PERMIT NO.: MT0021229
Minor Industrial

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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

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

WESTMORELAND RESOURCES, INC (the Permittee)

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

located at **100 SARPY CREEK ROAD, HARDIN, MT, 59034**

to receiving waters named **UNNAMED EPHEMERAL TRIBUTARY TO SARPY CREEK, UNNAMED EPHEMERAL TRIBUTARY TO MIDDLE FORK SARPY CREEK, UNNAMED EPHEMERAL TRIBUTARY TO EAST FORK SARPY 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: October 1, 2015

This permit and the authorization to discharge shall expire at midnight, September 30, 2020.

FOR THE MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Jon Kenning, Chief
Water Protection Bureau
Permitting & Compliance Division

Issuance Date: August 31, 2015

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I. EFFLUENT LIMITATIONS AND MONITORING & REPORTING REQUIREMENTS

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

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

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

Table 1. Description of Discharge Points and Mixing Zones

Outfall	Latitude	Longitude	Receiving Water/Mixing Zone[1]
001	45.8109	-107.0884	Unnamed ephemeral tributary to Sarpy Creek
002	45.7872	-107.0760	Unnamed ephemeral tributary to Middle Fork Sarpy Creek
006	45.8232	-107.0426	Unnamed ephemeral tributary to East Fork Sarpy Creek
007	45.8257	-107.0366	Unnamed ephemeral tributary to East Fork Sarpy Creek
008	45.8263	-107.0261	Unnamed ephemeral tributary to East Fork Sarpy Creek
009	45.8209	-107.0128	Unnamed ephemeral tributary to East Fork Sarpy Creek
011	45.8018	-107.0196	Unnamed ephemeral tributary to East Fork Sarpy Creek
012	45.8060	-107.0155	Unnamed ephemeral tributary to East Fork Sarpy Creek
013	45.7729	-107.0536	Unnamed ephemeral tributary to Middle Fork Sarpy Creek
015	45.7751	-107.0570	Unnamed ephemeral tributary to Middle Fork Sarpy Creek
016	45.7685	-107.0480	Unnamed ephemeral tributary to Middle Fork Sarpy Creek
017	45.7712	-107.0538	Unnamed ephemeral tributary to Middle Fork Sarpy Creek
018	45.7723	-107.0585	Unnamed ephemeral tributary to Middle Fork Sarpy Creek
020	45.7734	-107.0587	Unnamed ephemeral tributary to Middle Fork Sarpy Creek
021	45.7731	-107.0632	Unnamed ephemeral tributary to Middle Fork Sarpy Creek
023	45.7728	-107.0671	Unnamed ephemeral tributary to Middle Fork Sarpy Creek
024	45.7723	-107.0700	Unnamed ephemeral tributary to Middle Fork Sarpy Creek
026	45.7718	-107.0785	Unnamed ephemeral tributary to Middle Fork Sarpy Creek
027	45.8072	-107.0155	Unnamed ephemeral tributary to East Fork Sarpy Creek

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

B. Final Effluent Limitations and Monitoring Requirements

Effective immediately and lasting through the term of the permit, the quality of effluent discharged at each outfall shall, as a minimum, meet the limitations set forth in Tables 2 through 4, below. All monitoring shall be conducted at the overflow structure where effluent discharges as overflow from the sediment control structure, or at the end of the discharge pipe when pumped or drained, and prior to contact with the receiving water. Monitoring must be conducted at a minimum monitoring frequency and sampling type specified in Tables 2 through 4. Samples must achieve the listed required reporting value (RRV) or minimum level (ML).

Table 2. Final Numeric Effluent Limitations and Monitoring Requirements – Outfalls 001 and 002

