

**APPENDIX A
SITE MONITORING ARE, SITE INFORMATION, AND FEATURE**

Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water	
Los Alamos/Pueblo	Rendija Canyon	R003	R-SMA-1.95	00-015	Rendija Canyon	
		R006	R-SMA-2.5	00-011(a)	Rendija Canyon	
	Pueblo Canyon	P007	P-SMA-2.15	31-001	Pueblo Canyon	
	Los Alamos Canyon	L001	LA-SMA-0.85	03-055(c)		Los Alamos Canyon
		L002	LA-SMA-0.9	00-017		Los Alamos Canyon
				C-00-044		
		L003	LA-SMA-1	00-017		Los Alamos Canyon
				C-00-044		
		L004	LA-SMA-1.1	43-001(b2)		Los Alamos Canyon
		L005	LA-SMA-1.25	C-43-001		Los Alamos Canyon
		L006	LA-SMA-2.1	01-001(f)		Los Alamos Canyon
		L007	LA-SMA-2.3	01-001(b)		Los Alamos Canyon
	Los Alamos Canyon	L008	LA-SMA-3.1	01-003(a)		Los Alamos Canyon
		L009	LA-SMA-3.9	01-001(g)		Los Alamos Canyon
		L010	LA-SMA-4.1	01-003(b2)		Los Alamos Canyon
		L011	LA-SMA-4.2	01-001(c)		Los Alamos Canyon
		L012	LA-SMA-5.01	01-001(d3)		Los Alamos Canyon
		L012A	LA-SMA-5.02	01-003(e)		Los Alamos Canyon
		L013	LA-SMA-5.2	01-003(d)		Los Alamos Canyon
		L015	LA-SMA-5.31	41-002(c)		Los Alamos Canyon
		L016	LA-SMA-5.33	32-004		Los Alamos Canyon
		L014	LA-SMA-5.35	C-41-004		Los Alamos Canyon
		L017	LA-SMA-5.361	32-002(b1)		Los Alamos Canyon
				32-002(b2)		
		L017A	LA-SMA-5.362	32-003		Los Alamos Canyon
		L018	LA-SMA-5.51	02-003(a)		Los Alamos Canyon
	02-003(e)					
	02-004(a)					
	02-005					
	02-006(b)					
02-006(c)						
02-006(d)						
02-006(e)						
02-008(a)						
02-009(b)						
02-011(a)						

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Los Alamos/Pueblo	Los Alamos Canyon	L018	LA-SMA-5.51	02-011(b)	Los Alamos Canyon
				02-011(c)	
				02-011(d)	
				02-014	
		L018A	LA-SMA-5.52	02-003(b)	Los Alamos Canyon
				02-007	
				02-008(c)	
		L018B	LA-SMA-5.53	02-009(a)	Los Alamos Canyon
		L018C	LA-SMA-5.54	02-009(c)	Los Alamos Canyon
		L019	LA-SMA-5.91	21-021	BV Canyon - Tributary to Los Alamos Canyon
		L019A	LA-SMA-5.92	21-021	BV Canyon - Tributary to Los Alamos Canyon
		L020	LA-SMA-6.25	21-021	Los Alamos Canyon
				21-024(d)	
				21-027(c)	
		L022	LA-SMA-6.3	21-006(b)	Los Alamos Canyon
		L022A	LA-SMA-6.31	21-027(a)	Los Alamos Canyon
		L023	LA-SMA-6.32	21-021	Los Alamos Canyon
		L024	LA-SMA-6.34	21-021	Los Alamos Canyon
				21-022(h)	
		L026	LA-SMA-6.38	21-021	Los Alamos Canyon
				21-024(c)	
		L027	LA-SMA-6.395	21-021	Los Alamos Canyon
				21-024(j)	
		L028	LA-SMA-6.5	21-021	Los Alamos Canyon
				21-024(i)	
		L029	LA-SMA-9	26-001	Los Alamos Canyon
				26-002(a)	
				26-002(b)	
26-003					
L030A	LA-SMA-10.12	53-008	Los Alamos Canyon		

