

# **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 AREA B AM5**

located at CASTLE ROCK ROAD, COLSTRIP, MT

to receiving waters named: Lee Coulee, Fossil Fork of Lee Coulee, unnamed tributaries to Fossil Fork of Lee Coulee, and unnamed tributaries to Richard Coulee.

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: October 1, 2022.

This permit and the authorization to discharge shall expire at midnight, September 30, 2027.

**FOR THE MONTANA DEPARTMENT OF  
ENVIRONMENTAL QUALITY**

**|S| JON KENNING**

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Jon Kenning, Chief  
Water Protection Bureau  
Water Quality Division

Issuance Date: **August 12, 2022**

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## 1 AUTHORIZED DISCHARGES AND MIXING ZONES

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.

**Table 1. Description of Discharge and Monitoring Locations**

<b>Outfall (1)</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Outfall/Effluent Description</b>	<b>Receiving Water</b>	<b>Mixing Zone</b>
001	45°49'10"N	106°42'23"W	Precipitation event runoff, mine pit dewatering	Lee Coulee	(2)
002	45°48'59"N	106°42'00"W	Precipitation event runoff, mine pit dewatering	Lee Coulee	(2)
003	45°48'25"N	106°41'56"W	Precipitation event runoff, mine pit dewatering	Fossil Fork of Lee Coulee	(2)
004	45°48'23"N	106°44'53"W	Precipitation event runoff, mine pit dewatering	Fossil Fork of Lee Coulee	(2)
005	45°48'21"N	106°41'45"W	Precipitation event runoff, mine pit dewatering	Fossil Fork of Lee Coulee	(2)
006	45°48'20"N	106°41'39"W	Precipitation event runoff, mine pit dewatering	Fossil Fork of Lee Coulee	(2)
007	45°48'19"N	106°41'34"W	Precipitation event runoff, mine pit dewatering	Fossil Fork of Lee Coulee	(2)
008	45°48'7"N	106°42'42"W	Precipitation event runoff, mine pit dewatering	Unnamed tributary to Fossil Fork	(2)
009	45°48'1"N	106°42'42"W	Precipitation event runoff, mine pit dewatering	Unnamed tributary to Fossil Fork	(2)
010	45°47'57"N	106°42'42"W	Precipitation event runoff, mine pit dewatering	Unnamed tributary to Fossil Fork	(2)
011	45°48'37"N	106°44'12"W	Precipitation event runoff, mine drainage	Unnamed tributary to Richard Coulee	(2)
012	45°48'40"N	106°44'25"W	Precipitation event runoff, mine drainage	Unnamed tributary to Richard Coulee	(2)

Outfall (1)	Latitude	Longitude	Outfall/Effluent Description	Receiving Water	Mixing Zone
013	45°48'50"N	106°44'23"W	Precipitation event runoff, mine drainage	Unnamed tributary to Richard Coulee	(2)
014	45°49'5"N	106°44'21"W	Precipitation event runoff, mine drainage	Unnamed tributary to Richard Coulee	(2)
015	45°49'13"N	106°44'34"W	Precipitation event runoff, mine drainage	Unnamed tributary to Richard Coulee	(2)
016	45°49'35"N	106°45'36"W	Precipitation event runoff, mine drainage	Unnamed tributary to Richard Coulee	(2)
017	45°49'34"N	106°45'41"W	Precipitation event runoff, mine drainage	Unnamed tributary to Richard Coulee	(2)
018	45°49'35"N	106°45'50"W	Precipitation event runoff, mine drainage	Unnamed tributary to Richard Coulee	(2)

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

## 2 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Beginning on the effective date and lasting through the term of this permit, the quality of effluent discharged shall, at a minimum, meet the limitations set forth in this Part. All monitoring shall be conducted as specified in this Part and in Part 0 of this permit. If no discharge occurs during an entire reporting period, the permittee shall state "No Discharge" on the Discharge Monitoring Report.

### 2.1 Numeric Effluent Limitations

The quality of effluent from non-precipitation driven discharge events at Outfalls 001-018 shall, at a minimum, meet the limitations set forth in Table 2.

