MPDES Permit No: MT0000892
Major Industrial

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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

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

Decker Coal Company

is authorized to discharge from its **Decker West Mine**

located at STATE HIGHWAY 39 SOUTH, COLSTRIP MT, 59323

to receiving waters named **Tongue River Reservoir**

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: May 1, 2012.

This permit and the authorization to discharge shall expire at midnight, April 30, 2017.

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

Jenny Chambers

Jenny Chambers, Chief
Water Protection Bureau
Permitting & Compliance Division

Issuance Date: March 20, 2012

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I. EFFLUENT LIMITATIONS AND MONITORING & REPORTING REQUIREMENTS

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

The authorization to discharge provided under this permit is limited to those outfalls designated 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 the unauthorized discharge could subject such person to criminal penalties as provided under Montana Water Quality Act, Section 75-5-632.

Table 1 provides a description of the discharge points and mixing zones for each outfall. Treatment consists of the use of sediment ponds to remove suspended solids from storm water runoff.

Table 1. Description of Discharge Points and Mixing Zones

Outfall	Latitude	Longitude	Outfall Description/ Effluent Description	Receiving Water	Mixing Zone
001	45°2'45"N	106°48'50"W	Intermittent discharge from Pond #4; treated pit water commingled with storm water runoff	Tongue River Reservoir	200 ft
005	45°3'8"N	106°48'52"W	Intermittent discharge from Pond #1; treated runoff from facilities, coal processing and load out areas	Tongue River Reservoir	none
007	45°4'40"N	106°48'54"W	Continuous discharge from Pond #24; treated pit water commingled with storm water runoff	Tongue River Reservoir	200 ft
008	45°4'4"N	106°49'16"W	Intermittent discharge from Pond #25; treated runoff from stockpiled spoil	Pearson Creek	none
010	45°4'15.5" N	106°48'53.6" W	Intermittent discharge from Pond #26; treated runoff from stockpiled spoil and commingled storm water runoff	Pearson Creek	none

B. Effluent Limitations and Monitoring Requirements

Effective immediately and lasting through the term of the permit, the quality of effluent discharged at Outfalls 001, 005, 007, 008 and 010 shall at a minimum, meet the limitations set forth in Tables 2 and 3. All monitoring shall be conducted at the monitoring locations specified in section I.C.1 (Table 8) of this permit, and at a minimum monitoring frequency specified in Tables 2 and 3. Samples must be collected according to the sampling type in Tables 2 and 3 and must achieve the listed required reporting value (RRV) or minimum level (ML).

Narrative Effluent Limitations

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

ii. There shall be no discharge from any outfall of floating solids or visible foam other than trace amounts.
iii. There shall be no discharge from any outfall that produces visible oil sheen in the receiving stream.

Table 2. Numeric Effluent Limitations and Monitoring Requirements – Outfalls 001A, 005A and 007A.

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML
Flow	mgd	Report only	Report only	Continuous	Instant	--
Temperature	°F	Report only	Report only	1/Week	Instant	1
Aluminum, dissolved	mg/L	Report only	Report only	1/Month	Grab	0.03
Aluminum, total	mg/L	Report only	Report only	1/Month	Grab	0.03
Ammonia, as N	mg/L	Report only	Report only	1/Month	Grab	0.05
Barium, total	mg/L	Report only	Report only	1/Month	Grab	0.005
Copper, total	mg/L	0.032	0.041	1/Month	Grab	0.001
Iron, total	mg/L	3.5	7.0	1/Month	Grab	0.05
Kjeldahl nitrogen, as N	mg/L	Report only	Report only	1/Month	Grab	0.01
Lead, total	mg/L	0.273	0.295	1/Month	Grab	0.0005
Manganese, total	mg/L	Report only	Report only	1/Month	Grab	0.005
Nitrate + nitrite (as N)	mg/L	Report only	Report only	1/Month	Grab	0.01
Nitrogen, total	mg/L	Report only	Report only	1/Month	Grab	0.01
Nitrogen, total	lbs/day	151	279	1/Month	Calculated	0.01
Oil and grease	mg/L	--	10	1/Month	Grab	1
pH	s.u.	Between 6.0 and 9.0 at all times		1/Week	Grab	0.1
Phosphorus, total	mg/L	Report only	Report only	1/Month	Grab	0.01
Phosphorus, total	lbs/day	1.80	3.24	1/Month	Calculated	0.01
Selenium, total	mg/L	0.010	0.013	1/Month	Grab	0.001
Specific conductance[1]	µS/cm	3000	3488	1/Week	Grab	10
Sodium adsorption ratio (SAR)[1]	n/a	14.0	16.3	1/Month	Calculated	0.1
Specific conductance[2]	µS/cm	1000	1500	1/Week	Grab	10
Sodium adsorption ratio (SAR)[2]	n/a	3.0	4.5	1/Month	Calculated	0.1
Sulfate	mg/L	Report only	Report only	1/Month	Grab	10
Strontium	mg/L	Report only	Report only	1/Month	Grab	N/A
Total dissolved	mg/L	Report only	Report only	1/Month	Grab	10

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML
solids (TDS)						
Total suspended solids (TSS)	mg/L	35	70	1/Month	Grab	10
Metals, total recoverable[3]	µg/L	Report only	Report only	1/Year	Grab	[1]
Whole effluent toxicity, acute	LC_{50} (%)	--	>100 (Pass)	2/Year	Grab	--

Footnotes:
N/A= not applicable
1. Effluent limitation applicable to Outfalls 001A and 007A only.
2. Effluent limitation applicable to Outfall 005A only.
3. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.

Table 3. Numeric Effluent Limitations and Monitoring Requirements – Outfalls 008A and 010A.