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Los Alamos Pueblo	DP Canyon	D001	DP-SMA-0.3	21-029	DP Canyon
		D002	DP-SMA-0.4	21-021	DP Canyon
		D003	DP-SMA-0.6	21-021	DP Canyon
				21-024(l)	
		D004	DP-SMA-1	21-011(k)	DP Canyon
				21-021	
		D005	DP-SMA-2	21-021	DP Canyon
21-024(h)					
D006	DP-SMA-2.35	21-021	DP Canyon		
		21-024(n)			
D007	DP-SMA-3	21-013(c)	DP Canyon		
		21-021			
Sandia	Sandia Canyon	S001	S-SMA-0.25	03-013(a)	Sandia Canyon
				03-052(f)	
		S002	S-SMA-1.1	03-029	Sandia Canyon
		S003	S-SMA-2	03-012(b)	Sandia Canyon
				03-045(b)	
				03-045(c)	
				03-056(c)	
		S003A	S-SMA-2.01	03-052(b)	Sandia Canyon
		S004	S-SMA-2.8	03-014(c2)	Sandia Canyon
		S005	S-SMA-3.51	03-009(i)	Sandia Canyon
		S005A	S-SMA-3.52	03-021	Sandia Canyon
		S005B	S-SMA-3.53	03-014(b2)	Sandia Canyon
		S006	S-SMA-3.6	60-007(b)	Sandia Canyon
		S007	S-SMA-3.7	53-012(e)	Sandia Canyon
		S008	S-SMA-3.71	53-001(a)	Sandia Canyon
		S009	S-SMA-3.72	53-001(b)	Sandia Canyon
S010	S-SMA-3.95	20-002(a)	Sandia Canyon		
S011	S-SMA-4.1	53-014	Sandia Canyon		
S013	S-SMA-5	20-002(c)	Sandia Canyon		
S014	S-SMA-5.2	20-003(c)	Sandia Canyon		
S015	S-SMA-5.5	20-005	Sandia Canyon		
S016	S-SMA-6	72-001	Sandia Canyon		
Mortandad	Cañada del Buey	C001	CDB-SMA-0.15	04-003(a)	Cañada del Buey
				04-004	
		C002	CDB-SMA-0.25	46-004(c2)	Cañada del Buey
				46-004(e2)	

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Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water
Mortandad	Cañada del Buey	C003	CDB-SMA-0.55	46-004(g)	Cañada del Buey
				46-004(m)	
				46-004(s)	
				46-006(f)	
		C004	CDB-SMA-1	46-003(c)	SWSC Canyon - Tributary to Canada del Buey
				46-004(d2)	
				46-004(f)	
				46-004(t)	
				46-004(w)	
				46-008(g)	
				46-009(a)	
		C005	CDB-SMA-1.15	46-004(b)	Cañada del Buey
	46-004(y)				
	46-004(z)				
	46-006(d)				
	C010	CDB-SMA-4	54-017	Cañada del Buey	
			54-018		
			54-020		
	Mortandad Canyon	M001	M-SMA-1	03-050(a)	Mortandad Canyon
				03-054(e)	
		M002	M-SMA-1.2	03-049(a)	Mortandad Canyon
		M002A	M-SMA-1.21	03-049(e)	Mortandad Canyon
		M002B	M-SMA-1.22	03-045(h)	Mortandad Canyon
		M003	M-SMA-3	48-001	Mortandad Canyon
				48-005	
				48-007(c)	
		M004	M-SMA-3.1	48-001	Mortandad Canyon
				48-007(b)	
M005		M-SMA-3.5	48-001	Mortandad Canyon	
	48-003				
M006	M-SMA-4	48-001	Effluent Canyon - Tributary to Mortandad Canyon		
		48-005			
		48-007(a)			
		48-007(d)			
		48-010			

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Watershed	Canyon	Permitted Feature	Site Monitoring Area	Site ID	Receiving Water
Mortandad	Mortandad Canyon	M007	M-SMA-5	42-001(a)	Effluent Canyon - Tributary to Mortandad Canyon
				42-001(b)	
				42-001(c)	
				42-002(a)	
				42-002(b)	
		M008	M-SMA-6	35-016(h)	Effluent Canyon - Tributary to Mortandad Canyon
		M009	M-SMA-7	35-016(g)	Effluent Canyon - Tributary to Mortandad Canyon
		M010	M-SMA-7.9	50-006(d)	Effluent Canyon - Tributary to Mortandad Canyon
		M012	M-SMA-10	35-008	Mortandad Canyon
				35-014(e)	
		M012A	M-SMA-10.01	35-016(e)	Mortandad Canyon
		M013	M-SMA-10.3	35-014(e2)	Mortandad Canyon
				35-016(i)	
		M014	M-SMA-11.1	35-016(o)	Mortandad Canyon
		M015	M-SMA-12	35-016(p)	Mortandad Canyon
		M016	M-SMA-12.5	05-005(b)	Mortandad Canyon
				05-006(c)	
		M017	M-SMA-12.6	05-004	Mortandad Canyon
		M018	M-SMA-12.7	05-002	Mortandad Canyon
				05-005(a)	
	05-006(b)				
	05-006(e)				
M019	M-SMA-12.8	05-001(a)	Mortandad Canyon		
		05-002			
M020	M-SMA-12.9	05-001(b)	Mortandad Canyon		
		05-002			
M021	M-SMA-12.92	00-001	Mortandad Canyon		
M022	M-SMA-13	05-001(c)	Mortandad Canyon		
Ten-Site Canyon	T001	Pratt-SMA-1.05	35-003(h)	Pratt Canyon - Tributary to Ten-Site Canyon	
			35-003(p)		
			35-003(r)		

