PERMIT NO.: MT0023965
Major Industrial

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

AUTHORIZATION TO DISCHARGE UNDER THE
MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES)

In compliance with Montana Water Quality Act, Title 75, Chapter 5, Montana Code Annotated (MCA) and the Federal Water Pollution Control Act (the "Clean Water Act"), 33 U.S.C. § 1251 et seq.,

WESTERN ENERGY COMPANY (the Permittee)

is authorized to discharge from its **ROSEBUD MINE**

located at **CASTLE ROCK ROAD, COLSTRIP, MT, 59323**

to receiving waters named **EAST FORK ARMELLS CREEK, STOCKER CREEK, LEE COULEE, WEST FORK ARMELLS CREEK, BLACK HANK CREEK, DONLEY CREEK, COW CREEK, SPRING CREEK, AND PONY CREEK**

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein. Authorization for discharge is limited to those outfalls specifically listed in the permit.

This permit shall become effective: November 1, 2012

This permit and the authorization to discharge shall expire at midnight, October 31, 2017.

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

Jenny Chambers

Jenny Chambers, Chief
Water Protection Bureau
Permitting & Compliance Division

Issuance Date: September 14, 2012

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I. EFFLUENT LIMITATIONS AND MONITORING & REPORTING REQUIREMENTS

A. Description of Discharge Point(s) and Mixing Zone(s)

The authorization to discharge provided under this permit is limited to those outfalls specially designated below as discharge locations. Discharges at any location not authorized under an MPDES permit is a violation of the Montana Water Quality Act and could subject the person(s) responsible for such discharge to penalties under the Act. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge within a reasonable time from first learning of an unauthorized discharge could subject such person to criminal penalties as provided under Montana Water Quality Act, Section 75-5-632.

Table 1 below provides a description of the discharge points and mixing zones for each outfall. Treatment consists of the use of sediment ponds or traps, with a 10-year, 24-hour design capacity, to remove suspended solids from commingled storm water and pit water or coal plant wash down water.

Table 1. Description of Discharge Points and Mixing Zones

Outfall	Mine Area	Latitude	Longitude	Receiving Water/ Mixing Zone[1]
08D	A	45°55'07.54"N	106°35'25.86"W	East Fork Armells Creek
009	A	45°52'32.07"N	106°37'43.04"W	East Fork Armells Creek
09A	A	45°52'20.24"N	106°37'54.51"W	East Fork Armells Creek
13A	A	45°52'07.74"N	106°38'18.66"W	East Fork Armells Creek
014	A	45°51'57.46"N	106°38'46.04"W	East Fork Armells Creek
016	A	45°51'51.96"N	106°38'58.45"W	East Fork Armells Creek
16A	A	45°51'41.63"N	106°39'26.47"W	East Fork Armells Creek
023	A	45°51'38.54"N	106°40'22.36"W	East Fork Armells Creek
024	A	45°51'36.25"N	106°40'49.67"W	East Fork Armells Creek
069	A	45°52'52.27"N	106°42'08.78"W	Stocker Creek
070	A	45°53'06.14"N	106°41'57.75"W	Stocker Creek
071	A	45°53'21.63"N	106°41'15.25"W	Stocker Creek
71C	A	45°53'30.68"N	106°40'51.29"W	Stocker Creek
072	A	45°53'44.52"N	106°40'05.27"W	Stocker Creek
073	A	45°53'42.82"N	106°39'47.94"W	Stocker Creek
73A	A	45°53'41.42"N	106°39'44.54"W	Stocker Creek
074	A	45°53'40.81"N	106°39'28.20"W	Stocker Creek
075	A	45°53'32.77"N	106°39'04.81"W	East Fork Armells Creek (via Castle Rock Lake)
10C	B-East	45°52'0.79"N	106°36'33.27"W	East Fork Armells Creek
011	B-East	45°52'05.58"N	106°37'41.89"W	East Fork Armells Creek
012	B-East	45°52'01.49"N	106°38'02.54"W	East Fork Armells Creek
015	B-East	45°51'50.96"N	106°38'35.06"W	East Fork Armells Creek
018	B-East	45°51'35.98"N	106°39'12.49"W	East Fork Armells Creek
019	B-East	45°51'42.01"N	106°39'06.64"W	East Fork Armells Creek

Outfall	Mine Area	Latitude	Longitude	Receiving Water/ Mixing Zone[1]
020	B-East	45°51'29.58"N	106°39'44.17"W	East Fork Armells Creek
021	B-East	45°51'30.22"N	106°39'54.40"W	East Fork Armells Creek
022	B-East	45°51'30.98"N	106°39'56.35"W	East Fork Armells Creek
025	B-East	45°51'15.98"N	106°41'10.74"W	East Fork Armells Creek
026	B-West	45°51'07.26"N	106°41'36.91"W	East Fork Armells Creek
048	B-West	45°51'01.15"N	106°42'20.53"W	East Fork Armells Creek
056	B-West	45°50'42.13"N	106°44'04.97"W	East Fork Armells Creek
061	B-West	45°50'35.05"N	106°45'10.86"W	East Fork Armells Creek
127	B-West	45°50'38.66"N	106°46'49.00"W	East Fork Armells Creek
128	B-West	45°50'31.87"N	106°45'32.31"W	East Fork Armells Creek
128A	B-West	45°50'34.08"N	106°45'38.26"W	East Fork Armells Creek
128B	B-West	45°50'34.81"N	106°45'46.23"W	East Fork Armells Creek
128C	B-West	45°50'38.81"N	106°45'54.30"W	East Fork Armells Creek
128D	B-West	45°50'47.96"N	106°46'22.90"W	East Fork Armells Creek
129	B-West	45°50'38.45"N	106°44'26.24"W	East Fork Armells Creek
133	B-West	45°50'36.76"N	106°43'50.01"W	East Fork Armells Creek
136	B-West	45°50'38.29"N	106°43'31.85"W	East Fork Armells Creek
137	B-West	45°50'52.10"N	106°42'52.53"W	East Fork Armells Creek
139	B-West	45°50'59.84"N	106°42'07.16"W	East Fork Armells Creek
130	B-West	45°49'55.94"N	106°45'06.47"W	Lee Coulee
130A	B-West	45°49'55.93"N	106°44'31.72"W	Lee Coulee
130B	B-West	45°49'55.83"N	106°44'26.12"W	Lee Coulee
131	B-West	45°49'55.88"N	106°44'02.06"W	Lee Coulee
131A	B-West	45°49'55.95"N	106°43'54.32"W	Lee Coulee
132	B-West	45°49'56.11"N	106°43'42.38"W	Lee Coulee
134	B-West	45°49'56.10"N	106°43'05.84"W	Lee Coulee
030	C-East	45°52'36.96"N	106°46'06.14"W	Stocker Creek
032	C-East	45°52'19.00"N	106°45'47.23"W	Stocker Creek
033	C-East	45°52'31.74"N	106°45'14.89"W	Stocker Creek
034	C-East	45°52'31.68"N	106°45'08.32"W	Stocker Creek
035	C-East	45°52'20.96"N	106°44'06.26"W	Stocker Creek
036	C-East	45°52'30.83"N	106°43'26.38"W	Stocker Creek
037	C-East	45°52'32.24"N	106°43'09.49"W	Stocker Creek
038	C-East	45°52'31.49"N	106°42'51.82"W	Stocker Creek
039	C-East	45°52'29.39"N	106°42'20.73"W	Stocker Creek
040	C-East	45°52'25.06"N	106°42'12.23"W	Stocker Creek
041	C-East	45°52'20.67"N	106°42'07.31"W	Stocker Creek
042	C-East	45°51'53.75"N	106°41'30.62"W	East Fork Armells Creek
043	C-East	45°51'24.42"N	106°41'24.81"W	East Fork Armells Creek
044	C-East	45°51'15.98"N	106°41'39.21"W	East Fork Armells Creek
046	C-East	45°51'26.75"N	106°42'11.71"W	East Fork Armells Creek

Outfall	Mine Area	Latitude	Longitude	Receiving Water/ Mixing Zone[1]
049	C-East	45°51'10.96"N	106°42'54.96"W	East Fork Armells Creek
051	C-East	45°51'06.15"N	106°43'17.06"W	East Fork Armells Creek
052	C-East	45°50'57.26"N	106°43'41.63"W	East Fork Armells Creek
054	C-East	45°50'52.05"N	106°43'47.21"W	East Fork Armells Creek
058	C-East	45°50'50.79"N	106°44'24.22"W	East Fork Armells Creek
059	C-East	45°50'48.65"N	106°44'47.60"W	East Fork Armells Creek
59A	C-East	45°50'40.95"N	106°45'16.11"W	East Fork Armells Creek
060	C-East	45°50'39.79"N	106°45'44.60"W	East Fork Armells Creek
063	C-East	45°50'46.26"N	106°46'05.19"W	East Fork Armells Creek
064	C-East	45°50'58.75"N	106°46'33.31"W	East Fork Armells Creek
116	C-North	45°53'35.82"N	106°46'34.19"W	Stocker Creek
116A	C-North	45°53'31.76"N	106°46'19.29"W	Stocker Creek
119	C-North	45°53'08.08"N	106°45'48.84"W	Stocker Creek
121	C-North	45°52'44.18"N	106°46'08.98"W	Stocker Creek
121A	C-North	45°52'53.13"N	106°46'02.02"W	Stocker Creek
109	C-North	45°52'27.56"N	106°48'51.92"W	West Fork Armells Creek
112	C-North	45°53'23.54"N	106°48'15.03"W	West Fork Armells Creek
112A	C-North	45°53'24.12"N	106°47'24.00"W	West Fork Armells Creek
112B	C-North	45°53'30.74"N	106°47'08.03"W	West Fork Armells Creek
113	C-North	45°53'25.58"N	106°47'30.84"W	West Fork Armells Creek
096	C-West	45°53'16.74"N	106°52'30.57"W	Black Hank Creek
098	C-West	45°53'29.64"N	106°51'55.76"W	Donley Creek
095	C-West	45°53'13.99"N	106°51'30.80"W	West Fork Armells Creek
95A	C-West	45°53'20.03"N	106°51'35.24"W	West Fork Armells Creek
100	C-West	45°53'03.80"N	106°51'15.05"W	West Fork Armells Creek
101	C-West	45°52'55.77"N	106°50'57.26"W	West Fork Armells Creek
103	C-West	45°52'49.42"N	106°50'41.34"W	West Fork Armells Creek
104	C-West	45°52'45.78"N	106°50'30.14"W	West Fork Armells Creek
104A	C-West	45°52'41.11"N	106°47'39.94"W	West Fork Armells Creek
105	C-West	45°52'31.32"N	106°49'56.43"W	West Fork Armells Creek
106	C-West	45°52'33.21"N	106°49'42.00"W	West Fork Armells Creek
107	C-West	45°52'30.39"N	106°49'35.37"W	West Fork Armells Creek
108	C-West	45°52'33.16"N	106°49'26.97"W	West Fork Armells Creek
006	D	45°53'48.32"N	106°35'10.13"W	Cow Creek
007	D	45°54'14.87"N	106°36'48.10"W	East Fork Armells Creek
077	D	45°55'06.57"N	106°36'35.71"W	East Fork Armells Creek
079	D	45°55'13.15"N	106°36'08.19"W	East Fork Armells Creek
080	D	45°55'18.56"N	106°35'36.78"W	Spring Creek
082	D	45°55'21.56"N	106°35'07.92"W	Spring Creek
083	D	45°55'17.69"N	106°34'51.79"W	Spring Creek
090	D	45°53'52.24"N	106°34'00.13"W	Cow Creek

Outfall	Mine Area	Latitude	Longitude	Receiving Water/ Mixing Zone[1]
091	D	45°53'50.76"N	106°34'25.62"W	Cow Creek
092	D	45°53'50.38"N	106°34'37.70"W	Cow Creek
093	D	45°53'28.95"N	106°35'05.66"W	Cow Creek
141	D	45°54'53.18"N	106°36'51.03"W	East Fork Armells Creek
142	D	45°54'41.31"N	106°36'42.86"W	East Fork Armells Creek
143	D	45°54'32.92"N	106°36'46.36"W	East Fork Armells Creek
144	D	45°54'02.64"N	106°36'45.56"W	East Fork Armells Creek
151	D	45°52'56.29"N	106°35'31.64"W	Cow Creek
152	D	45°52'56.29"N	106°35'31.64"W	Cow Creek
153	D	45°53'07.09"N	106°35'22.24"W	Cow Creek
154	D	45°53'13.55"N	106°35'13.54"W	Cow Creek
155	D	45°53'23.19"N	106°35'11.24"W	Cow Creek
194	D	45°53'04.86"N	106°36'28.22"W	East Fork Armells Creek
195	D	45°53'04.57"N	106°36'13.69"W	East Fork Armells Creek
173	D-East	45°53'57.75"N	106°32'00.13"W	Cow Creek
175	D-East	45°53'50.23"N	106°32'35.82"W	Cow Creek
176	D-East	45°53'54.21"N	106°33'04.49"W	Cow Creek
177	D-East	45°53'52.02"N	106°35'18.38"W	Cow Creek
178	D-East	45°53'49.59"N	106°33'30.32"W	Cow Creek
179	D-East	45°53'50.86"N	106°33'52.65"W	Cow Creek
165	D-East	45°54'44.68"N	106°32'59.42"W	Pony Creek
166	D-East	45°54'44.69"N	106°33'04.25"W	Pony Creek
167	D-East	45°54'44.90"N	106°33'08.88"W	Pony Creek
168	D-East	45°54'44.71"N	106°33'19.72"W	Pony Creek
169	D-East	45°54'36.85"N	106°33'25.23"W	Pony Creek
169A	D-East	45°54'30.32"N	106°33'24.93"W	Pony Creek
170	D-East	45°54'19.05"N	106°33'06.14"W	Pony Creek
171	D-East	45°54'14.03"N	106°32'58.49"W	Pony Creek
172	D-East	45°54'13.94"N	106°32'39.80"W	Pony Creek
084	D-East	45°54'13.94"N	106°32'39.80"W	Spring Creek
085	D-East	45°55'02.18"N	106°34'11.91"W	Spring Creek
086	D-East	45°55'07.26"N	106°34'00.12"W	Spring Creek
160A	D-East	45°55'07.65"N	106°33'42.39"W	Spring Creek
160B	D-East	45°55'07.50"N	106°33'48.45"W	Spring Creek
161	D-East	45°55'07.08"N	106°33'29.29"W	Spring Creek
161A	D-East	45°55'07.62"N	106°33'34.39"W	Spring Creek
162	D-East	45°55'07.73"N	106°33'25.15"W	Spring Creek
163	D-East	45°55'07.04"N	106°33'01.10"W	Spring Creek
164	D-East	45°55'02.77"N	106°32'56.35"W	Spring Creek
010	E	45°52'12.48"N	106°37'05.52"W	East Fork Armells Creek
10A	E	45°52'30.01"N	106°36'42.14"W	East Fork Armells Creek

Outfall	Mine Area	Latitude	Longitude	Receiving Water/ Mixing Zone[1]
003	E	45°51'20.85"N	106°34'00.17"W	Cow Creek
004	E	45°52'10.22"N	106°34'54.76"W	Cow Creek
005	E	45°52'35.11"N	106°35'24.77"W	Cow Creek
027	E	45°51'56.32"N	106°34'28.47"W	Cow Creek

Footnotes:
1. There are no acute, chronic, or human health mixing zones allowed for any outfall.