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML
Flow	mgd	Report only	Report only	Continuous	Instant	--
Temperature	°F	Report only	Report only	1/Week	Instant	1
Copper, total	mg/L	Report only	Report only	1/Month	Grab	0.001
Iron, total	mg/L	3.5	7.0	1/Month	Grab	0.05
Kjeldahl nitrogen, as N	mg/L	Report only	Report only	1/Month	Grab	0.01
Lead, total	mg/L	Report only	Report only	1/Month	Grab	0.0005
Nitrate + nitrite (as N)	mg/L	Report only	Report only	1/Month	Grab	0.01
Nitrogen, total	mg/L	Report only	Report only	1/Month	Grab	0.01
Oil and grease	mg/L	--	10	1/Month	Grab	1
pH	s.u.	Between 6.0 and 9.0 at all times		1/Week	Grab	0.1
Phosphorus, total	mg/L	Report only	Report only	1/Month	Grab	0.01
Selenium, total	mg/L	Report only	Report only	1/Month	Grab	0.001
Specific conductance	µS/cm	1000	1500	1/Week	Grab	10
Sodium adsorption ratio (SAR)	n/a	3.0	4.5	1/Month	Calculated	0.1
Total dissolved solids (TDS)	mg/L	Report only	Report only	1/Month	Grab	10
Total suspended solids (TSS)	mg/L	35	70	1/Month	Grab	10
Whole effluent toxicity, acute	LC_{50} (%)	--	>100 (Pass)	2/Year	Grab	--

1. **Alternate Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events**
   a. Effluent limitations and monitoring requirements which may be applied alternately to the otherwise applicable effluent limitations and monitoring requirements presented above to discharges driven by precipitation events which result in a pond overflow are summarized in Tables 4 through 7. Samples must be collected according to the sampling type and analytical methods in Table 2 and must achieve the listed required reporting value (RRV) or minimum level (ML).

Table 4. Alternate Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events Less than or Equal to the 10-year/24-hour – Outfalls 001B, 005B and 007B.

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML
Flow	mgd	--	Report only	Continuous	Instant	--
Temperature	°F	--	Report only	1/Discharge	Instant	1
Aluminum, dissolved	mg/L	--	Report only	1/Discharge	Grab	0.03
Aluminum, total	mg/L	--	Report only	1/Discharge	Grab	0.03
Ammonia, as N	mg/L	--	Report only	1/Discharge	Grab	0.05
Barium, total	mg/L	--	Report only	1/Discharge	Grab	0.005
Copper, total	mg/L	--	0.041	1/Discharge	Grab	0.001
Iron, total	mg/L	--	7.0	1/Discharge	Grab	0.05
Kjeldahl nitrogen, as N	mg/L	--	Report only	1/Discharge	Grab	0.01
Lead, total	mg/L	--	0.295	1/Discharge	Grab	0.0005
Manganese, total	mg/L	--	Report only	1/Discharge	Grab	0.005
Nitrate + nitrite (as N)	mg/L	--	Report only	1/Discharge	Grab	0.01
Nitrogen, total	mg/L	--	Report only	1/Discharge	Grab	0.01
Nitrogen, total	lbs/day	--	279	1/Discharge	Calculated	0.01
Oil and grease	mg/L	--	10	1/Discharge	Grab	1
pH	s.u.	Between 6.0 and 9.0 at all times		1/Discharge	Grab	0.1
Phosphorus, total	mg/L	--	Report only	1/Discharge	Grab	0.01
Phosphorus, total	lbs/day	--	3.24	1/Discharge	Calculated	0.01
Selenium, total	mg/L	--	0.013	1/Discharge	Grab	0.001
Specific conductance[1]	µS/cm	--	3488	1/Discharge	Grab	10
Sodium adsorption ratio (SAR)[1]	n/a	--	16.3	1/Discharge	Calculated	0.1
Specific conductance[2]	µS/cm	--	1500	1/Discharge	Grab	10

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML
Sodium adsorption ratio (SAR)[2]	n/a	--	4.5	1/Discharge	Calculated	0.1
Sulfate	mg/L	--	Report only	1/Discharge	Grab	10
Strontium	mg/L	--	Report only	1/Discharge	Grab	N/A
Total dissolved solids (TDS)	mg/L	--	Report only	1/Discharge	Grab	10
Settleable solids	ml/L	--	0.5	1/Discharge	Grab	10
Metals, total recoverable[1]	µg/L	--	Report only	1/Year	Grab	[1]
Whole effluent toxicity, acute	LC_{50} (%)	--	>100 (Pass)	2/Year	Grab	--

Footnotes:
N/A= not applicable
1. Effluent limitation applicable to Outfalls 001B and 007Bonly.
2. Effluent limitation applicable to Outfall 005B only.
3. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.

Table 5. Alternate Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events Less than or Equal to the 10-year/24-hour – Outfalls 008B and 010B.

