Permit No: MT0024716

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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

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

Stillwater Mining Company

is authorized to discharge from its Stillwater Mine, Nye

located at **2562 Nye Road, Nye, Stillwater County, Montana**

to receiving waters named, **Stillwater River and associated ground water**,

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 December 1, 2015.

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

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

Jon Kenning, Chief
Water Protection Bureau

Modification Date: February 27, 2018

TABLE OF CONTENTS

COVER SHEET—ISSUANCE AND EXPIRATION DATES **1**
1 AUTHORIZED DISCHARGES AND MIXING ZONES **3**
2 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS **4**
2.1 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS—OUTFALL 001 4
2.2 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS—OUTFALL 002 AND 003 6
2.3 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS—OUTFALL SUM 9
2.4 ADDITIONAL EFFLUENT LIMITATIONS AND CONDITIONS 9
2.5 MONITORING AND REPORTING REQUIREMENTS 10
2.6 NOTIFICATION REQUIREMENTS 14
3 SPECIAL CONDITIONS **16**
3.1 ADDITIONAL MONITORING AND SPECIAL STUDIES 16
3.2 COMPLIANCE SCHEDULES 17
3.3 PERMIT MODIFICATIONS 18
4 STANDARD CONDITIONS **19**
4.1 DUTY TO COMPLY 19
4.2 DUTY TO REAPPLY 19
4.3 NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE 19
4.4 DUTY TO MITIGATE 19
4.5 PROPER OPERATION AND MAINTENANCE 20
4.6 PERMIT ACTIONS 20
4.7 PROPERTY RIGHTS 20
4.8 DUTY TO PROVIDE INFORMATION 20
4.9 INSPECTION AND ENTRY 20
4.10 MONITORING AND RECORDS 20
4.11 SIGNATORY REQUIREMENT 21
4.12 REPORTING REQUIREMENTS 22
4.13 BYPASS 25
4.14 UPSET 26
4.15 FEES 26
5 DEFINITIONS AND ABBREVIATIONS **27**
5.1 GENERAL DEFINITIONS AND ABBREVIATIONS 27
5.2 SPECIALIZED DEFINITIONS AND ABBREVIATIONS 29

1 AUTHORIZED DISCHARGES AND MIXING ZONES

The authorization to discharge provided under this permit is limited to those outfalls specifically designated below as discharge locations. Discharges at any location not authorized under an MPDES permit is a violation of the Montana Water Quality Act and could subject the person(s) responsible for such discharge to penalties under the Act. 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.

Below is a description of the discharges locations authorized by this permit and any associated mixing zones.

Outfall	Discharge Location(s) and Mixing Zone(s)
001	**Location:** At the end of the pipe, discharging into **Stillwater River** located at: 45° 23' 5.02" N latitude, 109° 52' 15.68" W longitude. **Mixing Zone:** The maximum extent of the mixing zone in the named receiving waters is as follows: 94 feet downstream; and 10 feet in width for the following parameters: total recoverable metals, cadmium, copper, lead, manganese, mercury, nickel silver and zinc; dissolved aluminum, total nitrogen, total phosphorus, total ammonia, and nitrite plus nitrate. The maximum extent of the acute mixing zone in the named receiving waters is as follows: 9 feet downstream and 4.5 feet in width for total ammonia.
002	**Location:** At the end of the pipe, discharging into **the percolation pond** located at: 45° 23' 38" N latitude, 109° 51' 43" W longitude. **Mixing Zone:** The maximum extent of the ground water mixing zone in the named receiving waters is as follows: from the point of discharge extending in a northeasterly direction approximately 500 feet downgradient and approximately 507 feet wide at its terminal end for the following parameters: total nitrogen.
003	**Location:** At the end of the pipe, discharging into **the percolation pond** located at: 45° 23' 12" N latitude, 109° 52' 9" W longitude. **Mixing Zone:** The maximum extent of the ground water mixing zone in the named receiving waters is as follows: from the point of discharge extending in a northwesterly direction approximately 2,000 feet downgradient and approximately 650 feet wide at its terminal end for the following parameters: total nitrogen.