B. Final Effluent Limitations and Monitoring Requirements

Effective immediately and lasting through the term of the permit, the quality of effluent discharged at each outfall shall, as a minimum, meet the limitations set forth in Tables 2 through 8, below. All monitoring shall be conducted at the overflow structure where effluent discharges as overflow from the sediment control structure, or at the end of the discharge pipe when pumped or drained, and prior to contact with the receiving water. Monitoring must be conducted at a minimum monitoring frequency and sampling type specified in Tables 2 through 8. Samples must achieve the listed required reporting value (RRV) or minimum level (ML).

Table 2. Final Numeric Effluent Limitations and Monitoring Requirements – Discharges to East Fork Armells Creek

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS[2]						
Total suspended solids (TSS)	mg/L	35	70	1/Day	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Day	Grab	0.1
Aluminum, dissolved	µg/L	63	127	1/Month	Grab	0.03
Copper, total	µg/L	4.4	8.8	1/Month	Grab	1
Iron, total	mg/L	0.50	1.61	1/Week	Grab	0.05
Selenium, total	µg/L	3.6	7.3	1/Month	Grab	1
Oil and grease	mg/L	--	10	1/Week	Grab	1
Total dissolved solids (TDS)	mg/L	3000	4500	1/Week	Grab	10
Sulfate	mg/L	2050	3075	1/Month	Grab	10
Boron	mg/L	0.70	1.1	1/Month	Grab	0.01
EXISTING OUTFALLS[3]						
TSS	mg/L	35	70	1/Day	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Day	Grab	0.1
Aluminum, dissolved	µg/L	Report only		1/Month	Grab	0.03
Iron, total	mg/L	3.5	7.0	1/Week	Grab	0.05
Selenium, total	µg/L	Report only		1/Month	Grab	1
Oil and grease	mg/L	--	10	1/Week	Grab	1
TDS	mg/L	3000	4500	1/Week	Grab	10
Sulfate	mg/L	2050	3075	1/Month	Grab	10

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
Boron	mg/L	0.70	1.1	1/Month	Grab	0.01
ALL OUTFALLS						
Flow	gpd	Report only		1/Day	Continuous	--
Chloride	µg/L	Report only		1/Month	Grab	--
Electrical conductivity (EC)	µS/cm	Report only		1/Month	Grab	10
Sodium adsorption ratio (SAR)	Unitless	Report only		1/Month	Calculated	0.1
Nitrate + nitrite (as N)	mg/L	Report only		1/Month	Grab	0.01
Metals, total recoverable[4]	µg/L	Report only		1/Year	Grab	[4]
Whole effluent toxicity, acute[5]	% Effluent	Report only		1/Year	Grab	--

Footnotes:
1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.
2. Outfalls 10C, 127, 128, 128A, 128B, 128C, 128D, 129, 136, 137 and 139 were not previously permitted and are considered new outfalls.
3. Existing outfalls include all outfalls not listed in footnote 2, above.
4. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.
5. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

Table 3. Final Numeric Effluent Limitations and Monitoring Requirements – Discharges to West Fork Armells, Black Hank, and Donley Creeks

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS						
There are no new outfalls discharging to these receiving waters.						
EXISTING OUTFALLS						
TSS	mg/L	35	70	1/Day	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Day	Grab	0.1
Aluminum, dissolved	µg/L	Report only		1/Month	Grab	0.03
Iron, total	mg/L	3.5	7.0	1/Week	Grab	0.05
Selenium, total	µg/L	Report only		1/Month	Grab	1
Oil and grease	mg/L	--	10	1/Week	Grab	1
TDS	mg/L	2600	3900	1/Week	Grab	10
Sulfate	mg/L	1500	2250	1/Month	Grab	10
Boron	mg/L	0.40	0.60	1/Month	Grab	0.01
Flow	gpd	Report only		1/Day	Continuous	--
Chloride	µg/L	Report only		1/Month	Grab	--
EC	µS/cm	Report only		1/Month	Grab	10

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
SAR	Unitless	Report only		1/Month	Calculated	0.1
Nitrate + nitrite (as N)	mg/L	Report only		1/Month	Grab	0.01
Metals, total recoverable[2]	µg/L	Report only		1/Year	Grab	[2]
Whole effluent toxicity, acute[3]	% Effluent	Report only		1/Year	Grab	--

Footnotes:
1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.
2. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.
3. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

Table 4. Final Numeric Effluent Limitations and Monitoring Requirements – Discharges to Stocker Creek

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS[2]						
TSS	mg/L	35	70	1/Day	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Day	Grab	0.1
Aluminum, dissolved	µg/L	63	127	1/Month	Grab	0.03
Copper, total	µg/L	4.4	8.8	1/Month	Grab	1
Iron, total	mg/L	0.50	1.61	1/Week	Grab	0.05
Selenium, total	µg/L	3.6	7.3	1/Month	Grab	1
Oil and grease	mg/L	--	10	1/Week	Grab	1
TDS	mg/L	3950	5925	1/Week	Grab	10
Sulfate	mg/L	2400	3600	1/Month	Grab	10
Boron	mg/L	1.0	1.5	1/Month	Grab	0.01
EXISTING OUTFALLS[3]						
TSS	mg/L	35	70	1/Day	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Day	Grab	0.1
Aluminum, dissolved	µg/L	Report only		1/Month	Grab	0.03
Iron, total	mg/L	3.5	7.0	1/Week	Grab	0.05
Selenium, total	µg/L	Report only		1/Month	Grab	1
Oil and grease	mg/L	--	10	1/Week	Grab	1
TDS	mg/L	3950	5925	1/Week	Grab	10
Sulfate	mg/L	2400	3600	1/Month	Grab	10
Boron	mg/L	1.0	1.5	1/Month	Grab	0.01
ALL OUTFALLS						
Flow	gpd	Report only		1/Day	Continuous	--
Chloride	µg/L	Report only		1/Month	Grab	--

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
EC	µS/cm	Report only		1/Month	Grab	10
SAR	Unitless	Report only		1/Month	Calculated	0.1
Nitrate + nitrite (as N)	mg/L	Report only		1/Month	Grab	0.01
Metals, total recoverable[4]	µg/L	Report only		1/Year	Grab	[4]
Whole effluent toxicity, acute[5]	% Effluent	Report only		1/Year	Grab	--

Footnotes:
1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.
2. Outfall 030 was not previously permitted and is considered a new outfall.
3. Existing outfalls include all outfalls not listed in footnote 2, above.
4. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.
5. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

Table 5. Final Numeric Effluent Limitations and Monitoring Requirements – Discharges to Lee Coulee

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS						
There are no new outfalls discharging to these receiving waters.						
EXISTING OUTFALLS						
TSS	mg/L	35	70	1/Day	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Day	Grab	0.1
Aluminum, dissolved	µg/L	Report only		1/Month	Grab	0.03
Iron, total	mg/L	3.5	7.0	1/Week	Grab	0.05
Selenium, total	µg/L	Report only		1/Month	Grab	1
Oil and grease	mg/L	--	10	1/Week	Grab	1
EC	µS/cm	500	500	1/Month	Grab	10
SAR	Unitless	Report only		1/Month	Calculated	0.1
Sulfate	mg/L	1500	2250	1/Month	Grab	10
Boron	mg/L	0.40	0.60	1/Month	Grab	0.01
Flow	gpd	Report only		1/Day	Continuous	--
Chloride	µg/L	Report only		1/Month	Grab	--
Nitrate + nitrite (as N)	mg/L	Report only		1/Month	Grab	0.01
Metals, total recoverable[2]	µg/L	Report only		1/Year	Grab	[2]
Whole effluent toxicity, acute[3]	% Effluent	Report only		1/Year	Grab	--

Footnotes:
1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]

2. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.
3. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

Table 6. Final Numeric Effluent Limitations and Monitoring Requirements – Discharges to Pony Creek

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS						
There are no new outfalls discharging to these receiving waters.						
EXISTING OUTFALLS						
TSS	mg/L	35	70	1/Day	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Day	Grab	0.1
Aluminum, dissolved	µg/L	Report only		1/Month	Grab	0.03
Iron, total	mg/L	3.5	7.0	1/Week	Grab	0.05
Selenium, total	µg/L	Report only		1/Month	Grab	1
Oil and grease	mg/L	--	10	1/Week	Grab	1
EC	µS/cm	500	500	1/Month	Grab	10
SAR	Unitless	Report only		1/Month	Calculated	0.1
Sulfate	mg/L	1550	2325	1/Month	Grab	10
Boron	mg/L	1.2	1.8	1/Month	Grab	0.01
Flow	gpd	Report only		1/Day	Continuous	--
Chloride	µg/L	Report only		1/Month	Grab	--
Nitrate + nitrite (as N)	mg/L	Report only		1/Month	Grab	0.01
Metals, total recoverable[2]	µg/L	Report only		1/Year	Grab	2
Whole effluent toxicity, acute[3]	% Effluent	Report only		1/Year	Grab	--

Footnotes:
1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.
2. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.
3. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

Table 7. Final Numeric Effluent Limitations and Monitoring Requirements – Discharges to Cow Creek

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS						
There are no new outfalls discharging to these receiving waters.						
EXISTING OUTFALLS						
TSS	mg/L	35	70	1/Day	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Day	Grab	0.1
Aluminum, dissolved	µg/L	Report only		1/Month	Grab	0.03
Iron, total	mg/L	3.5	7.0	1/Week	Grab	0.05
Selenium, total	µg/L	Report only		1/Month	Grab	1
Oil and grease	mg/L	--	10	1/Week	Grab	1
EC	µS/cm	500	500	1/Month	Grab	10
SAR	Unitless	Report only		1/Month	Calculated	0.1
Sulfate	mg/L	2300	3450	1/Month	Grab	10
Boron	mg/L	1.6	2.4	1/Month	Grab	0.01
Flow	gpd	Report only		1/Day	Continuous	--
Chloride	µg/L	Report only		1/Month	Grab	--
Nitrate + nitrite (as N)	mg/L	Report only		1/Month	Grab	0.01
Metals, total recoverable[2]	µg/L	Report only		1/Year	Grab	[2]
Whole effluent toxicity, acute[3]	% Effluent	Report only		1/Year	Grab	--

Footnotes:
1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.
2. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.
3. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

Table 8. Final Numeric Effluent Limitations and Monitoring Requirements – Discharges to Spring Creek

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS						
There are no new outfalls discharging to these receiving waters.						
EXISTING OUTFALLS						
TSS	mg/L	35	70	1/Day	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Day	Grab	0.1
Aluminum, dissolved	µg/L	Report only		1/Month	Grab	0.03
Iron, total	mg/L	3.5	7.0	1/Week	Grab	0.05
Selenium, total	µg/L	Report only		1/Month	Grab	1

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
Oil and Grease	mg/L	--	10	1/Week	Grab	1
EC	µS/cm	500	500	1/Month	Grab	10
SAR	Unitless	Report only		1/Month	Calculated	0.1
Sulfate	mg/L	1300	1950	1/Month	Grab	10
Boron	mg/L	1.1	1.7	1/Month	Grab	0.01
Flow	gpd	Report only		1/Day	Continuous	--
Chloride	µg/L	Report only		1/Month	Grab	--
Nitrate + nitrite (as N)	mg/L	Report only		1/Month	Grab	0.01
Metals, total recoverable[2]	µg/L	Report only		1/Year	Grab	[2]
Whole effluent toxicity, acute[3]	% Effluent	Report only		1/Year	Grab	--

Footnotes:
1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.
2. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.
3. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

a. Narrative Effluent Limitations: All Outfalls

i. There shall be no discharge from any outfall that reacts or settles to form an objectionable sludge deposit or emulsion beneath the surface of the receiving water or upon adjoining shorelines.

ii. There shall be no discharge from any outfall of floating solids or visible foam in other than trace amounts.

iii. There shall be no discharge from any outfall that causes visible oil sheen in the receiving stream.

b. Monitoring Locations:

The Permittee shall establish monitoring locations at each outfall to demonstrate compliance with the effluent limitations and other requirements in section I of this Permit. Appropriate monitoring locations include: at the overflow structure where the effluent discharges as overflow from the sediment control structure, or at the end of the discharge pipe when pumped or drained, and prior to contact with the receiving water.

The Permittee shall monitor effluent at the specific monitoring location during discharge. The location of each outfall regulated by this permit shall be permanently identified in the field.

1. Alternate Numeric Effluent Limitations and Monitoring Requirements – Alternate effluent limitations and monitoring requirements will be applied to discharges driven by precipitation events and/or snowmelt. Effluent limitations and

monitoring requirements presented in Tables 9 through 15 will be applied alternately to the otherwise applicable effluent limitations and monitoring requirements presented in Tables 2 through 8.

Table 9. Alternate Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events – Discharges to East Fork Armells Creek

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS[2]						
Settleable solids[4]	ml/L	--	0.5	1/Discharge	Grab	0.5
pH	s.u.	Between 6.0 and 9.0		1/Discharge	Grab	0.1
Aluminum, dissolved	µg/L	--	127	1/Discharge	Grab	0.03
Copper, total	µg/L	--	8.8	1/Discharge	Grab	1
Iron, total	mg/L	--	1.61	1/Discharge	Grab	0.05
Selenium, total	µg/L	--	7.3	1/Discharge	Grab	1
Oil and grease	mg/L	--	10	1/Discharge	Grab	1
TDS	mg/L	--	4500	1/Discharge	Grab	10
Sulfate	mg/L	--	3075	1/Discharge	Grab	10
Boron	mg/L	--	1.1	1/Discharge	Grab	0.01
EXISTING OUTFALLS[3]						
Settleable Solids[4]	ml/L	--	0.5	1/Discharge	Grab	0.5
pH	s.u.	Between 6.0 and 9.0		1/Discharge	Grab	0.1
Aluminum, dissolved	µg/L	Report only		1/Discharge	Grab	0.03
Iron, total	mg/L	Report only		1/Discharge	Grab	0.05
Selenium, total	µg/L	Report only		1/Discharge	Grab	1
Oil and Grease	mg/L	--	10	1/Discharge	Grab	1
TDS	mg/L	--	4500	1/Discharge	Grab	10
Sulfate	mg/L	--	3075	1/Discharge	Grab	10
Boron	mg/L	--	1.1	1/Discharge	Grab	0.01
ALL OUTFALLS						
Flow	gpd	Report only		1/Discharge	Continuous	--
Chloride	µg/L	Report only		1/Discharge	Grab	--
EC	µS/cm	Report only		1/Discharge	Grab	10
SAR	Unitless	Report only		1/Discharge	Calculated	0.1
Nitrate + nitrite (as N)	mg/L	Report only		1/Discharge	Grab	0.01
Metals, total recoverable[5]	µg/L	Report only		1/Discharge	Grab	[5]
Whole effluent toxicity, acute[6]	% Effluent	Report only		1/Discharge	Grab	--

Footnotes:
1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.
2. Outfalls 10C, 127, 128, 128A, 128B, 128C, 128D, 129, 136, 137 and 139 were not previously permitted and are considered new outfalls.
3. Existing outfalls include all outfalls not listed in footnote 2, above.
4. Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24 hour period less than or equal to the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume).
5. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7*

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]

Montana Numeric Water Quality Standards: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.

6. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

Table 10. Alternate Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events – Discharges to West Fork Armells, Black Hank, and Donley Creeks

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS						
There are no new outfalls discharging to these receiving waters.						
EXISTING OUTFALLS						
Settleable Solids[2]	ml/L	--	0.5	1/Discharge	Grab	0.5
pH	s.u.	Between 6.0 and 9.0		1/Discharge	Grab	0.1
Aluminum, Dissolved	µg/L	Report only		1/Discharge	Grab	0.03
Iron	mg/L	Report only		1/Discharge	Grab	0.05
Selenium, Total Recoverable	µg/L	Report only		1/Discharge	Grab	1
Oil and Grease	mg/L	--	10	1/Discharge	Grab	1
Total Dissolved Solids (TDS)	mg/L	--	3900	1/Discharge	Grab	10
Sulfate	mg/L	--	2250	1/Discharge	Grab	10
Boron	mg/L	--	0.60	1/Discharge	Grab	0.01
Flow	gpd	Report only		1/Discharge	Continuous	--
Chloride	µg/L	Report only		1/Discharge	Grab	--
Electrical Conductivity	µS/cm	Report only		1/Discharge	Grab	10
Sodium Adsorption Ratio	Unitless	Report only		1/Discharge	Calculated	0.1
Nitrate + Nitrite (as N)	mg/L	Report only		1/Discharge	Grab	0.01
Metals, Total Recoverable[3]	µg/L	Report only		1/Year	Grab	5
Whole Effluent Toxicity, Acute[4]	% Effluent	Report only		1/Year	Grab	--

Footnotes:

1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.
2. Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24 hour period less than or equal to the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume).
3. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.
4. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

Table 11. Alternate Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events – Discharges to Stocker Creek

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS[2]						
Settleable solids[4]	ml/L	--	0.5	1/Discharge	Grab	0.5
pH	s.u.	Between 6.0 and 9.0		1/Discharge	Grab	0.1
Aluminum, dissolved	µg/L	--	126	1/Discharge	Grab	0.03
Copper, total	µg/L	--	8.8	1/Discharge	Grab	1
Iron, total	mg/L	--	1.61	1/Discharge	Grab	0.05
Selenium, total	µg/L	--	7.3	1/Discharge	Grab	1
Oil and grease	mg/L	--	10	1/Discharge	Grab	1
TDS	mg/L	--	5925	1/Discharge	Grab	10
Sulfate	mg/L	--	3600	1/Discharge	Grab	10
Boron	mg/L	--	1.5	1/Discharge	Grab	0.01
EXISTING OUTFALLS[3]						
Settleable Solids[4]	ml/L	--	0.5	1/Discharge	Grab	0.5
pH	s.u.	Between 6.0 and 9.0		1/Discharge	Grab	0.1
Aluminum, dissolved	µg/L	Report only		1/Discharge	Grab	0.03
Iron, total	mg/L	Report only		1/Discharge	Grab	0.05
Selenium, total	µg/L	Report only		1/Discharge	Grab	1
Oil and grease	mg/L	--	10	1/Discharge	Grab	1
TDS	mg/L	--	5925	1/Discharge	Grab	10
Sulfate	mg/L	--	3600	1/Discharge	Grab	10
Boron	mg/L	--	1.5	1/Discharge	Grab	0.01
ALL OUTFALLS						
Flow	gpd	Report only		1/Discharge	Continuous	--
Chloride	µg/L	Report only		1/Discharge	Grab	--
EC	µS/cm	Report only		1/Discharge	Grab	10
SAR	Unitless	Report only		1/Discharge	Calculated	0.1
Nitrate + nitrite (as N)	mg/L	Report only		1/Discharge	Grab	0.01
Metals, total tecoverable[5]	µg/L	Report only		1/Year	Grab	[5]
Whole effluent toxicity, acute[6]	% Effluent	Report only		1/Year	Grab	--

Footnotes:

1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.
2. Outfall 030 was not previously permitted and is considered a new outfall.
3. Existing outfalls include all outfalls not listed in footnote 2, above.
4. Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24 hour period less than or equal to the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume).
5. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.
6. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

Table 12. Alternate Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events – Discharges to Lee Coulee

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS						
There are no new outfalls discharging to these receiving waters.						
EXISTING OUTFALLS						
Settleable solids[2]	ml/L	--	0.5	1/Discharge	Grab	0.5
pH	s.u.	Between 6.0 and 9.0		1/Discharge	Grab	0.1
Aluminum, dissolved	µg/L	Report only		1/Discharge	Grab	0.03
Iron, total	mg/L	Report only		1/Discharge	Grab	0.05
Selenium, total	µg/L	Report only		1/Discharge	Grab	1
Oil and grease	mg/L	--	10	1/Discharge	Grab	1
EC	µS/cm	--	500	1/Discharge	Grab	10
SAR	Unitless	Report only		1/Discharge	Calculated	0.1
Sulfate	mg/L	--	2250	1/Discharge	Grab	10
Boron	mg/L	--	0.60	1/Discharge	Grab	0.01
Flow	gpd	Report only		1/Discharge	Continuous	--
Chloride	µg/L	Report only		1/Discharge	Grab	--
Nitrate + nitrite (as N)	mg/L	Report only		1/Discharge	Grab	0.01
Metals, total recoverable[3]	µg/L	Report only		1/Year	Grab	[3]
Whole effluent toxicity, acute[4]	% Effluent	Report only		1/Year	Grab	--

Footnotes:
1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.
2. Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24 hour period less than or equal to the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume).
3. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.
4. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

Table 13. Alternate Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events – Discharges to Pony Creek

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS						
There are no new outfalls discharging to these receiving waters.						
EXISTING OUTFALLS						
Settleable Solids[2]	ml/L	--	0.5	1/Discharge	Grab	0.5
pH	s.u.	Between 6.0 and 9.0		1/Discharge	Grab	0.1
Aluminum, dissolved	µg/L	Report only		1/Discharge	Grab	0.03
Iron, total	mg/L	Report only		1/Discharge	Grab	0.05

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
Selenium, total	µg/L	Report only		1/Discharge	Grab	1
Oil and grease	mg/L	--	10	1/Discharge	Grab	1
EC	µS/cm	--	500	1/Discharge	Grab	10
SAR	Unitless	Report only		1/Discharge	Calculated	0.1
Sulfate	mg/L	--	2325	1/Discharge	Grab	10
Boron	mg/L	--	1.8	1/Discharge	Grab	0.01
Flow	gpd	Report only		1/Discharge	Continuous	--
Chloride	µg/L	Report only		1/Discharge	Grab	--
Nitrate + nitrite (as N)	mg/L	Report only		1/Discharge	Grab	0.01
Metals, total recoverable[3]	µg/L	Report only		1/Year	Grab	[3]
Whole effluent toxicity, acute[4]	% Effluent	Report only		1/Year	Grab	--

Footnotes:
1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.
2. Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24 hour period less than or equal to the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume).
3. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.
4. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

Table 14. Alternate Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events – Discharges to Cow Creek

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS						
There are no new outfalls discharging to these receiving waters.						
EXISTING OUTFALLS						
Settleable solids[2]	ml/L	--	0.5	1/Discharge	Grab	0.5
pH	s.u.	Between 6.0 and 9.0		1/Discharge	Grab	0.1
Aluminum, dissolved	µg/L	Report only		1/Discharge	Grab	0.03
Iron, total	mg/L	Report only		1/Discharge	Grab	0.05
Selenium, total	µg/L	Report only		1/Discharge	Grab	1
Oil and grease	mg/L	--	10	1/Discharge	Grab	1
EC	µS/cm	--	500	1/Discharge	Grab	10
SAR	Unitless	Report only		1/Discharge	Calculated	0.1
Sulfate	mg/L	--	3450	1/Discharge	Grab	10
Boron	mg/L	--	2.4	1/Discharge	Grab	0.01
Flow	gpd	Report only		1/Discharge	Continuous	--
Chloride	µg/L	Report only		1/Discharge	Grab	--

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
Nitrate + nitrite (as N)	mg/L	Report only		1/Discharge	Grab	0.01
Metals, total recoverable[3]	µg/L	Report only		1/Year	Grab	[3]
Whole effluent toxicity, acute[4]	% Effluent	Report only		1/Year	Grab	--

Footnotes:
1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.
2. Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24 hour period less than or equal to the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume).
3. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.
4. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

Table 15. Alternate Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events – Discharges to Spring Creek

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
NEW OUTFALLS						
There are no new outfalls discharging to these receiving waters.						
EXISTING OUTFALLS						
Settleable solids[2]	ml/L	--	0.5	1/Discharge	Grab	0.5
pH	s.u.	Between 6.0 and 9.0		1/Discharge	Grab	0.1
Aluminum, dissolved	µg/L	Report only		1/Discharge	Grab	0.03
Iron, total	mg/L	Report only		1/Discharge	Grab	0.05
Selenium, total recoverable	µg/L	Report only		1/Discharge	Grab	1
Oil and grease	mg/L	--	10	1/Discharge	Grab	1
EC	µS/cm	--	500	1/Discharge	Grab	10
SAR	Unitless	Report only		1/Discharge	Calculated	0.1
Sulfate	mg/L	--	1950	1/Discharge	Grab	10
Boron	mg/L	--	1.7	1/Discharge	Grab	0.01
Flow	gpd	Report only		1/Discharge	Continuous	--
Chloride	µg/L	Report only		1/Discharge	Grab	--
Nitrate + nitrite (as N)	mg/L	Report only		1/Discharge	Grab	0.01
Metals, total recoverable[3]	µg/L	Report only		1/Year	Grab	[3]
Whole effluent toxicity, acute[4]	% Effluent	Report only		1/Year	Grab	--

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]

Footnotes:
1. Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the August 2010 edition.
2. Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24 hour period less than or equal to the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume).
3. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.
4. Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located (see permit Section I.C.3 for details).

a. Monitoring Locations:

Due to the number of outfalls at the facility and inaccessibility of remote outfalls, representative monitoring will be allowed only for discharges resulting from precipitation events. Discharges consisting of stormwater runoff from areas classified as "Alkaline Mine Drainage" and "Coal Preparation Plants and Coal Preparation Plant Associated Areas" (40 CFR 434 Subparts B and D) may be sampled at the representative outfalls listed in Table 16, corresponding to 20% of total outfalls.

Sampling equipment must be installed at representative monitoring locations to ensure flow measurement and automatic sample collection regardless of weather and/or site conditions.

Table 16. Summary of Representative Monitoring Outfalls – Precipitation-Driven Discharges

Outfall	40 CFR 434 Subpart	Mine Area	Receiving Water
009	B	A	E. Fork Armells Creek
09A	B	A	E. Fork Armells Creek
16A	B	A	E. Fork Armells Creek
075	D	A	Stocker Creek
10C	D	B-East	E. Fork Armells Creek
011	D	B-East	E. Fork Armells Creek
021	B	B-East	E. Fork Armells Creek
128	D	B-West	E. Fork Armells Creek
133	D	B-West	E. Fork Armells Creek
139	D	B-West	E. Fork Armells Creek
035	D	C-East	Stocker Creek
043	B	C-East	E. Fork Armells Creek
046	D	C-East	E. Fork Armells Creek
058	D	C-East	E. Fork Armells Creek
095	D	C-West	W. Fork Armells Creek
096	D	C-West	Black Hank Creek

Outfall	40 CFR 434 Subpart	Mine Area	Receiving Water
105	D	C-West	W. Fork Armells Creek
109	D	C-Central	W. Fork Armells Creek
083	D	D	Spring Creek
151	D	D	Cow Creek
194	B	D	E. Fork Armells Creek
143	D	D	E. Fork Armells Creek
144	D	D	E. Fork Armells Creek

b. Sample Methods

The permittee shall collect a grab sample within the first thirty minutes of discharge from any permitted outfall for any discharges which results from a precipitation related events, at minimum. As an alternative to a single grab sample, the permittee may take a flow-weighted composite of either the entire discharge or for the first three hours of the discharge. For a flow-weighted composite, only one analysis of the composited aliquots is required. Flow weighted composite samples are not allowed for pH, total phenols, and oil and grease.

2. Effluent Limitations and Monitoring Requirements – Western Alkaline Coal Mining

During the period beginning on the effective date of this permit and lasting through the date of expiration, the permittee is authorized to discharge runoff from those outfalls listed in Table 17 to their corresponding receiving waters. Effluent sampling and flow measurement are not required, and numeric effluent limitations do not apply to discharges from those outfalls listed in Table 17. Such discharges shall be limited and monitored by the permittee as specified below. The permittee has submitted a site-specific Sediment Control Plan (SCP) that identifies Best Management Practices (BMPs), including design specifications, construction specifications, maintenance schedules, criteria for inspection, and expected performance and longevity of the BMPs. The SCP has also demonstrated using watershed models that implementation of the SCP will result in average annual sediment yields that will not be greater than the sediment yield levels from pre-mined, undisturbed conditions. The watershed model is the same model that was used to acquire the permittee's SMCRA permit.