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML
Flow	mgd	--	Report only	Continuous	Instant	--
Temperature	°F	--	Report only	1/Discharge	Instant	1
Copper, total	mg/L	--	Report only	1/Discharge	Grab	0.001
Iron, total	mg/L	--	Report only	1/Discharge	Grab	0.05
Kjeldahl nitrogen, as N	mg/L	--	Report only	1/Discharge	Grab	0.01
Lead, total	mg/L	--	Report only	1/Discharge	Grab	0.0005
Nitrate + nitrite (as N)	mg/L	--	Report only	1/Discharge	Grab	0.01
Nitrogen, total	mg/L	--	Report only	1/Discharge	Grab	0.01
Oil and grease	mg/L	--	10	1/Discharge	Grab	1
pH	s.u.	Between 6.0 and 9.0 at all times		1/Discharge	Grab	0.1
Phosphorus, total	mg/L	--	Report only	1/Discharge	Grab	0.01
Selenium, total	mg/L	--	Report only	1/Discharge	Grab	0.001
Specific conductance	µS/cm	--	1500	1/Discharge	Grab	10
Sodium adsorption ratio (SAR)	n/a	--	4.5	1/Discharge	Calculated	0.1

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML
Total dissolved solids (TDS)	mg/L	--	Report only	1/Discharge	Grab	10
Settleable solids (SS)	ml/L	--	0.5	1/Discharge	Grab	10
Whole effluent toxicity, acute	LC_{50} (%)	--	>100 (Pass)	2/Year	Grab	--

Table 6. Alternate Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events Greater than 10-year/24-hour – Outfalls 001C, 005C and 007C.

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML
Flow	mgd	--	Report only	Continuous	Instant	--
Temperature	°F	--	Report only	1/Discharge	Instant	1
Aluminum, dissolved	mg/L	--	Report only	1/Discharge	Grab	0.03
Aluminum, total	mg/L	--	Report only	1/Discharge	Grab	0.03
Ammonia, as N	mg/L	--	Report only	1/Discharge	Grab	0.05
Barium, total	mg/L	--	Report only	1/Discharge	Grab	0.005
Copper, total	mg/L	--	0.041	1/Discharge	Grab	0.001
Iron, total	mg/L	3.5	7.0	1/Discharge	Grab	0.05
Kjeldahl nitrogen, as N	mg/L	--	Report only	1/Discharge	Grab	0.01
Lead, total	mg/L	--	0.295	1/Discharge	Grab	0.0005
Manganese, total	mg/L	--	Report only	1/Discharge	Grab	0.005
Nitrate + nitrite (as N)	mg/L	--	Report only	1/Discharge	Grab	0.01
Nitrogen, total	mg/L	--	Report only	1/Discharge	Grab	0.01
Nitrogen, total	lbs/day	--	279	1/Discharge	Calculated	0.01
Oil and grease	mg/L	--	10	1/Discharge	Grab	1
pH	s.u.	Between 6.0 and 9.0 at all times		1/Discharge	Grab	0.1
Phosphorus, total	mg/L	--	Report only	1/Discharge	Grab	0.01
Phosphorus, total	lbs/day	--	3.24	1/Discharge	Calculated	0.01
Selenium, total	mg/L	--	0.013	1/Discharge	Grab	0.001
Specific conductance[1]	µS/cm	--	3488	1/Discharge	Grab	10
Sodium adsorption ratio (SAR)[1]	n/a	--	16.3	1/Discharge	Calculated	0.1
Specific conductance[2]	µS/cm	--	1500	1/Discharge	Grab	10
Sodium adsorption ratio (SAR)[2]	n/a	--	4.5	1/Discharge	Calculated	0.1

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML
Sulfate	mg/L	--	Report only	1/Discharge	Grab	10
Strontium	mg/L	--	Report only	1/Discharge	Grab	N/A
Total dissolved solids (TDS)	mg/L	--	Report only	1/Discharge	Grab	10
Metals, total recoverable[1]	µg/L	--	Report only	1/Year	Grab	[1]
Whole effluent toxicity, acute	LC_{50} (%)	--	>100 (Pass)	2/Year	Grab	--

Footnotes:
N/A= not applicable
1. 1. Effluent limitation applicable to Outfalls 001C and 007Conly.
2. Effluent limitation applicable to Outfall 005C only.
3. Metals include those metals with aquatic life numeric standards contained in the Montana *Circular DEQ-7 Montana Numeric Water Quality Standards*: arsenic, cadmium (0.08), chromium (1), copper (1), lead (0.05), mercury (0.01), nickel (10), silver (0.5), and zinc (10) as total recoverable. Corresponding RRVs (µg/L) are in parentheses behind each parameter.

Table 7. Alternate Numeric Effluent Limitations and Monitoring Requirements – Precipitation Events Greater than 10-year/24-hour – Outfalls 008C and 010C.

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type	RRV or ML
Flow	mgd	--	Report only	Continuous	Instant	--
Temperature	°F	--	Report only	1/Discharge	Instant	1
Copper, total	mg/L	--	Report only	1/Discharge	Grab	0.001
Iron, total	mg/L	--	Report only	1/Discharge	Grab	0.05
Kjeldahl nitrogen, as N	mg/L	--	Report only	1/Discharge	Grab	0.01
Lead, total	mg/L	--	Report only	1/Discharge	Grab	0.0005
Nitrate + nitrite (as N)	mg/L	--	Report only	1/Discharge	Grab	0.01
Nitrogen, total	mg/L	--	Report only	1/Discharge	Grab	0.01
Oil and grease	mg/L	--	10	1/Discharge	Grab	1
pH	s.u.	Between 6.0 and 9.0 at all times		1/Discharge	Grab	0.1
Phosphorus, total	mg/L	--	Report only	1/Discharge	Grab	0.01
Selenium, total	mg/L	--	Report only	1/Discharge	Grab	0.001
Specific conductance	µS/cm	--	1500	1/Discharge	Grab	10
Sodium adsorption ratio (SAR)	n/a	--	4.5	1/Discharge	Calculated	0.1
Total dissolved solids (TDS)	mg/L	--	Report only	1/Discharge	Grab	10
Whole effluent toxicity, acute	LC_{50} (%)	--	>100 (Pass)	2/Year	Grab	--

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 event, 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 and oil and grease.