2 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Effective immediately and lasting through the term of this permit, the quality of effluent discharged shall, as a minimum, meet the limitations set forth in this Part. All monitoring shall be conducted as specified in this Part and in Part 4 of this permit. If no discharge occurs during an entire reporting period, the permittee shall state "No Discharge" on the Discharge Monitoring Report Form (EPA No. 3320-1).

2.1 Effluent Limitations and Monitoring Requirements—Outfall 001

The quality of effluent discharged at Outfall 001 shall, as a minimum, meet the limitations set forth below. Compliance with these limitations shall be reported on DMR 001-A.

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
pH	SU	6.0 to 9.0	
Total Suspended Solids	mg/L	20	30
Oil and Grease	mg/L	10	10
Aluminum, Dissolved	µg/L	84	168
Cadmium, Total Recoverable	µg/L	0.23	0.47
Chromium, Total Recoverable	µg/L	174	350
Copper, Total Recoverable	µg/L	1.9	3.8
Lead, Total Recoverable	µg/L	0.85	1.7
Mercury, Total Recoverable	µg/L	0.49	0.49
Nickel, Total Recoverable	µg/L	48	100
Silver, Total Recoverable	µg/L	0.62	1.2
Zinc, Total Recoverable	µg/L	18.4	37
Nitrogen, Total, as N [1]	lb/day	60	--

Footnotes:
1. Limit effective July 1 through September 30, annually.

Monitoring Requirements – Outfall 001

Parameter and Code [1]	Units	Minimum Monitoring Frequency	Sample Type	Reporting Frequency [2]
Effluent Flow Rate (00056)	MGD	Continuous	Recording Device	Monthly
pH (00400)	s.u.	1/Day	Instantaneous	Monthly
Total Suspended Solids (00530)	mg/L	1/Week	Composite	Monthly
Oil and Grease (00556)	mg/L	1/Week	Grab	Monthly
Aluminum, Dissolved (01106)	µg/L	1/Week	Composite	Monthly
Cadmium, Total Recoverable (01113)	µg/L	1/Week	Composite	Monthly
Chromium, Total Recoverable (01118)	µg/L	1/Week	Composite	Monthly
Copper, Total Recoverable (01119)	µg/L	1/Week	Composite	Monthly
Iron, Total Recoverable (00980)	µg/L	1/Week	Composite	Monthly
Lead, Total Recoverable (01114)	µg/L	1/Week	Composite	Monthly
Mercury, Total Recoverable (71901)	µg/L	1/Week	Composite	Monthly
Nickel, Total Recoverable (01074)	µg/L	1/Week	Composite	Monthly
Silver, Total Recoverable (01079)	µg/L	1/Week	Composite	Monthly
Zinc, Total Recoverable (01094)	µg/L	1/Week	Composite	Monthly
Cyanide, Total (00720)	µg/L	1/Month	Composite	Monthly
Phosphorus, Total as P (00665)	mg/L	1/Week	Composite	Monthly
Ammonia, as N (00610)	mg/L	1/Week	Composite	Monthly
Kjeldahl Nitrogen, Total (as N) (00625)	mg/L	1/Week	Composite	Monthly
Nitrate+Nitrite, as N (00630)	mg/L	1/Week	Composite	Monthly
Total Nitrogen, as N (00600)	mg/L	1/Week	Calculate	Monthly
Total Nitrogen, as N (00640)	lbs/day	1/Week	Calculate	Monthly
Whole Effluent Toxicity LC50, Statre 48 Hr Acute, Ceriodaphnia dubia (TAM3B)	Percent Effluent	1/Quarter	Composite	Quarterly
Whole Effluent Toxicity, LC 50, 96 -Hr Acute – Pimephales promelas (TAN6C)	Percent Effluent	1/Quarter	Composite	Quarterly

Footnotes:
1. All analyses must meet the applicable RRV in the latest version of Department Circular DEQ-7
2. Report average monthly and daily maximum values at the required frequency. Each quarterly WET test is reported quarterly.

