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Date: September 29, 2000  
 Refer to: ER2000-0535



HSWA LANL G/m Report

Mr. John Young, Corrective Action Project Leader  
 Permits Management Program  
 NMED – Hazardous Waste Bureau  
 2044 A Galisteo  
 Santa Fe, NM 87502

**SUBJECT: ANNUAL TRANSMITTAL OF BEST MANAGEMENT PRACTICES (BMPs) INSTALLED, INSPECTED & MAINTAINED AT PRSs AT LOS ALAMOS NATIONAL LABORATORY (LANL)**

Dear Mr. Young:

Enclosed please find a list of all BMPs installed, inspected and maintained at Potential Release Sites at the Los Alamos National Laboratory during FY00. These BMPs have been implemented and maintained as a result of recommendations from the Surface Water Assessment Team or in support of source removal activities at LANL. In addition, several BMPs have been installed at PRSs as a result of the Cerro Grande Fire. Also enclosed are two copies of LA-UR-00-3767, "Cerro Grande Fire Aftermath: Environmental Restoration Project Activities to Reduce the Migration of Contamination from Potential Release Sites."

As previously requested, this is an annual update on the status of BMPs implemented Since mid 1998. ER Project Staff is committed to providing this information to you in order to update the RCRIS database.

If you have any questions, please ask your office to contact Dave McInroy at (505)-667-0819 or Joe Mose at (505)-667-5808

Sincerely,

Julie A. Canepa, Program Manager  
 Los Alamos National Laboratory  
 Environmental Restoration

Sincerely,

Theodore J. Taylor, Project Manager  
 Department of Energy  
 Los Alamos Area Office

tl



JC/TT/SV/vn

Enclosure: 1) BMPs  
2) Two copies of LA-UR-00-3767

Cy (w/enc.):

M. Buksa, E/ET, MS M992  
J. Mose, LAAO, MS A316  
D. Neleigh, US EPA (2 copies)  
T. Taylor, LAAO, MS A316  
J. Davis, NMED-SWQB  
M. Leavitt, NMED-GWQB  
J. Parker, NMED-DOE OB  
S. Yanicak, NMED-DOE OB, MS J993  
J. Young, NMED-HWB (2 copies)  
E/ER File, MS M992  
RPF, MS M707

Cy (w/o enc.):

J. Canepa, E/ER, MS M992  
D. McInroy, E/ER, MS M992  
J. Bearzi, NMED-HWB  
R. Dinwiddie, NMED-HWB  
J. Kieling, NMED-HWB