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Mortandad	Ten-Site Canyon	T001	Pratt-SMA-1.05	35-009(d)	Pratt Canyon - Tributary to Ten-Site Canyon
				35-016(k)	
				35-016(l)	
		T002	T-SMA-1	50-006(a)	Ten-Site Canyon
				50-009	
		T003	T-SMA-2.5	35-014(g3)	Ten-Site Canyon
		T004	T-SMA-2.85	35-014(g)	Ten-Site Canyon
				35-016(n)	
		T005	T-SMA-3	35-016(b)	Ten-Site Canyon
		T006	T-SMA-4	35-004(a)	Ten-Site Canyon
				35-009(a)	
				35-016(c)	
		T007	T-SMA-5	35-016(d)	Ten-Site Canyon
				35-004(a)	
35-009(a)					
35-016(a)					
T008	T-SMA-6.8	35-016(q)	Ten-Site Canyon		
		35-010(e)			
T009	T-SMA-7	04-003(b)	Ten-Site Canyon		
T010	T-SMA-7.1	04-001	Ten-Site Canyon		
		04-002			
Pajarito	Twomile Canyon	E001	2M-SMA-1	03-010(a)	Twomile Canyon
		E002	2M-SMA-1.42	06-001(a)	Twomile Canyon
		E003	2M-SMA-1.43	22-014(a)	Twomile Canyon
				22-015(a)	
		E004	2M-SMA-1.44	06-001(b)	Twomile Canyon
		E005	2M-SMA-1.45	06-006	Twomile Canyon
		E006	2M-SMA-1.5	22-014(b)	Twomile Canyon
		E007	2M-SMA-1.65	40-005	Twomile Canyon
		E008	2M-SMA-1.67	06-003(h)	Twomile Canyon
		E009	2M-SMA-1.7	03-055(a)	Twomile Canyon
		E010	2M-SMA-1.8	03-001(k)	Twomile Canyon
		E011	2M-SMA-1.9	03-003(a)	Twomile Canyon
		E012	2M-SMA-2	03-050(d)	Twomile Canyon
				03-054(b)	
E013	2M-SMA-2.2	03-003(k)	Twomile Canyon		
E014	2M-SMA-3	07-001(a)	Twomile Canyon		
		07-001(b)			
		07-001(c)			
		07-001(d)			

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Pajarito	Twomile Canyon	E015	2M-SMA-2.5	40-001(c)	Twomile Canyon
	Threemile Canyon	H001	3M-SMA-0.2	15-010(b)	Threemile Canyon
		H002	3M-SMA-0.4	15-006(b)	Threemile Canyon
		H003	3M-SMA-0.5	15-006(c)	Threemile Canyon
				15-009(c)	
		H004	3M-SMA-0.6	15-008(b)	Threemile Canyon
		H005	3M-SMA-2.6	36-008	Threemile Canyon
				C-36-003	
		H006	3M-SMA-4	18-002(b)	Threemile Canyon
	18-003(c)				
	18-010(f)				
	Pajarito Canyon	J001	PJ-SMA-1.05	09-013	Pajarito Canyon
		J002	PJ-SMA-2	09-009	Pajarito Canyon
		J003	PJ-SMA-3.05	09-004(o)	Pajarito Canyon
		J004	PJ-SMA-4.05	09-005(g)	Pajarito Canyon
		J005	PJ-SMA-5	22-015(c)	Pajarito Canyon
		J006	PJ-SMA-5.1	22-010(b)	Pajarito Canyon
		J007	PJ-SMA-6	40-010	Pajarito Canyon
		J008	PJ-SMA-7	40-006(c)	Pajarito Canyon
		J009	PJ-SMA-8	40-006(b)	Pajarito Canyon
		J010	PJ-SMA-9	40-009	Pajarito Canyon
		J012	PJ-SMA-10	40-006(a)	Pajarito Canyon
		J013	PJ-SMA-11	40-003(a)	Pajarito Canyon
		J014	PJ-SMA-11.1	40-003(b)	Pajarito Canyon
		J016	PJ-SMA-13.7	18-010(b)	Pajarito Canyon
		J018	PJ-SMA-14.2	18-012(b)	Pajarito Canyon
		J019	PJ-SMA-14.3	18-003(e)	Pajarito Canyon
		J020	PJ-SMA-14.4	18-010(d)	Pajarito Canyon
		J021	PJ-SMA-14.6	18-010(e)	Pajarito Canyon
		J022	PJ-SMA-14.8	18-012(a)	Pajarito Canyon
J023		PJ-SMA-16	27-002	Pajarito Canyon	
J024		PJ-SMA-17	54-018	Pajarito Canyon	
J026		PJ-SMA-18	54-014(d)	Pajarito Canyon	
			54-017		
J025		PJ-SMA-19	54-013(b)	Pajarito Canyon	
	54-017				
	54-020				