**Table 2. Summary of Final Numeric Effluent Limitations – Outfalls 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018**

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Total suspended solids	mg/L	35	70
pH	S.U.	Between 6.0 and 9.0 at all times	
Oil and grease	mg/L	--	10
Iron, total	mg/L	3.0	6.0
EC	μS/cm	500	500
SAR <sup>(1)(3)</sup>	Ratio	3.0	4.5
SAR <sup>(2)(3)</sup>	Ratio	5.0	7.5

Footnotes:  
(1) Applicable to discharges occurring March 2 through October 31.  
(2) Applicable to discharges occurring November 1 through March 1.  
(3) SAR is calculated using effluent concentrations of dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as  $SAR = [Na^+]/\sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}])}$

## 2.2 Alternate Numeric Effluent Limitations

The quality of precipitation-driven effluent discharged at Outfalls 001-018 shall, at a minimum, meet the alternate limitations set forth in Table 3.

**Table 3. Summary of Alternate Numeric Effluent Limitations for Precipitation Events – Outfalls 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018**

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
Settleable solids <sup>(1)</sup>	mg/L	--	0.5
pH <sup>(1)(2)</sup>	S.U.	Between 6.0 and 9.0 at all times	
Oil and grease <sup>(1)(2)</sup>	mg/L	--	10
EC <sup>(1)(2)</sup>	µS/cm	--	500
SAR <sup>(1)(2)(3)(5)</sup>	Ratio	--	4.5
SAR <sup>(1)(2)(4)(5)</sup>	Ratio	--	7.5
Footnotes:			
(1) Applicable to discharges or increases in the volume of discharges caused by precipitation within any 24-hour period <u>less than or equal to</u> the 10-year, 24-hour 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 <u>greater than</u> the 10-year, 24-hour precipitation event (or snowmelt of equivalent volume) of 2.4 inches.			
(3) Applicable to discharges occurring March 2 through October 31.			
(4) Applicable to discharges occurring November 1 through March 1.			
(5) SAR is calculated using effluent concentrations of dissolved sodium, calcium and magnesium with a ML of 1.0 mg/L; calculated as $SAR = [Na +] / \sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}])}$			

## 2.3 Narrative Effluent Limitations

The quality of all effluent discharged at Outfalls 001-018 shall, at a minimum, meet the narrative effluent limitations provided below:

1. 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.
2. 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.
3. 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.
4. There shall be no discharge from any outfall listed in Table 1 that creates conditions that produce undesirable aquatic life; or
5. There shall be no discharge from any outfall listed in Table 1 that creates concentrations or combinations of materials with are toxic or harmful to human, animal, plant, or aquatic life.
6. Each outfall listed in Table 1 will be associated with a sediment pond designed and used to capture and contain the stormwater runoff from a 10-year, 24-hour storm event (2.4 inches). The permittee shall employ best management practices that meet, at a minimum, the water quality performance standards in ARM 17.24.633 and 17.24.638; the requirements for sediment control measures in ARM 17.24.638; the requirements for discharge structures in ARM

17.24.640; the requirements to mitigate and prevent discharges that may affect human health or the environment in ARM 17.30.1342(4); and requirements to properly operate and maintain all facilities and systems of treatment and control in accordance with ARM 17.30.1342(5).

7. The permittee shall avoid discharge from any outfall listed in Table 1 unless necessary due to planned maintenance events that are required for compliance with SMP C1984003B or unless related to precipitation events (of snowmelt of equivalent volume) in excess of a 10-year, 24-hour event. The permittee has the burden of proof to demonstrate and document that any discharge was necessary due to planned maintenance events required for compliance with SMP C1984003B or discharges related to precipitation events (or snowmelt of equivalent volume) in excess of a 10-year, 24-hour event.

## **2.4 Western Alkaline Standards**

Beginning on the effective date and lasting through the term of this permit, the permittee may discharge runoff from outfalls that receive drainage exclusively from reclaimed areas that meet the requirements in 40 CFR 434, Subpart H, when the entire contributing watershed has been released from Phase 2 bonding under the Rosebud Mine Area B surface mine permit (C1984003B) with the exception of water management facilities, as described in MCA 82-4-235(3). Water management facilities and other support facilities addressed by 82-4-235(3) must meet phase I bonding requirements. A permitted outfall's effluent limitations shift from standard and alternate limitations as detailed in Sections 2.1 through 2.2 of this permit to effluent limitations, derived from 40 CFR 434, subpart H, as provided 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. After MPDES permit modification, 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), describes 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, or will be, used to acquire the surface mining permit, SMP C1984003B, 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 C1984003B.