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
Flow	gpm	Report only		1/Day	Continuous	--
Total Volume Discharged	Acre feet	Report only		1/Discharge	Continuous	--
Total Suspended Solids (TSS)	mg/L	35	70	1/Month	Grab	10
Total Dissolved Solids (TDS)	mg/L	Report only		1/Month	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Month	Grab	0.1
Oil and Grease	mg/L	--	10	1/Month	Grab	1
Aluminum, dissolved	µg/L	Report only		1/Month	Grab	9
Arsenic, total	µg/L	Report only		1/Month	Grab	1
Cadmium, total	µg/L	Report only		1/Month	Grab	0.03
Chloride	mg/L	Report only		1/Month	Grab	--
Chromium, total	µg/L	Report only		1/Month	Grab	1
Copper, total	µg/L	Report only		1/Month	Grab	1
Iron, total	mg/L	3.5	7.0	1/Month	Grab	0.05
Lead, total	µg/L	Report only		1/Month	Grab	0.05
Nickel, total	µg/L	Report only		1/Month	Grab	10
Nitrate + Nitrite (as N)	mg/L	Report only		1/Month	Grab	0.01
Nitrogen, total	mg/L	Report only		1/Month	Calculated	10
Phosphorus, total	mg/L	Report only		1/Month	Grab	1
Selenium, total	µg/L	Report only		1/Month	Grab	1
Zinc, total	µg/L	Report only		1/Month	Grab	10
Whole Effluent Toxicity, Acute[2]	% Effluent	Report only		1/Year	Grab	--

Footnotes:

(1) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the October 2012 edition.

(2) Applicable only to outfalls associated with coal preparation plants and coal preparation plant associated areas (Outfall 001). Upon the detection of acute toxicity in the effluent at one of the routine monitor locations where accelerated monitoring is triggered, monitoring for acute toxicity at all outfalls at their respective monitoring locations shall occur for 12 months.

Table 3. Final Numeric Effluent Limitations and Monitoring Requirements – Outfalls 023, 024, and 026

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
Flow	gpm	Report only		1/Day	Continuous	--
Total Volume Discharged	Acre feet	Report only		1/Discharge	Continuous	--
Total Suspended Solids (TSS)	mg/L	35	70	1/Month	Grab	10
Total Dissolved Solids (TDS)	mg/L	Report only		1/Month	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Month	Grab	0.1
Oil and Grease	mg/L	--	10	1/Month	Grab	1
Aluminum, dissolved	µg/L	Report only		1/Month	Grab	9
Arsenic, total	µg/L	Report only		1/Month	Grab	1
Cadmium, total	µg/L	Report only		1/Month	Grab	0.03
Chloride	mg/L	Report only		1/Month	Grab	--
Chromium, total	µg/L	Report only		1/Month	Grab	1
Copper, total	µg/L	Report only		1/Month	Grab	1
Iron, total	mg/L	3.0	6.0	1/Month	Grab	0.05
Lead, total	µg/L	Report only		1/Month	Grab	0.05
Nickel, total	µg/L	Report only		1/Month	Grab	10
Nitrate + Nitrite (as N)	mg/L	Report only		1/Month	Grab	0.01
Nitrogen, total	mg/L	Report only		1/Month	Calculated	10
Phosphorus, total	mg/L	Report only		1/Month	Grab	1
Selenium, total	µg/L	Report only		1/Month	Grab	1
Zinc, total	µg/L	Report only		1/Month	Grab	10

Footnotes:

(1) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the October 2012 edition.

Table 4. Final Numeric Effluent Limitations and Monitoring Requirements – Outfalls 013, 015, 016, 017, and 018

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
Flow	gpm	Report only		1/Day	Continuous	--
Total Volume Discharged	Acre feet	Report only		1/Discharge	Continuous	--
Total Suspended Solids (TSS)	mg/L	35	70	1/Month	Grab	10
Total Dissolved Solids (TDS)	mg/L	Report only		1/Month	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Month	Grab	0.1
Oil and Grease	mg/L	--	10	1/Month	Grab	1
Aluminum, dissolved	µg/L	Report only		1/Month	Grab	9
Arsenic, total	µg/L	Report only		1/Month	Grab	1

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
Cadmium, total	µg/L	Report only		1/Month	Grab	0.03
Chloride	mg/L	Report only		1/Month	Grab	--
Chromium, total	µg/L	Report only		1/Month	Grab	1
Copper, total	µg/L	Report only		1/Month	Grab	1
Iron, total	mg/L	1.0	6.0	1/Month	Grab	0.05
Lead, total	µg/L	Report only		1/Month	Grab	0.05
Nickel, total	µg/L	Report only		1/Month	Grab	10
Nitrate + Nitrite (as N)	mg/L	Report only		1/Month	Grab	0.01
Nitrogen, total	mg/L	Report only		1/Month	Calculated	10
Phosphorus, total	mg/L	Report only		1/Month	Grab	1
Selenium, total	µg/L	Report only		1/Month	Grab	1
Zinc, total	µg/L	Report only		1/Month	Grab	10