2. Western Alkaline Coal Mining Areas

Pursuant to 40 CFR 434.81(a) through (c), the Western Alkaline subpart applies to alkaline mine drainage at western coal mining operations from reclamation areas, brushing and grubbing areas, topsoil stockpiling areas, and regraded areas. The discharge, before any treatment, must meet all of the following requirements: pH is equal to or greater than 6.0; dissolved iron concentration is less than 10 mg/L; and net alkalinity is greater than zero. Western Alkaline effluent limitations apply until the appropriate SMCRA authority has authorized bond release.

The permittee has submitted a site-specific Sediment Control Plan (SCP) that identifies the following Best Management Practices (BMPs), including design specifications, construction specifications, maintenance schedules, criteria for inspection, and expected performance and longevity of the BMPs. The SCP demonstrates using watershed models that the 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.

2.1 Design of Postmine Topography

The Postmine Topography (PMT) has been designed to provide adequate drainage of areas disturbed by mine-related activities, using reconstructed valleys and stream channels. These drainages have been designed with thalweg profiles that are generally concave up in order to support stable transport of design flows. Additionally, the PMT has been designed to blend smoothly with the surrounding native topography. This avoids the abrupt (generally concave down) changes in slope that often lead to headcutting. The presence of adequate drainage density in the PMT reduces the risk of overloading small tributaries (in terms of design flow) and also diminishes the severity of and the number of long unbroken slopes. As an added benefit, this also reduces the size and number of areas having very little slope (poorly drained areas), which in turn helps to minimize changes in downstream runoff volumes.

The general characteristics of the designed PMT also lend themselves to a reduction in sediment generation (e.g., gradual slopes, designed stream channels, etc.). Additionally, the PMT may utilize micro features that serve to slow runoff velocities and retard sediment transport. Such features include depressions and contour furrows. Depressions typically result incidentally due to imperfections in surface preparation or due to differential settling of the backfill. In any case, no depression shall be allowed to remain if its capacity is such that it would require being permitted as an impoundment. Relatively long slopes may incorporate contour furrows in order to slow the associated runoff, thereby reducing sediment

transfer and erosion. These contour furrows would remain as permanent slope features; however, as the reclamation matures, the presence of the furrows will become less prominent due to aggradations of sediment on the upgradient side.

2.2 Scheduling and Sequencing of Reclamation Activities

Key in the success of this Sediment Control Plan are the efforts to reclaim disturbed areas as soon as is practicable after mineral extraction is complete. Beyond this, the reclamation activities are generally begun in upland areas and then progress toward the valley bottoms. In this way, runoff flows from areas of more mature reclamation to areas of less mature reclamation.

Additionally, the reclamation activities are scheduled so as to take advantage of favorable conditions associated with various seasons. Regrading operations and topsoil laydown operations are avoided during excessively wet periods; whereas, seeding is deliberately scheduled for early spring or late fall in order to take advantage of the inherent moisture associated with those time periods.

2.3 Source Control BMPs

Various BMPs serve to reduce sediment generation at its source. Generally, these are in the form of topsoil laydown practices, mulches, rock riprap, Rolled Erosion Control Products (RECPs), drill seeding on the contour, vegetation, and land imprinting. The mulches, rock riprap, and RECPs are typically employed on a temporary basis in order to stabilize conditions long enough for the more permanent vegetation to be established. Any of the source control BMPs may be used in combination with BMPs of other types. Each source control is described further below.

2.3.1 Topsoil Laydown Practices. As discussed previously, replaced topsoil exhibits (at least initially) an augmented rate of infiltration, which decreases the rate of runoff generation, thereby reducing erosion. Additionally, the disking operations associated with the topsoil laydown serve to roughen the surface, which slows runoff, encourages infiltration, and hinders sediment transport.

2.3.2 Mulch. A mulch cover helps provide short-term stability by moderating wind erosion, by reducing raindrop impact and runoff velocity, and by promoting vegetal growth, which further stabilizes the area. Mulch may be in the form of stubble mulch or of an applied commercial variety where loose material is spread evenly over an area and often secured by crimping.

2.3.3 Rock Riprap. A layer of rock (sized in accordance with expected flows) protects the soil below from flows with erosive velocities and often serves to reduce flow velocities via increased surface roughness. Riprap is most often used for small areas of concentrated flow (e.g., rills). The protection of the soil and the reduction in flow velocities both encourage the establishment of vegetation.

2.3.4 Rolled Erosion Control Products (RECPs). RECPs may be used on steep slopes or areas of concentrated flow. These products typically consist of degradable woven mesh materials that are staked on topsoiled surfaces where vegetation can be established.

2.3.5 Drill Seeding on the Contour. Whenever practicable, drill seeding on the contour will be employed as a means of reducing erosion. This practice leaves small ridges parallel to the contours of the reclaimed landscape. These small ridges impede overland flow, thereby decreasing the propensity for particle detachment and particle transport.

2.3.6 Vegetation. Establishing vegetation in a reclaimed area is the preferred method of sediment control. Vegetation reduces raindrop impact, runoff velocity, the soil's propensity for detachment, and wind erosion. Existing vegetation is preserved whenever practicable.

2.3.7 Land Imprinting. Land imprinting is a process wherein a roller with large staggered teeth is pulled across the reclaimed surface. This greatly increases the macro-porosity of the land surface, covering an area with small pockets (often about one foot square at the crest) wherein seeds, splash-eroded topsoil, and surface water collect. These pockets also promote establishment of vegetation by providing a degree of protection from drying winds.

2.4 Filtering and Flow-retardance BMPs

Best Management Practices based on filtering and flow retardance serve to hinder the transport of eroded sediment. Filtering and flow retardance BMPs potentially employed by the operator include: rock check dams, filter fence, wattles and straw bales, contour furrows, and small depressions. Any these BMPs may be used in combination with BMPs of other types. Each type of filtering and flow retardance BMP is discussed briefly below.

