in Part IV, Certification Activities of this STRIP.

Table IV.A Baseline Certifications in V1 STRIP

Baseline Certification Documents	Document Title	Document Date
<a href="#">LA-UR-10-07681</a>	Certification of baseline control measures completion for 63 site monitoring areas	12/1/2010
<a href="#">LA-UR-10-08294</a>	Certification of baseline control measures completion for 65 site monitoring areas	12/16/2010
<a href="#">LA-UR-11-00912</a>	Certification of baseline control measures completion for 26 site monitoring areas	2/11/2011
<a href="#">LA-UR-11-10500</a>	Certification of baseline control measures completion for 21 site monitoring areas	4/27/2011
<a href="#">LA-UR-11-10593</a>	Certification of completion of baseline control measures for 18 site monitoring areas	5/16/2011

### CERTIFICATES OF COMPLETION UNDER NMED CONSENT ORDER

Sites monitored under the IP are in some stage of investigation under the Consent Order issued by the New Mexico Environment Department (NMED). At the conclusion of extensive investigation, and/or

remediation, and reporting, the NMED issues a Certificate of Completion of Corrective Action under the Consent Order. Sites that have received such certifications from NMED have been thoroughly investigated and have met the standards set by the collective parties under this agreement.

Certificates of Completion under the Consent Order have been issued by the New Mexico Environment Department for Sites listed in the table below. These certifications are pending certification in the 2011 Annual Report.

Table IV.B Certificates of Completion for Sites in V1 STRIP

Site	NMED Document
21-013(b)	Certificates of Completion Material Disposal Area V, Technical Area 21 Los Alamos National Laboratory, HWB-LANL-11-030
21-013(g)	Certificates of Completion Material Disposal Area V, Technical Area 21 Los Alamos National Laboratory
21-018(a)	Certificates of Completion Material Disposal Area V, Technical Area 21 Los Alamos National Laboratory
21-023(c)	Certificates of Completion Material Disposal Area V, Technical Area 21 Los Alamos National Laboratory

### COMPLETION OF CORRECTIVE ACTION

Completions of corrective action under NMED’s Consent Order were certified pursuant to Part 1.E.2 (d) for 10 Sites within the V1 STRIP as provided in the [Individual Permit Annual Report](#).

These Sites will continue to be monitored according to the requirements specified in the Permit until the Sites can be formally petitioned for removal from the IP.

### DELETION FROM PERMIT

Currently there are no Sites/SMAs meeting the criteria for deletion from the Permit.

# **APPENDIX A**

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## **PREVENTATIVE MAINTENANCE INSPECTION DETAILS**

SMA	DATE INSPECTED	FINDINGS	INSPECTION REFERENCE	MAINTENANCE CONDUCTED	DATE MAINTENANCE CONDUCTED	MAINTENANCE REFERENCE
R-SMA-0.5	6/22/2011	All controls are operating effectively	BMP-14033	None	Not Applicable	None
R-SMA-1	6/22/2011	All controls are operating effectively	BMP-14032	None	Not Applicable	None
R-SMA-1.95	6/22/2011	All controls are operating effectively	BMP-14031	None	Not Applicable	None
R-SMA-2.05	6/22/2011	Juniper Bales R00406030004 needs repair or replacement	BMP-13792	Control has been retired. Similar redundant controls in place [R00406030003 and R00406030002] that are controlling sediment and run-off from the area.	Not Applicable	None
R-SMA-2.3	6/22/2011	All controls are operating effectively	BMP-14030	None	Not Applicable	None
R-SMA-2.5	6/22/2011	All controls are operating effectively	BMP-14029	None	Not Applicable	None
B-SMA-1	6/22/2011	All controls are operating effectively	BMP-13832	None	Not Applicable	None
ACID-SMA-1.05	6/23/2011	All controls are operating effectively	BMP-13799	None	Not Applicable	None
ACID-SMA-2	6/23/2011	All controls are operating effectively	BMP-13833	None	Not Applicable	None
ACID-SMA-2.01	6/23/2011	All controls are operating effectively	BMP-13798	None	Not Applicable	None
ACID-SMA-2.1	6/21/2011	All controls are operating effectively	BMP-13834	None	Not Applicable	None
LA-SMA-0.85	6/21/2011	All controls are operating effectively	BMP-13886	None	Not Applicable	None
LA-SMA-0.9	6/24/2011	All controls are operating effectively	BMP-13884	None	Not Applicable	None
LA-SMA-1	6/23/2011	All controls are operating effectively	BMP-13885	Built up rock check dams at inspection.	Not Applicable	None
LA-SMA-1.1	6/21/2011	All controls are operating effectively	BMP-13887	None	Not Applicable	None
LA-SMA-1.25	6/21/2011	Retire or replace gabions, L00507010002	BMP-13893	Installed rock berm L00503120006 north of the access road and west of the culvert outlet	7/13/2011	BMP-14368
LA-SMA-2.1	6/24/2011	All controls are operating effectively	BMP-13894	None	Not Applicable	None
LA-SMA-2.3	6/24/2011	All controls are operating effectively	BMP-13888	None	Not Applicable	None
LA-SMA-3.1	6/22/2011	All controls are operating effectively	BMP-13889	None	Not Applicable	None
LA-SMA-3.9	6/24/2011	All controls are operating effectively	BMP-13890	None	Not Applicable	None