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Pajarito	Pajarito Canyon	J027	PJ-SMA-20	54-017	Pajarito Canyon
		J028	STRM-SMA-1.05	08-009(f)	Pajarito Canyon/Starmers Gulch
		J029	STRM-SMA-1.5	08-009(d)	Pajarito Canyon/Starmers Gulch
		J030	STRM-SMA-4.2	09-008(b)	Pajarito Canyon/Starmers Gulch
		J031	STRM-SMA-5.05	09-013	Pajarito Canyon/Starmers Gulch
Water/Cañon de Valle	Cañon de Valle	V001	CDV-SMA-1.2	16-017(b)-99	Cañon de Valle
				16-029(k)	
		V002	CDV-SMA-1.3	16-017(a)-99	Cañon de Valle
				16-026(m)	
		V003	CDV-SMA-1.4	16-020	Cañon de Valle
				16-026(l)	
				16-028(c)	
		V004	CDV-SMA-1.45	16-026(i)	Cañon de Valle
		V005	CDV-SMA-1.7	16-019	Cañon de Valle
		V006	CDV-SMA-2	16-021(c)	Cañon de Valle
		V007	CDV-SMA-2.3	13-001	Cañon de Valle
				13-002	
				16-003(n)	
				16-003(o)	
				16-029(h)	
				16-031(h)	
		V009	CDV-SMA-2.5	16-028(a)	Cañon de Valle
		V009A	CDV-SMA-2.51	16-010(i)	Cañon de Valle
	V010	CDV-SMA-3	14-009	Cañon de Valle	
	V011	CDV-SMA-4	14-010	Cañon de Valle	
	V012	CDV-SMA-6.01	14-001(g)	Cañon de Valle	
			14-006		
	V012A	CDV-SMA-6.02	14-002(c)	Cañon de Valle	
	V013	CDV-SMA-7	15-008(d)	Cañon de Valle	
	V014	CDV-SMA-8	15-011(c)	Cañon de Valle	
	V015	CDV-SMA-8.5	15-014(a)	Cañon de Valle	
V016	CDV-SMA-9.05	15-007(b)	Cañon de Valle		
	Fence Canyon	F001	F-SMA-2	36-004(c)	Fence Canyon
Potrillo Canyon	I001	PT-SMA-0.5	15-009(e)	Potrillo Canyon	
			C-15-004		
	I002	PT-SMA-1	15-004(f)	Potrillo Canyon	
		15-008(a)			

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Water/Cañon de Valle	Potrillo Canyon	I003	PT-SMA-1.7	15-003	Potrillo Canyon
		I004	PT-SMA-2	15-008(f)	Potrillo Canyon
				36-003(b)	
				36-004(e)	
		I004A	PT-SMA-2.01	C-36-001	Potrillo Canyon
				C-36-006(e)	
		I005	PT-SMA-3	36-004(a)	Potrillo Canyon
	36-006				
	I007	PT-SMA-4.2	36-004(d)	Potrillo Canyon	
	Water Canyon	W001	W-SMA-1	16-017(j)-99	Water Canyon
				16-026(c2)	
				16-026(v)	
		W002	W-SMA-1.5	16-026(b2)	Water Canyon
				16-028(d)	
		W003	W-SMA-2.05	16-028(e)	Water Canyon
		W004	W-SMA-3.5	16-026(y)	Water Canyon
		W005	W-SMA-4.1	16-003(a)	Water Canyon
		W006	W-SMA-5	16-001(e)	S-Site Canyon - Tributary to Water Canyon
				16-003(f)	
				16-026(b)	
				16-026(c)	
				16-026(d)	
		W007	W-SMA-6	11-001(c)	Water Canyon
16-029(e)					
W009		W-SMA-7.8	16-031(a)	Water Canyon	
W010	W-SMA-7.9	16-006(c)	Water Canyon		
W011	W-SMA-8	16-016(g)	Water Canyon		
		16-028(b)	Water Canyon		
W012	W-SMA-8.7	13-001	Water Canyon		
		13-002			
		16-004(a)			
		16-026(j2)			
		16-029(h)			
16-035					
W012A	W-SMA-8.71	16-004(c)	Water Canyon		
W013	W-SMA-9.05	16-030(g)	Water Canyon		