**BEST MANAGEMENT PRACTICES  
INSTALLED, INSPECTED & MAINTAINED AT LANL PRSs  
FY00**

#	PRS	Erosion Matrix Score	BMP Description	Date Installed	SWAT Recommend?	Comments
1	00-016	39.8	Covering, geotextiles	Since 1993 upgraded since	No	Site stable, no further inspections required
2	00-019	51.5	Silt fencing	3/99	No	Central WWTF, VCA Addendum 2000
3	01-001(d)	74.5	Earthen berm, jute matting, reseed/mulching	5/96	Yes	HS 138, Site is stable
4	03-009(d)	64.8	Gabions, asphalt/concrete repaving	8/1/99	Yes	FMU 80 responsible for I&M
5	03-010(a)	69.0	Silt fencing, jute matting and sandbags. Permanent run-on control (asphalt curb).	7/99	Yes	Site is stable, no further inspections required
6	03-014(c2)	72.0	Straw wattles and triangular silt dikes	6/99	Yes	Site stable, ER I&M
7	03-045(c)	57.7	Flow attenuation	8/1/99		FMU 80 responsible for I&M
8	03-056(c)	52.6	Run-on diversion asphalt./riprap swale, geotextile, straw barrier at toe of slope. Straw wattles have been placed in all drainages during excavation, roof drain bypass hose installed to keep run-on off of slope.	Originally 1995. Upgraded since	Yes	Excavation ongoing, with BMPs placed in all drainage channels. Run-on diversion practices have been implemented.
9	04-001	43.9	Hand seeding, mulching, straw wattles	7/1/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
	04-002	43.9	Hand seeding, mulching, straw wattles	7/1/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
	04-003(b)	51.5	Hand seeding, mulching, straw wattles	7/1/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
10	05-001(a-b)	15.3	Hand seeding, mulching, straw wattles	7/8/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
	05-001(c)	80.0	Straw barriers and jute matting; silt fencing within drainage	12/98	Yes	Site is stable, ER I&M
11	05-003	49.7	Hand seeding, mulching, straw wattles	7/1/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
	05-004	49.7	Hand seeding, mulching, straw wattles	7/1/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
12	05-005(a)	15.3	Hand seeding, mulching, straw wattles	7/8/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
	05-005(b)	27	Hand seeding, mulching, straw wattles	7/1/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
	05-006(b)	15.3	Hand seeding, mulching, straw wattles	7/2/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
	05-006(c)	27	Hand seeding, mulching, straw wattles	7/1/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
	05-006(e)	15.3	Hand seeding, mulching, straw wattles	7/2/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
	05-006(h)	15.3	Hand seeding, mulching, straw wattles	7/2/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
13	06-007(g)	50.8	Hand seeding, mulching, straw wattles	7/3/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
14	09-004(o)	43.8	Hand seeding, mulching, straw wattles	7/2/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
15	09-009	58.8	Hand seeding, mulching, straw wattles	7/2/00	Yes	BMPs installed due to Cerro Grande Fire, ER I&M
16	09-013	56.0	Hand seeding, mulching, straw wattles, triangular silt dikes, retention area, earth berms	Originally 1996, upgraded since	Yes	BMPs upgraded due to Cerro Grande Fire, ER I&M

**BEST MANAGEMENT PRACTICES  
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FY00**

#	PRS	Erosion Matrix Score	BMP Description	Date Installed	SWAT Recommend?	Comments
17	11-004(a-f)	56	Log check dams, hydromulch	5/26/00	Yes	BMPs installed due to Cerro Grande Fire, ER I&M
18	11-006(a-d)	10.6 52.0 68.8 74.0	Log check dams, hydromulch, concrete curbing	5/26/00	Yes	BMPs upgraded due to Cerro Grande Fire, ER I&M
19	14-002(a)	51.5	Hand seeding, mulching, straw wattles, riprap dam	7/6/00	Yes	BMPs installed due to Cerro Grande Fire, DX I&M
20	14-002(c)	36.8	Hand seeding, mulching, straw wattles, riprap dam	6/30/00	No	BMPs installed due to Cerro Grande Fire, DX I&M
	14-002(d)	40.8	Hand seeding, mulching, straw wattles, riprap dam	6/30/00	Yes	BMPs installed due to Cerro Grande Fire, DX I&M
	14-002(e)	47.8	Hand seeding, mulching, straw wattles, riprap dam	6/30/00	No	BMPs installed due to Cerro Grande Fire, DX I&M
21	14-006	47.1	Hand seeding, mulching, straw wattles, riprap dam	7/6/00	No	BMPs installed due to Cerro Grande Fire, DX I&M
22	14-009	53.7	Hand seeding, mulching, straw wattles, riprap dam	7/6/00	Yes	BMPs installed due to Cerro Grande Fire, DX I&M
	14-010	51.5	Hand seeding, mulching, straw wattles, riprap dam	7/6/00	Yes	BMPs installed due to Cerro Grande Fire, DX I&M
23	15-006(c)	67.2	straw wattles	7/4/00	Yes	BMPs installed due to Cerro Grande Fire, DX I&M at R-44
	15-008(b)	67.2	Hand seeding, mulching, straw wattles	7/4/00	Yes	BMPs installed due to Cerro Grande Fire, DX I&M at R-44
24	15-007(b)	40.2	Hand seeding, mulching, straw wattles	7/6/00	No	BMPs installed due to Cerro Grande Fire, DX I&M at MDA Z
25	15-011(a-c), 15-014(l-k), C-15-007, C-15-010	3.6 to 61.3	Hand seeding, mulching, straw wattles	6/29/00	Yes	BMPs installed due to Cerro Grande Fire, DX I&M Hollow Site
26	16-003(a)	55.5	Hand seeding, mulching, straw wattles	7/4/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
27	16-003(f)	8.8	Hand seeding, mulching, straw wattles	6/29/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
28	16-003(k)	38.6	Concrete curb, plastic cover over trench	10/98	No	Part of 16-260 Interim Measure
	16-021(c)	73.3	Concrete curbing for run-on diversion, straw barriers, storm water collection area, jute matting	Originally 1996, upgraded since	Yes	Ongoing Interim Measure. Site impacted slightly by Cerro Grande Fire, BMPs upgraded.
29	16-003(n)	25	Hand seeding, mulching, straw wattles	6/30/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
30	16-003(o)	27.3	Hand seeding, mulching, straw wattles	6/30/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
31	16-004(f)	31	Hand seeding, mulching, straw wattles	7/2/00	No	BMPs installed due to Cerro Grande Fire, ER I&M