SMA	DATE INSPECTED	FINDINGS	INSPECTION REFERENCE	MAINTENANCE CONDUCTED	DATE MAINTENANCE CONDUCTED	MAINTENANCE REFERENCE
LA-SMA-4.1	6/24/2011	All controls are operating effectively	BMP-13891	None	Not Applicable	None
LA-SMA-4.2	6/24/2011	All controls are operating effectively	BMP-13892	None	Not Applicable	None
LA-SMA-5.01	6/24/2011	All controls are operating effectively	BMP-13896	None	Not Applicable	None
LA-SMA-5.02	6/24/2011	All controls are operating effectively	BMP-13897	None	Not Applicable	None
LA-SMA-5.2	6/24/2011	All controls are operating effectively	BMP-13895	None	Not Applicable	None
LA-SMA-5.31	6/24/2011	All controls are operating effectively	BMP-13889	None	Not Applicable	None
LA-SMA-5.33	6/23/2011	All controls are operating effectively	BMP-13899	None	Not Applicable	None
LA-SMA-5.361	6/23/2011	Replace Rock Check Dam, L01706010003	BMP-13794	Replaced Rock Check Dam	7/21/2011	BMP-14278
LA-SMA-5.362	6/23/2011	All controls are operating effectively	BMP-13800	None	Not Applicable	None
LA-SMA-6.25	6/24/2011	All controls are operating effectively	BMP-13900	None	Not Applicable	None
LA-SMA-6.27	6/23/2011	All controls are operating effectively	BMP-13901	None	Not Applicable	None
LA-SMA-6.3	6/24/2011	All controls are operating effectively	BMP-13902	None	Not Applicable	None
LA-SMA-6.32	6/23/2011	All controls are operating effectively	BMP-13903	None	Not Applicable	None
LA-SMA-6.36	6/23/2011	Culvert, L02504040005 is no longer operational. Retire.	BMP-13905	L02504040005 is retired. Existing vegetation and berms are functioning to control erosion and run-on to the area.	Not Applicable	None
LA-SMA-6.38	6/23/2011	All controls are operating effectively	BMP-13909	None	Not Applicable	None
LA-SMA-6.395	6/23/2011	All controls are operating effectively	BMP-13912	None	Not Applicable	None
LA-SMA-6.5	6/23/2011	All controls are operating effectively. Repair and re-seed berm cover.	BMP-13910	Repaired erosion control blanket and reseeded berm L2803010006	7/21/2011	BMP-14277
LA-SMA-9	6/24/2011	All controls are operating effectively	BMP-13911	None	Not Applicable	None
DP-SMA-0.3	6/22/2011	All controls are operating effectively	BMP-13871	None	Not Applicable	None
DP-SMA-0.4	6/22/2011	All controls are operating effectively	BMP-13877	None	Not Applicable	None
DP-SMA-0.6	6/22/2011	All controls are operating effectively	BMP-13878	None	Not Applicable	None