2.2 Effluent Limitations and Monitoring Requirements—Outfall 002 and 003

The quality of effluent discharged at **Outfall 002** shall, as a minimum, meet the limitations set forth below. Compliance with these effluent limitations shall be reported on DMR SUM2.

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
pH	SU	6.0 to 9.0	
Aluminum, Dissolved [1]	µg/L	142	285
Cadmium, Total Recoverable [1]	µg/L	0.187	0.216
Copper, Total Recoverable [1]	µg/L	4.66	9.34
Lead, Total Recoverable [1]	µg/L	1.02	1.35
Mercury, Total Recoverable [1]	µg/L	0.1	0.1
Zinc, Total Recoverable [1]	µg/L	62	115
Nitrite plus Nitrate [1]	mg/L	20	20
Ammonia, Total, as N [1]	mg/L	7.1	14.3

Footnotes:
1. Effective 58 months after permit effective date

The quality of effluent discharged at **Outfall 003** shall, as a minimum, meet the limitations set forth below. Compliance with these effluent limitations shall be reported on DMR SUM3.

Parameter	Units	Effluent Limitations	
		Average Monthly	Maximum Daily
pH	SU	6.0 to 9.0	
Aluminum, Dissolved[1]	µg/L	107	215
Cadmium, Total Recoverable [1]	µg/L	0.141	0.163
Copper, Total Recoverable [1]	µg/L	3.52	7.05
Lead, Total Recoverable [1]	µg/L	0.767	1.02
Mercury, Total Recoverable [1]	µg/L	0.076	0.076
Zinc, Total Recoverable [1]	µg/L	47	87
Nitrite plus Nitrate [1]	mg/L	15.1	15.1
Ammonia, Total, as N [1]	mg/L	5.38	10.8

Footnotes:
1. Effective 58 months after permit effective date

Monitoring Requirements – Outfall 002 and 003

Monitoring Requirements at Monitoring Locations SUM2, 002A, 002B, SUM3, 003A, 003B, 003C, and 003D				
Parameter and Code [1]	**Units**	**Minimum Monitoring Frequency**	**Sample Type**	**Reporting Frequency [2]**
Flow Rate (00060)	MGD	Continuous	Recording Device	Monthly
pH (00400)	s.u.	1/Week	Grab	Monthly
Aluminum, Dissolved (01106)	µg/L	1/Month	Grab	Monthly
Cadmium, Total Recoverable (01113)	µg/L	1/Month	Grab	Monthly
Chromium, Total Recoverable	µg/L	1/Month	Grab	Monthly
Copper, Total Recoverable (01119)	µg/L	1/Month	Grab	Monthly
Iron, Total Recoverable (00980)	µg/L	1/Month	Grab	Monthly
Lead, Total Recoverable (01114)	µg/L	1/Month	Grab	Monthly
Mercury, Total Recoverable (71901)	µg/L	1/Month	Grab	Monthly
Nickel, Total Recoverable (01074)	µg/L	1/Month	Grab	Monthly
Silver, Total Recoverable (01079)	µg/L	1/Month	Grab	Monthly
Zinc, Total Recoverable (01094)	µg/L	1/Month	Grab	Monthly
Cyanide, Total (00720)	µg/L	1/Month	Grab	Monthly
Kjeldahl Nitrogen, Total, as N (00625)	mg/L	1/Week	Composite	Monthly
Nitrate+Nitrite (00630)	mg/L	1/Week	Composite	Monthly
Total Nitrogen, as N (00640)	mg/L	1/Week	Calculate	Monthly
Total Nitrogen, as N (00640)	lbs/day	1/Week	Calculate	Monthly
Phosphorus, Total as P (00665)	mg/L	1/Week	Composite	Monthly
Ammonia, Total, as N (00610)	mg/L	1/Week	Composite	Monthly

Footnotes:
1. All analyses must achieve the applicable RRV in the latest revision of Department Circular DEQ-7
2. Report average monthly and daily maximum values at the required frequency