## **2.5 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 for the duration of activity at the permitted location.

### 2.5.1 Effluent Monitoring Requirements

At a minimum, upon the effective date of this permit, the following constituents shall be monitored at the frequency and the type of measurement indicated. If no discharge occurs during the entire monitoring period, it shall be stated on the Discharge Monitoring Report that no discharge occurred.

The permittee shall collect a grab sample within the first 30 minutes of any discharge from any permitted outfall. As an alternate to a single grab sample, the permittee may take a flow-weighted composite, see Section 2.5.4. Flow weighted composite samples are not allowed for pH or oil and grease.

Monitoring requirements for discharges not caused by precipitation-driven events are summarized in Table 4.

**Table 4. Summary of Monitoring Requirements – Outfalls 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018**

Parameter <sup>(1)</sup>	Units	Sample Type	Minimum Monitoring Frequency	Reporting Requirement	Reporting Frequency
Effluent Flow	mgd	(2)	Continuous	Daily Max. & Mo. Avg.	Monthly
pH	s.u.	Instantaneous or Grab	1/Day	Daily Max. & Daily Min.	Monthly
Total Suspended Solids	mg/L	Grab	1/Day	Daily Max. & Mo. Avg.	Monthly
Iron, Total Recoverable	µg/L	Grab	1/Day	Daily Max. & Mo. Avg.	Monthly
Electrical conductivity	µS/cm	Grab	1/Day	Daily Max. & Mo. Avg.	Monthly
Sodium adsorption ratio	Ratio	Calculated <sup>(3)</sup>	1/Day	Daily Max. & Mo. Avg.	Monthly
Oil and grease	mg/L	Grab	1/Week	Daily Max. & Mo. Avg.	Monthly
Aluminum, Dissolved	µg/L	Grab	1/Month	Daily Max. & Mo. Avg.	Monthly
Nitrate + nitrite, as N	mg/L	Grab	1/Month	Daily Max. & Mo. Avg.	Monthly
Selenium, Total Recoverable	µg/L	Grab	1/Month	Daily Max. & Mo. Avg.	Monthly
Arsenic, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Cadmium, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Chromium, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Copper, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly

Parameter <sup>(1)</sup>	Units	Sample Type	Minimum Monitoring Frequency	Reporting Requirement	Reporting Frequency
Lead, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Mercury, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Nickel, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Silver, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Zinc, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Footnotes:					
(1) All analyses must meet the applicable RRV in the latest version of Circular DEQ-7 Montana Numeric Water Quality Standards.					
(2) Requires a 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 $SAR = [Na^+] / \sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}]))}$					

Alternate monitoring requirements for discharges caused by precipitation-driven events are summarized in Table 5 and Table 6. The Permittee shall have the burden of proof that any discharge was a result of a precipitation event and that these alternate monitoring requirements are applicable.

**Table 5. Summary of Monitoring Requirements for Precipitation-Driven Small Events<sup>(1)</sup> – Outfalls 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018**

Parameter <sup>(2)</sup>	Units	Sample Type	Minimum Monitoring Frequency	Reporting Requirement	Reporting Frequency
Effluent Flow	mgd	(3)	Continuous	Daily Max. & Mo. Avg.	Monthly
pH	s.u.	Instantaneous or Grab	1/Day	Daily Max. & Daily Min.	Monthly
Settleable Solids	ml/L	Grab	1/Day	Daily Max. & Mo. Avg.	Monthly
Total Suspended Solids	mg/L	Grab	1/Day	Daily Max. & Mo. Avg.	Monthly
Iron, Total Recoverable	µg/L	Grab	1/Day	Daily Max. & Mo. Avg.	Monthly
Electrical conductivity	µS/cm	Grab	1/Day	Daily Max. & Mo. Avg.	Monthly
Sodium adsorption ratio	Ratio	Calculated <sup>(4)</sup>	1/Day	Daily Max. & Mo. Avg.	Monthly
Oil and grease	mg/L	Grab	1/Week	Daily Max. & Mo. Avg.	Monthly
Aluminum, Dissolved	µg/L	Grab	1/Week	Daily Max. & Mo. Avg.	Monthly
Nitrate + nitrite, as N	mg/L	Grab	1/Week	Daily Max. & Mo. Avg.	Monthly



