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.,

WESTMORELAND ROSEBUD MINING LLC (the Permittee)

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

located at CASTLE ROCK ROAD, COLSTRIP, MT

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: to be determined.

This permit and the authorization to discharge shall expire at midnight, five years after effective date.

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

DRAFT

Jon Kenning, Chief
Water Protection Bureau
Water Quality Division

Issuance Date: DRAFT

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I. EFFLUENT LIMITATIONS AND MONITORING & REPORTING REQUIREMENTS

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

The authorization to discharge provided under this permit is limited to those outfalls specifically 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. 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, 75-5-Part 6, Montana Code Annotated (MCA).

Table 1 below provides a description of the discharge points and mixing zones for each outfall associated with active mining. Treatment consists of the use of sediment ponds, with a 10-year, 24-hour (or larger) design capacity, to remove suspended solids from commingled storm water and pit water or coal plant wash down water. **Table 2** provides a description of the discharge points and mixing zones for each outfall assigned Western Alkaline Standards.

Table 1. Description of Discharge Points, Monitoring Locations and Mixing Zones for Active Mining

Outfall[(1)]	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
023	45°51'39"N	106°40'22"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[(2)]
024	45°51'36"N	106°40'50"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[(2)]
025	45°51'16"N	106°41'11"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[(2)]
026	45°51'7"N	106°41'37"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[(2)]
043	45°51'24"N	106°41'25"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	East Fork Armells Creek – Ephemeral	[(2)]
044	45°51'16"N	106°41'39"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[(2)]
046	45°51'27"N	106°42'12"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[(2)]
048	45°51'1"N	106°42'21"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[(2)]

Outfall[1]	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
049	45°51'11"N	106°42'55"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
051	45°51'6"N	106°43'17"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
052	45°50'57"N	106°43'42"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
054	45°50'52"N	106°43'47"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
056	45°50'42"N	106°44'5"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
058	45°50'51"N	106°44'24"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
059	45°50'49"N	106°44'48"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
060	45°50'40"N	106°45'45"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
061	45°50'35"N	106°45'11"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
063	45°50'46"N	106°46'5"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
064	45°50'59"N	106°46'33"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
127	45°50'39"N	106°46'49"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
128	45°50'32"N	106°45'32"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
129	45°50'38"N	106°44'26"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
133	45°50'37"N	106°43'50"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
136	45°50'38"N	106°43'32"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]

Outfall[1]	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
137	45°50'52"N	106°42'53"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
139	45°50'60"N	106°42'7"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
128A	45°50'34"N	106°45'38"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
128B	45°50'35"N	106°45'46"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
128C	45°50'39"N	106°45'54"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
128D	45°50'48"N	106°46'23"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
059A	45°50'41"N	106°45'16"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Ephemeral	[2]
009	45°52'32"N	106°37'43"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	East Fork Armells Creek – Intermittent	[2]
010	45°52'12"N	106°37'6"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
011	45°52'6"N	106°37'42"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
012	45°52'1"N	106°38'3"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
013	45°52'13"N	106°38'11"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
014	45°51'57"N	106°38'46"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
015	45°51'51"N	106°38'35"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
016	45°51'52"N	106°38'58"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
018	45°51'36"N	106°39'12"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]

Outfall[1]	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
019	45°51'42"N	106°39'7"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
020	45°51'30"N	106°39'44"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
021	45°51'30"N	106°39'54"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
022	45°51'31"N	106°39'56"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
075	45°53'33"N	106°39'5"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
194	45°53'5"N	106°36'28"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	East Fork Armells Creek – Intermittent	[2]
010A	45°52'30"N	106°36'42"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
013A	45°52'8"N	106°38'19"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
016A	45°51'42"N	106°39'26"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	East Fork Armells Creek – Intermittent	[2]
008D	45°55'8"N	106°35'26"W	Precipitation event runoff and mine pit dewatering	East Fork Armells Creek – Intermittent	[2]
009A	45°52'20"N	106°37'55"W	Precipitation event runoff, mine pit dewatering, and coal preparation area	East Fork Armells Creek – Intermittent	[2]
095	45°53'14"N	106°51'31"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	[2]
100	45°53'4"N	106°51'15"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	[2]
101	45°52'56"N	106°50'57"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	[2]
103	45°52'49"N	106°50'41"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	[2]

Outfall[1]	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
104	45°52'46"N	106°50'30"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	[2]
105	45°52'31"N	106°49'56"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	[2]
106	45°52'33"N	106°49'42"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	[2]
107	45°52'30"N	106°49'35"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	[2]
108	45°52'33"N	106°49'27"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	[2]
109	45°52'28"N	106°48'52"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	[2]
104A	45°52'41"N	106°47'40"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	[2]
95A	45°53'20"N	106°51'35"W	Precipitation event runoff and mine pit dewatering	West Fork Armells Creek	[2]
096	45°53'17"N	106°52'31"W	Precipitation event runoff and mine pit dewatering	Black Hank Creek	[2]
098	45°53'30"N	106°51'56"W	Precipitation event runoff and mine pit dewatering	Donley Creek	[2]
030	45°52'37"N	106°46'6"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	[2]
032	45°52'19"N	106°45'47"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	[2]
033	45°52'32"N	106°45'15"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	[2]
034	45°52'32"N	106°45'8"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	[2]
035	45°52'21"N	106°44'6"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	[2]
069	45°52'52"N	106°42'9"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	[2]

Outfall[1]	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
070	45°53'6"N	106°41'58"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	(2)
071	45°53'22"N	106°41'15"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	(2)
072	45°53'45"N	106°40'5"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	(2)
071C	45°53'31"N	106°40'51"W	Precipitation event runoff and mine pit dewatering	Stocker Creek	(2)
130	45°49'56"N	106°45'6"W	Precipitation event runoff and mine pit dewatering	Lee Coulee	(2)
131	45°49'56"N	106°44'2"W	Precipitation event runoff and mine pit dewatering	Lee Coulee	(2)
132	45°49'56"N	106°43'42"W	Precipitation event runoff and mine pit dewatering	Lee Coulee	(2)
134	45°49'56"N	106°43'6"W	Precipitation event runoff and mine pit dewatering	Lee Coulee	(2)
130A	45°49'56"N	106°44'32"W	Precipitation event runoff and mine pit dewatering	Lee Coulee	(2)
130B	45°49'56"N	106°44'26"W	Precipitation event runoff and mine pit dewatering	Lee Coulee	(2)
131A	45°49'56"N	106°43'54"W	Precipitation event runoff and mine pit dewatering	Lee Coulee	(2)

Footnotes:
(1) Outfall locations define monitoring locations.
(2) No acute, chronic or human health mixing zone allowed for this discharge.