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FY00**

#	PRS	Erosion Matrix Score	BMP Description	Date Installed	SWAT Recommend?	Comments
32	16-016(c)	72	Regrading, flow dissipation, vegetation buffer strips, covering, poly-jute, soil sement	10/98	Yes	Part of MDA P Clean Closure
	16-018	69.3	Earth berms, sediment traps, straw barriers, silt fencing, storm water collection trenches, soil sement	Originally 1996, upgraded since	Yes	MDA P Clean Closure ongoing
33	16-019	83	Debris removal, hydromulching, straw wattles, contour tree felling, run-on diversion channel	6/20/00	Yes	MDA R - Cerro Grande Fire Related, ER I&M
34	16-020	61.3	Straw wattles	6/30/00	Yes	BMPs upgraded due to Cerro Grande Fire, ER I&M
35	16-026(c2) 16-026(v)	61.8 65.8	Straw barriers	10/98	Yes	Site stable, ER I&M
36	16-026(h2)	61	Hand seeding, mulching, straw wattles	6/29/00	Yes	BMPs upgraded due to Cerro Grande Fire, ER I&M
37	16-028(a)	51.5	Hand seeding, mulching, straw wattles	6/29/00	Yes	BMPs installed due to Cerro Grande Fire, ER I&M
38	16-028(b)	83	Hand seeding, mulching, straw wattles, debris removal	7/4/00	Yes	BMPs installed due to Cerro Grande Fire, ER I&M
39	16-029(g)	21.5	Hand seeding, mulching, straw wattles	6/27/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
40	16-030(g)	71	Straw barriers and rock check dam	10/98	Yes	Site stable, ER I&M
41	16-030(h)	29.1	Hand seeding, mulching, straw wattles	6/29/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
42	21-003	33.3	Run-on diversion, earthen berm for runoff	4/98	No	FWO responsible for I&M
43	21-011(k)	72.0	Run-on diversion, sandbags, silt fence, straw barriers, mulch, georidges	Originally 1996, upgraded since	Yes	Site is stable, ER I&M
44	21-011(c)	54.0	Asphalt run-on diversion channel	9/96	Yes	Site is stable, ER I&M
	21-016(a-c)	54.0	Asphalt run-on diversion channel, riprap lined channel, straw wattles, flow dissipation	8/99	Yes	Site is stable, ER I&M
45	21-024(i)	53.7	Brush barrier, mulch, sandbags, cover was placed over the tank to keep rainfall out.	11/98	Yes	Site is stable, ER I&M
46	22-015(c)	51.5	Hand seeding, mulching, straw wattles	7/5/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
47	33-006(a)	56.0	Straw and brush barriers	10/98	Yes	Site stable, ER I&M is ongoing
48	33-007(b)	59.3	Site cleanup, reseeding, mulch, regraded, slope stabilization.	8/99	Yes	Site stable, ER I&M is ongoing
49	33-008(c)	56.0	Debris removed from watercourse, georidges, coir fiber geotextile installed	8/99	Yes	Site stable, ER I&M is ongoing
50	33-009	27	Straw barrier	11/96	No	Site stable, ER I&M is ongoing
51	33-010(c)	60.5	Regraded, reseeded and covered with mulch, geotextile on slopes, riprap placed at toe for slope stabilization.	9/99	Yes	Site stable, ER I&M is ongoing
52	35-003(d,l,q)	59	Earthen berm, curlex, riprap	12/98	Yes	Site stable, ER I&M is ongoing