Parameter <sup>(2)</sup>	Units	Sample Type	Minimum Monitoring Frequency	Reporting Requirement	Reporting Frequency
Selenium, Total Recoverable	µg/L	Grab	1/Week	Daily Max. & Mo. Avg.	Monthly
Arsenic, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Cadmium, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Chromium, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Copper, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Lead, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Mercury, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Nickel, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Silver, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Zinc, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Footnotes:					
(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period <u>less than or equal to</u> the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.					
(2) All analyses must meet the applicable RRV in the latest version of Circular DEQ-7 Montana Numeric Water Quality Standards.					
(3) Requires a 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 $SAR = [Na^+] / \sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}]))}$					

**Table 6. Summary of Monitoring Requirements for Precipitation-Driven Large Events<sup>(1)</sup> – Outfalls 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, 018**

Parameter <sup>(2)</sup>	Units	Sample Type	Minimum Monitoring Frequency	Reporting Requirement	Reporting Frequency
Effluent Flow	mgd	<sup>(3)</sup>	Continuous	Daily Max. & Mo. Avg.	Monthly
pH	s.u.	Instantaneous or Grab	1/Day	Daily Max. & Daily Min.	Monthly
Total Suspended Solids	mg/L	Grab	1/Week	Daily Max. & Mo. Avg.	Monthly
Iron, Total Recoverable	µg/L	Grab	1/Week	Daily Max. & Mo. Avg.	Monthly
Electrical conductivity	µS/cm	Grab	1/Week	Daily Max. & Mo. Avg.	Monthly
Sodium adsorption ratio	Ratio	Calculated <sup>(4)</sup>	1/Week	Daily Max. & Mo. Avg.	Monthly

Parameter <sup>(2)</sup>	Units	Sample Type	Minimum Monitoring Frequency	Reporting Requirement	Reporting Frequency
Oil and grease	mg/L	Grab	1/Week	Daily Max. & Mo. Avg.	Monthly
Aluminum, Dissolved	µg/L	Grab	1/Week	Daily Max. & Mo. Avg.	Monthly
Nitrate + nitrite, as N	mg/L	Grab	1/Week	Daily Max. & Mo. Avg.	Monthly
Selenium, Total Recoverable	µg/L	Grab	1/Week	Daily Max. & Mo. Avg.	Monthly
Arsenic, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Cadmium, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Chromium, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Copper, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Lead, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Mercury, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Nickel, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Silver, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Zinc, Total Recoverable	µg/L	Grab	1/Year	Daily Max. & Mo. Avg.	Monthly
Footnotes:					
(1) These monitoring requirements apply to any discharges or increases in volume of discharges caused by precipitation within any 24-hour period <u>greater than</u> the 10-year, 24-hour precipitation event (or snowmelt of equal volume) of 2.4 inches.					
(2) All analyses must meet the applicable RRV in the latest version of Circular DEQ-7 Montana Numeric Water Quality Standards.					
(3) Requires a 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 $SAR = [Na^+] / \sqrt{(0.5 * ([Ca^{2+}] + [Mg^{2+}]))}$					

### 2.5.2 Monitoring Locations

The permittee shall establish monitoring locations at each outfall to demonstrate compliance with the effluent limitations and other requirements in Section 2 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. Table 1 outlines all outfall locations and monitoring locations.

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

### **2.5.3 Sample Methods**

Samples shall be collected, preserved, and analyzed in accordance with approved procedures listed in 40 CFR 136. Data supplied by the permittee or an appointed representative must meet the Required Reporting Value (RRV) for any parameter listed in the most recent Circular DEQ-7. The RRV is the Department's determination of a level of analysis achievable by the majority of commercial, university, or government laboratories using EPA-approved methods, or methods approved by the Department. For pollutants without an RRV, the detection limit of the analysis lab 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.