Table 2. Description of Discharge Points, Monitoring Locations and Mixing Zones for Outfalls Assigned Western Alkaline Standards

Outfall[1]	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
042	45°51'54"N	106°41'31"W	Precipitation event runoff	East Fork Armells Creek – Ephemeral	[2]
007	45°54'15"N	106°36'48"W	Precipitation event runoff	East Fork Armells Creek – Intermittent	[2]
077	45°55'7"N	106°36'36"W	Precipitation event runoff	East Fork Armells Creek – Intermittent	[2]
079	45°55'13"N	106°36'8"W	Precipitation event runoff	East Fork Armells Creek – Intermittent	[2]
141	45°54'53"N	106°36'51"W	Precipitation event runoff	East Fork Armells Creek – Intermittent	[2]
142	45°54'41"N	106°36'43"W	Precipitation event runoff	East Fork Armells Creek – Intermittent	[2]
143	45°54'33"N	106°36'46"W	Precipitation event runoff	East Fork Armells Creek – Intermittent	[2]
144	45°54'3"N	106°36'46"W	Precipitation event runoff	East Fork Armells Creek – Intermittent	[2]
195	45°53'5"N	106°36'14"W	Precipitation event runoff	East Fork Armells Creek – Intermittent	[2]
112	45°53'24"N	106°48'15"W	Precipitation event runoff	West Fork Armells Creek	[2]
113	45°53'26"N	106°47'31"W	Precipitation event runoff	West Fork Armells Creek	[2]
112A	45°53'24"N	106°47'24"W	Precipitation event runoff	West Fork Armells Creek	[2]
112B	45°53'31"N	106°47'8"W	Precipitation event runoff	West Fork Armells Creek	[2]
036	45°52'31"N	106°43'26"W	Precipitation event runoff	Stocker Creek	[2]
037	45°52'32"N	106°43'9"W	Precipitation event runoff	Stocker Creek	[2]
038	45°52'31"N	106°42'52"W	Precipitation event runoff	Stocker Creek	[2]
039	45°52'29"N	106°42'21"W	Precipitation event runoff	Stocker Creek	[2]
040	45°52'25"N	106°42'12"W	Precipitation event runoff	Stocker Creek	[2]
041	45°52'21"N	106°42'7"W	Precipitation event runoff	Stocker Creek	[2]
073	45°53'43"N	106°39'48"W	Precipitation event runoff	Stocker Creek	[2]
074	45°53'41"N	106°39'28"W	Precipitation event runoff	Stocker Creek	[2]
116	45°53'36"N	106°46'34"W	Precipitation event runoff	Stocker Creek	[2]

Outfall[1]	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
119	45°53'8"N	106°45'49"W	Precipitation event runoff	Stocker Creek	[2]
121	45°52'44"N	106°46'9"W	Precipitation event runoff	Stocker Creek	[2]
113D	45°52'37"N	106°46'53"W	Precipitation event runoff	Stocker Creek	[2]
116A	45°53'32"N	106°46'19"W	Precipitation event runoff	Stocker Creek	[2]
120A	45°52'47"N	106°46'36"W	Precipitation event runoff	Stocker Creek	[2]
121A	45°52'53"N	106°46'2"W	Precipitation event runoff	Stocker Creek	[2]
028-1A	45°52'35"N	106°47'47"W	Precipitation event runoff	Stocker Creek	[2]
028-2A	45°52'33"N	106°48'2"W	Precipitation event runoff	Stocker Creek	[2]
028A	45°52'40"N	106°47'30"W	Precipitation event runoff	Stocker Creek	[2]
028B	45°52'37"N	106°47'35"W	Precipitation event runoff	Stocker Creek	[2]
073A	45°53'41"N	106°39'45"W	Precipitation event runoff	Stocker Creek	[2]
006	45°53'48"N	106°35'10"W	Precipitation event runoff	Cow Creek	[2]
090	45°53'52"N	106°34'0"W	Precipitation event runoff	Cow Creek	[2]
091	45°53'51"N	106°34'26"W	Precipitation event runoff	Cow Creek	[2]
092	45°53'50"N	106°34'38"W	Precipitation event runoff	Cow Creek	[2]
093	45°53'29"N	106°35'6"W	Precipitation event runoff	Cow Creek	[2]
151	45°52'56"N	106°35'32"W	Precipitation event runoff	Cow Creek	[2]
152	45°52'52"N	106°35'21"W	Precipitation event runoff	Cow Creek	[2]
153	45°53'7"N	106°35'22"W	Precipitation event runoff	Cow Creek	[2]
154	45°53'14"N	106°35'14"W	Precipitation event runoff	Cow Creek	[2]
155	45°53'23"N	106°35'11"W	Precipitation event runoff	Cow Creek	[2]
173	45°53'58"N	106°32'0"W	Precipitation event runoff	Cow Creek	[2]
175	45°53'50"N	106°32'36"W	Precipitation event runoff	Cow Creek	[2]
176	45°53'54"N	106°33'4"W	Precipitation event runoff	Cow Creek	[2]
177	45°53'52"N	106°35'18"W	Precipitation event runoff	Cow Creek	[2]
178	45°53'50"N	106°33'30"W	Precipitation event runoff	Cow Creek	[2]
179	45°53'51"N	106°33'53"W	Precipitation event runoff	Cow Creek	[2]
165	45°54'45"N	106°32'59"W	Precipitation event runoff	Pony Creek	[2]
166	45°54'45"N	106°33'4"W	Precipitation event runoff	Pony Creek	[2]
167	45°54'45"N	106°33'9"W	Precipitation event runoff	Pony Creek	[2]
168	45°54'45"N	106°33'20"W	Precipitation event runoff	Pony Creek	[2]
169	45°54'37"N	106°33'25"W	Precipitation event runoff	Pony Creek	[2]
170	45°54'19"N	106°33'6"W	Precipitation event runoff	Pony Creek	[2]
171	45°54'14"N	106°32'58"W	Precipitation event runoff	Pony Creek	[2]
172	45°54'15"N	106°32'39"W	Precipitation event runoff	Pony Creek	[2]
169A	45°54'30"N	106°33'25"W	Precipitation event runoff	Pony Creek	[2]
080	45°55'19"N	106°35'37"W	Precipitation event runoff	Spring Creek	[2]
082	45°55'22"N	106°35'8"W	Precipitation event runoff	Spring Creek	[2]
083	45°55'18"N	106°34'52"W	Precipitation event runoff	Spring Creek	[2]