SMA	DATE INSPECTED	FINDINGS	INSPECTION REFERENCE	MAINTENANCE CONDUCTED	DATE MAINTENANCE CONDUCTED	MAINTENANCE REFERENCE
DP-SMA-1	6/22/2011	All controls are operating effectively, additional controls and map update requested.	BMP-13879	Added Straw wattle D00403060013, added base course berm D00403020014, spatial correction noted for project map.	8/8/2011 8/4/2011	BMP-16065 CCN-14275
DP-SMA-2	6/22/2011	All controls are operating effectively	BMP-13880	None	Not Applicable	None
DP-SMA-2.35	6/23/2011	Repair or replace wattle D00603060003	BMP-13787	Replaced wattle D00603060003	7/14/2011	BMP-14274
DP-SMA-3	6/23/2011	All controls are operating effectively	BMP-13881	None	Not Applicable	None
DP-SMA-4	6/23/2011	All controls are operating effectively	BMP-13882	None	Not Applicable	None

## **APPENDIX B**

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### **2011 SAMPLER LOCATIONS AND ACTIVATION DATES**

SMA	Latitude (decimal degrees)	Longitude (decimal degrees)	NMSP (Ft.)	NMSP (Ft.)	Sampler No.	Activation Date
R-SMA-0.5	35.90740184	-106.3114034	1622233	1785567	SS082701	6/9/2011
R-SMA-1 <sup>1</sup>	35.90748602	-106.2997610	1625681	1785593	SS00	5/31/2011
R-SMA-1.95	35.90999856	-106.2745792	1633138	1786505	SS092701	6/8/2011
R-SMA-2.05	35.91567036	-106.2836002	1630468	1788570	SS092702	6/8/2011
R-SMA-2.3	35.91417238	-106.2748091	1633071	1788024	SS082704	6/8/2011
R-SMA-2.5 <sup>1</sup>	35.91077203	-106.2675483	1635220	1786786	SS082705	6/9/2011
B-SMA-0.5	35.88695929	-106.2438800	1642229	1778118	SS100302	6/6/2011
B-SMA-1	35.90022018	-106.2962221	1626728	1782948	SS080301	5/11/2011
ACID-SMA-1.05	35.88394470	-106.3106342	1622456	1777026	SS090102	6/6/2011
ACID-SMA-2	35.88592456	-106.3072203	1623468	1777746	SS100105	5/31/2011
ACID-SMA-2.01	35.88447582	-106.3065574	1623664	1777219	SS090101	6/6/2011
ACID-SMA-2.1	35.88879652	-106.3039677	1624432	1778791	SS100104	5/31/2011
P-SMA-0.3 <sup>1</sup>	35.88285705	-106.2394918	1643529	1776625	SS080801	6/7/2011
P-SMA-1 <sup>2</sup>	35.88074507	-106.2681854	1635030	1775856	SS080802	5/26/2011
P-SMA-2	35.88386789	-106.2748938	1633043	1776993	SS057	5/31/2011
P-SMA-2.15	35.88527923	-106.2795082	1631676	1777507	SS080803	6/9/2011
P-SMA-2.2 <sup>1</sup>	35.88379621	-106.2850505	1630034	1776968	SS0575	5/26/2011
P-SMA-3.05	35.88994012	-106.3088018	1623000	1779208	SS090802	7/7/2011
LA-SMA-0.85	35.87855167	-106.3234481	1618659	1775066	SS091010	5/26/2011
LA-SMA-0.9	35.87969034	-106.3218540	1619131	1775480	SS081002	5/11/2011
LA-SMA-1	35.88023821	-106.3217075	1619175	1775679	SS081003	5/11/2011
LA-SMA-1.1	35.88077258	-106.3210752	1619362	1775873	SS081004	5/31/2011
LA-SMA-1.25 <sup>2</sup>	35.88050385	-106.3204729	1619541	1775776	SS091011	5/26/2011
LA-SMA-2.1	35.88035319	-106.3094239	1622814	1775719	SS081005	6/6/2011
LA-SMA-2.3	35.87918434	-106.3089520	1622953	1775293	SS081024	6/8/2011
LA-SMA-3.1	35.87948776	-106.3067044	1623619	1775403	SS101034	6/22/2011
LA-SMA-3.9	35.87879764	-106.3058773	1623864	1775152	SS081026	6/7/2011
LA-SMA-4.1	35.87848842	-106.3052454	1624051	1775039	SS101035	5/24/2011
LA-SMA-4.2	35.87841486	-106.3048079	1624181	1775012	SS091009	5/24/2011
LA-SMA-5.01	35.87819458	-106.3030456	1624703	1774932	SS091012	5/24/2011
LA-SMA-5.02	35.87840598	-106.3028613	1624757	1775009	SS091013	5/26/2011
LA-SMA-5.2	35.87710533	-106.3017743	1625079	1774535	SS026805	6/8/2011
LA-SMA-5.31	35.87665769	-106.2963829	1626676	1774371	SS081012	6/7/2011
LA-SMA-5.33	35.87788772	-106.2960116	1626786	1774819	SS081013	7/13/2011
LA-SMA-5.35	35.87661819	-106.2969394	1626511	1774357	SS091014	7/11/2011
LA-SMA-5.361	35.87767795	-106.2949496	1627101	1774742	SS091022	5/26/2011
LA-SMA-5.362	35.87774182	-106.2951899	1627030	1774766	SS101036	6/6/2011
LA-SMA-5.51	35.87634039	-106.2902462	1628494	1774255	SS091015	5/25/2011
LA-SMA-5.52	35.87636520	-106.2900065	1628565	1774264	SS091016	5/25/2011
LA-SMA-5.53	35.87597788	-106.2898477	1628612	1774123	SS091017	6/1/2011
LA-SMA-5.54	35.87618129	-106.2895271	1628707	1774197	SS091018	6/8/2011
LA-SMA-5.91	35.87705828	-106.2820578	1630920	1774515	SS091019	5/31/2011