### **2.5.4 Composite Samples**

Composite samples shall, at a minimum, be composed of 4 or more discrete aliquots of equal volume and time collected in a 24-hour period. The aliquots shall be combine in a single container for analysis (simple composite). The time between the collection of the first sample and the last sample shall not be less than six hours nor more than 24 hours.

### **2.5.5 Monitoring Periods and Reporting Schedules**

Monitoring periods and reporting schedules for all required monitoring shall be completed according to the schedule in Table 4, Table 5, Table 6, and Section 0. Reporting periods begin and end on the first and last days of the calendar month, quarter, semi-annual period, or year.

All quarterly reports required by Section 0 of this Permit are due no later than the 28<sup>th</sup> day of the month following the end of the quarter.

All annual reports required by Section 0 of this Permit are due January 28<sup>th</sup> of each year.

### **2.5.6 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 28<sup>th</sup> 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 Section 4.11 of this permit and submitted to DEQ at the following address:

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

### **2.5.7 Reporting of Non-quantified Analytical Results**

Compliance with numeric effluent limitations in this permit shall be determined as specified below. At a minimum, analytical methods used by the permittee for compliance purposes, must achieve the required reporting value (RRV) specified in this permit. For analytical results which are not quantified, compliance is determined as follows:

- (a) *Single values (i.e., instantaneous or a maximum daily limitations for which compliance is determined using a single sample)*: For concentration-based limitations, a result of “less than” the RRV is considered in compliance. The permittee must report the analytical reporting value (RRV) achieved and reported by the laboratory with a less than (“<”) symbol preceding the value. If the permittee has not used a method that meets the specified RRV, the result is considered invalid.
- (b) *Average values (i.e., average limitations that are based on multiple samples within a given time period)*: For a result of “less than” the RRV, the permittee should calculate the average using the RRV to determine an average concentration or mass discharge and report the average on the Discharge Monitoring Report form with a less than (“<”) symbol. If required, the permittee must also report individual values in addition to the average following the procedures listed above for single values.

### 2.5.8 Other Monitoring Requirements

#### **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 7. Precipitation gauges will be maintained in the Lee Coulee drainage basin.

**Table 7. Precipitation Gauge Performance Standards**

<b>Manual Daily Precipitation – Gauge Standard</b>					
<b>Parameter</b>	<b>Requires</b>	<b>Seasonal</b>	<b>Range</b>	<b>Resolution</b>	<b>Measurement Activity</b>
Precipitation, Rain	8-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
	4-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)	8-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
	4-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
<b>Snowfall / Snow Depth – Equipment Standard</b>					
Snowfall/Snow Depth: 0.1 to 20 inches	Snow stick (marked) and Snow board	Not applicable	0 to 20 inches	0.1 inch	±0.1 inch

Snowfall/Snow Depth: 20 to 40 inches	Snow stick (marked) and Snow board		0 to 40 inches	0.1 inch	±0.1 inch
Snowfall/Snow Depth: 40 to 60 inches	Snow stake (marked)		0 to 60 inches	1 inch	±1 inch

### **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 included 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.

### **Other**

In addition to the monitoring above, the Permittee must complete and submit Parts V and VI of U.S EPA Form 2C within two years of beginning discharge.

## **2.6 Notification Levels**

Notification shall be provided to the DEQ, Water Protection Bureau, as soon as the permittee knows of, or has reason to believe any of the following conditions are applicable:

- 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).

### 3 SPECIAL CONDITIONS

The permittee shall comply with the special conditions described below.

#### 3.1 Additional Monitoring and Special Studies

##### 3.1.1 *Investigation of Naturally Occurring Conditions for Lee Coulee “Wet Reach” and Wetlands G047 and G054*

The naturally occurring hydrologic conditions for Lee Coulee “Wet Reach” and Richard Coulee wetlands G047 and G054 must be analyzed investigated prior to construction of the associated outfalls. Outfalls 001 and 002 are the associated outfalls for Lee Coulee “Wet Reach.” Outfalls 011-012 are the associated outfalls for Richard Coulee wetland G054. Outfalls 013-018 are the associated outfalls for Richard Coulee wetland G047.