Outfall[1]	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
084	45°55'6"N	106°34'21"W	Precipitation event runoff	Spring Creek	(2)
085	45°55'2"N	106°34'12"W	Precipitation event runoff	Spring Creek	(2)
086	45°55'7"N	106°34'0"W	Precipitation event runoff	Spring Creek	(2)
161	45°55'7"N	106°33'29"W	Precipitation event runoff	Spring Creek	(2)
162	45°55'8"N	106°33'25"W	Precipitation event runoff	Spring Creek	(2)
163	45°55'7"N	106°33'1"W	Precipitation event runoff	Spring Creek	(2)
164	45°55'3"N	106°32'56"W	Precipitation event runoff	Spring Creek	(2)
160A	45°55'8"N	106°33'42"W	Precipitation event runoff	Spring Creek	(2)
160B	45°55'8"N	106°33'48"W	Precipitation event runoff	Spring Creek	(2)
161A	45°55'8"N	106°33'34"W	Precipitation event runoff	Spring Creek	(2)

Footnotes:
(1) Outfall locations define monitoring locations.
(2) No acute, chronic or human health mixing zone allowed for this discharge.

B. Final Effluent Limitations and Monitoring Requirements

1. Numeric Effluent Limitations and Monitoring Requirements

Beginning on the effective date and lasting through the term of the permit, the quality of effluent discharged at all outfalls shall, at a minimum, meet the limitations set forth in **Tables 3 through 7.**

Table 3. Summary of Final Numeric Effluent Limitations – East Fork Armells Creek – Ephemeral

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Boron, total a B	mg/L	0.7	1.1
Iron, total as Fe	mg/L	3.5	7
Oil and grease	mg/L	--	10
pH	s.u.	Between 6.0 and 9.0 at all times	
Sulfate	mg/L	2050	3075
Total dissolved solids (TDS)	mg/L	3000	4500
Total suspended solids	mg/L	35	70
Outfalls: 023, 024, 025, 026, 043, 044, 046, 048, 049, 051, 052, 054, 056, 058, 059, 060, 061, 063, 064, 127, 128, 133, 136, 137, 139, 128A, 128B, 128C, 128D, 059A			

Table 4. Summary of Final Numeric Effluent Limitations – East Fork Armells Creek - Intermittent

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Aluminum, dissolved as Al[1]	µg/L	71.24	142.91

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Boron, total as B	mg/L	0.7	1.1
Iron, total as Fe(1)	mg/L	0.7	1.8
Mercury, total recoverable(1)	µg/L	0.05	0.05
Nitrogen, total as N(1)(2)	µg/L	150	150
Nitrogen, Ammonia as N(1)	mg/L	1.56	3.14
Oil and grease	mg/L	--	10
pH	s.u.	Between 6.0 and 9.0 at all times	
Selenium, total as Se(1)	µg/L	4.1	8.2
Silver, total recoverable(1)	µg/L	0.14	0.27
Sulfate	mg/L	2050	3075
Total dissolved solids (TDS)	mg/L	3000	4500
Total suspended solids	mg/L	35	70

Outfalls: 009, 010, 011, 012, 013, 014, 015, 016, 018, 019, 020, 021, 022, 075, 194, 010A, 013A, 016A, 008D, 009A

Footnotes:
(1) Limits for these parameters will become effective four (4) years from the effective date of the permit.
(2) Average monthly limit and daily maximum limit for total nitrogen are applicable July 1 to September 30 annually.

Table 5. Summary of Final Numeric Effluent Limitations – West Fork Armells Creek, Black Hank Creek, and Donley Creek

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Boron, total as B	mg/L	0.4	0.6
Iron, total as Fe	mg/L	3.5	7
Oil and grease	mg/L	--	10
pH	s.u.	Between 6.0 and 9.0 at all times	
Sulfate	mg/L	1500	2250
Total dissolved solids (TDS)	mg/L	2600	3900
Total suspended solids	mg/L	35	70

West Fork Armells Creek Outfalls: 095, 100, 101, 103, 104, 105, 106, 107, 108, 109, 104A, 95A
Black Hank Creek Outfall: 096
Donley Creek Outfall: 098

Table 6. Summary of Final Numeric Effluent Limitations – Stocker Creek

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Boron, total as B	mg/L	1	1.5
Iron, total as Fe	mg/L	3.5	7
Oil and grease	mg/L	--	10
pH	s.u.	Between 6.0 and 9.0 at all times	
Sulfate	mg/L	2400	3600
Total dissolved solids (TDS)	mg/L	3950	5925
Total suspended solids	mg/L	35	70
Outfalls: 030, 032, 033, 034, 035, 069, 070, 071, 072, 071C			

Table 7. Summary of Final Numeric Effluent Limitations – Lee Coulee

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Boron, total as B	mg/L	0.4	0.6
Electrical Conductivity (EC)	µS/cm	249	500
Iron, total as Fe	mg/L	3.5	7
Oil and grease	mg/L	--	10
pH	s.u.	Between 6.0 and 9.0 at all times	
Sulfate	mg/L	1500	2250
Total suspended solids	mg/L	35	70
Outfalls: 130, 131, 132, 134, 130A, 130B, 131A			

2. Narrative Effluent Limitations:

a. "Free From" Standards

There shall be no discharge from any outfall listed in **Table 1** that reacts or settles to form an objectionable sludge deposit or emulsion beneath the surface of the receiving water or upon adjoining shorelines.

There shall be no discharge from any outfall listed in **Table 1** of floating debris, scum, a visible oil film or globules of grease or other floating materials.