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Water/Cañon de Valle	Water Canyon	W014	W-SMA-9.5	11-012(c)	S-Site Canyon - Tributary to Water Canyon
		W015	W-SMA-9.7	11-011(a)	S-Site Canyon - Tributary to Water Canyon
				11-011(b)	
		W016	W-SMA-9.8	11-005(c)	S-Site Canyon - Tributary to Water Canyon
		W017	W-SMA-9.9	11-006(b)	S-Site Canyon - Tributary to Water Canyon
		W018	W-SMA-10	11-002	S-Site Canyon - Tributary to Water Canyon
				11-003(b)	
				11-005(a)	
				11-005(b)	
				11-006(c)	
				11-006(d)	
		11-011(d)			
		W019	W-SMA-11.7	49-008(c)	Water Canyon
W020	W-SMA-12.05	49-001(g)	Water Canyon		
W021	W-SMA-14.1	15-004(h)	Water Canyon		
		15-014(l)			
W022	W-SMA-15.1	49-005(a)	Water Canyon		
Ancho	Ancho Canyon	A001	A-SMA-1.1	39-004(a)	North Ancho Canyon
				39-004(d)	
		A002	A-SMA-2	39-004(b)	North Ancho Canyon
				39-004(e)	
		A003	A-SMA-2.5	39-010	North Ancho Canyon
		A004	A-SMA-2.7	39-002(c)	North Ancho Canyon
				39-008	
		A005	A-SMA-2.8	39-001(b)	North Ancho Canyon
		A006	A-SMA-3	39-002(b)	North Ancho Canyon
				39-004(c)	
A007	A-SMA-3.5	39-006(a)	South Ancho Canyon		
A008	A-SMA-4	33-010(d)	South Ancho Canyon		
A009	A-SMA-6	33-004(k)	South Ancho Canyon		
		33-007(a)			
		33-010(a)			
Chaquehui	Chaquehui Canyon	Q001	CHQ-SMA-0.5	33-004(g)	Chaquehui Canyon
				33-007(c)	
				33-009	
		Q002	CHQ-SMA-1.01	33-002(d)	Chaquehui Canyon
		Q002A	CHQ-SMA-1.02	33-004(h)	Chaquehui Canyon
33-008(c)					

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Chaquehui	Chaquehui Canyon	Q002A	CHQ-SMA-1.02	33-011(d)	Chaquehui Canyon
				33-015	
		Q002B	CHQ-SMA-1.03	33-008(c)	Chaquehui Canyon
				33-012(a)	
				33-017	
				C-33-001	
				C-33-003	
		Q003	CHQ-SMA-2	33-004(d)	Chaquehui Canyon
				33-007(c)	
				C-33-003	
		Q004	CHQ-SMA-3.05	33-010(f)	Chaquehui Canyon
		Q005	CHQ-SMA-4	33-011(e)	Chaquehui Canyon
		Q006	CHQ-SMA-4.1	33-016	Chaquehui Canyon
		Q007	CHQ-SMA-4.5	33-011(b)	Chaquehui Canyon
		Q008	CHQ-SMA-5.05	33-007(b)	Chaquehui Canyon
		Q009	CHQ-SMA-6	33-004(j)	Chaquehui Canyon
33-006(a)					
33-007(b)					
33-010(c)					
33-010(g)					
33-010(h)					
33-014					
Q010	CHQ-SMA-7.1	33-010(g)	Chaquehui Canyon		

APPENDIX B
STORM WATER BACKGROUND THRESHOLD VALUES (BTVS)

Pollutant of Concern	Sample Preparation¹	Landscape	Data Subset Description	SSC-Normalized?	Units	90th Percentile BTV
Aluminum	F	Developed	All locations	Yes	mg/kg SSC	2100
Aluminum	F	Undeveloped	SEP Reference ²	No	µg/L	3200
Aluminum	F	Undeveloped	Locations other than SEP Reference and E240 gage	No	µg/L	1200
Aluminum	F	Undeveloped	E240 gage	No	µg/L	2200
Aluminum	UF	Developed	All locations	Yes	mg/kg SSC	34,000
Aluminum	UF	Undeveloped	SEP and Western Reference	Yes	mg/kg SSC	36,000
Aluminum	UF	Undeveloped	Northern and Bandelier Reference	Yes	mg/kg SSC	12,000
Arsenic	F	Developed	All locations	No	µg/L	NR ³
Arsenic	F	Undeveloped	All locations	No	µg/L	6.0
Boron	F	Developed	Lab Developed	No	µg/L	NR
Boron	F	Developed	Town Developed	No	µg/L	NR
Boron	F	Undeveloped	Western and Northern Reference	No	µg/L	23
Boron	F	Undeveloped	SEP and Bandelier Reference	No	µg/L	21
Benzo(a)pyrene	UF	Developed	All locations	No	µg/L	0.067
Cadmium	F	Developed	All locations	No	µg/L	NR
Cadmium	F	Undeveloped	All locations	No	µg/L	NR
Cobalt	F	Developed	All locations	No	µg/L	5.0
Cobalt	F	Undeveloped	Western and Northern Reference	No	µg/L	4.3
Cobalt	F	Undeveloped	SEP and Bandelier Reference	No	µg/L	1.9
Chromium	F	Developed	All locations	No	µg/L	NR
Chromium	F	Undeveloped	All locations	No	µg/L	NR
Copper	F	Developed	Lab Developed	No	µg/L	11
Copper	F	Developed	Town Developed	No	µg/L	8.0
Copper	F	Undeveloped	All Reference except Bandelier	No	µg/L	3.3
Gross alpha	UF	Developed	All locations	Yes	pCi/g SSC	47
Gross alpha	UF	Undeveloped	All locations	Yes	pCi/g SSC	66
Mercury	UF	Developed	All locations	No	µg/L	NR
Mercury	UF	Undeveloped	Western and Northern Reference, excluding E240 gage	No	µg/L	0.21
Mercury	UF	Undeveloped	SEP and Bandelier Reference	No	µg/L	0.10
Nickel	F	Developed	All locations	No	µg/L	3.1
Nickel	F	Undeveloped	Chupaderos, Garcia, and Mortandad Watersheds	No	µg/L	3.1