SMA	Latitude (decimal degrees)	Longitude (decimal degrees)	NMSP (Ft.)	NMSP (Ft.)	Sampler No.	Activation Date
LA-SMA-5.92	35.87671266	-106.2816067	1631053	1774390	SS091020	6/7/2011
LA-SMA-6.25 <sup>1</sup>	35.87513203	-106.2793009	1631736	1773814	SS081015	6/24/2011
LA-SMA-6.27	35.87497018	-106.2787652	1631895	1773755	SS081016	5/25/2011
LA-SMA-6.3	35.87496560	-106.2785197	1631968	1773753	SS028	6/24/2011
LA-SMA-6.31	35.87477114	-106.2779577	1632134	1773683	SS081033	5/12/2011
LA-SMA-6.32	35.87569489	-106.2768828	1632453	1774019	SS081017	6/7/2011
LA-SMA-6.34	35.87451140	-106.2765355	1632556	1773588	SS081018	7/14/2011
LA-SMA-6.36 <sup>1</sup>	35.87445001	-106.2752161	1632946	1773565	SS081019	7/13/2011
LA-SMA-6.38 <sup>1</sup>	35.87390792	-106.2738063	1633364	1773368	SS081020	6/8/2011
LA-SMA-6.395 <sup>1</sup>	35.87369649	-106.2732729	1633522	1773291	SS091002	6/1/2011
LA-SMA-6.5	35.87394762	-106.2710070	1634193	1773379	SS0287	6/16/2011
LA-SMA-9	35.87349927	-106.2540455	1639218	1773218	SS0304	5/26/2011
LA-SMA-10.11	35.86701197	-106.2513148	1640027	1770857	SS091001	6/7/2011
LA-SMA-10.12	35.86665928	-106.2508598	1640162	1770729	SS091021	5/25/2011
DP-SMA-0.3	35.88002238	-106.2887458	1628939	1775595	SS0375	5/25/2011
DP-SMA-0.4	35.87879158	-106.2788043	1631884	1775146	SS081901	5/31/2011
DP-SMA-0.6	35.87782763	-106.2775240	1632263	1774795	SS081902	5/31/2011
DP-SMA-1	35.87781459	-106.2738805	1633342	1774790	SS0385	5/12/2011
DP-SMA-2	35.87739270	-106.2723887	1633784	1774636	SS0387	6/13/2011
DP-SMA-2.35	35.87664356	-106.2716911	1633991	1774364	SS091901	5/31/2011
DP-SMA-3 <sup>2</sup>	35.87658373	-106.2709559	1634209	1774342	SS111906	5/31/2011
DP-SMA-4	35.87533687	-106.2672829	1635297	1773888	SS081905	5/31/2011

<sup>1</sup> An error in the SDPPP publication of the Y coordinates of these Sites was published in the SDPPP R0. The corrected coordinates are provided above and will be corrected in the R1 publication of the SDPPP.

<sup>2</sup> These samplers have had minor adjustments from the locations originally provided in the Permit as provided by Part I.D.2 of the Permit. These minor adjustments were made to collect more representative storm water samples from these areas and were published in SDPPP R0.