Footnotes:
(1) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the October 2012 edition.

a. Narrative Effluent Limitations: All Outfalls

Effective immediately and lasting through the term of this permit, discharges from all outfalls shall be free from substances that will:

i. settle to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines;
ii. create floating debris, scum, a visible oil film, or globule of grease or other floating materials;
iii. produce odors, colors, or other conditions that create a nuisance or render undesirable tastes to fish flesh or make fish inedible;
iv. create conditions that produce undesirable aquatic life; or
v. create concentrations or combinations of materials which are toxic or harmful to human, animal, plant, or aquatic life.

b. Monitoring Locations:

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

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

1. Alternate Numeric Effluent Limitations and Monitoring Requirements –

Alternate effluent limitations and monitoring requirements will be applied to discharges driven by precipitation events and/or snowmelt. Effluent limitations and monitoring requirements presented in Tables 5 through 8 will be applied alternately to

the otherwise applicable effluent limitations and monitoring requirements presented in Tables 2 through 4.

Table 5. Final Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events Less than or Equal to the 10-year, 24-hour event – Outfalls 001, 002, 023, 024, and 026

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
Flow	gpm	Report only		1/Discharge	Calculated	--
Total Volume Discharged	Acre feet	Report only		1/Discharge	Calculated	--
Settleable Solids (SS)	ml/L	--	0.5	1/Discharge	Grab	10
Total Dissolved Solids (TDS)	mg/L	Report only		1/Discharge	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Discharge	Grab	0.1
Oil and Grease	mg/L	--	10	1/Discharge	Grab	1
Aluminum, dissolved	µg/L	Report only		1/Discharge	Grab	9
Arsenic, total	µg/L	Report only		1/Discharge	Grab	1
Cadmium, total	µg/L	Report only		1/Discharge	Grab	0.03
Chloride	mg/L	Report only		1/Discharge	Grab	--
Chromium, total	µg/L	Report only		1/Discharge	Grab	1
Copper, total	µg/L	Report only		1/Discharge	Grab	1
Iron, total	mg/L	Report only		1/Discharge	Grab	0.05
Lead, total	µg/L	Report only		1/Discharge	Grab	0.05
Nickel, total	µg/L	Report only		1/Discharge	Grab	10
Nitrate + Nitrite (as N)	mg/L	Report only		1/Discharge	Grab	0.01
Nitrogen, total	mg/L	Report only		1/Discharge	Calculated	10
Phosphorus, total	mg/L	Report only		1/Discharge	Grab	1
Selenium, total	µg/L	Report only		1/Discharge	Grab	1
Zinc, total	µg/L	Report only		1/Discharge	Grab	10
Whole Effluent Toxicity, Acute[2]	% Effluent	Report only		1/Year	Grab	--

Footnotes:

(1) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the October 2012 edition.

(2) Applicable only to outfalls associated with coal preparation plants and coal preparation plant associated areas (Outfall 001). Upon the detection of acute toxicity in the effluent at one of the routine monitor locations where accelerated monitoring is triggered, monitoring for acute toxicity at all outfalls at their respective monitoring locations shall occur for 12 months.

Table 6. Final Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events Less than or Equal to the 10-year, 24-hour event – Outfalls 013, 015, 016, 017, and 018

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
Flow	gpm	Report only		1/Discharge	Calculated	--
Total Volume Discharged	Acre feet	Report only		1/Discharge	Calculated	--
Settleable Solids (SS)	ml/L	--	0.5	1/Discharge	Grab	10
Total Dissolved Solids (TDS)	mg/L	Report only		1/Discharge	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Discharge	Grab	0.1
Oil and Grease	mg/L	--	10	1/Discharge	Grab	1
Aluminum, dissolved	µg/L	Report only		1/Discharge	Grab	9
Arsenic, total	µg/L	Report only		1/Discharge	Grab	1
Cadmium, total	µg/L	Report only		1/Discharge	Grab	0.03
Chloride	mg/L	Report only		1/Discharge	Grab	--
Chromium, total	µg/L	Report only		1/Discharge	Grab	1
Copper, total	µg/L	Report only		1/Discharge	Grab	1
Iron, total	mg/L	--	6.0	1/Discharge	Grab	0.05
Lead, total	µg/L	Report only		1/Discharge	Grab	0.05
Nickel, total	µg/L	Report only		1/Discharge	Grab	10
Nitrate + Nitrite (as N)	mg/L	Report only		1/Discharge	Grab	0.01
Nitrogen, total	mg/L	Report only		1/Discharge	Calculated	10
Phosphorus, total	mg/L	Report only		1/Discharge	Grab	1
Selenium, total	µg/L	Report only		1/Discharge	Grab	1
Zinc, total	µg/L	Report only		1/Discharge	Grab	10

Footnotes:

(1) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the October 2012 edition.