2.3 Effluent Limitations and Monitoring Requirements—Outfall SUM

The quality of effluent discharged at Outfalls 001, 002, and 003 shall, as a minimum, meet the limitations set forth below. Compliance with this limitation shall be reported on DMR SUMA and shall be the total of the nitrogen loads reported on DMRs 001A, SUM2, and SUM3

Parameter	Units	Average Monthly Limitation	Maximum Daily Limitation	Minimum Monitoring Frequency	Sample Type
Nitrogen, Total, as N	lbs/day	60	--	1/Week	Calculated

2.4 Additional Effluent Limitations and Conditions

The permittee is required to comply with the additional effluent limitations and conditions described below.

2.4.1 Narrative Prohibitions—Outfall 001

Effective immediately and lasting through the term of this permit, discharges from Outfall 001 shall be free from substances that will:

(a) Settle to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines.

(b) Create floating debris, scum, a visible oil film, or globule of grease or other floating materials.

(c) Produce odors, colors, or other conditions that create a nuisance or render undesirable tastes to fish flesh or make fish inedible.

2.4.2 General Prohibition

There shall be no discharge of mine drainage or process wastewater at any location except as authorized in this section. This permit does not authorize the discharge of unaltered ground water at any location.

2.5 Monitoring and Reporting Requirements

Samples or measurements shall be representative of the volume and nature of the monitored discharge. In addition to the standard monitoring and reporting requirements given in Part 4 of this permit, the permittee shall meet the general monitoring and reporting requirements included below.

2.5.1 Monitoring Locations

The permittee shall monitor to demonstrate compliance with the effluent limitations and other requirements of this permit at the locations specified in the table below (see Fact Sheet and permit application for schematic of monitoring locations).

Outfall Designation	Monitoring Location Designation (DMR Form)	Monitoring Description
001	001A	At the end of the pipe discharging into the Stillwater River, prior to mixing with the receiving water.
RIV	RIVA	Stillwater River - established upstream location SMC-1a
RIV	RIVB	Stillwater River - established downstream location SMC-11
SUM	SUMA	Sum of all discharges from Outfalls 001, 002, and 003
002	SUM2 [1]	Sum of all discharges to Outfall 002 from monitoring locations SMC 9A, SMC-9C & F002A, and SMC-16 & F002B.
002	002A	Monitoring location SMC-9A with flow from East Side Line and/or SMC-9C with Flow monitoring location F002A
002	002B	Monitoring location SMC-16; Flow monitoring location F002B
003	SUM3 [1]	Sum of all discharges at Outfall 003 from monitoring locations SMC-9A & F003A, SMC-9B & F003B, SMC-9D & F003C, and SMC-16 & F003D.
003	003A	Monitoring location SMC-9A; flow monitoring location F003A
003	003B	Monitoring location SMC-9B; flow monitoring location F003B
003	003C	Monitoring location SMC-9D; flow monitoring location F003C
003	003D	Monitoring location SMC-16; flow monitoring location F003D

Footnotes:
1. Effluent Limits for Outfalls 002 and 003 apply to these monitoring locations only.

2.5.2 Mass Load Calculations

Effluent limitations or monitoring requirements that are expressed in terms of load (lb/day), must be based on total mass of the discharge in accordance with the definition of daily discharge in Part 5 of this permit, including days of zero flow. The total mass shall be calculated using the following equations:

Load (lb/day)	=	**Avg. discharge concentration (mg/L)**	x	**Avg.Monthly Flow (MGD)**	x	**8.34**

Similarly for the maximum daily load, the total mass shall be calculated using the following equation:

Load (lb/day)	=	**Avg. discharge concentration (mg/L)**	x	**Highest daily flow (MGD)**	x	**8.34**

2.5.3 Composite Sample

Composite samples shall, as a minimum, be composed of four or more discrete aliquots (samples) of equal volume and time collected in a 24 hour period. The aliquots shall be combined in a single container for analysis (simple composite). The time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours.