Table 17. Outfalls Subject to Western Alkaline Coal Mining Standards

Outfall	Mine Area	Receiving Water
073	A	Stocker Creek
073A	A	Stocker Creek
074	A	Stocker Creek
036	C-East	Stocker Creek
037	C-East	Stocker Creek
038	C-East	Stocker Creek
039	C-East	East Fork Armells Creek

Outfall	Mine Area	Receiving Water
040	C-East	East Fork Armells Creek
041	C-East	East Fork Armells Creek
042	C-East	East Fork Armells Creek
116	C-North	Stocker Creek
116A	C-North	Stocker Creek
119	C-North	Stocker Creek
121	C-North	Stocker Creek
121A	C-North	Stocker Creek
079	D	East Fork Armells Creek
090	D	Cow Creek
091	D	Cow Creek
092	D	Cow Creek
141	D	East Fork Armells Creek
142	D	East Fork Armells Creek
152	D	Cow Creek
153	D	Cow Creek
154	D	Cow Creek
155	D	Cow Creek
085	D-East	Spring Creek
086	D-East	Spring Creek
160A	D-East	Spring Creek
160B	D-East	Spring Creek
161A	D-East	Spring Creek
161	D-East	Spring Creek
162	D-East	Spring Creek
163	D-East	Spring Creek
164	D-East	Spring Creek
165	D-East	Pony Creek
166	D-East	Pony Creek
167	D-East	Pony Creek
168	D-East	Pony Creek
169	D-East	Pony Creek
169A	D-East	Pony Creek
173	D-East	Cow Creek
175	D-East	Cow Creek

Outfall	Mine Area	Receiving Water
176	D-East	Cow Creek
177	D-East	Cow Creek
178	D-East	Cow Creek
179	D-East	Cow Creek
170	D-East	Pony Creek
171	D-East	Pony Creek
172	D-East	Pony Creek
010	E	East Fork Armells Creek
003	E	Cow Creek
004	E	Cow Creek
005	E	Cow Creek
027	E	Cow Creek

Sediment Control Plan

The permittee shall during the term of this permit operate the facility in accordance with the SCP. Department approval of the SCP is based upon a demonstration that the Best Management Practices (BMP) given in the Plan will result in an average annual sediment yield that is less than the pre-mine undisturbed condition for the outfalls and watersheds specified in Table 17, above. The approved SCP applies to, and is limited to, reclamation areas, brushing and grubbing areas, topsoil stockpiling areas, and regraded areas, and is applicable until the facility receives final bond release.

a. Managerial Best Management Practices

Managerial sediment control BMPs include project design and planning methods used to protect water quality and minimize erosion and sedimentation (US EPA, 2001). Managerial BMPs are employed prior to, during, and following reclamation of a site.

i. Proposed Design of Area

The Permittee will minimize to the greatest extent possible the areas necessary to accomplish mining and conduct concurrent reclamation on disturbed areas. Erosion control will be accomplished as close as practicable to the source and must receive approval from state SMCRA permitting agencies. Post-mine topography, erosion control, and sediment control practices will be implemented to control overland flow, trap sediment in runoff or protect the disturbed land surface from erosion. Designs will be developed to meet the intent of the Western Alkaline Coal Mining subcategory to prevent increases in sediment transport above pre-mining levels. The Permittee commits to reclaim all mining-related land disturbances to a use equal to or better than what existed prior to mining.

The Western Energy Reclamation Plan within the Surface Mining Permit 86003A (WECO, 2007) addresses procedures that will be used at Rosebud Mine during reclamation activities. The following discussions from the Reclamation Plan are incorporated into the SCP.

ii. Erosion Control

Reclamation Planning. The relationship between topography, substrate and vegetation will be incorporated into reclamation design to promote successful vegetation re-establishment. Revegetation is divided into reclamation types; each type represents a particular plant or community type. Revegetation will be based on existing communities present prior to mining disturbances.

Re-contouring. After mining, overburden spoil piles will be re-graded to a topography meeting the SMCRA requirement of approximate original contour to facilitate erosion control, revegetation and the post-mining land use. Post-mining topography must be approved by the state regulatory agency and must meet the final land use requirements. Re-contouring of reclaimed areas will consider the following:

- planning post-mining topography using modeling to mimic approximate original contour or pre-mining natural, background erosion and sedimentation yields;
- designing and implementing a BMP plan that will approximate natural drainage as closely as possible;
- choosing sediment control structures according to review of existing topography, flow direction and volume, outlet location, and feasibility of construction;
- backfilling and grading to approximate original topography or other acceptable slope gradients and configurations;
- blending disturbed areas into the surrounding terrain;
- eliminating unstable areas to the greatest extent possible;
- with the exception of agricultural areas, re-graded landscapes are left in a roughened condition to minimize compaction; and
- coarse-textured substrates, including soils with high coarse-fragment content are used, particularly on sites with increased erosion potential, or where establishment of woody species is desired.

Soil Redistribution. Soil salvaged prior to mining disturbance is redistributed on appropriate regraded areas to meet a specific reclamation type. Soil laydown depths; specific to the type of reclamation will be of a thickness consistent with the soil resource and will promote its successful end use. The soil type, depth and redistribution must be approved by the Industrial Energy and Minerals Bureau (IEMB) to promote revegetation establishment, similar to the pre-mining conditions.

Soil Preparation on the Contour. Spoil scarification, soil placement, soil preparation and seeding are done on the contour provided the safety of equipment operators is not compromised. After soil lay down, soils are deep ripped to reduce subsurface compaction. The site will then be chisel plowed to breakup surface compaction and prepare an appropriate seedbed. Surface conditions will remain rough to aid in infiltration and mulch adherence (if applied).

Establishment of Vegetation. The Permittee has prepared an extensive revegetation plan for re-establishing vegetative communities on reclaimed areas. Approved vegetation plans require not only specific acreages but, specific vegetative communities to be reintroduced. Vegetation communities include lowland grasslands, shrub and complex shrub grasslands, and deciduous tree/shrub reclamation types. Upland communities include: grasslands, shrub/sagebrush/skunkbush sumac and complex shrub grasslands, deciduous tree/shrub, and conifer/shrub vegetation complexes.

Seedbed preparation techniques are specific to the vegetative communities and include: re-contouring and conditioning of spoils, topsoil type and depth, and seedbed preparation. Seed mixes for each community have been approved by the state SMCRA authority and require specific application rates and subsequent live plantings if required by the vegetation type.

Normal seeding periods include September through November (fall) and March through May (spring). Sufficient soil moisture and temperatures conditions may extend these periods. The Permittee has the option to mulch reclaimed areas should erosion potential exist; however, they are required to mulch areas with slopes greater than 3:1. The Permittee may use hydro-mulching instead of straw on slopes greater than 3:1 at a rate of 500 lbs/acre.

Permanent vegetation cover appropriate for the site typically is established by the end of the third growing season following initial seeding, although the reclaimed plant community will continue to develop. From a hydrologic perspective the objective is 75 percent cover, including litter, which defines "good" hydrologic condition for runoff and sediment modeling purposes.

iii. Sediment Control

At points of concentrated runoff flows, sediment control BMPs will be proposed to slow down runoff or capture sediment contained in the runoff. Site-specific BMPs include silt fence, straw waddles, straw or hay bales, matting/mulch, rip-rap etc. Exhibits 7 through 10 of the SCP contain Standard Notes for the construction of typical BMPs used on site. The Standard Notes contain information pertaining to design guidelines and

maintenance/inspection criteria. Additional sediment control structures are described below.

Roadways Transecting Reclamation. Permanent or semi-permanent roadways crossing applicable reclaimed areas shall be constructed with conveyance structures (borrow ditches) capable of passing the runoff from a 10-year, 24-hour storm event. Energy dissipation (site-specific BMPs) structures will be used to reduce velocities of runoff to prevent sediment mobilization. Ditch transitions and intersections will be constructed to minimize erosion and sedimentation transport.

Road Crossings. Where drainage conveyance or watercourses are diverted beneath a roadway, culverts will be sized to convey a 10-year, 24-hour storm event. Inlet and outlet protection (rip-rap or matting) will be considered at high-risk locations to prevent sediment mobilization.

Small Depressions. During reclamation, sediment traps and ponds will be converted to small depressions designed for vegetation diversity and wildlife habitat enhancement in addition to short-term sediment capture. Small depressions may also be established on an opportunistic basis within the reclaimed area for vegetation diversity and wildlife habitat enhancement in addition to short-term sediment control. Small depressions will meet the following criteria:

- each depression on the interior of the reclaimed area will be one acre-foot or less in capacity;
- each depression at the margin of the reclaimed area will be two acre feet or less in capacity;
- no depression will be deeper than three feet;
- depressions will be soiled and revegetated;
- maximum slopes will be 5:1 on the uphill (inflow) side and 3:1 on the lateral and downhill (outflow) sides; and
- site-specific sediment control (silt fence, straw waddles, etc.) may be used at the outlet to further the effectiveness of the structure.

Sediment Traps. In smaller watersheds, which range from less than 10 to approximately 160 acres, ditching to convey and sediment traps to contain at a minimum the 2-year, 24-hour storm event plus appropriate sediment storage will be established prior to clearing, grubbing and soil salvage. Sediment traps or other appropriate BMPs will be used where drainage flows from disturbed to undisturbed or reclaimed areas. Other site-specific BMPs may be used to increase effectiveness of the trap.

Sediment Ponds. Sediment ponds or traps located at final discharge points are designed to detain runoff from a 10-year 24-hour storm event during active mining operations. Ponds or traps may be reduced in size to 2-year, 24-hour capacity during the reclamation phase, or they may be eliminated, with IEMB approval, when the contributing watershed is fully reclaimed

and revegetated. Sediment traps may be reclaimed as small depressions for topographic, vegetative and wildlife habitat diversity per plans approved by IEMB.

iv. Planning
The Permittee will evaluate erosion and sedimentation control capabilities, site-specific environmental conditions, and sedimentation predictions to fulfill the intent of the Western Alkaline subcategory. After coal extraction is complete, disturbed areas are reclaimed as rapidly as is practicable and rehabilitated for the designated post-mining land use. The facility has an approved reclamation schedule (Section 17.24.313(1)(b), Reclamation Plan) which lays out the timetable for reclaiming disturbed lands within the permitted site.

v. Construction
The Permittee will backfill, re-contour, replace soils and re-vegetate areas as timely as practicable based on the reclamation timetable and current mining plan needs. The IEMB must approve all reclamation plans prior to construction.

b. Inspection and Maintenance
The Permittee will perform routine inspections of erosion and sediment control structures as required by state and federal regulations. Federal regulations (40 CFR 434.82(a)) require "sediment control plans to identify best management practices (BMPs) and also must describe design specification, construction specifications, maintenance schedules, criteria for inspections, as well as expected performance and longevity of the best management practices." Exhibits 7 through 10 of the SCP contain Standard Notes for BMPs currently used to control erosion and sediment transport on the mine site. The Standard Notes contain the design and installation specifications, inspection and maintenance criteria as required by the above-mentioned rule. Additional maintenance activities specific to Rosebud Mine are described below.

Maintenance of Conveyance Structures. Ditches and culverts are inspected periodically for blockages and erosion. Erosion and/or sedimentation that compromises the ability of the ditch to convey its design flow are addressed by reconstructing the ditch to its design geometry. Where ditch erosion occurs, more frequent trap maintenance to maintain design capacity may be required. Sediment accumulations in culverts will be removed as necessary to maintain design flow capacities.

Maintenance of Sediment Traps. Sediment accumulations in sediment traps and ponds will be cleaned when sediment accumulation may interfere with detention of the 2-year or 10-year, 24-hour event, as appropriate.

Maintenance of Sediment Control BMP's. Sediment traps and site-specific BMPs (e.g., ponds, traps, and erosion control products) are maintained in effective operating condition during the active mining phase. Control measures for site-

specific sediment control (e.g., straw dikes, rip rap) are removed during reclamation.

Reclamation of Rills and Gullies. Rills and gullies developed post-reclamation are remediated on a site-specific basis if they adversely impact the establishment of vegetation, or disrupt post-mine land use (ARM 17.24.721).

Maintenance of Vegetation. Revegetated areas are inspected periodically and maintained throughout the post-mine phase. Maintenance of revegetated areas utilizes DEQ approved husbandry practices for use on coal mines (see Appendix A of the SCP). Interseeding, supplemental plantings or mulching may be used to enhance revegetation on a site-specific basis. Mechanical practices (e.g., cutting, mowing and raking, etc.), pest control, grazing and prescribed burns may be used to control weeds, undesirable litter buildup, or stimulate growth. A comprehensive noxious weed control plan will be submitted to the Rosebud County Weed Board for approval prior to pest and weed control.

Maintenance of Water Resources. Water resources developed for approved post-mining land uses are maintained (cleaned, repaired, upgraded, stabilized, and revegetated) and protected (fencing/animal exclusion) according to approved husbandry practices (see Appendix A of the SCP).

The approved SCP contains the criteria and reporting requirements for inspections conducted on site. Comprehensive inspections are required annually for all areas covered under the SCP. Visual inspections will be conducted annually or after significant storm events (>0.5 inches in 24 hours) on areas where vegetation has been established for less than two years. Based on the outcomes of these inspections, maintenance will be scheduled. Maintenance activities will be documented (date, type and location of activity, supervisor or contractor), and records will be retained for a minimum of three years. Appendix B of the SCP contains the Visual Inspection Form for Sediment Control BMPs.

c. Reporting

For discharges that are regulated under the Western Alkaline Coal Mining Effluent Limitation Guidelines (ELGs), Comprehensive Site Inspections must be conducted and an annual Compliance Evaluation Report must be submitted to evaluate the BMPs performance as identified in the Plan

i. Comprehensive Site Inspection

Comprehensive site inspections must be performed annually. Comprehensive site inspections must assess the following:

- Whether the description of area covered by the Plan is accurate as required under the discharge permit;
- Whether the site map has been updated or otherwise modified to reflect current conditions;
- Whether the BMPs to control sediment as identified in the Plan are being effectively implemented; and
- Whether any Plan revisions such as additional BMPs are necessary.

Based on the results of the Comprehensive Site Inspection, the description of potential pollutant sources and BMPs identified in the SCP must be revised as appropriate and submitted to the DEQ within 14 days of such inspection for review. All changes to the SCP must be reviewed and approved by the DEQ prior to implementation.

ii. Compliance Evaluation Report

A compliance evaluation report must be submitted to the DEQ addressing the site inspections performed during each calendar year.

- The report must identify personnel making the inspection and the date(s) of the inspection.
- The report must summarize observations made based on the items stated in Section 6.1.
- The report must summarize actions taken in accordance with Section 6.1.
- The report must be retained with the Plan.
- The permittee shall submit a copy of the report to the DEQ by January 28th of each year for the preceding calendar year's inspection.
- The report must identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report must contain a certification that the facility is in compliance with the Plan and this permit.
- The report must be signed in accordance with the signatory requirements stated in Part IV. G, of the MPDES Permit.

iii. Record Retention

Records of the Comprehensive Site Inspection, the Compliance Evaluation Report, and any related follow-up actions must be maintained by the permittee for a minimum of three years.