Table 7. Final Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events Greater than the 10-year, 24-hour event – Outfalls 001, 002, 023, 024, and 026

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
Flow	gpm	Report only		1/Discharge	Calculated	--
Total Volume Discharged	Acre feet	Report only		1/Discharge	Calculated	--
Total Dissolved Solids (TDS)	mg/L	Report only		1/Discharge	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Discharge	Grab	0.1
Oil and Grease	mg/L	--	10	1/Discharge	Grab	1
Aluminum, dissolved	µg/L	Report only		1/Discharge	Grab	9
Arsenic, total	µg/L	Report only		1/Discharge	Grab	1

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
Cadmium, total	µg/L	Report only		1/Discharge	Grab	0.03
Chloride	mg/L	Report only		1/Discharge	Grab	--
Chromium, total	µg/L	Report only		1/Discharge	Grab	1
Copper, total	µg/L	Report only		1/Discharge	Grab	1
Iron, total	mg/L	Report only		1/Discharge	Grab	0.05
Lead, total	µg/L	Report only		1/Discharge	Grab	0.05
Nickel, total	µg/L	Report only		1/Discharge	Grab	10
Nitrate + Nitrite (as N)	mg/L	Report only		1/Discharge	Grab	0.01
Nitrogen, total	mg/L	Report only		1/Discharge	Calculated	10
Phosphorus, total	mg/L	Report only		1/Discharge	Grab	1
Selenium, total	µg/L	Report only		1/Discharge	Grab	1
Zinc, total	µg/L	Report only		1/Discharge	Grab	10
Whole Effluent Toxicity, Acute[2]	% Effluent	Report only		1/Year	Grab	--

Footnotes:

(3) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the October 2012 edition.

(4) Applicable only to outfalls associated with coal preparation plants and coal preparation plant associated areas (Outfall 001). Upon the detection of acute toxicity in the effluent at one of the routine monitor locations where accelerated monitoring is triggered, monitoring for acute toxicity at all outfalls at their respective monitoring locations shall occur for 12 months.

Table 8. Final Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events Greater than the 10-year, 24-hour event – Outfalls 013, 015, 016, 017, and 018

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML[1]
Flow	gpm	Report only		1/Discharge	Calculated	--
Total Volume Discharged	Acre feet	Report only		1/Discharge	Calculated	--
Total Dissolved Solids (TDS)	mg/L	Report only		1/Discharge	Grab	10
pH	s.u.	Between 6.0 and 9.0		1/Discharge	Grab	0.1
Oil and Grease	mg/L	--	10	1/Discharge	Grab	1
Aluminum, dissolved	µg/L	Report only		1/Discharge	Grab	9
Arsenic, total	µg/L	Report only		1/Discharge	Grab	1
Cadmium, total	µg/L	Report only		1/Discharge	Grab	0.03
Chloride	mg/L	Report only		1/Discharge	Grab	--
Chromium, total	µg/L	Report only		1/Discharge	Grab	1
Copper, total	µg/L	Report only		1/Discharge	Grab	1
Iron, total	mg/L	--	6.0	1/Discharge	Grab	0.05
Lead, total	µg/L	Report only		1/Discharge	Grab	0.05
Nickel, total	µg/L	Report only		1/Discharge	Grab	10

Nitrate + Nitrite (as N)	mg/L	Report only	1/Discharge	Grab	0.01
Nitrogen, total	mg/L	Report only	1/Discharge	Calculated	10
Phosphorus, total	mg/L	Report only	1/Discharge	Grab	1
Selenium, total	µg/L	Report only	1/Discharge	Grab	1
Zinc, total	µg/L	Report only	1/Discharge	Grab	10

Footnotes:
(1) Required reporting values (RRV) for parameters listed in *Circular DEQ-7 Montana Numeric Water Quality Standards* are current as of the October 2012 edition.