2.5.4 Whole Effluent Toxicity Testing

The permittee shall conduct acute whole effluent toxicity sampling and testing in accordance with the following.

(a) WET Permit Trigger. There is no acute toxicity limit for the discharges regulated by this permit. An acute WET permit trigger occurs when any one test (invertebrate or fish) results in a lethal concentration, 50 percent (LC50) that is less than or equal to 100 percent effluent in either test (acute toxicity). The LC50 is the test concentration that would cause death in 50 percent of the test organisms over the specified period of time. This permit requires additional toxicity testing if acute toxicity is measured in any one test.

(b) Sample Frequency and Dilution Series. Beginning in the first calendar quarter following the effective date of the permit, the permittee shall, at least once each calendar quarter conduct an acute static renewal toxicity test on a composite sample of the effluent. Testing shall employ two species per quarter and will consist of 5 effluent concentrations (100, 50, 25, 12.5, 6.25 percent effluent) and a control. Dilution water and the control shall consist of the receiving water unless the permittee obtains authorization from the DEQ to use alternate dilution water. Quarterly samples shall be collected on a two day progression; i.e., if the first quarterly sample is on a Monday, the second quarter sample shall be on a Wednesday, etc. Saturdays, Sundays and holidays will be skipped in the progression.

(c) Test Methods. The static renewal acute toxicity tests shall be conducted in 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 (2002). The permittee shall conduct a 48-hour static renewal acute toxicity test using *Ceriodaphnia dubia* (EPA Method 2002.0) and a 96-hour static renewal acute toxicity test using *Pimephales promelas* (fathead minnow) (EPA Method 2000.0).

(d) Quality Assurance. Quality assurance, instructions, and other recommendations and requirements are found in Section 4 of the test method manual previously cited. If either the reference toxicant or effluent toxicity tests to do not meet the acceptability criteria in the test method manual, then the permittee must resample and retest within 14 days.

(e) Accelerated Testing and TRE/TIE Process. If an acute toxicity limit or trigger is exceeded, the permittee shall conduct one additional toxicity test using the same species and test method. This test shall begin within 14 days of the date of completion of the initial test in which acute toxicity was detected. If the additional toxicity test does not exceed an acute WET permit limit or trigger, then the permit may return to the regular testing frequency.

Should acute toxicity occur in the second test, the permittee shall conduct six additional toxicity tests over a twelve week period. This testing shall begin within 14 days of receipt of the test results exceeding an acute WET permit limit or trigger. If none of the additional tests exceed an acute WET permit limit or trigger, then the permittee may return to the regular testing frequency.

If one of the additional toxicity tests exceed an acute WET permit limit or trigger then within 14 days of receipt of this test result, the permittee shall initiate a TRE using as guidance, based on the type of treatment facility, either EPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002), 1999) or EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989). In conjunction with the TRE, the permittee shall develop and implement a detailed work plan which shall include: further actions undertaken by the permittee to investigate, identify, and correct the causes of toxicity; actions the permittee will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and a schedule for these actions.

The permittee may initiate a Toxicity Identification Evaluation (TIE) as part of a TRE to identify the causes of toxicity using the same species and test method and as guidance, EPA test method manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); and *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Sampling Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993).

(f) Reporting of Test Results. The permittee shall submit a laboratory report for all toxicity testing as an attachment to the DMR for the month in which the toxicity test was conducted. The format for the laboratory report shall be consistent with the latest revision of Region VIII Acute Whole Effluent Reporting Form and shall include all chemical and physical data as specified. In addition the report shall include a copy of all results for effluent parameters monitored concurrently with the toxicity tests and progress reports on any TRE/TIE investigations required by this permit.

(g) Notification. The permittee shall notify the DEQ (Water Protection Bureau) in writing within 14 days of exceedance of an acute WET permit limit or trigger. This notification shall describe the steps the permittee has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this permit; and schedule for actions not yet completed; or reasons no action has been taken.