A tracking or follow-up procedure, including a schedule for implementation, must be used and identified in the annual Compliance Evaluation Report which ensures adequate response and corrective actions have been taken in response to the Comprehensive Site Inspection and/or noncompliance. The Visual Inspection Form for Sediment Control BMPs provides a method of tracking maintenance activities following visual inspections (See SCP Appendix B).

d. Transfer of Additional Outfalls
Transfer of additional areas to be covered under this ELG is acceptable, by additional documentation and submittal of a revised plan to the Department semiannually. Requests are due the 28th of the month following the close of the semi-annual period (June and December). Revisions to the SCP must meet all requirements contained at 40 CFR Part 434.82; a permit modification will be required to facilitate the transfer.

3. Toxicity Limitations

a. Acute Whole Effluent Toxicity Limitations – Not Applicable

b. Chronic Whole Effluent Toxicity Limitations – Not Applicable

4. Interim Effluent Limitations – Not Applicable

5. Other Monitoring Requirements

a. Precipitation Monitoring. Precipitation shall be monitored and recorded in each of the drainage basins where regulated outfalls are located (East Fork Armells, Stocker Creek, West Fork Armells, Black Hank Creek, Donley Creek, Cow Creek, Lee Coulee, Spring Creek, and Pony Creek) using a precipitation gauge which meets the standards provided in National Weather Services Instructional Bulletin 10-1302 (October 4, 2005), *Instrument Requirements and Standards for the NWS Surface Observing Programs (Land)*, and provided below.

Precipitation Gauge Performance Standard			
Parameter	Accuracy	Range	Resolution
Liquid Precipitation Accumulated Amount	±0.02 inches or 4 percent of hourly amount (whichever is greater)	0-10"/Hour	0.01 inches
Snow Depth	0 to 5 inches- ±0.5 inches >5 to 99 inches - ±1.0 inch	0 to 99 inches (auto)	1 inch
Freezing Precipitation	Detection occurs whenever 0.01" accumulates	0 to 40 inches	0.01 inches
Frozen Precipitation (water equivalent)	±0.04 inches or 1% of total accumulation	0 to 40 inches	0.01 inches

b. Flow Monitoring and Sampling Units. The Permit requires the Permittee to install and use flow monitoring and sampling equipment at each representative outfall listed in Table 16, above. A crest gauge or equivalent equipment can measure flow at the crest, with the establishment of a ratings curve that shows the relationship between peak flow and gauge height. Remote sampling units can sample a representative sample of the discharged effluent when discharge occurs.

The discharge point and monitoring location shall be permanently marked and identified at the overflow.

C. General Monitoring and Reporting Requirements

Samples or measurements shall be representative of the volume and nature of the monitored discharge as specified. If no discharge occurs during the entire reporting period, it shall be stated on the Discharge Monitoring Report Form (EPA No. 3320-1) that no discharge occurred. The reporting period for discharges is monthly. If multiple discharge events occur during the monthly reporting period the permittee must report the highest calculated or measured values that conform to the numeric effluent in the permit.

Data collected on site, copies of Discharge Monitoring Reports, and a copy of this MPDES permit must be maintained on site during the duration of activity at the permitted location.

1. Monitoring Locations

The Permittee shall establish monitoring locations at each outfall to demonstrate compliance with the effluent limitations and other requirements in section I of this Permit. Appropriate monitoring locations include: at the overflow structure where the effluent discharges as overflow from the sediment control structure, or at the end of the discharge pipe when pumped or drained, and prior to contact with the receiving water.

The Permittee shall monitor effluent at the specific monitoring location during discharge. The location of each outfall regulated by this permit shall be permanently identified in the field.

2. Mass Loading Calculations

Where Section I.B.1 above includes effluent limitations expressed in terms of mass or requires reporting mass loading for a particular parameter, the Permittee shall calculate the mass loading must be calculated using the following equations:

Daily Mass Load (lb/day)	=	Daily Discharge Concentration (mg/L)	x	Daily Effluent Flow Rate (MGD)	x	8.34

The permittee shall calculate the Average Monthly Mass Load (lb/day) for a calendar month by determining the arithmetic mean of all daily mass loads calculated for that calendar month.

3. Whole Effluent Toxicity Testing

a. Acute Whole Effluent Toxicity Testing

Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located. As defined by the Permittee's application, this includes Outfalls 009, 09A, 16A, 021, 043, and 194.

i. **Sampling and Dilution Series Requirements**. Beginning in the calendar year in which this Permit becomes effective, the Permittee shall conduct annual acute static replacement toxicity tests on grab samples of the effluent. Testing will employ two species per test and will consist of 6 effluent concentrations (100, 50, 25, 12.5, 6.25 percent effluent) and a control. Dilution water and the control shall consist of grab samples of the receiving water. If a sample of the receiving water is unavailable, because of its ephemeral nature, standard synthetic water may be used. If a discharge does not occur for a specified monitoring location during the calendar year, this fact shall be reported in the annual report.

ii. **Methods**. Acute WET tests shall be conducted in general accordance with the procedures set out in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, EPA-821-R-02-012 <http://www.epa.gov/waterscience/WET/disk2/atx.pdf> (or a subsequent edition) and the "Region VIII USEPA NPDES Acute Test Conditions—Static Renewal Whole Effluent Toxicity Test" contained in the *Region VIII NPDES Whole Effluent Toxics Control Program, August 1997.* The Permittee must conduct a 48-hour static renewal acute toxicity test using *Ceriodaphnia dubia* (USEPA Method 2002.0) and a 96-hour static renewal acute toxicity test using *Pimephales promelas* (fathead minnow) (USEPA Method 2000.0). Acute toxicity is measured by determining the LC_{50} (i.e., the percent of effluent that is lethal to 50 percent of the exposed test organisms) for each type of test.

iii. **Test Validity**. If more than 10 percent control mortality occurs, the test is considered invalid and shall be repeated until satisfactory control survival is achieved, unless a specific individual exception is granted by the Department. This exception may be granted if less than 10 percent mortality was observed at the dilutions containing high effluent concentrations.

iv. **Accelerated Testing**. If acute toxicity occurs in a routine test, an additional test shall be conducted within 14 days of the date of the initial sample. Should acute toxicity occur in the second test, testing shall occur once a month until further notified by the Department. In all cases, the results of all toxicity tests must be submitted to the Department in accordance with Section III.A of this Permit.

v. **Reduced Monitoring Frequency – Not Applicable**

4. Monitoring Periods and Reporting Schedule

Monitoring periods and reporting for all required monitoring shall be completed according to the schedule in Table 17, below.

When the minimum monitoring frequency is 1/Week or less (e.g, 1/Month), monitoring must take place on a weekday (Monday through Friday).

Table 17. Monitoring Periods and Reporting Schedule

Required Monitoring Frequency	Monitoring Period Begins On...	Monitoring Period	Reporting Due Date
1/Day	NOVEMBER 1, 2012	Midnight through 11:59 PM or any 24-hour period that reasonably represents a calendar day for purposes of monitoring.	Due date for next DMR submittal
1/Month	NOVEMBER 1, 2012	1st day of calendar month through last day of calendar month	Due date for next DMR submittal
Annually	JANUARY 1, 2013	January 1 through December 31	28 days from the end of the monitoring period
1 / Discharge	NOVEMBER 1, 2012	Duration of discharge event	Due date for next DMR submittal

5. **Discharge Monitoring Reports**
All monitoring results obtained during the previous month(s) shall be summarized and reported on a monthly Discharge Monitoring Report Form (EPA No. 3320-1) postmarked no later than the 28th day of the month following the completed reporting period. Whole effluent toxicity (biomonitoring) results must be reported with copies of the laboratory analysis report on forms from the most recent version of USEPA Region VIII's *Guidance for Whole Effluent Reporting.*

If no discharge occurs during the monitoring period, "No Discharge" shall be reported on the report form.

Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the "Signatory Requirements" (see Section III.C.7. of this permit), and submitted to the Department and to the USEPA at the following addresses:

Montana Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, Montana 59620-0901
Phone: (406) 444-3080

U.S. Environmental Protection Agency
301 South Park Avenue
Drawer 10096
Helena, Montana 59626
Phone: (406) 441-1123

Whole Effluent Toxicity (WET) results from the laboratory shall be reported along with the next DMR form submitted. The format for the laboratory report shall be consistent with the latest revision of *Region VIII Guidance for Acute Whole Effluent*

Reporting and Chronic Whole Effluent Reporting, and shall include all chemical and physical data as specified.

II. SPECIAL CONDITIONS

A. Additional Monitoring and Special Studies

1. **Ambient Monitoring - Not Applicable.**

2. **Supplemental Monitoring and Studies - Not Applicable.**

3. **Toxicity Identification Evaluation (TIE)/Toxicity Reduction Evaluation (TRE)**
The Permittee shall submit to the Department and initiate implementation of a TIE/TRE plan within 45 days of detecting acute toxicity during any accelerated testing required under section I.C.3. The TIE/TRE shall describe steps to be undertaken by the Permittee to establish the cause of the toxicity, locate the source(s) of the toxicity, and develop control or treatment for the toxicity.

   If implementation of the TIE/TRE establishes that the toxicity cannot be eliminated, the Permittee shall submit a proposed compliance plan to the Department. The compliance plan shall include the proposed approach to control toxicity and a proposed compliance schedule for achieving control. If the approach and schedule are acceptable to the Department, this permit may be reopened and modified.

   If the TIE/TRE shows that the toxicity is caused by a toxicant(s) that may be controlled with parameter-specific numeric limitations, the Permittee may:

   a. Submit an alternative control program for compliance with the parameter-specific numeric effluent limitations,
   b. If necessary, provide a modified whole effluent testing protocol, which compensates for the pollutant(s) being controlled with parameter-specific numeric effluent limitations.

   Based on the results of WET testing and a TIE/TRE conducted by the Permittee, the Department may reopen and modify this Permit in accordance with the provisions in section II.D to incorporate any additional WET or parameter-specific numeric limitations, a modified compliance schedule if judged necessary by the Department, and/or a modified whole effluent toxicity protocol.

B. Best Management Practices and Pollution Prevention – Not Applicable

C. Compliance Schedules

The Permittee will be granted a one-year compliance schedule from the date of permit issuance to facilitate procurement, installation, and commissioning of flow monitoring and effluent sampling devices at representative monitoring outfalls. Until such equipment is installed, the Permittee must continue to monitor and sample effluent using non-automated methods.

D. Reopener Provisions

This permit shall be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

1. **Water Quality Standards**
   The water quality standards of the receiving water(s) to which the Permittee discharges are modified in such a manner as to require different effluent limitations than contained in this permit.

2. **Water Quality Standards are Exceeded**
   If it is found that water quality standards or Trigger Values in the receiving stream are exceeded either for parameters included in the permit or others, the Department may modify the effluent limitations or the water quality management plan. Trigger Values are used to determine if a given increase in the concentration of toxic parameters is significant or non-significant as per the non-degradation rules ARM 17.30.701 et seq. and are listed in Circular DEQ-7.

3. **TMDL or Wasteload Allocation**
   TMDL requirements or a wasteload allocation is developed and approved by the Department and/or USEPA for incorporation in this permit.

4. **Water Quality Management Plan**
   A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit.

5. **Toxic Pollutants**
   A toxic standard or prohibition is established under Clean Water Act Section 307(a) for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit.

6. **Toxicity Limitations – Not Applicable**

III. STANDARD CONDITIONS

A. Monitoring, Recording, and Reporting

1. **Representative Sampling:** Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity. [*ARM 17.30.1342(10)(a)*]

2. **Monitoring and Reporting Procedures:** Monitoring results must be reported on a Discharge Monitoring Report (DMR) form at the intervals specified in Section I of this permit. Calculations for all limitations that require averaging of measurements must use an arithmetic mean unless otherwise specified by the Department in the permit [*ARM 17.30.1342(12)(d)(i),(iii)*]. Monitoring must be conducted according to test procedures approved under Title 40 of the Code of Federal Regulations (40 CFR) Part 136, unless other test procedures have been specified in this permit. [*ARM 17.30.1342(10)(d)*]

3. **Penalties for Tampering:** The Montana Water Quality Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $25,000, or by imprisonment for not more than six months, or by both. [*MCA 75-5-633*]

4. **Compliance Schedule Reporting:** Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date. [*ARM 17.30.1342(12)(e)*]

5. **Additional Monitoring by the Permittee:** If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. [*ARM 17.30.1342(12)(d)(ii)*]

6. **Records Contents** [*ARM 17.30.1342(9)(c)*]: Records of monitoring information must include:
   - **a.** the date, exact place, and time of sampling or measurements;
   - **b.** the initials or name(s) of the individual(s) who performed the sampling or measurements;
   - **c.** the date(s) analyses were performed;
   - **d.** the initials or name(s) of individual(s) who performed the analyses;
   - **e.** the analytical techniques or methods used; and
   - **f.** the results of such analyses;

7. **Retention of Records:** The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for

this permit, for a period of at least three years from the date of the sample, measurement, report or application. [*ARM 17.30.1342(10)(b)*]

8. **Twenty-four Hour Notification** [*ARM 17.30.1342(12)(f)*]: The permittee shall report any serious incident of noncompliance as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances.
   a. *Oral notification.* The report shall be made orally to the Water Protection Bureau at (406) 444-3080 or the Office of Disaster and Emergency Services at (406) 841-3911. The following examples are considered serious incidents of noncompliance:
      i. Any noncompliance which might endanger health or the environment;
      ii. Any unanticipated bypass that exceeds any effluent limitation in the permit (See Subsection III.B.7 of this permit, "Bypass of Treatment Facilities");
      iii. Any upset which exceeds any effluent limitation in the permit (See Subsection III.B.8 of this permit, "Upset Conditions") or;
      iv. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in this permit to be reported within 24 hours.
   b. *Written notification.* A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
      i. A description of the noncompliance and its cause;
      ii. The period of noncompliance, including exact dates and times;
      iii. The estimated time noncompliance is expected to continue if it has not been corrected; and
      iv. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
   c. *Waiver of written notification requirement*: The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-3080. Reports shall be submitted to the addresses in Subsection I.C.5 of this permit ("Discharge Monitoring Reports").

9. **Other Noncompliance Reporting**: Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Subsection I.C.5 of this permit ("Discharge Monitoring Reports") are submitted. The reports shall contain the information listed in Subsection III.A.8 of this permit ("Twenty-four Hour Notification"). [*ARM 17.30.1342(12)(g)*]

10. **Inspection and Entry** [*ARM 17.30.1342(9)*]: The permittee shall allow the head of the Department, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:
   a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Montana Water Quality Act, any substances or parameters at any location.

B. <u>Compliance Responsibilities</u>

1. **Duty to Comply:** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Montana Water Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [*ARM 17.30.1342(1)*]

2. **Planned Changes:** The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
   - The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source under ARM 17.30.1340(2); or
   - The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements under ARM 17.30.1343(1)(a).