APPENDIX B
STORM WATER BACKGROUND THRESHOLD VALUES (BTVS)

Pollutant of Concern	Sample Preparation¹	Landscape	Data Subset Description	SSC-Normalized?	Units	90th Percentile BTV
Nickel	F	Undeveloped	Watersheds other than Chupaderos, Garcia, and Mortandad	No	µg/L	1.7
Lead	F	Developed	All locations	No	µg/L	2.0
Lead	F	Undeveloped	All Reference except Bandelier	No	µg/L	1.5
Total PCBs	UF	Developed	All watersheds except South Fork Acid	No	µg/L	0.028
Total PCBs	UF	Developed	South Fork Acid watershed	No	µg/L	NR
Total PCBs	UF	Undeveloped	Northern and Western Reference	No	µg/L	0.012
Total PCBs	UF	Undeveloped	SEP Reference	No	µg/L	NR
Radium-226 and radium-228	UF	Developed	All locations	Yes	pCi/g SSC	10
Radium-226 and radium-228	UF	Undeveloped	All locations	Yes	pCi/g SSC	7.5
Antimony	F	Developed	All locations	No	µg/L	NR
Selenium	UF	Developed	All locations	No	µg/L	5.6
Selenium	UF	Undeveloped	Watersheds other than Mortandad	No	µg/L	4.8
Thallium	F	Developed	All locations	No	µg/L	NR
Vanadium	F	Developed	All locations	No	µg/L	5.5
Vanadium	F	Undeveloped	Watersheds other than Mortandad	No	µg/L	4.3
Zinc	F	Developed	All locations	No	µg/L	77
Zinc	F	Undeveloped	Watersheds other than Garcia	No	µg/L	10

¹ Sample preparation: F = filtered using a 0.45 µm filter (i.e., dissolved), UF = not filtered (i.e., total).

² SEP = Supplemental Environmental Project.

³ NR = not recommended.

APPENDIX C
STORM WATER BACKGROUND THRESHOLD VALUES (BTVS)

Total, unless indicated	CAS No.		MQL (µg/l)(*1)	ATAL (µg/l)(*2)	MTAL (µg/l)(*3)
RADIOACTIVITIES					
Ra-226 and Ra-228 (pCi/l)				30	---
METALS					
Aluminum, total recoverable	7429-90-5		2.5	---	(*4)
Antimony, dissolved (P)	7440-36-0		60	640	---
Arsenic, dissolved (P)	7440-38-2		0.5	9	340
Boron, dissolved	7440-42-8		100	5000	---
Cadmium, dissolved	7440-43-9		1	---	(*4)
Chromium, dissolved	18540-29-9		10	---	(*4)(*5)
Cobalt, dissolved	7440-48-4		50	1000	---
Copper, dissolved	7440-50-8		0.5	---	(*4)
Lead, dissolved	7439-92-1		0.5	---	(*4)
Mercury, total	7439-97-6		0.005	0.77	---
Nickel, dissolved (P)	7440-02-0		0.5	---	(*4)
Selenium, total recoverable	7782-49-2		5	5	20
Silver, dissolved	7440-22-4		0.5	---	(*4)
Thallium, dissolved (P)	7440-28-0		0.5	0.47	---
Vanadium, dissolved	7440-62-2		50	100	---
Zinc, dissolved	7440-66-6		20	---	(*4)
CYANIDE					
Cyanide, total recoverable	57-12-5		10	5.2	22
DIOXIN					
2,3,7,8-TCDD (P)	1746-01-6		0.00001	5.1E-08	---
SEMIVOLATILE COMPOUNDS					
Pentachlorophenol	87-86-5		5	---	19
Benzo(a)pyrene (P)	50-32-8		5	0.18	---
Hexachlorobenzene (P)	118-74-1		5	0.0029	---
PESTICIDES					
Aldrin (P)	309-00-2		0.01	0.0005	3

APPENDIX C
STORM WATER BACKGROUND THRESHOLD VALUES (BTVS)

Total, unless indicated	CAS No.		MQL (µg/l)(*1)	ATAL (µg/l)(*2)	MTAL (µg/l)(*3)
Gamma-BHC	58-89-9		0.05	---	0.95
Chlordane (P)	57-74-9		0.2	0.0081	2.4
4,4'-DDT and derivatives (P)	50-29-3		0.02	0.001	1.1
Dieldrin (P)	60-57-1		0.02	0.00054	0.24
Alpha-Endosulfan	959-98-8		0.01	---	0.22
Beta-Endosulfan	33213-65-9		0.02	---	0.22
Endrin	72-20-8		0.02	---	0.086
Heptachlor	76-44-8		0.01	---	0.52
Heptachlor Epoxide	1024-57-3		0.01	---	0.52
Toxaphene	8001-35-2		0.3	---	0.73
PCBS					
PCBs (P)	1336-36-3		(*6)	(*7)	---
HIGH EXPLOSIVES					
RDX	121-82-4		---	200	---
2,4,6-Trinitrotoluene (TNT)	118-96-7		---	20	---

Note: The target action levels (TALs) are based on and equivalent to New Mexico State water quality criteria for the subject pollutants. The applicable TALs are not themselves effluent limitations, but are benchmarks to determine the effectiveness of control measures implemented to meet the non-numeric technology-based effluent limitations.