a. Flow Monitoring and Sampling Units

The Permit requires the Permittee to install and use flow monitoring and sampling equipment at each outfall. A crest gauge or equivalent equipment can measure flow at the crest, with the establishment of a ratings curve that shows the relationship between peak flow and gauge height. Remote sampling units can sample a representative sample of the discharged effluent when discharge occurs. The discharge point and monitoring location shall be permanently marked and identified at the overflow. Sampling equipment must be inspected and maintained to ensure flow measurement and automatic sample collection regardless of weather and/or site conditions.

b. Sample Methods

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

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

During the period beginning on the effective date of this permit and lasting through the date of expiration, the permittee is authorized to discharge runoff from those outfalls listed in Table 9 to their corresponding receiving waters. Effluent sampling and flow measurement are not required, and numeric effluent limitations do not apply to discharges from those outfalls listed in Table 9. Such discharges shall be limited and monitored by the permittee as specified below. The permittee has submitted a site-specific Sediment Control Plan (SCP) that identifies Best Management Practices (BMPs), including design specifications, construction specifications, maintenance schedules, criteria for inspection, and expected performance and longevity of the BMPs. The SCP has also demonstrated using watershed models that implementation of the SCP will result in average annual sediment yields that will not be greater than the sediment yield levels from pre-mined, undisturbed conditions. The watershed model is the same model that was used to acquire the permittee's SMCRA permit.

Table 9. Outfalls Subject to Western Alkaline Coal Mining Standards

Outfall	Receiving Water
006	Unnamed ephemeral tributary to East Fork Sarpy Creek
007	Unnamed ephemeral tributary to East Fork Sarpy Creek
008	Unnamed ephemeral tributary to East Fork Sarpy Creek
009	Unnamed ephemeral tributary to East Fork Sarpy Creek
011	Unnamed ephemeral tributary to East Fork Sarpy Creek
020	Unnamed ephemeral tributary to Middle Fork Sarpy Creek
012	Unnamed ephemeral tributary to East Fork Sarpy Creek
027	Unnamed ephemeral tributary to East Fork Sarpy Creek

Sediment Control Plan

The permittee shall during the term of this permit operate the facility in accordance with the SCP. Department approval of the SCP is based upon a demonstration that the Best Management Practices (BMP) given in the Plan will result in an average annual sediment yield that is less than the pre-mine undisturbed condition for the outfalls and watersheds specified in Table 9, above. The approved SCP applies to, and is limited to, reclamation areas, brushing and grubbing areas, topsoil stockpiling areas, and regraded areas, and is applicable until the facility receives final bond release.

a. **Best Management Practices (BMPs)**
Roadway Conveyances. Conveyance structures (ditches) are constructed to route the 10-year, 24-hour storm event to sediment traps and along roads during mining. Ditch transitions and intersections are constructed to minimize erosion and sedimentation. Where conveyance crosses a road, culverts are sized to convey a 10-year, 24-hour storm event.

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

Sediment Capture. Sediment traps are employed in low spots along the undisturbed topsoil edge to confine sediment to the disturbed area to the extent practicable. Sediment traps are not designed if the ultimate point of control is a designed sediment trap or sediment pond downstream.

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

when the contributing watershed is fully reclaimed and revegetated. Sediment traps may be reclaimed as small depressions for topographic, vegetative and wildlife habitat diversity per plans approved by IEMB. Sediment accumulations in sediment traps and ponds will be cleaned when sediment accumulation may interfere with detention of the 2-year or 10-year, 24-hour event, as appropriate.

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

- Each depression on the interior of the reclaimed area will be one acre-foot or less in capacity;
- Each depression at the margin of the reclaimed area will be two acre feet or less in capacity;
- No depression will be deeper than three feet;
- Depressions will be soiled and revegetated; and
- Maximum slopes will be 5:1 on the uphill (inflow) side and 3:1 on the lateral and downhill (outflow) sides.

Recontouring. After mining, overburden spoil piles are regraded to a topography meeting the SMCRA requirement of approximate original contour to facilitate erosion control, revegetation and the post-mining land use.

Soil Redistribution. Soil salvaged prior to mining disturbance is redistributed on recontoured spoils to re-establish infiltration and runoff characteristics, and to promote revegetation establishment, similar to the pre-mining conditions, consequently promoting erosion and sediment control similar to pre-mining conditions.