There shall be no discharge from any outfall listed in **Table 1** that produce odors, colors, or other conditions as to which create a nuisance or render undesirable tastes to fish flesh or make fish inedible.

There shall be no discharge from any outfall listed in **Table 1** that create concentrations or combinations of material which are toxic or harmful to human, animal, plant or aquatic life.

There shall be no discharge from any outfall listed in **Table 1** that create conditions which produce undesirable aquatic life.

b. East Fork Armells Creek – Ephemeral

All planned discharges to East Fork Armells Creek – Ephemeral will be managed in such a way that effluent infiltrates prior to reaching East Fork Armells Creek – Intermittent. This includes all outfalls on East Fork Armells which are upstream of the in-channel dam located between outfalls 022 and 023. Planned discharges to East Fork Armells – Ephemeral shall adhere to the following requirements:

a) Discharges must be designed in such a way as to prevent erosion of the channel at the point of discharge and immediately downstream;
b) Any discharges that result in the overtopping of the in-channel dam located between outfalls 022 and 023 must be reported to DEQ within 24 hours;
c) The in-channel dam between outfalls 022 and 023 must be maintained in good working order;
d) The site conditions for all planned discharges to East Fork Armells Creek – Ephemeral must be recorded and retained onsite. These records are to include the reason for the planned discharge, weather conditions, observations of the channel, and date of last inspection of the in-channel dam between outfalls 022 and 023; and
e) The permittee must submit a report to DEQ within one month following each planned discharge to East Fork Armells Creek – Ephemeral which contains a summary of the event as described in item “d” above.

3. Alternate Numeric Effluent Limitations

Beginning on the effective date and lasting through the term of this permit, the quality of precipitation-driven effluent discharged at all active outfalls per Table 1 shall, at a minimum, meet the alternate limitations set forth in **Tables 8 through 12**.

Table 8. Summary of Alternate Numeric Effluent Limitations for Precipitation Events – East Fork Armells Creek – Ephemeral

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Boron, total as B[(1)(2)]	mg/L	--	1.1
Oil and grease[(1)(2)]	mg/L	--	10
pH[(1)(2)]	s.u.	Between 6.0 and 9.0 at all times	
Settleable solids[(1)]	ml/L	--	0.5
Sulfate[(1)(2)]	mg/L	--	3075
Total dissolved solids (TDS)[(1)(2)]	mg/L	--	4500
Outfalls: 023, 024, 025, 026, 043, 044, 046, 048, 049, 051, 052, 054, 056, 058, 059, 060, 061, 063, 064, 127, 128, 133, 136, 137, 139, 128A, 128B, 128C, 128D, 059A Footnotes: (1) 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) of 2.4 inches. (2) Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24-hour period greater than the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume) of 2.4 inches.			

Table 9. Summary of Alternate Numeric Effluent Limitations for Precipitation Events – East Fork Armells Creek – Intermittent

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Aluminum, dissolved as Al[(1)(2)(3)]	µg/L	--	143
Boron, total as B[(1)(2)]	mg/L	--	1.1
Iron, total as Fe[(1)(2)(3)]	mg/L	--	1.8
Mercury, total recoverable[(1)(2)(3)]	µg/L	--	0.05
Nitrogen, total as N[(1)(2)(3)(4)]	µg/L	--	150
Nitrogen, Ammonia as N[(1)(2)(3)]	mg/L	--	3.14
Oil and grease[(1)(2)]	mg/L	--	10
pH[(1)(2)]	s.u.	Between 6.0 and 9.0 at all times	
Selenium, total as Se[(1)(2)(3)]	µg/L	--	8.2
Settleable solids[(1)]	ml/L	--	0.5

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Silver, total recoverable[(1)(2)(3)]	µg/L	--	0.27
Sulfate[(1)(2)]	mg/L	--	3075
Total dissolved solids (TDS) [(1)(2)]	mg/L	--	4500

Outfalls: 009, 010, 011, 012, 013, 014, 015, 016, 018, 019, 020, 021, 022, 075, 194, 010A, 013A, 016A, 008D, 009A

Footnotes:
(1) 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) of 2.4 inches.
(2) Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24-hour period greater than the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume) of 2.4 inches.
(3) Limits for these parameters will become effective four (4) years from the effective date of the permit.
(4) Average monthly limit and daily maximum limit for total nitrogen are applicable July 1 to September 30 annually.

Table 10. Summary of Alternate Numeric Effluent Limitations for Precipitation Events – West Fork Armells Creek, Black Hank Creek, and Donley Creek

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Boron, total as B[(1)(2)]	mg/L	--	0.6
Oil and grease[(1)(2)]	mg/L	--	10
pH[(1)(2)]	s.u.	Between 6.0 and 9.0 at all times	
Settleable solids[(1)]	ml/L	--	0.5
Sulfate[(1)(2)]	mg/L	--	2250
Total dissolved solids (TDS) [(1)(2)]	mg/L	--	3900

West Fork Armells Creek Outfalls: 095, 100, 101, 103, 104, 105, 106, 107, 108, 109, 104A, 95A
Black Hank Creek Outfall: 096
Donley Creek Outfall: 098

Footnotes:
(1) 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) of 2.4 inches.
(2) Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24-hour period greater than the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume) of 2.4 inches.

Table 11. Summary of Alternate Numeric Effluent Limitations for Precipitation Events – Stocker Creek

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Boron, total as B[(1)(2)]	mg/L	--	1.5
Oil and grease[(1)(2)]	mg/L	--	10
pH[(1)(2)]	s.u.	Between 6.0 and 9.0 at all times	
Settleable solids[(1)]	ml/L	--	0.5
Sulfate[(1)(2)]	mg/L	--	3600
Total dissolved solids (TDS) [(1)(2)]	mg/L	--	5925

Outfalls: 030, 032, 033, 034, 035, 069, 070, 071, 072, 071C

Footnotes:
(1) 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) of 2.4 inches.
(2) Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24-hour period greater than the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume) of 2.4 inches.