2.4.1 Rock Check Dams. These structures are typically placed across areas of channelized flow. The primary function is to slow the velocity of the channelized flows, thereby allowing suspended sediment to settle out. Due to the inherently robust nature, rock check dams are particularly well suited to higher energy flows. Construction of rock check dams will include an overflow notch (to prevent flows from circumventing the structure), a small downstream apron (to prevent scour), and will call for the use of rocks sized in accordance with expected flows.

2.4.2 Filter Fence. Typically installed on the contour and keyed into the reclaimed surface, filter fence serves to slow overland flow, facilitating the deposition of sediment. Additionally, filter fence physically retains the coarser fraction of the suspended sediment.

2.4.3 Wattles and Straw Bales. Both wattles and straw bales may be used to slow overland flows or relatively low-energy channelized flows. The reduction in flow velocity induces settling of suspended sediment and the narrow interstitial spaces inherent within the wattles and straw bales serve to capture larger particles. Additionally, wattles may function as spreader dikes, hindering the development of concentrated flows that lead to rilling.

2.4.4 Contour Furrows. Contour furrows reduce the velocity of overland flows, facilitating sediment deposition. Over time, the depth of the furrows is gradually decreased by the accumulation of sediment on the upstream side. Like wattles, these structures also function as small spreader dikes, diminishing the propensity for rilling.

2.4.5 Small Depressions. Small depressions are typically installed in-channel and operate by increasing the cross sectional area of flow, thereby reducing the average velocity. Like contour furrows, the depth of small depressions typically decreases with the aggradation of deposited sediment.

2.5 Maintenance, Inspections and Reporting

In accordance with ARM 17.30.1323(11), all reports or other information submitted to the Department will be signed and certified in compliance with Part IV.G of the Department's Major Industrial permit, "Authorization to Discharge Under the Montana Pollutant Discharge Elimination System." Legible copies of these reports will be submitted to the Department at the following address:

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

2.5.1 Comprehensive Site Inspections. The basins to be monitored under this Sediment Control Plan will undergo a Comprehensive Site Inspection on a monthly basis for the first two years after implementing this Sediment Control Plan and quarterly thereafter. Additionally, a Comprehensive Site Inspection will be conducted after any storm event greater than the 10-year, 24-hour event (2.2" of precipitation). The Comprehensive Site Inspection will assess whether or not this plan accurately reflects the area that it covers and whether or not the site map has been updated or otherwise modified to reflect current conditions. Further, the Comprehensive Site Inspection will evaluate the implementation of the BMPs discussed in this plan and the need for remedial revisions to this plan.

Based on the results of the Comprehensive Site Inspection, this plan will be revised as appropriate within 14 days of such an inspection. Remedial actions will be employed as needed and recorded in accordance with the stipulations of this section. Significant changes to this plan will not be implemented prior to review and approval by the Department.

2.5.2 Compliance Evaluation Report. A Compliance Evaluation Report will be submitted to the Department addressing the Comprehensive Site Inspections performed during each calendar year. This report will identify the personnel conducting the inspections and the dates of those inspections as well as summarizing the observations made during the inspections and the associated actions taken. These reports will be kept with this Sediment Control Plan, and a

copy of the report will be submitted to the Department by January 28th of each year for the preceding calendar year's inspections. Additionally, the reports will identify any incidents of noncompliance and, where the reports do not identify incidents of noncompliance, they will contain a certification that the facility is in compliance with this plan and the Department's Major Industrial permit, "Authorization to Discharge Under the Montana Pollutant Discharge Elimination System." To ensure adequate corrective actions have been taken in response to problems noted in the Comprehensive Site Inspections, a tracking sheet will be included with each Compliance Evaluation Report. These tracking sheets will report the actions taken in response to conditions noted in the Comprehensive Site Inspections and will list scheduled implementation for those conditions yet to be corrected.

2.5.3 Record Retention. Records of the Comprehensive Site Inspections, the Compliance Evaluation Report and any related follow-up actions will be maintained by the Decker Coal Company (Decker West) for a period of at least three years following the date of the inspection, report, or action. This period may be extended by the Department at any time.

3. Toxicity Limitations – Not Applicable

4. Interim Effluent Limitations – Not Applicable

5. Other Monitoring Requirements – Not Applicable

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 monitoring period, it shall be stated on the Discharge Monitoring Report Form (EPA No. 3320-1) that no discharge occurred.

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

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department and the Director. As required by the CWA, permit applications, permits, and effluent data shall not be considered confidential [*ARM 17.30.1419*].

1. Monitoring Locations

The Permittee shall establish the monitoring locations as specified in Table 8 to demonstrate compliance with the effluent limitations and other requirements in section I of this permit. The Permittee shall monitor effluent at the specific monitoring location during discharge.

Table 8. Monitoring Locations

Discharge Point Name	Monitoring Location Name	Monitoring Location Description
Outfall 001	EFF-001	At the end of the discharge structure, prior to contact with receiving water.
Outfall 005	EFF-005	At the end of the discharge structure, prior to contact with receiving water.
Outfall 007	EFF-007	At the end of the discharge structure, prior to contact with receiving water.
Outfall 008	EFF-008	At the end of the discharge structure, prior to contact with receiving water.
Outfall 010	EFF-010	At the end of the discharge structure, prior to contact with receiving water.