Minimizing Potential for Erosion During Reclamation. Slope lengths are minimized by constructing complex topography. With the exception of agricultural areas, regraded landscapes are left in a roughened condition to minimize compaction. Coarse-textured substrates, including soils with high coarse-fragment content are used, particularly on sites with increased erosion potential, or where establishment of woody species is desired.

Soil Preparation on the Contour. Spoil scarification, soil placement, soil preparation and seeding are done on the contour provided the safety of equipment operators is not compromised.

Establishment of Vegetation. Seedbed preparation techniques that create a roughened surface to retard surface runoff and increase infiltration are used. Reclaimed vegetative cover must be similar to pre-mining vegetative cover. Permanent vegetation cover appropriate for the site typically is established by the

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

Reclamation of Rills and Gullies. Rills and gullies developed post-reclamation are remediated on a site-specific basis if they adversely impact the establishment of vegetation, disrupt post-mine land use and/or cause or contribute to a violation of a water quality standard. Unless otherwise approved, any rill of gully greater than 30 inches in depth will be considered disruptive and will be remediated.

Establishment of Sediment Control Measures for Site-Specific Control. Sediment control measures such as contour scarification, straw dikes, rip-rap, check dams and erosion control products will be used when necessary to minimize erosion and sediment transport in areas requiring site-specific erosion control.

b. Inspection and Maintenance

The Permittee will perform routine inspections of erosion and sediment control structures as required by state and federal regulations. Federal regulations (40 CFR 434.82(a)) require "sediment control plans to identify best management practices (BMPs) and also must describe design specification, construction specifications, maintenance schedules, criteria for inspections, as well as expected performance and longevity of the best management practices."

Comprehensive inspections are required annually for all areas covered under the SCP. Visual inspections will be conducted annually or after significant storm events (≥1.4 inches in 24 hours) on areas where vegetation has been established for less than two years. Based on the outcomes of these inspections, maintenance will be scheduled. Maintenance activities will be documented (date, type and location of activity, supervisor or contractor), and records will be retained for a minimum of three years.

c. Reporting

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

i. Comprehensive Site Inspection

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

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

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

ii. Compliance Evaluation Report

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

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

iii. Record Retention

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

A tracking or follow-up procedure, including a schedule for implementation, must be used and identified in the annual Compliance Evaluation Report which ensures adequate response and corrective actions have been taken in response to the Comprehensive Site Inspection and/or noncompliance.

d. Transfer of Additional Outfalls

As outfalls defined in this permit are reclaimed, the approved SCP may be updated to incorporate the newly reclaimed outfalls. A revised SCP and revised watershed model must be submitted to and approved by DEQ before it becomes effective. Revisions to the SCP must meet all requirements contained at 40 CFR Part 434.82, and 100% of the drainage area to an outfall must meet the definition of "western alkaline reclamation, brushing and grubbing, topsoil stockpiling, and regraded areas" (as defined at 40 CFR 434.80) to be considered for coverage. DEQ's approval of an updated SCP and reclassification of an existing outfall to a

Western Alkaline area will be considered a minor modification to the permit in accordance with ARM 17.30.1362(1)(f).

3. **Other Monitoring Requirements**
   a. Precipitation Monitoring. Precipitation shall be monitored and recorded in each of the drainage basins where regulated outfalls are located and precipitation-dependent effluent limitations are applicable (Sarpy Creek and Middle Fork Sarpy Creek) using a precipitation gauge which meets the standards provided in National Weather Services Instructional Bulletin 10-1302 (October 4, 2005), *Instrument Requirements and Standards for the NWS Surface Observing Programs (Land)*, and provided in Table 10.

Table 10. Precipitation Gauge Performance Standards

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

C. General Monitoring and Reporting Requirements

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

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

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

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

2. **Whole Effluent Toxicity Testing**

   a. **Acute Whole Effluent Toxicity Testing**

   Whole effluent toxicity testing is required for any outfall where activities that meet the definition of "coal preparation plant", "coal preparation plant associated areas" and "coal plant water circuit", as defined in 40 CFR 434.11 are conducted or are located. As defined by the Permittee's application, this includes Outfall 001.

   i. **Sampling and Dilution Series Requirements**. Beginning in the calendar year in which this Permit becomes effective, the Permittee shall conduct annual acute static replacement toxicity tests on grab samples of the effluent. Testing will employ two species per test and will consist of five effluent concentrations (100, 50, 25, 12.5, 6.25 percent effluent) and a control. Dilution water and the control shall consist of grab samples of the receiving water. If a sample of the receiving water is unavailable, because of its ephemeral nature, standard synthetic water may be used.