Table 12. Summary of Alternate Numeric Effluent Limitations for Precipitation Events – Lee Coulee

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Boron, total as B[(1)(2)]	mg/L	--	0.6
Electrical Conductivity[(1)(2)]	µS/cm	--	500
Oil and grease[(1)(2)]	mg/L	--	10
pH[(1)(2)]	s.u.	Between 6.0 and 9.0 at all times	
Settleable solids[(1)]	ml/L	--	0.5
Sulfate[(1)(2)]	mg/L	--	2250

Outfalls: 130, 131, 132, 134, 130A, 130B, 131A

Footnotes:
(1) 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) of 2.4 inches.
(2) Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24-hour period greater than the 10-yr, 24-hr precipitation event (or snowmelt of equivalent volume) of 2.4 inches.

4. Western Alkaline Standards

Beginning on the effective date and lasting through the term of this permit, the permittee may discharge runoff from outfalls outlined in Table 2, meeting definitions set forth in 40 CFR 434(H), and the entire contributing watershed has been released from Phase II bonding in the Rosebud Mine strip mine permits (SMP) C1986003A, C1984003B, C1985003C, and C1986003D. A Permitted outfall's effluent limitations shift from standard and alternate limitations as detailed in Section I.B(1-3) of this permit to effluent limitations derived from 40 CFR 434(H) and summarized below.

(a) The operator must submit a site-specific Sediment Control Plan to DEQ that is designed to prevent an increase in the annual average sediment yield from pre-mined conditions. The approved sediment control plan is incorporated into the MPDES permit as an effluent limitation. The Sediment Control Plan identifies best management practices (BMPs) or best technology currently available (BTCA), must describe design specifications, construction specifications, maintenance schedules, inspection criteria, and the expected performance and longevity of the BMPs/BTCA practices.

(b) Using watershed models, the operator must demonstrate that the implementation of the Sediment Control Plan will result in average annual sediment yields that will not be greater than the sediment yield levels from pre-mined, undisturbed conditions. The operator must use the same watershed model that was used to acquire SMPs C1986003A, C1984003B, C1985003C, and C1986003D under Montana Strip and Underground Mine Reclamation Act (ARM 17.24.313; 17.24.314; 17.24.634).

(c) The operator must design, implement, and maintain BMPs and BCTA in the manner specified in the Sediment Control Plan, consistent with the requirements of SMP C1986003A, C1984003B, C1985003C, and C1986003D.

C. General Monitoring and Reporting Requirements

Self-monitoring of effluent shall be conducted after final treatment and prior to combining with receiving waters. 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 that no discharge occurred.

Reports of 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. **Tables 1 and 2** outline all outfall locations and monitoring locations. Acute WET testing is required at Outfalls 043, 194, 016A, and 009A.

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. Sample Methods

Required analysis must be conducted by methods approved under 40 CFR 136 sufficiently sensitive to detect the pollutant, reach the Required Reporting Value (RRV), or achieve the lowest water quality standard in Circular DEQ-7 of Circular DEQ-12A, unless the Department approves an alternate reporting level for a specific parameter, in writing. For pollutants without an RRV, the detection limit of the lab analysis is used. The permittee shall use the procedure described in 40 CFR 434.64 for measurement of settleable solids, with a method detection limit of 0.4 mL/L.

3. Effluent Monitoring Requirements

The permittee shall collect a grab sample within the first 30 minutes of any discharge from any permitted outfall. **Tables 13 through 16** contain required monitoring frequencies for each parameter following the initial sample.

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 or oil and grease.

Table 13. Summary of Monitoring Requirements – East Fork Armells Creek – Ephemeral

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (1)
Flow	gpd	(2)	Continuous	Daily Max. & Mo. Avg.	NA
pH	S.U.	Instantaneous or Grab	Daily	Daily Max./Min.	NA
Total suspended solids	mg/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	µg/L	Grab	Monthly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	µS/cm	Grab	Monthly	Daily Max. & Mo. Avg.	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (1)
Nitrate + nitrite, total as N	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	0.02
Selenium, total as Se	µg/L	Grab	Monthly	Daily Max. & Mo. Avg.	1
Sodium adsorption ratio	Ratio	Calculated(3)	Monthly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable(4)	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	(4)
WET – Acute Two Species(5)	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls: 023, 024, 025, 026, 043, 044, 046, 048, 049, 051, 052, 054, 056, 058, 059, 060, 061, 063, 064, 127, 128, 133, 136, 137, 139, 128A, 128B, 128C, 128D, 059A

Footnotes:
(1) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
(2) Requires recording device or totalizer.
(3) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as $\mathrm{SAR} = [\mathrm{Na}+]/\sqrt{(0.5 * ([\mathrm{Ca}^{2+}] + [Mg^{2+}])}$
(4) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
(5) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 016A, 009A

Table 14. Summary of Monitoring Requirements – East Fork Armells Creek – Intermittent

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (1)
Flow	gpd	(2)	Continuous	Daily Max. & Mo. Avg.	NA
pH	S.U.	Instantaneous or Grab	Daily	Daily Max./Min.	NA
Total suspended solids	mg/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Mercury, total recoverable	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.005
Nitrogen, total as N	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	245
Nitrogen, Ammonia as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.07
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (1)
Silver, total recoverable	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.2
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Boron, total as B	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	µS/cm	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Nitrate + nitrite, total as N	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	0.02
Phosphorus, total as P	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	3
Sodium adsorption ratio	Ratio	Calculated(3)	Monthly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable(4)	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	(4)
WET – Acute Two Species(5)	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls: 009, 010, 011, 012, 013, 014, 015, 016, 018, 019, 020, 021, 022, 075, 194, 010A, 013A, 016A, 008D, 009A

Footnotes:
(1) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
(2) Requires recording device or totalizer.
(3) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as $\mathrm{SAR} = [\mathrm{Na}+]/\sqrt{(0.5 * ([\mathrm{Ca}^{2+}] + [Mg^{2+}])}$
(4) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
(5) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 016A, 009A

Table 15. Summary of Monitoring Requirements – West Fork Armells Creek, Black Hank Creek, Donley Creek, and Stocker Creek

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (1)
Flow	gpd	(2)	Continuous	Daily Max. & Mo. Avg.	NA
pH	S.U.	Instantaneous or Grab	Daily	Daily Max./Min.	NA
Total suspended solids	mg/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (1)
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	µg/L	Grab	Monthly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	µS/cm	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Nitrate + nitrite, total as N	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	0.02
Selenium, total as Se	µg/L	Grab	Monthly	Daily Max. & Mo. Avg.	1
Sodium adsorption ratio	Ratio	Calculated(3)	Monthly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable(4)	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	(4)
WET – Acute Two Species(5)	% Effluent	Grab	Annually	Pass/Fail	NA