2. Mass Loading Calculations

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

$$\text{Daily Mass Load (lb/day)} = \text{Daily Discharge Concentration (mg/L)} \times \text{Daily Effluent Flow Rate (MGD)} \times 8.34$$

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

3. Whole Effluent Toxicity Testing

a. Acute Whole Effluent Toxicity Testing

i. **Sampling and Dilution Series Requirements**. Beginning in the calendar year in which this Permit becomes effective, and each calendar year thereafter, the Permittee shall conduct a semi-annual acute static replacement toxicity test on a grab sample of the effluent. Testing will use. two species (*Ceriodaphnia dubia* and *Pimephales promelas*) and will consist of 6 effluent concentrations (100, 75, 50, 25, 12.5, 6.25 percent effluent) and a control. Dilution water and the control shall consist of grab samples of the receiving water. If a sample of the receiving water is unavailable, because of its ephemeral nature, standard synthetic water may be used. If a discharge does not occur for a specified monitoring location during the calendar year, this fact shall be reported in the annual WET report.

ii. **Methods**. Acute WET tests shall be conducted in general accordance with the procedures set out in *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, Fifth Edition, EPA-821-R-02-012 (or a subsequent edition) and the "Region VIII USEPA NPDES Acute Test Conditions—Static Renewal Whole Effluent Toxicity Test" contained in the *Region VIII NPDES Whole Effluent Toxics Control*

Program, August 1997. The Permittee must conduct a 48-hour static renewal acute toxicity test using *Ceriodaphnia dubia* (USEPA Method 2002.0) and a 96-hour static renewal acute toxicity test using *Pimephales promelas* (fathead minnow) (USEPA Method 2000.0). Acute toxicity is measured by determining the LC_{50} (i.e., the percent of effluent that is lethal to 50 percent of the exposed test organisms) for each type of test.

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

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

v. **Reduced Monitoring Frequency—** If the results for four consecutive acute toxicity tests indicate no acute toxicity, the Permittee may request a reduction to acute toxicity testing on only one species on an alternating basis each year. The Department may approve or deny the request based on the results and other available information without an additional public notice. If the request is approved, the test procedures are to be the same as specified above for the test species.

4. Monitoring Periods and Reporting Schedule

Monitoring periods and reporting for all required monitoring shall be completed according to the schedule in Table 9.

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

5. Discharge Monitoring Reports

All monitoring results obtained during the previous month shall be summarized and reported on a Discharge Monitoring Report Form (EPA No. 3320-1) postmarked no later than the 28th day of the month following the completed monitoring period. If no discharge occurs during the monitoring period, "No Discharge" shall be reported on the report form.

Table 9. Monitoring Periods and Reporting Schedule

Required Monitoring Frequency	Monitoring Period Start Date	Monitoring Period	Reporting Due Date
1/Day	May 1, 2012	Midnight through 11:50 PM or any 24-hour period that reasonably represents a calendar day for purposes of monitoring	Due date for next DMR submittal
1/Month	May 1, 2012	1st day of calendar month through last day of calendar month	Due date for next DMR submittal
Quarterly	July 1, 2012	Through the end of each calendar quarter	28 days from the end of each calendar quarter
Semi Annually	July 1, 2012	January 1 through June 30 and July 1 through December 31.	Due date for next DMR submittal
Annually	January 1, 2013	January 1 through December 31	28 days from the end of the monitoring period
1 / Discharge Event	May 1, 2012	Duration of discharge event	Due date for next DMR submittal

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

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

II. SPECIAL CONDITIONS

A. Additional Monitoring and Special Studies

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

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

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

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

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

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

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

B. Best Management Practices and Pollution Prevention

The permittee shall during the term of this permit operate the facility in accordance with the current stormwater pollution prevention plan (SWPPP) or in accordance with subsequent amendments to the Plan. The permittee shall also amend this Plan, to incorporate practices to achieve the objectives and specific requirements listed below, and a copy shall be submitted to the Department in accordance with the requirements of Part II of this permit. The amended Plan shall be implemented as soon as possible but not later than six months from the effective date of this permit.

C. Compliance Schedules – Not Applicable

D. Reopener Provisions

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

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

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

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

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

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

6. **Toxicity Limitations – Not Applicable**

E. Storm Water Management

See SWPPP discussion in part II.B, above.

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 Part 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)(a)*]: 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; and
   - **d.** the initials or name(s) of individual(s) who performed the 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 affecting the environment 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 seriously endanger health or the environment;
      ii. Any unanticipated bypass that exceeds any effluent limitation in the permit (See Subsection III.B.6 of this permit, "Bypass of Treatment Facilities");
      iii. Any upset which exceeds any effluent limitation in the permit (See Subsection III.B.7 of this permit, "Upset Conditions") or;
      iv. Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in this permit to be reported within 24 hours.
   b. *Written notification.* A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
      i. A description of the noncompliance and its cause;
      ii. The period of noncompliance, including exact dates and times;
      iii. The estimated time noncompliance is expected to continue if it has not been corrected; and
      iv. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
   c. *Waiver of written notification requirement*: The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-3080. Reports shall be submitted to the addresses in Subsection I.C.5 of this permit ("Discharge Monitoring Reports").

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

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

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

B. <u>Compliance Responsibilities</u>

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

2. **Planned Changes:** The permittee shall give 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* and *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* and *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.13.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. <u>Notification Levels</u>

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.

"Annual Average Load" means the arithmetic mean of all 30-day or monthly average loads reported during the calendar year for a monitored parameter.

"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.

"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.