2.5.5 Monitoring and Reporting Schedule

Reporting periods begin and end on the first and last days of the calendar month, quarter, semi-annual period, or year. For example, if the reporting periods for a parameter are semiannual, the permittee must report results for monitoring conducted between January 1 and June 30 and between July 1 and December 31.

2.5.6 Discharge Monitoring Reports

All monitoring results shall be summarized and reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1) postmarked no later than the 28th day of the calendar month following the completed reporting period. For example, if the permittee is required to report quarterly, a DMR must be postmarked by October 28 for the quarterly reporting period running from July 1 through September 30. Monitoring results must be reported on DMR forms provided by the DEQ.

The permittee shall report measured or calculated values as specified by the pre-printed effluent limitations on the DMR form. Effluent limitations typically are expressed as average monthly, average weekly, or maximum daily limitations and the corresponding measured or calculated values must be reported (monthly average, weekly average, daily maximum). When there are multiple measured or calculated values determined within a reporting period (e.g., 30 daily maximums determined during a monthly reporting period, 13 weekly averages determined during a quarterly reporting period), the highest of the calculated values must be reported on the DMR form, except for parameters reported as minimum values. For parameters specified as minimum values on the DMR, the permittee must report the lowest calculated or measured value.

If no discharge occurs during the reporting period, the permittee shall report "No Discharge" on the Discharge Monitoring Report form.

Legible copies of DMRs and all other reports required herein shall be signed and certified in accordance with the "Signatory Requirement" of this permit (see Standard Conditions in Section 4.), and submitted to the DEQ and at the following addresses:

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

2.5.7 Reporting of Non-quantified Analytical Results

Compliance with numeric effluent limitations in this permit shall be determined as specified below. At minimum, analytical methods used by the permittee for compliance purposes, must achieve the Minimum Level (ML) specified in this permit. For analytical results which are not quantified at the ML, compliance is determined as follows.

(a) Single values (i.e., instantaneous or a maximum daily limitations for which compliance is determined using a single sample): For concentration-based limitations, a result of "less than" the RRV is considered in compliance. The discharge also would be considered in compliance with any mass-loading limitation derived from the same concentration-based limitation. The permittee must report the analytical reporting value (RRV) achieved and reported by the laboratory with a less than ("<") symbol preceding the value. For mass-load limitations, the load should be calculated as given in Section 2.5.2 using the reported analytical value and reported with a less than ("<") symbol preceding the value. If the permittee has not used a method that meets the specified RRV, the result is considered invalid.

(b) Average values (i.e., average limitations that are based on multiple samples within a given time period): For a result of "less than" the RRV, the permittee should substitute zero ("0") for the sample when averaging multiple samples to determine an average concentration or mass discharge and report the average on the Discharge Monitoring Report form. Do not report averaged results using the "less than" symbol. If required, the permittee must also report individual values in addition to the average following the procedures listed above for single values.

2.6 Notification Requirements

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

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

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

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;

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

The level established by the DEQ 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":

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

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

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

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

3 SPECIAL CONDITIONS

The permittee shall comply with the special conditions described below.

3.1 Additional Monitoring and Special Studies

The permittee is required to conduct the additional monitoring and special studies described below.

3.1.1 Ambient Monitoring

The Permittee shall monitor for the following parameters in the Stillwater River upstream and downstream of the facility at the locations listed in 2.5.1.