West Fork Armells Creek Outfalls: 095, 100, 101, 103, 104, 105, 106, 107, 108, 109, 104A, 95A
Black Hank Creek Outfall: 096
Donley Creek Outfall: 098
Stocker Creek Outfalls: 030, 032, 033, 034, 035, 069, 070, 071, 072, 071C

Footnotes:
(1) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
(2) Requires recording device or totalizer.
(3) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR $= [\mathrm{Na}+]/\sqrt{(0.5 * ([\mathrm{Ca}^{2+}] + [Mg^{2+}])}$
(4) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
(5) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 016A, 009A

Table 16. Summary of Monitoring Requirements – Lee Coulee

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (1)
Flow	gpd	(2)	Continuous	Daily Max. & Mo. Avg.	NA
pH	S.U.	Instantaneous or Grab	Daily	Daily Max./Min.	NA
Total suspended solids	mg/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (1)
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	µg/L	Grab	Monthly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	µS/cm	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Nitrate + nitrite, total as N	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	0.02
Selenium, total as Se	µg/L	Grab	Monthly	Daily Max. & Mo. Avg.	1
Sodium adsorption ratio	Ratio	Calculated(3)	Monthly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Monthly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable(4)	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	(4)
WET – Acute Two Species(5)	% Effluent	Grab	Annually	Pass/Fail	NA

Footnotes:
(1) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
(2) Requires recording device or totalizer.
(3) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR $= [\mathrm{Na}+]/\sqrt{(0.5 * ([\mathrm{Ca}^{2+}] + [Mg^{2+}])}$
(4) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
(5) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 016A, 009A

Alternate monitoring requirements for discharges caused by precipitation events are summarized in **Tables 17 through 24**. The permittee is required to monitor precipitation in the East Fork Armells Creek, West Fork Armells Creek, Black Hank Creek, Donley Creek, Stocker Creek, Lee Coulee, Cow Creek, Pony Creek, and Spring Creek basins, as described in Section I.C.7 below. The permittee shall have the burden of proof that any discharge was a result of a precipitation events, and that these alternate monitoring requirements are applicable.

Table 17. Summary of Monitoring Requirements for Small Precipitation-Driven Events(1) – East Fork Armells Creek - Ephemeral

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
pH	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
Settleable Solids	mL/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	µS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated(4)	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total settleable solids	mL/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.4
Metals, total recoverable(5)	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species(6)	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls: 023, 024, 025, 026, 043, 044, 046, 048, 049, 051, 052, 054, 056, 058, 059, 060, 061, 063, 064, 127, 128, 133, 136, 137, 139, 128A, 128B, 128C, 128D, 059A

Footnotes:

(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.

(2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.

(3) Requires recording device or totalizer.

(4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as $\mathrm{SAR} = [\mathrm{Na}+]/\sqrt{(0.5 * ([\mathrm{Ca}^{2+}] + [Mg^{2+}])}$

(5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.

(6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 016A, 009A

Table 18. Summary of Monitoring Requirements for Large Precipitation-Driven Events(1) – East Fork Armells Creek – Ephemeral

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
pH	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Aluminum, dissolved as Al	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	µS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated(4)	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total settleable solids	mL/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.4
Metals, total recoverable(5)	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species(6)	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls: 023, 024, 025, 026, 043, 044, 046, 048, 049, 051, 052, 054, 056, 058, 059, 060, 061, 063, 064, 127, 128, 133, 136, 137, 139, 128A, 128B, 128C, 128D, 059A

Footnotes:

(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.

(2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.

(3) Requires recording device or totalizer.

(4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as $\mathrm{SAR} = [\mathrm{Na}+]/\sqrt{(0.5 * ([\mathrm{Ca}^{2+}] + [Mg^{2+}])}$

(5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.

(6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 016A, 009A

Table 19. Summary of Monitoring Requirements for Small Precipitation-Driven Events[1] – East Fork Armells Creek - Intermittent

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV [2]
Flow	gpd	[3]	Continuous	Daily Max. & Mo. Avg.	NA
pH	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Settleable Solids	mL/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	µS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Mercury, total recoverable	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.005
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrogen, total as N	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	245
Nitrogen, Ammonia as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.07
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Phosphorus, total as P	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	3
Selenium, total as Se	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Silver, total recoverable	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.2
Sodium adsorption ration	Ratio	Calculated[4]	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable[5]	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	[5]
WET – Acute Two Species[6]	% Effluent	Grab	Annually	Pass/Fail	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
Outfalls: 009, 010, 011, 012, 013, 014, 015, 016, 018, 019, 020, 021, 022, 075, 194, 010A, 013A, 016A, 008D, 009A Footnotes: (1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches. (2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition. (3) Requires recording device or totalizer. (4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR $= [\mathrm{Na}+]/\sqrt{(0.5 * ([\mathrm{Ca}^{2+}] + [Mg^{2+}])}$ (5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable. (6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 016A, 009A					

Table 20. Summary of Monitoring Requirements for Large Precipitation-Driven Events(1) – East Fork Armells Creek – Intermittent

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
pH	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Aluminum, dissolved as Al	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	µS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Mercury, total recoverable	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.005
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrogen, total as N	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	245
Nitrogen, Ammonia as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.07
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Phosphorus, total as P	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	3
Selenium, total as Se	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
Silver, total recoverable	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.2
Sodium adsorption ration	Ratio	Calculated(4)	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable(5)	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species(6)	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls: 009, 010, 011, 012, 013, 014, 015, 016, 018, 019, 020, 021, 022, 075, 194, 010A, 013A, 016A, 008D, 009A

Footnotes:
(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.
(2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
(3) Requires recording device or totalizer.
(4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as $SAR = [\mathrm{Na}+]/\sqrt{(0.5 * ([\mathrm{Ca}^{2+}] + [Mg^{2+}])}$
(5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
(6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 016A, 009A

Table 21. Summary of Monitoring Requirements for Small Precipitation-Driven Events(1) – West Fork Armells Creek, Black Hank Creek, Donley Creek, and Stocker Creek