Footnotes:

(*1) MQL is the minimum quantification level. EPA approved analytical methods with the same or more sensitive detectable level (DL) than MQL shall be used. If an individual analytical test result is smaller than the MQL or the more sensitive DL, a value of zero (0) or "ND" may be used for reporting and action purpose. A Table of MQLs is attached as Appendix D.

The Permittees shall use sufficiently sensitive EPA-approved analytical methods (under 40 CFR part 136 and 40 CFR chapter I, subchapters N and O) when quantifying the presence of POCs in a discharge for analyses of POCs or pollutant parameters under the permit. In case the minimum quantification levels (MQLs) are not sufficiently sensitive to the limits, the actual detected values, instead of zeros, need to be reported. If there is a sensitive method with MDL (method detection limit) below the TAL/BTV, but the MQL is above the TAL/BTV, they cannot report zero based on MQL but must report actual value. If any individual analytical test result is less than the MQL listed in Appendix C, or the more sensitive MDL, a value of zero (0) may be used for that individual result for reporting purpose.

The Permittees may develop an effluent specific method detection limit (MDL) in accordance with the monitoring requirements in the SIP and 40 CFR 136. For any POC for which the Permittees determine an effluent specific MDL, the Permittees shall send to the EPA Region 6 Permitting & Water Quality Branch (6WD-P) a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate that the effluent specific MDL was correctly calculated. An effluent specific minimum quantification level (MQL) shall be determined in accordance with the following calculation: $MQL = 3.3 \times MDL$. Upon written approval by the EPA Region 6 Permitting & Water Quality Branch (6WD-P), the effluent specific MQL may be utilized by the Permittees for all future Compliance Status Report (CSR) reporting requirements. The PCB congener-specific MQLs are listed in footnote (*7) below.

(*2) ATAL stands for Average Target Action Level. The average is the geometric mean of applicable monitoring results at the SMA. If all analytical results are below analytical method detect level, a value of "zero" may be reported. If one or more data are above detect level, a value of ½ detect level shall be assigned to those below detect level data for calculation purpose. If the average value of a specific POC is below its MQL, a value of "zero" may be reported for the average. If a new or an enhanced best management practice (BMP) is installed, the average is calculated based on analytical results from samples taken after installation of the BMP.

APPENDIX C
STORM WATER BACKGROUND THRESHOLD VALUES (BTVS)

- (*3) MTAL stands for Maximum Target Action Level.
- (*4) Hardness-dependent metals target action levels. See Table C-1 below.
- (*5) While the 20.6.4 New Mexico Administrative Code (NMAC) aquatic life standard is for chromium III, analyzing this in storm water is operationally infeasible because of the 24-hr preservation requirement. Therefore, for the purposes of this Permit, total dissolved chromium will be analyzed and compared to the hardness-dependent criteria (see Table C-1 below).
- (*6) Method 1668 Revision C or the most current revision of the Congener Method shall be used for PCB analysis. Per Appendix C of 2010 Permit, the MQLs for PCB congeners 4/10, 5/8, 6, 7/9, 11, 12/13, 14, and 15 will be 50 pg/l, and the MQLs for all other PCB Congeners will be 25 pg/l. If adjusted Reporting Limits (RL) are used to adjust MQLs due to laboratory's contemporary ambient background, such adjusted RL shall be updated no less than once per 6 mo. If laboratory method blank, field blank, or trip blank subtraction are used in calculation of sample analytical result, supporting document shall be submitted with the Annual Report.
- (*7) If the stream reach that an SMA drains to is classified as ephemeral (per the Clean Water Act 303(d)/305(b) Integrated Report), the total PCB wildlife habitat surface water quality criterion (0.014 µg/l from 20.6.4 NMAC) will be used as the ATAL; if the stream reach that an SMA drains to is classified as intermittent or perennial, the total PCB human health-organism aquatic life criterion (0.00064 µg/l) will be used as the ATAL.
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APPENDIX C
STORM WATER BACKGROUND THRESHOLD VALUES (BTVS)