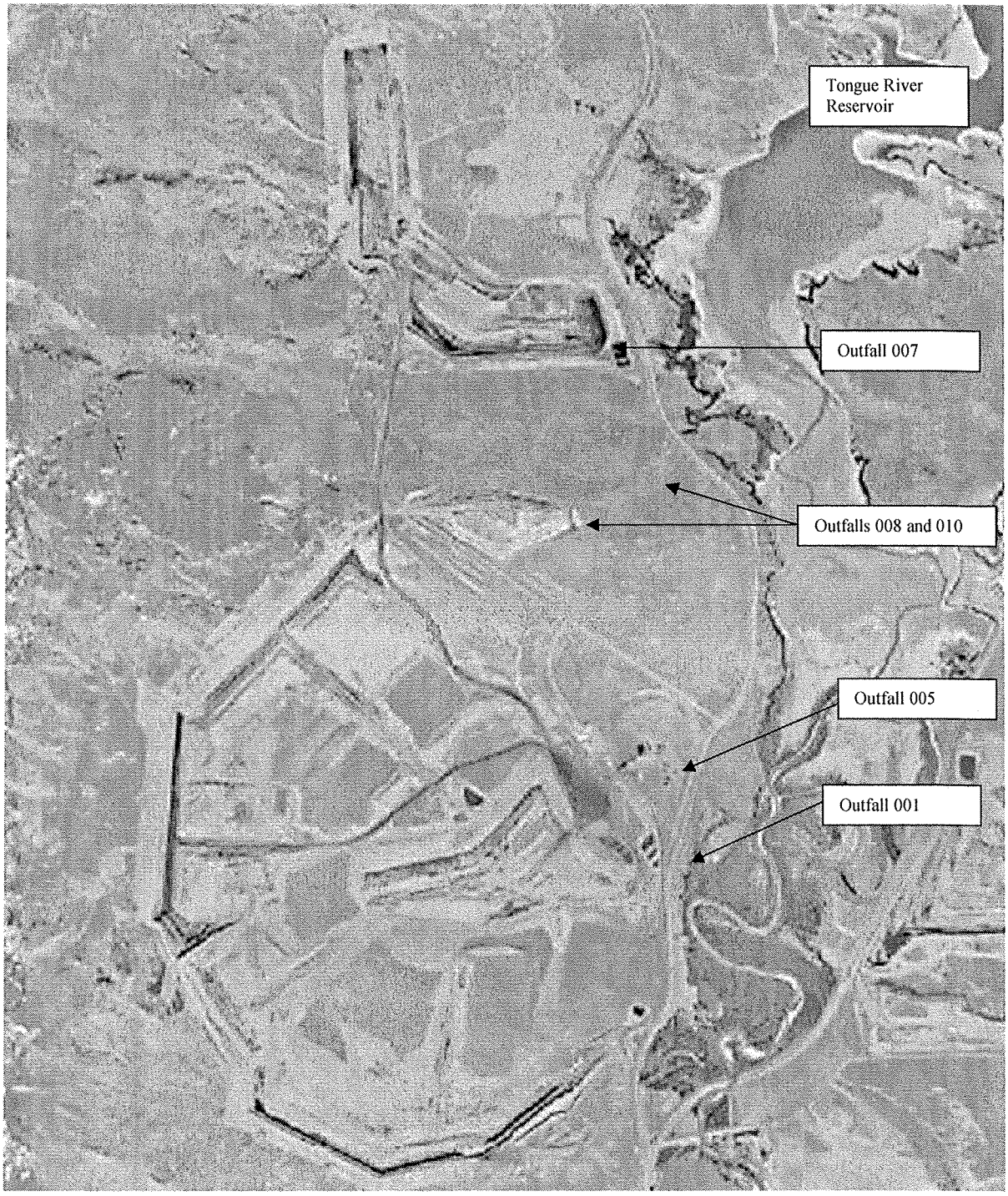
"Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly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