   The permittee shall give advance notice to the Department of any planned changes at the permitted facility or of an activity that could result in noncompliance with permit requirements. [*ARM 17.30.1342(12)(b)*]

3. **Penalties for Violations of Permit Conditions**

   a. In an action initiated by the Department to collect civil penalties against a person who is found to have violated a permit condition, the person is subject to a civil penalty not to exceed $25,000. Each day of violation constitutes a separate violation. [*MCA 75-5-631*], [*ARM 17.30.1342(1)(b)*].

   b. The Montana Water Quality Act provides that any person who willfully or negligently violates a prohibition or permit condition is subject, upon conviction, to criminal penalties not to exceed $25,000 per day or one year in prison, or both, for the first conviction, and $50,000 per day of violation or by imprisonment for not more than two years, or both, for subsequent convictions. [*MCA 75-5-632*], [*ARM 17.30.1342(1)(b)*].

   c. MCA 75-5-611(9)(a) also provides for administrative penalties not to exceed $10,000 for each day of violation and up to a maximum not to exceed $100,000 for any related series of violations.

   d. Except as provided in permit conditions on Subsection III.B.7 of this permit ("Bypass of Treatment Facilities") and Subsection III.B.8 of this permit ("Upset Conditions"), nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

4. **Need to Halt or Reduce Activity Not a Defense:** It may not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce

the permitted activity in order to maintain compliance with the conditions of this permit. [*ARM 17.30.1342(3)*]

5. **Duty to Mitigate:** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. [*ARM 17.30.1342(4)*]

6. **Proper Operation and Maintenance:** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. [*ARM 17.30.1342(5)*]

7. **Bypass of Treatment Facilities** [*ARM 17.30.1342(13)*]
   a. *Bypass not exceeding limitations.* The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions under "Prohibition of bypass" and "Notice" (Subsections III.B.7.b and c of this permit) below.

   b. *Prohibition of bypass.* Bypass is prohibited and the Department may take enforcement action against a permittee for a bypass, unless:
      i. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
      ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
      iii. The permittee submitted notices as required under "Notice" below (Subsection III.B.7.c of this permit).

   c. *Notice*:
      i. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass.
      ii. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Subsection III.A.8 of this permit ("Twenty-four Hour Reporting").

   d. *Approval of bypass under certain conditions.* The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above under "Prohibition of bypass" (Subsection III.B.7.b of this permit).

8. **Upset Conditions** [*ARM 17.30.1342(14)*]
   a. *Effect of an upset.* An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Subsection III.B.8.2 of this permit are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

   b. *Conditions necessary for a demonstration of upset.* A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
      i. An upset occurred and that the permittee can identify the cause(s) of the upset;
      ii. The permitted facility was at the time being properly operated;
      iii. The permittee submitted notice of the upset as required under Subsection III.A.8 of this permit ("Twenty-four Hour Notification"); and
      iv. The permittee complied with any remedial measures required under Subsection III.B.5 of this permit, ("Duty to Mitigate").

   c. *Burden of proof.* In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

C. **General Requirements**

1. **Planned Changes** [*ARM 17.30.1342(12)(a)*]: The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
   a. The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements under Subsection III.D.1 of this permit ; or

   b. The alteration or addition to the permitted facility may meet one of the criteria in ARM 17.30.1340(2) for determining whether a facility is a new source.

2. **Anticipated Noncompliance:** The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements [*ARM 17.30.1342(12)(b)*].

3. **Permit Actions:** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. [*ARM 17.30.1342(6)*]

4. **Duty to Reapply:** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must first apply for and obtain a new permit. [*ARM 17.30.1342(2)*] In accordance with ARM 17.30.1322(4), the application must be submitted at least 180 days before the expiration date of this permit.

5. **Duty to Provide Information:** The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit. [*ARM 17.30.1342(8)*]

6. **Other Information:** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information [*ARM 17.30.1342(12)(h)*].

7. **Signatory Requirements**
   a. All applications, reports or information submitted to the Department shall be signed and certified. [*ARM 17.30.1342(11)*]

   b. All permit applications must be signed as follows:
   i. *For a corporation*: By a responsible corporate officer, which means
      1) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or
      2) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
   ii. *For a partnership or sole proprietorship*: By a general partner or the proprietor, respectively.
   iii. *For a municipality, state, federal, or other public agency*: By either a principal executive officer or ranking elected official. A principal executive office of a federal agency includes:
      1) The chief executive officer of the agency; or
      2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

   c. *Authorized representatives*. All reports required by the permit and other information requested by the Department shall be signed by a person described above in Subsection III.C.7.b of this permit or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:
   i. The authorization is made in writing by a person described above in Subsection III.C.7.b and submitted to the Department; and
   ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (a duly authorized representative may thus be either a named individual or an individual occupying a named position).

d. *Changes to authorization.* If an authorization under Subsection III.C.7.c of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Subsection III.C.7.c of this permit must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

e. *Certification.* Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

8. **Penalties for Falsification of Reports:** The Montana Water Quality Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more that $25,000 per violation, or by imprisonment for not more than six months per violation, or both. [*MCA 75-5-633*]

9. **Property or Water Rights:** The issuance of this permit does not convey any property or water rights of any sort, or any exclusive privilege. [*ARM 17.30.1342(7)*]

10. **Severability:** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby. [*ARM 17.30.1302*]

11. **Transfers** [*ARM 17.30.1360(2)*]: This permit may be automatically transferred to a new permittee if:
    - **a.** The current permittee notifies the Department at least 30 days in advance of the proposed transfer date;
    - **b.** The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them;
    - **c.** The Department does not notify the existing permittee and the proposed new permittee of an intent to revoke or modify and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Subsection III.C.11.b of this permit; and

d. Required annual and application fees have been paid.

12. Fees [*ARM 17.30.201(8)*]: The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the Department may:

a. Impose an additional assessment consisting of 15% of the fee plus interest on the required fee computed at the rate established under 15-31-510(3), MCA, or

b. Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The Department may lift suspension at any time up to one year after the suspension occurs if the holder has paid all outstanding fees, including all penalties, assessments and interest imposed under this subsection. Suspensions are limited to one year, after which the permit will be terminated.

D. Notification Levels

1. The permittee shall comply with effluent standards or prohibitions established under Clean Water Act Section 307(a) for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement. [*ARM 17.30.1342(1)(a)*]

2. Notification shall be provided to the Department as soon as the permittee knows of, or has reason to believe [*ARM 17.30.1343(1)(a)*]:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i. One hundred micrograms per liter (100 μg/l);

ii. Two hundred micrograms per liter (200 μg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/l) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or

iv. The level established by the Department in accordance with 40 CFR 122.44(f).

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

i. Five hundred micrograms per liter (500 μg/l);

ii. One milligram per liter (1 mg/l) for antimony;

iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or

iv. The level established by the Department in accordance with 40 CFR 122.44(f).

IV. DEFINITIONS AND ABBREVIATIONS

"1-year, 2-year, and 10-year, 24-hour precipitation events" means the maximum 24-hour precipitation event with a probable recurrence interval of once in one, two, and ten years, respectively, as defined by the National Weather Service Technical Paper No. 40, *Rainfall Frequency Atlas of the U.S.*, May 1961, or equivalent regional or rainfall probability information developed therefrom.

"Act" means the Montana Water Quality Act, Title 75, chapter 5, MCA.

"Active mining area" means the area, on and beneath land, used or disturbed in activity related to the extraction, removal, or recovery of coal from its natural deposits. This term excludes coal preparation plants, coal preparation plant associated areas, and post-mining areas.

"Acute Toxicity" occurs when 50 percent or more mortality is observed for either species (See Subsection I.C of this permit) at any effluent concentration. Mortality in the control must simultaneously be 10 percent or less for the effluent results to be considered valid.

"Administrator" means the administrator of the United States Environmental Protection Agency.

"Alkaline mine drainage" means mine drainage which, before any treatment, has a pH equal or greater than 6.0, and total iron concentration of less than 10 mg/L.

"Arithmetic Mean" or "Arithmetic Average" for any set of related values means the summation of the individual values divided by the number of individual values.

"Average monthly limitation" means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

"Average weekly limitation" means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

"Best Management Practices" (BMPs) mean schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States.

"Bond release" means the time at which the appropriate regulatory authority returns a reclamation or performance bond based upon its determination that reclamation work has been satisfactorily completed.

"Brushing and grubbing area" means the area where woody plant materials that would interfere with soil salvage operations have been removed or incorporated into the soil being salvaged.

"Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

"CFR" means the Code of Federal Regulations.

"Chronic toxicity" occurs when, during a chronic toxicity test, the 25% inhibition concentration (IC_{25}) for any tested species is less than or equal to 100% effluent (i.e., $IC_{25} \leq 100\%$ effluent).

"Clean Water Act" means the federal legislation at 33 USC 1251, et seq.

"Coal preparation plant" means a facility where coal is subjected to cleaning, concentrating, or other processing preparation in order to separate coal from its impurities and then is loaded for transit to a consuming facility.

"Coal preparation plant associated areas" means the coal preparation plant yards, immediate access roads, coal refuse piles, and coal storage piles and facilities.

"Composite samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:

a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
c. Constant sample volume, time interval between samples proportional to flow (i.e. sample taken every "X" gallons of flow); and,
d. Continuous collection of sample, with sample collection rate proportional to flow rate.

"Daily Discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

"Department" means the Montana Department of Environmental Quality (MDEQ). Established by 2-15-3501, MCA.

"Director" means the Director of the Montana Department of Environmental Quality.

"Discharge" means the injection, deposit, dumping, spilling, leaking, placing, or failing to remove any pollutant so that it or any constituent thereof may enter into state waters, including ground water.

"Effluent Limitations Guidelines" (ELGs) mean regulations published by the Administrator under Section 304(b) of the CWA that establishes national technology-based effluent requirements for a specific industrial category.
"EPA" or "USEPA" means the United States Environmental Protection Agency.

"GPM" means gallons per minute.

"Grab Sample" means a sample which is taken from a waste stream on a one-time basis without consideration of flow rate of the effluent or without consideration for time.

"Instantaneous Maximum Limit" means the maximum allowable concentration of a pollutant determined from the analysis of any discrete or composite sample collected, independent of the flow rate and the duration of the sampling event.

"Instantaneous Measurement", for monitoring requirements, means a single reading, observation, or measurement.

"Maximum Daily Limit" means the highest allowable discharge of a pollutant during a calendar day. Expressed as units of mass, the daily discharge is cumulative mass discharged over the course of the day. Expressed as a concentration, it is the arithmetic average of all measurements taken that day.

"mg/L" means milligrams per liter.

"Mine drainage" means any drainage, and any water pumped or siphoned, from an active mining area or a post-mining area.

"Minimum Level" (ML) of quantitation means the lowest level at which the entire analytical system gives a recognizable signal and acceptable calibration point for the analyte, as determined by the procedure set forth at 40 CFR 136. In most cases the ML is equivalent to the Required Reporting Value (RRV) unless other wise specified in the permit. (ARM 17.30.702(22))

"Mixing zone" means a limited area of a surface water body or aquifer where initial dilution of a discharge takes place and where certain water quality standards may be exceeded.

"mL/L" means milliliters per liter.

"Nondegradation" means the prevention of a significant change in water quality that lowers the quality of high-quality water for one or more parameters. Also, the prohibition of any increase in discharge that exceeds the limits established under or determined from a permit or approval issued by the Department prior to April 29, 1993.

"Reclamation area" means the surface area of a coal mine which has been returned to required contour and on which re-vegetation (specifically, seeding or planting) work has commenced.

"Regraded area" means the surface area of a coal mine that has been returned to required contour.

"Regional Administrator" means the administrator of Region VIII of EPA, which has jurisdiction over federal water pollution control activities in the state of Montana.

"Settleable solids" means that matter measured by the volumetric method specified in 40 CFR 434.64.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

"SMCRA" means the Surface Mining Control and Reclamation Act.

"Storm water" means storm water runoff, snow melt runoff, and surface run-off and drainage in response to a precipitation event.

"TIE" means a toxicity identification evaluation.

"TMDL" means the total maximum daily load limitation of a parameter, representing the estimated assimilative capacity for a water body before other designated uses are adversely affected. Mathematically, it is the sum of wasteload allocations for point sources, load allocations for non-point and natural background sources, and a margin of safety.

"Topsoil stockpiling area" means the area outside the mined-out area where topsoil is temporarily stored for use in reclamation, including containment berms.

"TRE" means a toxicity reduction evaluation.

"TSS" means the pollutant parameter total suspended solids.

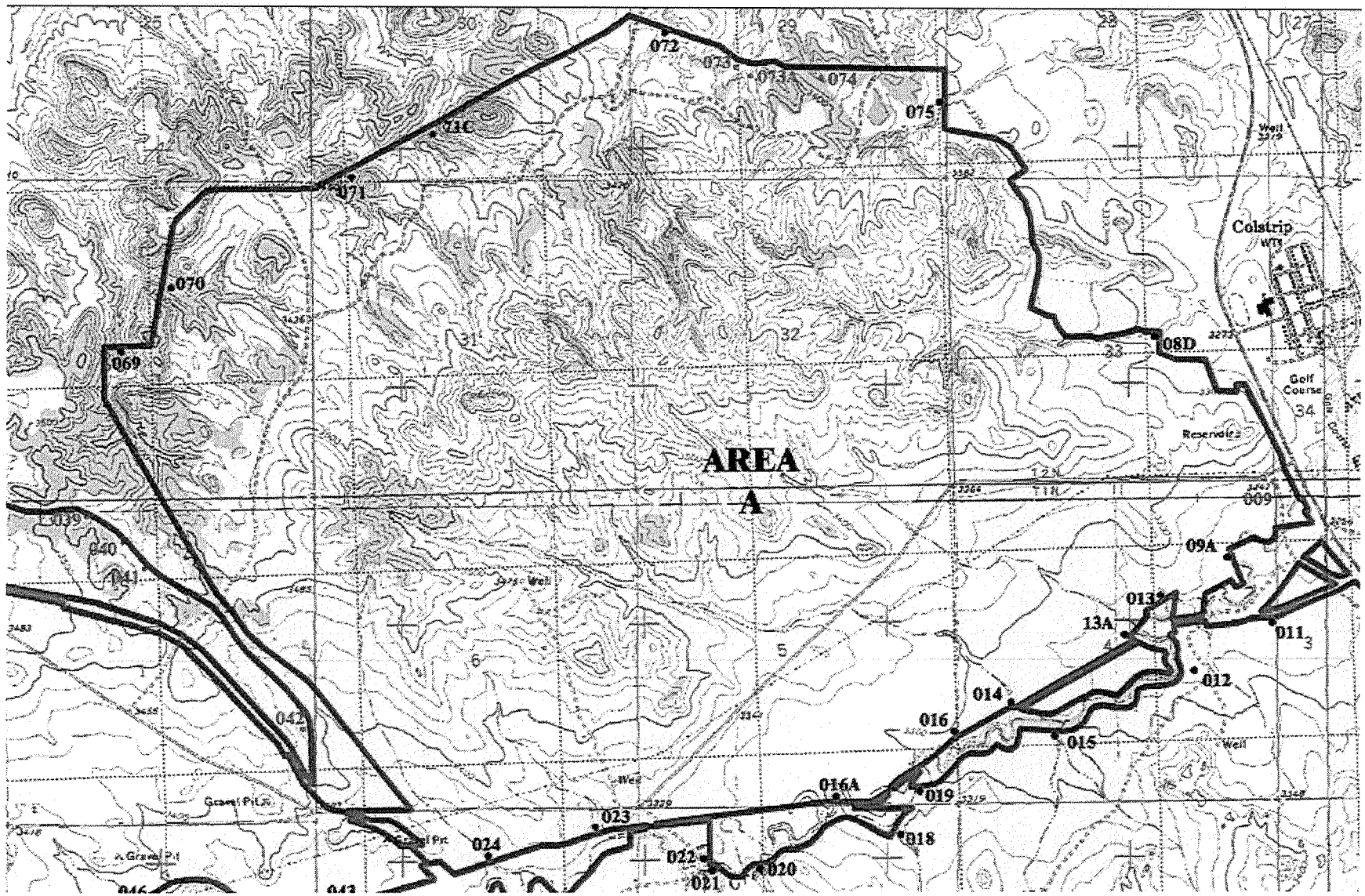
"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