**Table C-1
Proposed Metals MTALs (*1)**

Major Canyon	Hardness (*2) (mg/L)	Aluminum	Cadmium (dissolved)	Chromium (dissolved)	Copper (dissolved)	Lead (dissolved)	Nickel (dissolved)	Silver (dissolved)	Zinc (dissolved)
Ancho	35.7	830	0.69	250	5.1	20.7	200	0.55	63
Chaquehui	30.0	660	0.59	210	4.3	17.0	170	0.41	54
Los Alamos/Pueblo	34.5	800	0.67	240	4.9	19.9	190	0.52	61
Mortandad	29.4	640	0.58	210	4.2	16.7	170	0.39	43
Pajarito	30.2	660	0.59	210	4.3	17.2	170	0.41	54
Sandia	44.8	1140	0.83	300	6.3	26.7	240	0.81	77
Water/Cañon de Valle	47.7	1240	0.88	310	6.7	28.6	250	0.90	82

- (*1) MTALs are based on acute aquatic life criteria contained in New Mexico Water Quality Standards in 20.6.4.900 NMAC, computed at the hardness values listed.
- (*2) Geometric mean receiving water hardness for each major canyon, based on calculated hardness using dissolved (0.45-µm filtered) calcium and magnesium results (SM 2340B).

The following Minimum Quantification Levels (MQL's) are to be used for reporting pollutant data for NPDES permit applications and/or compliance reporting.

POLLUTANTS	MQL µg/l	POLLUTANTS	MQL µg/l
METALS, RADIOACTIVITY, CYANIDE AND CHLORINE			
Aluminum	2.5	Molybdenum	10
Antimony	60	Nickel	0.5
Arsenic	0.5	Selenium	5
Barium	100	Silver	0.5
Beryllium	0.5	Thallium	0.5
Boron	100	Uranium	0.1
Cadmium	1	Vanadium	50
Chromium	10	Zinc	20
Cobalt	50	Cyanide	10
Copper	0.5	Cyanide, weak acid dissociable	10
Lead	0.5	Total Residual Chlorine	33
Mercury *1	0.0005 0.005		
DIOXIN			
2,3,7,8-TCDD	0.00001		
VOLATILE COMPOUNDS			
Acrolein	50	1,3-Dichloropropylene	10
Acrylonitrile	20	Ethylbenzene	10
Benzene	10	Methyl Bromide	50
Bromoform	10	Methylene Chloride	20
Carbon Tetrachloride	2	1,1,2,2-Tetrachloroethane	10
Chlorobenzene	10	Tetrachloroethylene	10
Clorodibromomethane	10	Toluene	10
Chloroform	50	1,2-trans-Dichloroethylene	10
Dichlorobromomethane	10	1,1,2-Trichloroethane	10
1,2-Dichloroethane	10	Trichloroethylene	10
1,1-Dichloroethylene	10	Vinyl Chloride	10
1,2-Dichloropropane	10		

ACID COMPOUNDS

2-Chlorophenol	10	2,4-Dinitrophenol	50
2,4-Dichlorophenol	10	Pentachlorophenol	5
2,4-Dimethylphenol	10	Phenol	10
4,6-Dinitro-o-Cresol	50	2,4,6-Trichlorophenol	10

BASE/NEUTRAL

Acenaphthene	10	Dimethyl Phthalate	10
Anthracene	10	Di-n-Butyl Phthalate	10
Benzidine	50	2,4-Dinitrotoluene	10
Benzo(a)anthracene	5	1,2-Diphenylhydrazine	20
Benzo(a)pyrene	5	Fluoranthene	10
3,4-Benzofluoranthene	10	Fluorene	10
Benzo(k)fluoranthene	5	Hexachlorobenzene	5
Bis(2-chloroethyl)Ether	10	Hexachlorobutadiene	10
Bis(2-chloroisopropyl)Ether	10	Hexachlorocyclopentadiene	10
Bis(2-ethylhexyl)Phthalate	10	Hexachloroethane	20
Butyl Benzyl Phthalate	10	Indeno(1,2,3-cd)Pyrene	5
2-Chloronaphthalene	10	Isophorone	10
Chrysene	5	Nitrobenzene	10
Dibenzo(a,h)anthracene	5	n-Nitrosodimethylamine	50
1,2-Dichlorobenzene	10	n-Nitrosodi-n-Propylamine	20
1,3-Dichlorobenzene	10	n-Nitrosodiphenylamine	20
1,4-Dichlorobenzene	10	Pyrene	10
3,3'-Dichlorobenzidine	5	1,2,4-Trichlorobenzene	10
Diethyl Phthalate	10		

PESTICIDES AND CBS

Aldrin	0.01	Beta-Endosulfan	0.02
Alpha-BHC	0.05	Endosulfan sulfate	0.02
Beta-BHC	0.05	Endrin	0.02
Gamma-BHC	0.05	Endrin Aldehyde	0.1
Chlordane	0.2	Heptachlor	0.01
4,4'-DDT and derivatives	0.02	Heptachlor Epoxide	0.01
Dieldrin	0.02	PCBs	0.2
Alpha-Endosulfan	0.01	Toxaphene	0.3

Footnotes:

*1 Default MQL for Mercury is 0.005 unless Part I of your permit requires the more sensitive Method 1631 (Oxidation / Purge and Trap / Cold vapor Atomic Fluorescence Spectrometry), then the MQL shall be 0.0005.