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
pH	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Settleable Solids	mL/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	µS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated(4)	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable(5)	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species(6)	% Effluent	Grab	Annually	Pass/Fail	NA

West Fork Armells Creek Outfalls: 095, 100, 101, 103, 104, 105, 106, 107, 108, 109, 104A, 95A
Black Hank Creek Outfall: 096
Donley Creek Outfall: 098
Stocker Creek Outfalls: 030, 032, 033, 034, 035, 069, 070, 071, 072, 071C

Footnotes:
(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.
(2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
(3) Requires recording device or totalizer.
(4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as $\mathrm{SAR} = [\mathrm{Na}+]/\sqrt{(0.5 * ([\mathrm{Ca}^{2+}] + [Mg^{2+}])}$
(5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
(6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 016A, 009A

Table 22. Summary of Monitoring Requirements for Large Precipitation-Driven Events(1) – West Fork Armells Creek, Black Hank Creek, Donley Creek, and Stocker Creek

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
pH	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Aluminum, dissolved as Al	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	µS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated(4)	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total dissolved solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable(5)	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species(6)	% Effluent	Grab	Annually	Pass/Fail	NA

West Fork Armells Creek Outfalls: 095, 100, 101, 103, 104, 105, 106, 107, 108, 109, 104A, 95A
Black Hank Creek Outfall: 096
Donley Creek Outfall: 098
Stocker Creek Outfalls: 030, 032, 033, 034, 035, 069, 070, 071, 072, 071C

Footnotes:
(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.
(2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
(3) Requires recording device or totalizer.
(4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as $\mathrm{SAR} = [\mathrm{Na}+]/\sqrt{(0.5 * ([\mathrm{Ca}^{2+}] + [Mg^{2+}])}$
(5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
(6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 016A, 009A

Table 23. Summary of Monitoring Requirements for Small Precipitation-Driven Events(1) – Lee Coulee

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA
pH	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
Settleable Solids	mL/L	Grab	Daily	Daily Max. & Mo. Avg.	NA
Aluminum, dissolved as Al	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	µS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated(4)	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable(5)	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species(6)	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls: 130, 131, 132, 134, 130A, 130B, 131A

Footnotes:
(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.
(2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
(3) Requires recording device or totalizer.
(4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as $\mathrm{SAR} = [\mathrm{Na}+]/\sqrt{(0.5 * ([\mathrm{Ca}^{2+}] + [Mg^{2+}])}$
(5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
(6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 016A, 009A

Table 24. Summary of Monitoring Requirements for Large Precipitation-Driven Events(1) – Lee Coulee

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
Flow	gpd	(3)	Continuous	Daily Max. & Mo. Avg.	NA

Parameter	Units	Sample Type	Monitoring Frequency	Reporting Requirement	RRV (2)
pH	s.u.	Instantaneous or Grab	Daily	Monthly Max. Monthly Min.	NA
Aluminum, dissolved as Al	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	9
Boron, total as B	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Chloride (as Cl)	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Electrical conductivity	µS/cm	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Iron, total as Fe	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Nitrate + nitrite, total as N	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	0.02
Oil and grease	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Selenium, total as Se	µg/L	Grab	Weekly	Daily Max. & Mo. Avg.	1
Sodium adsorption ration	Ratio	Calculated(4)	Weekly	Daily Max. & Mo. Avg.	NA
Sulfate	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Total suspended solids	mg/L	Grab	Weekly	Daily Max. & Mo. Avg.	NA
Metals, total recoverable(5)	µg/L	Grab	Annually	Daily Max. & Mo. Avg.	(5)
WET – Acute Two Species(6)	% Effluent	Grab	Annually	Pass/Fail	NA

Outfalls: 130, 131, 132, 134, 130A, 130B, 131A

Footnotes:
(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period less than or equal to the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.
(2) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standard* are current as of the June 2019 edition.
(3) Requires recording device or totalizer.
(4) Monitoring for SAR shall consist of monitoring for dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as SAR $= [\mathrm{Na}+]/\sqrt{(0.5 * ([\mathrm{Ca}^{2+}] + [Mg^{2+}])}$
(5) Metals include: arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc as total recoverable.
(6) Whole effluent toxicity testing is required for outfalls associated with Coal Preparation Plants and Coal Preparation Plant Associated Areas: Outfalls 043, 194, 016A, 009A

4. Whole Effluent Toxicity Testing

a. Acute Whole Effluent Toxicity Testing

i. Sampling and Dilution Series Requirements

Beginning in the calendar year in which this Permit becomes effective, and each calendar year thereafter, the Permittee shall conduct annual acute static

toxicity tests on grab samples of the effluent discharged from Outfalls 043, 194, 016A, and 009A. Testing will employ two species per test and will consist of 5 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 moderately hard water, in accordance with WET Methods. If a discharge does not occur from Outfalls 043, 194, 016A, and 009A during the calendar year, this 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 of Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, EPA-821-R-02-012 (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 or if a second sample cannot be collected, testing shall occur at each discharge event for the duration of the permit term. In all cases, the results of all toxicity tests must be submitted to the Department in accordance with Section III.A of this Permit.

5. Monitoring Periods and Reporting Schedule

Monitoring periods and reporting for all required monitoring shall be completed according to the schedule in **Tables 13 through 24**.

6. Discharge Monitoring Reports

Monitoring results must be reported within a Discharge Monitoring Report (DMR). Monitoring results must be submitted electronically (NetDMR web-based application) no later than the 28th day of the month following the end of the monitoring period. If no discharge occurs during the entire reporting period, "No Discharge" must be reported within the respective DMR. All other reports must be signed and certified in accordance with Part III.G 'Signatory Requirements' of this permit and submitted to DEQ at the following address:

Montana Department of Environmental Quality
Water Protection Bureau
PO Box 200901
Helena, Montana 59620-0901

Whole Effluent Toxicity (WET) results from the laboratory shall be reported along with the DMR form. 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.

7. Other Monitoring Requirements

a. Precipitation Monitoring:
Precipitation shall be monitored and recorded using a precipitation gauge which meets the standards provided in the National Weather Service Instructional Bulletin 10-1302 (November 14, 2014), *Instrument Requirements and Standards for the NWS Surface Observing Programs (Land)* and provided in **Table 25**. Precipitation gauges will be maintained in the East Fork Armells Creek, West Fork Armells Creek, Black Hank Creek, Donley Creek, Stocker Creek, Lee Coulee, Cow Creek, Pony Creek, and Spring Creek.