ATTACHMENT I – MAP

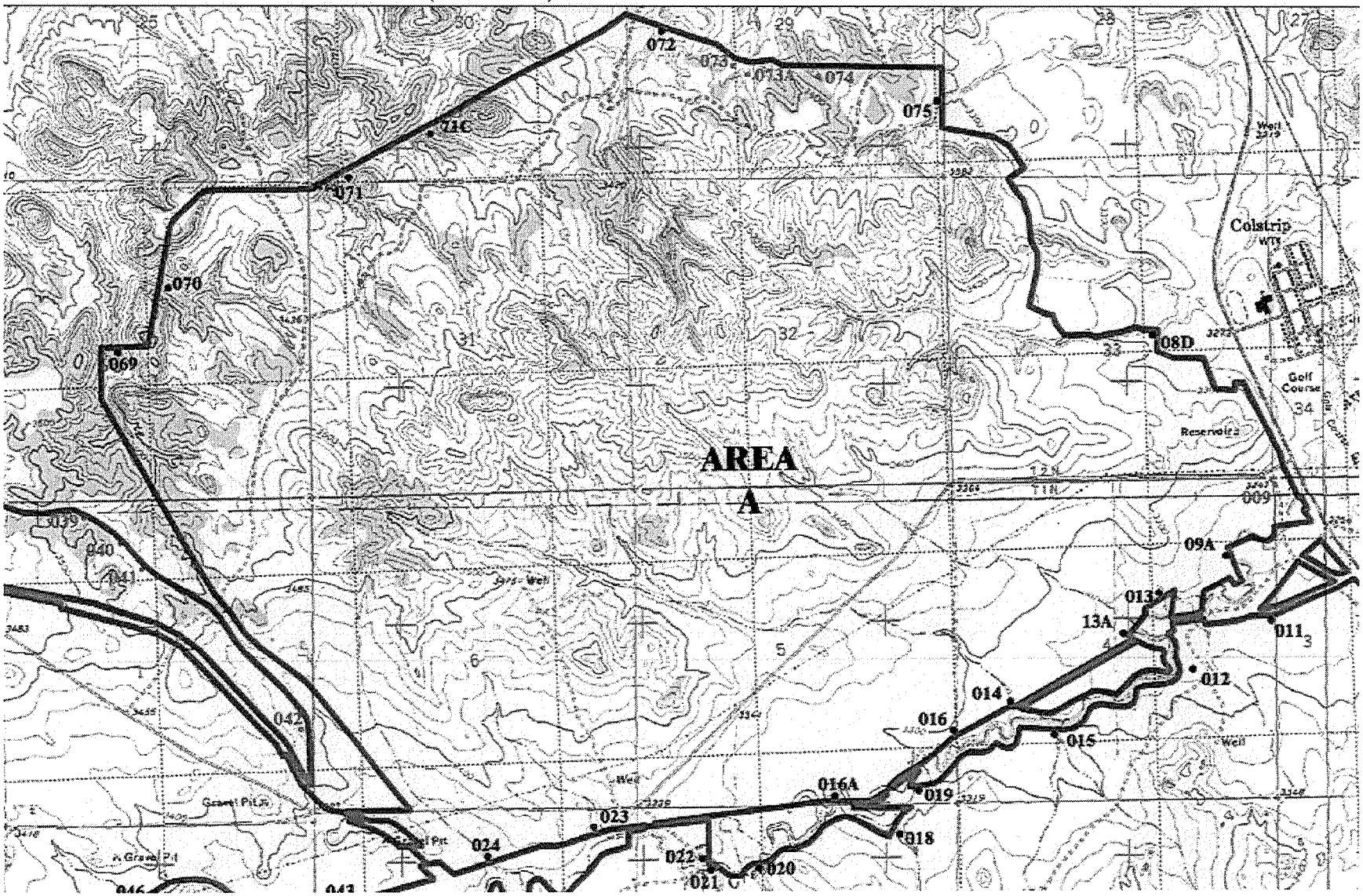
ATTACHMENT II – FLOW SCHEMATIC

ATTACHMENT III – STATEMENT OF BASIS

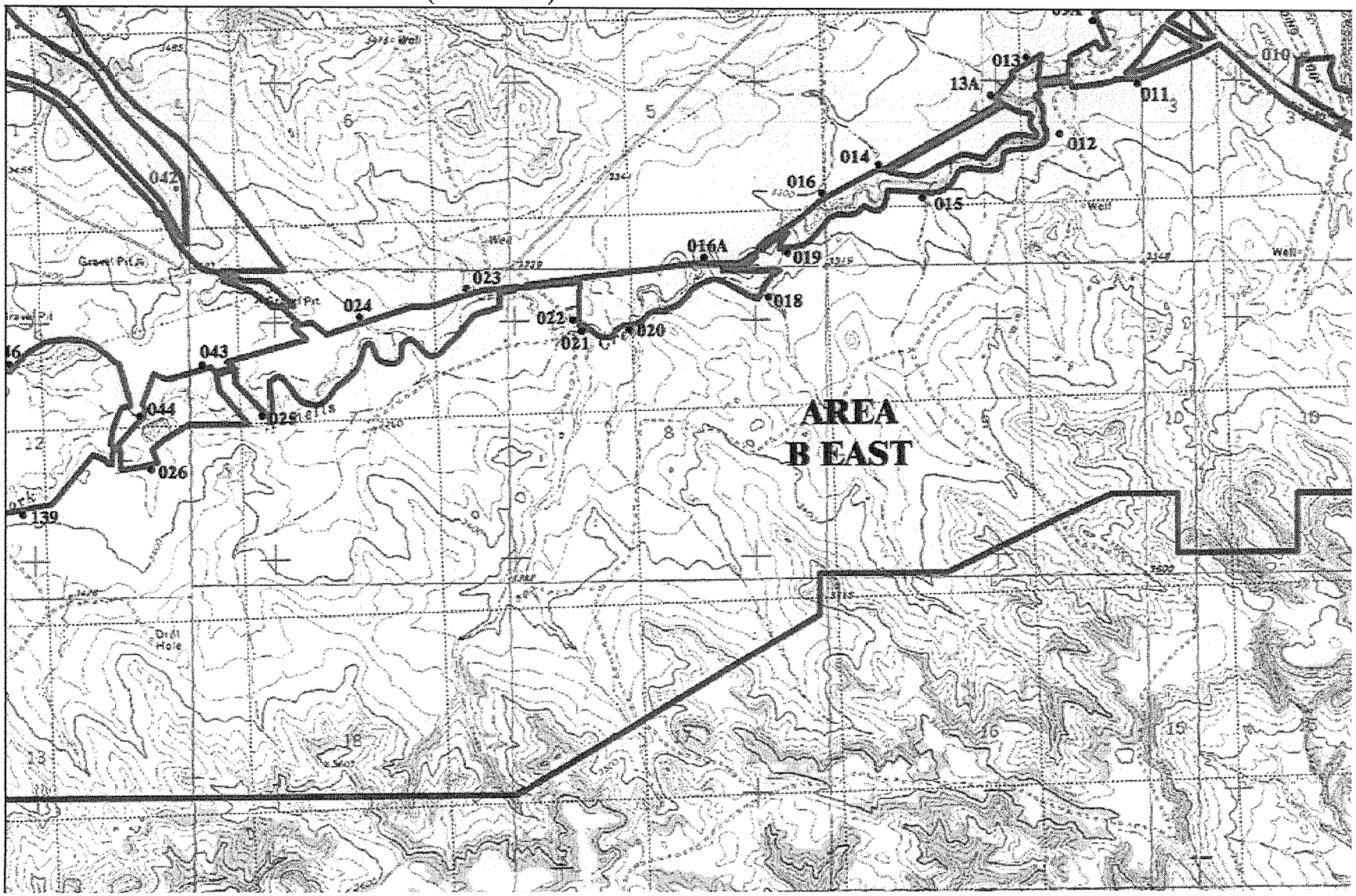
ATTACHMENT I - FACILITY MAPS



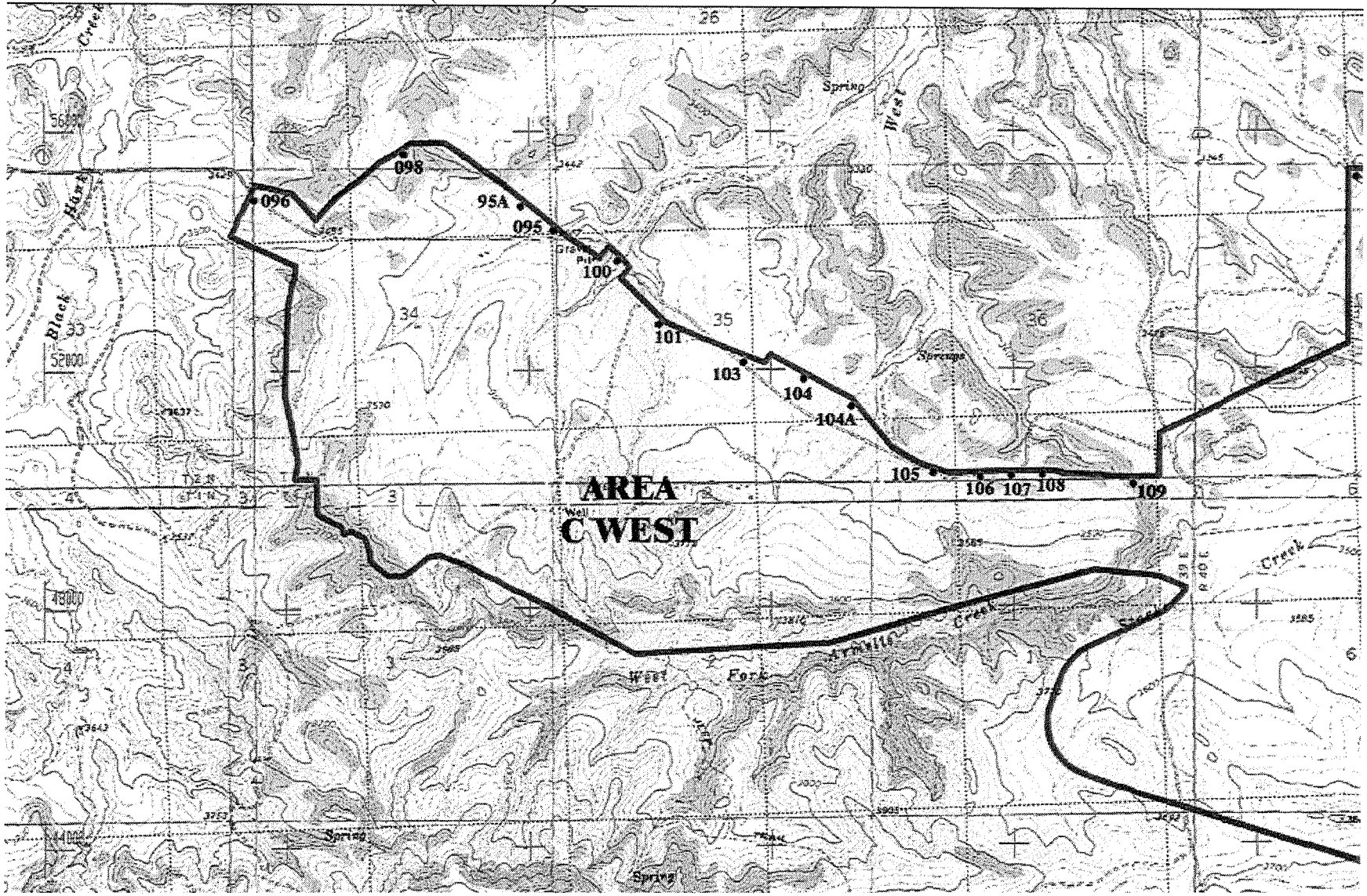
ATTACHMENT I - FACILITY MAPS (Continued)