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

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

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

4. Monitoring Periods and Reporting Schedule

Monitoring periods and reporting for all required monitoring shall be completed according to the schedule in Table 11.

Table 11. Monitoring Periods and Reporting Schedule

Required Monitoring Frequency	Monitoring Period Begins On…	Monitoring Period	Reporting Due Date
1/Day	OCTOBER 1, 2015	Midnight through 11:59 PM or any 24-hour period that reasonably represents a calendar day for purposes of monitoring.	Due date for next DMR submittal
1/Month	OCTOBER 1, 2015	1st day of calendar month through last day of calendar month	Due date for next DMR submittal
Annually	JANUARY 1, 2016	January 1 through December 31	28 days from the end of the monitoring period
1 / Discharge	OCTOBER 1, 2015	Duration of discharge event	Due date for next DMR submittal

5. Discharge Monitoring Reports

Monitoring results must be reported on a Discharge Monitoring Report (DMR) EPA form 3320-1. Monitoring results must be submitted in either electronic or paper format and be postmarked no later than the 28th day of the month following the end of the monitoring period. Whole effluent toxicity (biomonitoring) results must be reported with copies of the laboratory analysis report on forms from the most recent version of USEPA Region VIII's *Guidance for Whole Effluent Reporting.*

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

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

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

Whole Effluent Toxicity (WET) results from the laboratory shall be reported along with the next DMR form submitted. The format for the laboratory report shall be consistent with the latest revision of *Region VIII Guidance for Acute Whole Effluent Reporting and Chronic Whole Effluent Reporting*, and shall include all chemical and physical data as specified.

II. SPECIAL CONDITIONS

A. Additional Monitoring and Special Studies

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

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

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

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

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

B. Reopener Provisions

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

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

2. **Water Quality Standards are Exceeded**
If it is found that water quality standards or Trigger Values in the receiving stream are exceeded either for parameters included in the permit or others, the Department may modify the effluent limitations or the water quality management plan. Trigger Values are used to determine if a given increase in the concentration of toxic parameters is

significant or non-significant as per the non-degradation rules ARM 17.30.701 et seq. and are listed in Circular DEQ-7.

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

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

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

III. STANDARD CONDITIONS

A. Monitoring, Recording, and Reporting

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

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

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

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

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

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

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

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

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

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

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

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

B. Compliance Responsibilities

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

C. **General Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

d. Required annual and application fees have been paid.

12. **Fees** [*ARM 17.30.201(8)*]: The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the Department may:
    a. Impose an additional assessment consisting of 15% of the fee plus interest on the required fee computed at the rate established under 15-31-510(3), MCA, or
    b. Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The Department may lift suspension at any time up to one year after the suspension occurs if the holder has paid all outstanding fees, including all penalties, assessments and interest imposed under this subsection. Suspensions are limited to one year, after which the permit will be terminated.

D. Notification Levels

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

2. Notification shall be provided to the Department as soon as the permittee knows of, or has reason to believe [*ARM 17.30.1343(1)(a)*]:
    a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
        i. One hundred micrograms per liter (100 µg/l);
        ii. Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
        iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
        iv. The level established by the Department in accordance with 40 CFR 122.44(f).
    b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
        i. Five hundred micrograms per liter (500 µg/l);
        ii. One milligram per liter (1 mg/l) for antimony;
        iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
        iv. The level established by the Department in accordance with 40 CFR 122.44(f).

IV. DEFINITIONS AND ABBREVIATIONS

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

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

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

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

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

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

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

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

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

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

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

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

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

"CFR" means the Code of Federal Regulations.

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

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

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

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

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

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

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

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

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

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

"Effluent Limitations Guidelines" (ELGs) mean regulations published by the Administrator under Section 304(b) of the CWA that establishes national technology-based effluent requirements for a specific industrial category.

"EPA" or "USEPA" means the United States Environmental Protection Agency.

"GPM" means gallons per minute.

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

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

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

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

"mg/L" means milligrams per liter.

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

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

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

"mL/L" means milliliters per liter.

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

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

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

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

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

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

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

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

"TIE" means a toxicity identification evaluation.

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

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

"TRE" means a toxicity reduction evaluation.

"TSS" means the pollutant parameter total suspended solids.

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