The investigation analysis must provide the naturally occurring hydrologic conditions and consider seasonal variability. The assessment must describe:

- The aerial extent of the waterbody;
- Depth of the waterbody;
- Description of the water conditions (i.e., clear, murky, muddy, etc.);
- If the waterbody is dry, flowing, or standing;
- Description of the hydrologic condition of respective upstream receiving water; and
- Any relevant observations of vegetation and wildlife.

The analyses investigation of naturally occurring hydrologic conditions for these waterbodies must be submitted to the DEQ, Water Protection Bureau prior to the construction of the associated outfalls.

Studies conducted as part of the permit application package for the AM5 amendment to SMP C1984003B may be submitted in fulfillment of this requirement if the study includes the analysis investigation requirements listed above.

##### 3.1.2 *Inspections of the Lee Coulee “Wet Reach” and Richard Coulee Wetlands G047 and G054*

The permittee is required to visually inspect the Lee Coulee “Wet Reach” and Richard Coulee wetlands G047 and G054 once per quarter and within 24 hours of any discharge event that may reach the waterbody. The inspection must describe the condition of the waterbody, including:

- Any changes to the aerial extent of the waterbody from the original assessment or previous inspection, whichever is most recent;
- Depth of the waterbody;
- Description of the waterbody conditions with respect to the narrative limitations provided Section 2.3 of this permit;
- The hydrologic condition of the respective upstream receiving water during the time of inspection (i.e., flowing, standing water, dry, frozen, etc.);
- Any relevant observations of vegetation and wildlife;
- Weather conditions during the inspection; and
- Identification of all precipitation or discharge events for that quarter.

Written reports of the inspections must be submitted to the DEQ Water Protection Bureau quarterly with a report that includes a discussion of observations made. Inspections completed in response to

discharge events must be submitted to the Water Protection Bureau within 30 days of each discharge event. The permittee must submit an annual report to the Water Protection Bureau that discusses the observations of the waterbodies made throughout the year and any changes in hydrologic condition of the waterbody or in hydrologic condition of the receiving waters flowing into the waterbody.

The Permittee may copy the DEQ Water Protection Bureau on any reports prepared for the DEQ Coal Program in fulfillment of this requirement if the report includes the inspection requirements listed above.

### **3.1.3 Discharge Monitoring for Outfalls 001, 002, and 011 through 018**

The permittee is required to monitor discharges from Outfalls 001, 002, and 011 through 018 and maintain a log of discharge events. The log must describe:

- The condition(s) causing the event;
- The date and start and end time of the discharge event;
- Volume of water discharged;
- Weather conditions;
- The farthest distance discharge traveled from the outfall location;
- Conditions of the receiving water at the time of discharge (for example: dry, frozen, flowing, or standing water);
- Description of the receiving water at the time of discharge with respect to the narrative limitations provided Section 2.3 of this permit; and
- If the discharge reached the respective downstream waterbody (see Section 3.1.2 for requirements).

This log must be submitted to the Water Quality Division within 30 days of each discharge event. The permittee must notify the Department within 24 hours of becoming aware of any discharges that enter the Lee Coulee "Wet Reach," wetland G047, or wetland G054.

### **3.1.4 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 2.4 of this permit, when the entire contributing drainage of the outfall has been released from phase 2 bonding under the Montana Surface Mine Permit C1984003B. 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 under C1984003B. Notification of phase 2 bond release by the Department shall be provided to the MPDES file and to the applicant within 30 days of successful phase 2 bond release. The phase 2 bond release must apply to the entire contributing watershed of an outfall, except as described in MCA 82-4-235(3). Following a minor modification to MT0032042, pursuant to ARM 17.30.1362, effluent limitations for an applicable outfall convert to Western Alkaline Standards as described in Section 2.4 of this permit.

## **3.2 Reopener Provisions**

This permit shall be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations, compliance schedules, or other appropriate requirements in accordance with the provisions of ARM 17.30.1361. Specific causes for reopening and modifying this permit include those described below.

### ***3.2.1 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.

### ***3.2.2 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.

### ***3.2.3 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.

### ***3.2.4 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.

### ***3.2.5 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.



## **4 STANDARD CONDITIONS**

### **4.1 Duty to Comply**

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

The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the federal Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

The Montana Water Quality Act at MCA § 75-5-631 provides that in an action initiated by the DEQ 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 the violation constitutes a separate violation.