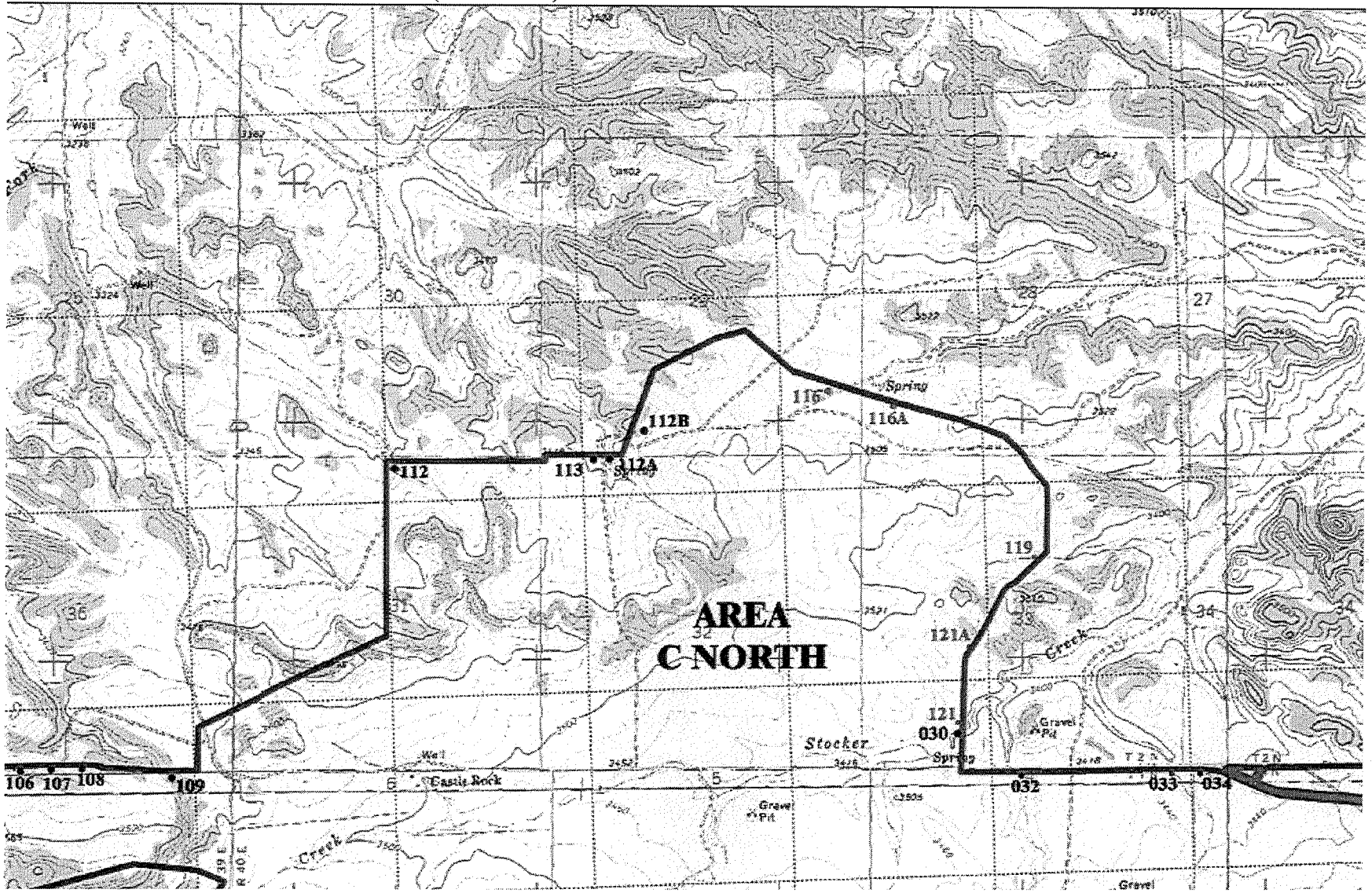
ATTACHMENT I - FACILITY MAPS (Continued)



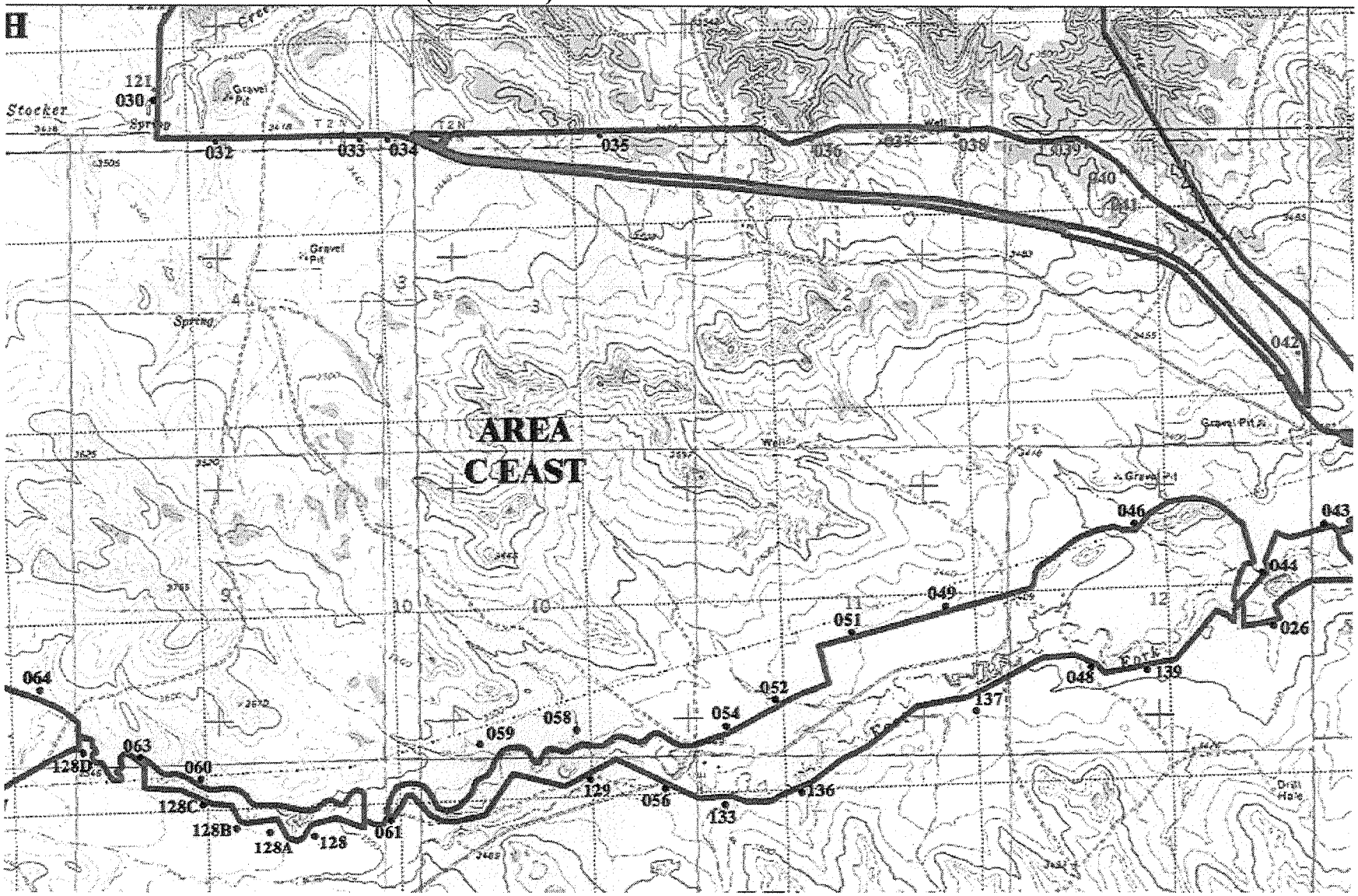
ATTACHMENT I - FACILITY MAPS (Continued)



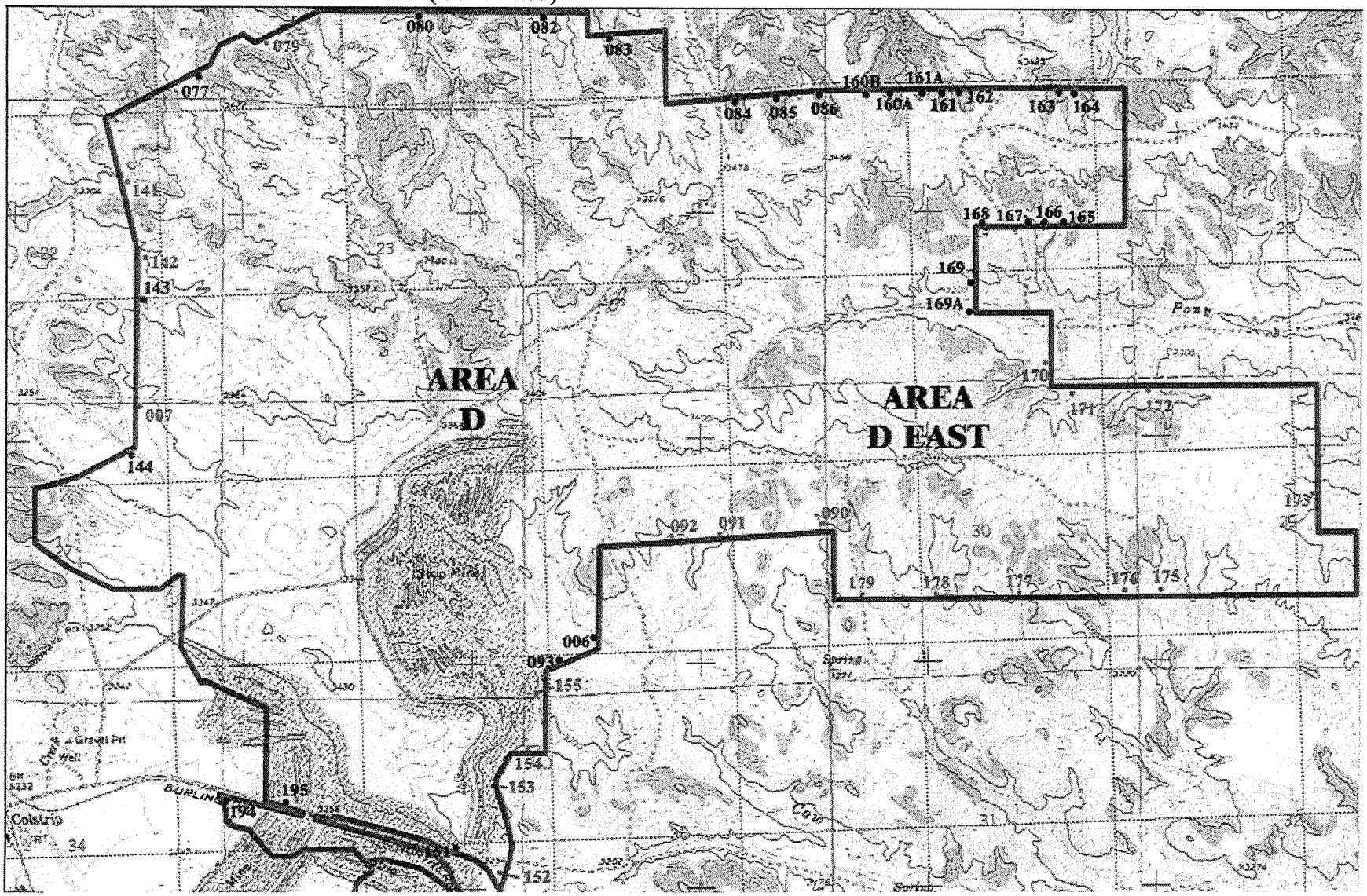
ATTACHMENT I - FACILITY MAPS (Continued)



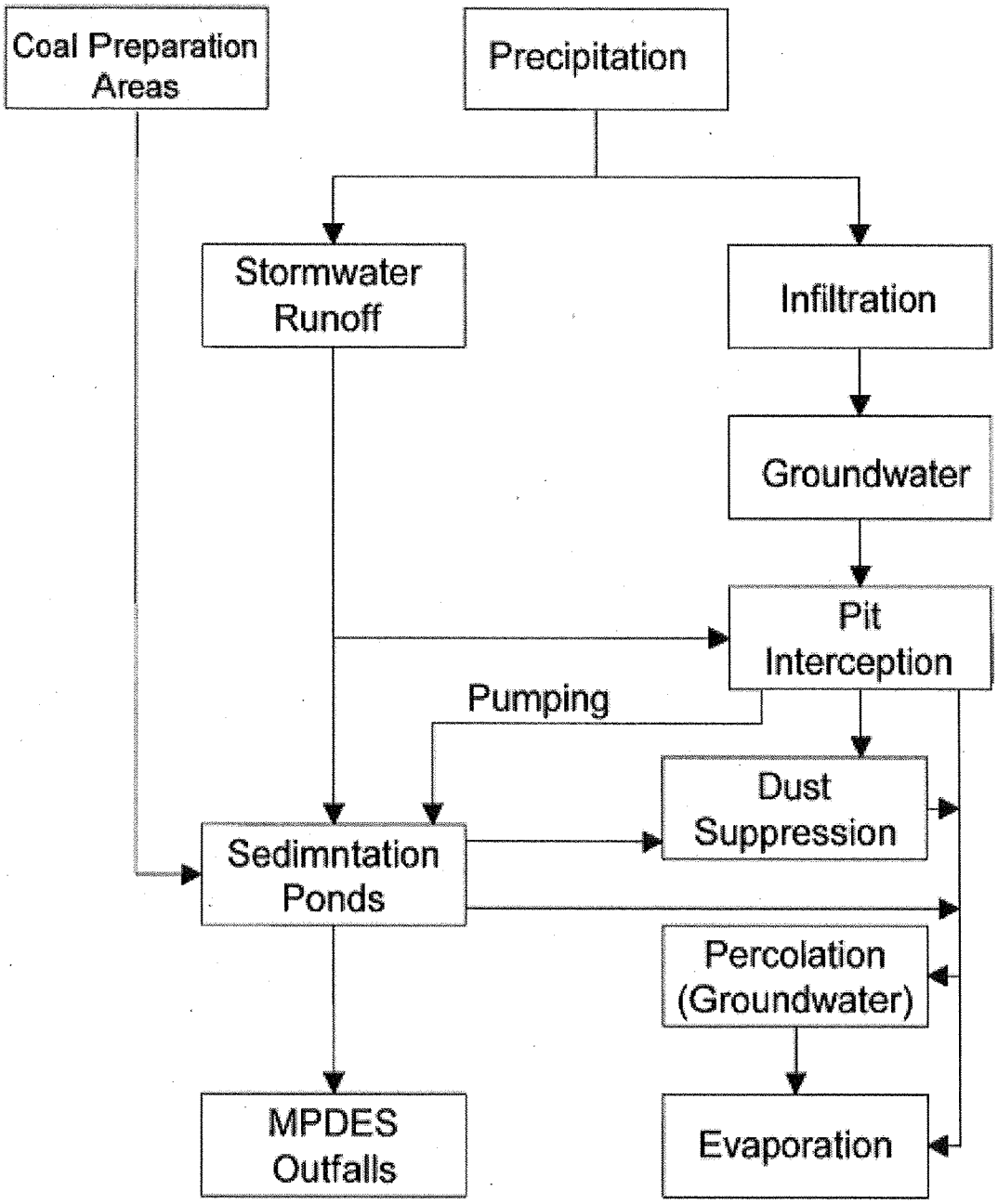
ATTACHMENT I - FACILITY MAPS (Continued)



ATTACHMENT I - FACILITY MAPS (Continued)



ATTACHMENT II – FLOW SCHEMATIC



NOTES:
(1) The Rosebud Mine does not intercept any perennial streamflows and as such inflows are a result of precipitation.
(2) Water balance can not be determined due to the variability in precipitation events (intensities, duration, etc.)
(3) A Listing of individual outfalls can be found in Table (2).
(4) This water process is representative of all outfalls under MPDES Permit #MT-0023965.

ATTACHMENT III – STATEMENT OF BASIS