Monitoring Requirements at Monitoring Locations RIVA and RIVB				
Parameter and Code [1]	**Units**	**Minimum Monitoring Frequency**	**Sample Type**	**Reporting Frequency**
pH (00400)	s.u.	1/Quarter	Instantaneous	Quarterly
Hardness (00900)	mg/L	1/Quarter	Grab	Quarterly
Aluminum, Total Recoverable (01104)	µg/L	1/Quarter	Grab	Quarterly
Cadmium, Total Recoverable (01113)	µg/L	1/Quarter	Grab	Quarterly
Chromium, Total Recoverable (01118)	µg/L	1/Quarter	Grab	Quarterly
Copper, Total Recoverable (01119)	µg/L	1/Quarter	Grab	Quarterly
Iron, Total Recoverable (00980)	µg/L	1/Quarter	Grab	Quarterly
Lead, Total Recoverable (01114)	µg/L	1/Quarter	Grab	Quarterly
Mercury, Total Recoverable (71901)	µg/L	1/Quarter	Grab	Quarterly
Nickel, Total Recoverable (01074)	µg/L	1/Quarter	Grab	Quarterly
Silver, Total Recoverable (01079)	µg/L	1/Quarter	Grab	Quarterly
Zinc, Total Recoverable (01094)	µg/L	1/Quarter	Grab	Quarterly
Cyanide, Total (00720)	µg/L	1/Quarter	Grab	Quarterly
Phosphorus, Total as P (00665)	mg/L	1/Quarter	Grab	Quarterly
Ammonia, as N (00610)	mg/L	1/Quarter	Grab	Quarterly
Kjeldahl Nitrogen, Total (as N) (00625)	mg/L	1/Quarter	Grab	Quarterly

Monitoring Requirements at Monitoring Locations RIVA and RIVB				
Parameter and Code [1]	**Units**	**Minimum Monitoring Frequency**	**Sample Type**	**Reporting Frequency**
Nitrate+Nitrite, as N (00630)	mg/L	1/Quarter	Grab	Quarterly
Total Nitrogen, as N (00600)	mg/L	1/Quarter	Calculate	Quarterly
Footnotes: 1. All analyses must achieve the RRV in the latest revision of Department Circular DEQ-7.				

3.1.2 Supplemental Study — Not Applicable

3.2 Compliance Schedules

1. Compliance with final effluent limits

The permit imposes new WQBELs for several pollutants at Outfall 002 and 003. The final WQBELs are effective 58 months after the permit effective date.

The permittee shall submit an annual report of progress towards compliance with the final WQBELs, or towards the submission of a request to modify the final WQBELs. The annual reports shall be postmarked to the Water Protection Bureau by January 28th of each calendar year following the permit effective date.

Should the permittee choose to apply for a modification of the final WQBELs, such a request must be submitted to DEQ no later one year prior to the effective date of the final WQBELs.

2. Nutrient Optimization Study

The actions listed in the table below must be completed on or before the respective scheduled completion dates. The completion of all actions or deliverables must be reported to the Department at the address listed in Part II.D. of the permit and in accordance with the signatory requirements of Part IV.G. of the permit.

Nutrient Optimization Study Compliance Schedule			
Action	**Frequency**	**Scheduled Completion Date of Action [1]**	**Report Due Date[2]**
Complete a Facility Optimization Study and Nutrient Reduction Analysis	Single Event	By 2 years after effective date	NA
Submit Notification that the Facility Optimization Study and Nutrient Reduction Analysis is Complete	Single Event	By 2 years after effective date	Due 28th of the month following scheduled completion date
Footnotes: NA = Not Applicable [1] The actions must be completed on or before the scheduled completion dates. [2] This notification must be postmarked or electronically submitted to the Department on or before the scheduled due date.			

3.3 Permit Modifications

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

3.3.1 Toxic Pollutants

This permit may be reopened and modified if a toxic standard or prohibition is established under Clean Water Act section 307(a) for a toxic pollutant that is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit.

3.3.2 TIE/TRE Results

Based on the results of whole effluent toxicity testing and a toxicity identification evaluation (TIE) / toxicity reduction evaluation (TRE) conducted by the permittee, this permit may be reopened and modified to incorporate any additional WET or parameter-specific numeric limitations, a modified compliance schedule for WET limitations, if judged necessary by the DEQ, or a modified whole effluent toxicity protocol.

4 STANDARD CONDITIONS

The permittee shall meet the following standard conditions.

4.1 Duty to Comply

The permittee shall 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.

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

The Montana Water Quality Act at MCA 75-5-631 provides that in an action initiated by the DEQ to collect civil penalties against a person who is found to have violated a permit condition, the person is subject to a civil penalty not to exceed $25,000. Each day of violation constitutes a separate violation.