Table 25. Precipitation Gauge Performance Standards

Manual Daily Precipitation – Gauge Standard					
Parameter	**Requires**	**Seasonal**	**Range**	**Resolution**	**Measurement Accuracy**
Precipitation, Rain	Eight-Inch Diameter Collection Vessel with Tube and Measuring Stick	Funnel (All year except for snow or frozen precip events)	0 to 20 inches	0.01 inches	±0.02 inches
	Four-Inch Diameter Collection Vessel with Tube	Funnel (All year except for snow or frozen precip events.)	0 to 10 inches	0.01 inches	±0.02 inches
Precipitation, Frozen (Liquid Equivalent)	Eight-Inch Diameter Collection Vessel	Open Aperture (snow or frozen precip events)	0 to 24 inches of snow	0.01 inches melted	±0.04 inches melted
	Four-Inch Diameter Collection Vessel	Open Aperture (snow or frozen precip events)	0 to 12 inches of snow	0.01 inches melted	±0.04 inches melted

Snowfall / Snow Depth - Equipment Standard					
Snowfall / Snow Depth: 0.1 to 20 in.	Snow stick (marked) and Snow board	Not applicable	0 to 20 inches	0.1 inch	±0.1 inch
Snowfall / Snow Depth: 20 to 40 in.	Snow stick (marked) and Snow board		0 to 40 inches	0.1 inch	±0.1 inch
Snow Depth: 40 to 60 in.	Snow stake (marked)		0 to 60 inches	1 inch	± 1 inch

b. Flow Monitoring and Sampling Units

The permit requires the permittee to install and use flow monitoring and sampling equipment at each outfall. This requirement is necessary because precipitation events are often localized, high intensity, short duration thunderstorms, and watersheds often cover vast and isolated areas. Ponds may retain water from previous events. Likewise, weather conditions may prevent access to outfalls for monitoring whether an overflow discharge occurred or for discharge sampling. 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. A remote sampling unit 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 structure.

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.4. 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 of 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.C 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. Western Alkaline Standards

The permittee shall submit a Sediment Control Plan, watershed model, and a schedule of BMP/BTCA implementation and maintenance meeting the requirements of 40 CFR 434 (H) to the department for approval prior to conversion of any permitted outfall to Western Alkaline Standards status. Outfalls are only eligible for conversion to Western Alkaline Standards effluent limitations described in Section I.B.4 of this permit when the entire contributing drainage of the outfall has been released from Phase II bonding under the Montana SMPs C1986003A, C1984003B, C1985003C, and C1986003D. Notification of intent to convert an outfall to Western Alkaline Standards status shall be provided by the applicant at the time of bond release application for C1986003A, C1984003B, C1985003C, and C1986003D. Notification of Phase II bond release by the Department shall be provided to the MPDES file and to the applicant within 30 days of successful Phase II bond release for an entire contributing watershed for an outfall. Following a minor modification to MT0023965, pursuant to ARM 17.30.1362, effluent limitations for an applicable outfall convert to Western Alkaline Standards as described in Section I.B.4 of this permit. Western Energy must design, implement and maintain Best Management Practices specified in the Sediment Control Plans.

C. 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 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**

D. Compliance Schedules

The permit imposes new WQBELs for ammonia, dissolved aluminum, total iron, mercury, total nitrogen, selenium, and silver at outfalls discharging to East Fork Armells Creek – Intermittent. A compliance schedule to allow the Permittee to assess the need for and develop any additional treatment. The final WQBELs shall be effective four years from the effective date of the permit.

The Permittee must submit an annual reports summarizing progress towards compliance with the final WQBELs. Each annual report is due January 28th .

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 II 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(10)(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) 444-5546 or the Office of Disaster and Emergency Services at (406) 324-4777. 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 Section III.B.7 of this permit, "Bypass of Treatment Facilities");
   iii. Any upset which exceeds any effluent limitation in the permit (See Section 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) 444-5546. Reports shall be submitted to the addresses in Section I.C.6 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 Section I.C.6 of this permit ("Discharge Monitoring Reports") are submitted. The reports shall contain the information listed in Section III.A.8.b 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. Compliance Responsibilities

a. 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)*]

b. 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 not subject to effluent limitations in the permit, or to pollutants that are not subject 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)*]

c. 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 Section III.B.7 of this permit ("Bypass of Treatment Facilities") and Section 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.

d. 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)*]

e. 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)*]

f. 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)*]

g. 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" (Sections 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:

v. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

vi. 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

vii. The permittee submitted notices as required under "Notice" below (Section 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 Section III.A.8 of this permit ("Twenty-four Hour Notification").

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" (Section III.B.7.b of this permit).

h. 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 Section III.B.8.b 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 Section III.A.8 of this permit ("Twenty-four Hour Notification"); and

iv. The permittee complied with any remedial measures required under Section 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. **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)*].

2. **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)*]

3. **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.

4. **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)*]

5. **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)*].

6. **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 [ARM 17.30.1323(1)].

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 Section III.C.6.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 Section III.C.6.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) [ARM 17.30.1323(2)].

d. *Changes to authorization*. If an authorization under Section III.C.6.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 Section III.C.6.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 [ARM 17.30.1323(3)].

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" [ARM 17.30.1323(4)].

7. **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*]

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

9. **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*]

10. **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 Section III.C.10.b of this permit; and
    d. Required annual and application fees have been paid.

11. **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 20% of the fee plus interest on the required fee computed at the rate established under 15-1-216, 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 ARM 17.30.1322(7)(g); 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 ARM 17.30.1322(7)(g); or
iv. The level established by the Department in accordance with 40 CFR 122.44(f).

IV. DEFINITIONS AND ABBREVIATIONS

"1-year, 2-year, 10-year, and 25-year, 24-hour precipitation events" means the maximum 24-hour precipitation event with a probable recurrence interval of once in one, two, ten, and twenty-five 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 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 otherwise 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.

“MSUMRA” means the Montana Strip and Underground Mine Reclamation Act.

“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.