ATTACHMENT I – MAP

ATTACHMENT II – FLOW SCHEMATIC

ATTACHMENT III – STATEMENT OF BASIS

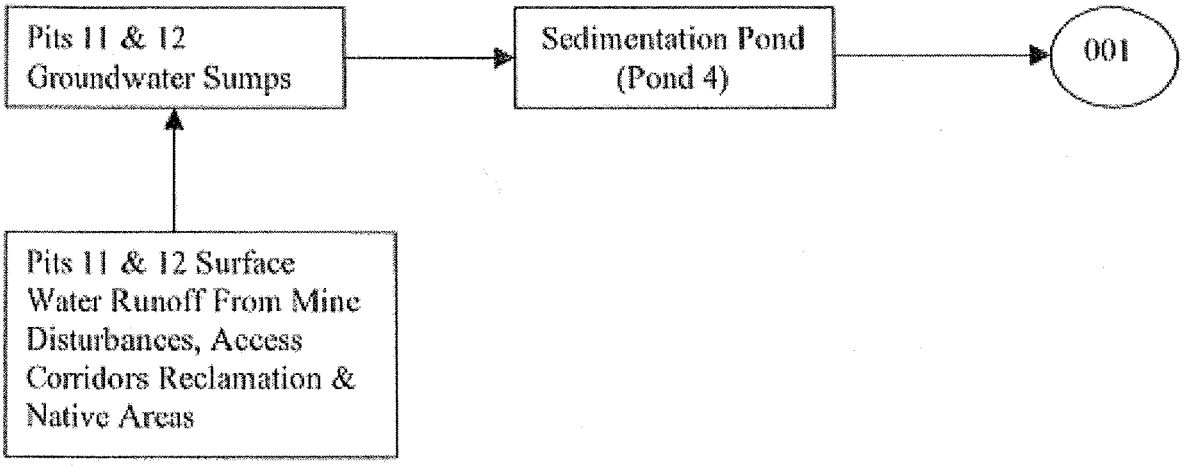
ATTACHMENT I - MAP



ATTACHMENT II – FLOW SCHEMATICS

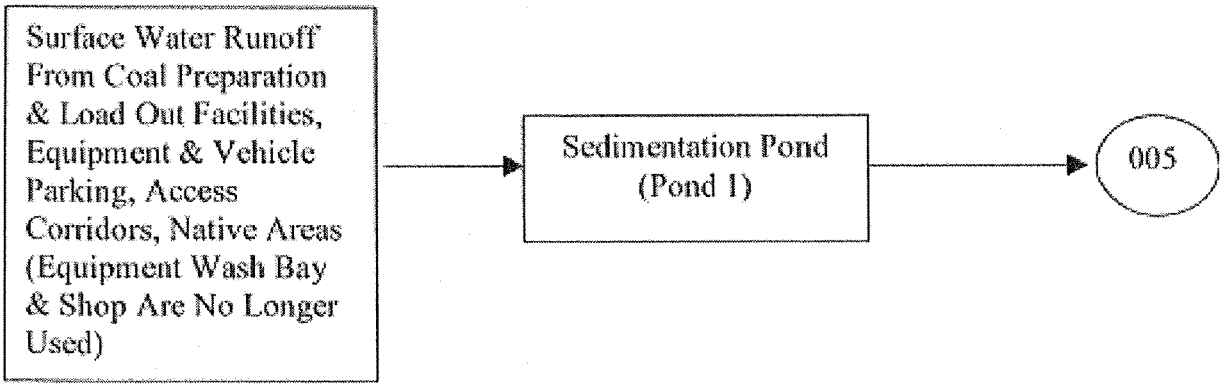
Point 001:

Discharged 001 *intermittently* for four months during the current permit term. The 30-day average flow rate for the four months of discharge was 42 gpm.



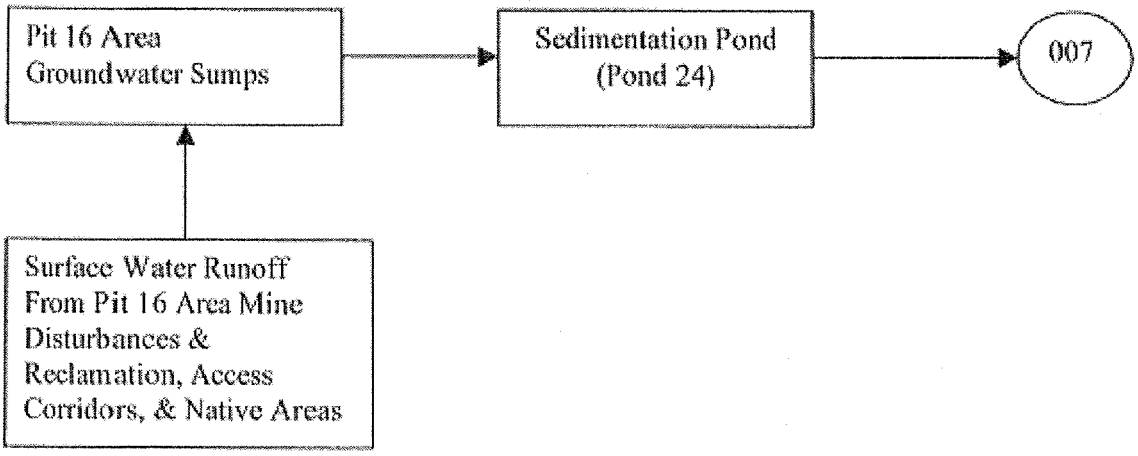
Point 005:

Point 005 was not discharged during current or previous permit terms.



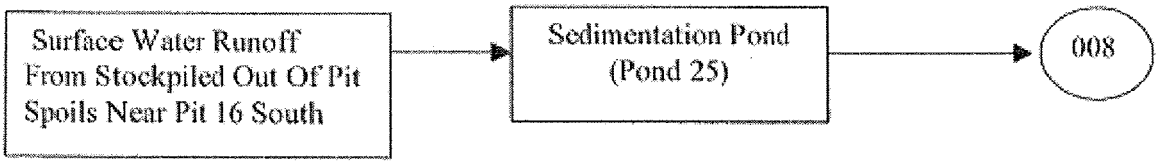
Point 007:

Point 007 discharged continuously during late stages of mining in Pit 16 area during current term. For the last three years, the 30-day average flow rate at 007 was 2,720 gpm.



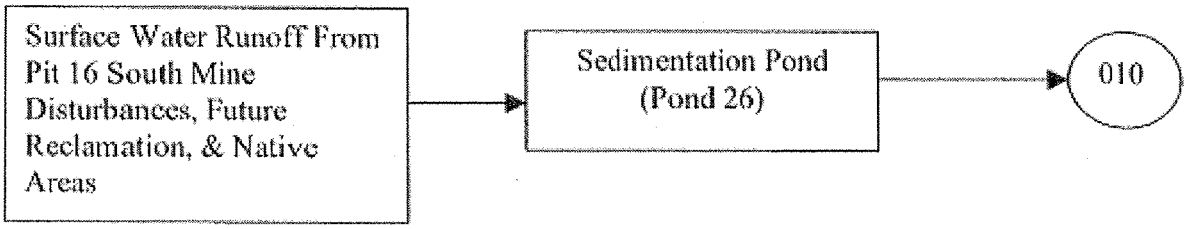
Point 008:

Point 008 has not discharged during the current or previous permit terms.



Point 010:

Point 010 has not discharged during the current permit term. The upper portion of Pond 26 has been temporarily intersected by Pit 16 South during late stage mining activities, but the pond will be reconstructed for sediment control during mine reclamation.



ATTACHMENT III – STATEMENT OF BASIS