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FY00**

#	PRS	Erosion Matrix Score	BMP Description	Date Installed	SWAT Recommend?	Comments
53	35-003(r)	87	check dam	10/1/99	Yes	Site stable, ER I&M is ongoing
54	35-008	61	covering, geotextiles	8/1/99	Yes	Site stable, ER I&M is ongoing
55	40-006(b)	62	Hand seeding, mulching, straw wattles	7/5/00	No	BMPs installed due to Cerro Grande Fire, DX I&M
56	40-006(c)	62	Hand seeding, mulching, straw wattles	7/5/00	No	BMPs installed due to Cerro Grande Fire, DX I&M
57	40-009	54.5	straw wattles	7/5/00	Yes	BMPs installed due to Cerro Grande Fire, DX I&M
58	40-010	40.2	straw wattles	7/7/00	No	BMPs installed due to Cerro Grande Fire, DX I&M
59	42-004	93.5	Hand seeding, mulching, straw wattles	7/7/00	Yes	BMPs installed due to Cerro Grande Fire, ER I&M
60	46-004 (a2,b2,c2,f,g, h,m,q,r,s, t,v,w,x,y,z)	30.5	Hand seeding, mulching, straw wattles, rock check dams, hydromulching, contour tree felling, earthen berm	7/2/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
61	48-003	40.7	Rock check dams	7/7/00	No	BMPs installed due to Cerro Grande Fire, ER I&M
62	48-007(b)	49.3	Hand seeding, mulching, straw wattles	7/7/00	Yes	BMPs installed due to Cerro Grande Fire, ER I&M
63	48-007(c)	69.5	Hand seeding, mulching, straw wattles	7/7/00	Yes	BMPs installed due to Cerro Grande Fire, ER I&M
64	48-007(f)	76.5	Hand seeding, mulching, straw wattles	7/7/00	Yes	BMPs installed due to Cerro Grande Fire, ER I&M
65	49-001(b)	34.6	Run-on diversion, silt fence, flow dissipation, straw barriers	6/21/00	Yes	Existing BMPs were upgraded due to impacts from the Cerro Grande Fire, ER I&M
	49-001(c-d)	17.5	Run-on diversion, silt fence, flow dissipation, straw barriers	6/21/00	Yes	Existing BMPs were upgraded due to impacts from the Cerro Grande Fire, ER I&M
	49-001(g)	59.2	Hand seeding, mulching, straw wattles, rock check dams, silt fencing	6/21/00	Yes	Existing BMPs were upgraded due to impacts from the Cerro Grande Fire, ER I&M
	49-003	36.8	Silt fence, straw barriers	6/21/00	Yes	Existing BMPs were upgraded due to impacts from the Cerro Grande Fire, ER I&M
66	73-001(a)	85.5	Run-on diversion trench, riprap, curlex, sediment check dams (tires)	11/98	Yes	Site stable, ER I&M is ongoing
	73-002	56.0	Run-on diversion berm, straw barrier, reseeding, jute matting	11/98	Yes	Site stable, ER I&M is ongoing
	73-004(a)	10.6	Run-on diversion berm, straw barrier, reseeding, jute matting	11/98	No	Site stable, ER I&M is ongoing
	73-006	56.0	Run-on diversion berm, straw barrier, reseeding, jute matting	11/98	Yes	Site stable, ER I&M is ongoing
67	C-33-001	56	debris removal	9/1/99	Yes	Site stable, ER I&M is ongoing