MCA § 75-5-632 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 § 75-5-611(9)(a) also provides for administrative penalties not to exceed \$10,000 for each day of violation and up to a maximum of \$100,000 for any related series of violations.

Except as provided in permit conditions in Section 4.13 of this permit (“Bypass of Treatment Facilities”) and Section 4.14 of this permit (“Upset Conditions”), nothing in this permit shall be construed to relieve the permittee of administrative, civil or criminal penalties for noncompliance.

### **4.2 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. In accordance with ARM 17.30.1322(4), the application must be submitted at least 180 days before the expiration date of this permit.

### **4.3 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)]

#### **4.4 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)]

#### **4.5 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)]

#### **4.6 Permit Actions**

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

#### **4.7 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)]

#### **4.8 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)]

#### **4.9 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.

#### **4.10 Monitoring and Records**

The permittee shall comply with the following conditions:

##### ***4.10.1 Representative Sampling***

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

##### ***4.10.2 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)]

##### ***4.10.3 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;

##### ***4.10.4 Test Procedures***

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.

##### ***4.10.5 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]

#### **4.11 Signatory Requirements**

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

- a. 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)].
- b. *Authorized representatives.*** All reports required by the permit and other information requested by the Department shall be signed by a person described above in Subsection 4.11.a of this permit or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:
- i. The authorization is made in writing by a person described above in Subsection 4.11.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)].
- c. *Changes to authorization.*** If an authorization under Subsection 4.11.c of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Subsection 4.11.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)].
- d. *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)].

## 4.12 Reporting Requirements

The Permittee shall comply with all reporting requirements identified in this Section.

### 4.12.1 Planned Changes

The permittee shall give notice to the DEQ as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- (a) The alteration or addition to the permitted facility may meet one of the criteria for determining where a facility is a new source under ARM 17.30.1340(2).
- (b) The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to any activity that may result in the discharge of any toxic pollutant(s) that are not limited in the Permit when the discharge exceeds the notification levels ARM 17.30.1343(1)(a)(i) and (ii).

#### ***4.12.2 Anticipated Noncompliance***

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

#### ***4.12.3 Transfers***

This permit is not transferable to any person except after notice to the DEQ. The DEQ may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Montana Water Quality Act. [ARM 17.30.1360]

In accordance with 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. A modification may also be a minor modification under ARM 17.30.1362. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned above; and
- d. Required annual and application fees have been paid.

#### ***4.12.4 Monitoring Reports***

Monitoring results shall be reported at the intervals specified in this permit.

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form via netDMR.

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 DMR.

#### ***4.12.5 Compliance Schedules***

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)]

#### **4.12.6 Twenty-four Hour Notification [ARM 17.30.1342(12)(f)]**

The permittee shall report any serious incident of noncompliance as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances.

- a. *Oral notification.* The report shall be made orally to the Water Protection Bureau at (406) 444-3080 or the Office of Disaster and Emergency Services at (406) 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 4.13 of this permit, "Bypass of Treatment Facilities");
  - iii. Any upset which exceeds any effluent limitation in the permit (See Section 4.14 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 2.5.6 of this permit ("Discharge Monitoring Reports").

#### **4.12.7 Other Noncompliance Reporting**

Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports submitted. The reports shall contain the information listed above for written submissions under "Reporting Requirements – Twenty-four Hour Notification." [ARM 17.30.1342(12)(g)]

#### **4.12.8 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)].

#### **4.13 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" below.
- b. *Prohibition of bypass.* Bypass is prohibited and the Department may take enforcement action against a permittee for a bypass, unless:

- i. The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - iii. The permittee submitted notices as required under “Notice” below.
- 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 “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.”

#### 4.14 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 outlined below under “Conditions Necessary for Demonstration of an Upset.” 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 “Reporting Requirements – Twenty-four Hour Notification” above; and
  - iv. The permittee complied with any remedial measures required under “Duty to Mitigate” above.
- c. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

#### 4.15 Fees

The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201.

#### **4.16 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]



## 5 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.

“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.

"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.

"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.

"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.