MCA 75-5-632 provides that any person who willfully or negligently violates a prohibition or permit condition is subject, upon conviction, to criminal penalties not to exceed $25,000 per day or one year in prison, or both, for the first conviction, and $50,000 per day of violation or by imprisonment for not more than two years, or both, for subsequent convictions.

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

4.2 Duty to Reapply

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

4.3 Need to Halt or Reduce Activity Not a Defense

It may not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

4.4 Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

4.5 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that 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 that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

4.6 Permit Actions

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

4.7 Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege.

4.8 Duty to Provide Information

The permittee shall furnish to the DEQ, within a reasonable time, any information that the DEQ 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 DEQ, upon request, copies of records required to be kept by this permit.

4.9 Inspection and Entry

The permittee shall allow the head of the DEQ, 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.

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

4.10 Monitoring and Records

The permittee shall comply with the following conditions.

4.10.1 Representative Sample

Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

4.10.2 Retention of Records

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report or application.

4.10.3 Records Contents

Records of monitoring information must include:

(a) The date, exact place, and time of sampling or measurements.

(b) The individual(s) who performed the sampling or measurements.

(c) The date(s) analyses were performed.

(d) The individual(s) who performed the analyses.

(e) The analytical techniques or methods used.

(f) The results of such analyses.

4.10.4 Test Procedures

Monitoring must be conducted according to test procedures approved under Title 40 of the Code of Federal Regulations (40 CFR) Part 136, unless other test procedures have been specified in this permit.

4.10.5 Falsification and Tampering

The Montana Water Quality Act at MCA 75-5-633 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.

4.11 Signatory Requirement

All applications, reports or information submitted to the DEQ shall be signed and certified. (See ARM 17.30.1323.)

(a) For a corporation, the application must be signed by a responsible corporate officer, which means: 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, 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.

(b) For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.

(c) 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: the chief executive officer of the agency; or, a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

Authorized representatives. All reports required by the permit and other information requested by the DEQ shall be signed by a person described above or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:

(a) The authorization is made in writing by a person described above.

(b) 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).

(c) The written authorization is submitted to the DEQ.

Changes to authorization. If an authorization 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 above must be submitted to the DEQ prior to or together with any reports, information, or applications to be signed by an authorized representative.

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.*"

4.12 Reporting Requirements

The permittee shall comply with the reporting requirements identified in this Section.

4.12.1 Planned Changes

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

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

(b) The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements under ARM 17.30.1343(1)(a).

4.12.2 Anticipated Noncompliance

The permittee shall give advance notice to the DEQ of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

4.12.3 Transfers

This permit is not transferable to any person except after notice to the DEQ. The DEQ may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Montana Water Quality Act. (See ARM 17.30.1360; in some cases, modification or revocation and reissuance is mandatory.)

In accordance with ARM 17.30.1360(2), this permit may be automatically transferred to a new permittee if:

(a) The current permittee notifies the DEQ 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 DEQ does not notify the existing permittee and the proposed new permittee of an intent to revoke or modify and reissue the permit. A modification may also be a minor modification under ARM 17.30.1362. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned above.

4.12.4 Monitoring Reports

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

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

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.

Calculations for all limitations that require averaging of measurements must use an arithmetic mean unless otherwise specified by the DEQ in the permit.

4.12.5 Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be postmarked no later than 14 days following each schedule date.

4.12.6 Twenty-four Hour Reporting

The permittee shall report any noncompliance that might endanger health or the environment. Any information must be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. 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:

(a) A description of the noncompliance and its cause;

(b) The period of noncompliance, including exact dates and times;

(c) The estimated time noncompliance is expected to continue if it has not been corrected.

(d) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The following are included as information that must be reported within 24 hours under this provision:

(a) Any unanticipated bypass that exceeds any effluent limitation in the permit of this permit (see ARM 17.30.1342(7) and "Bypass" below);

(b) Any upset that exceeds any effluent limitation in the permit (see "Upset" below).

(c) Violation of a maximum daily discharge limitation for any of the pollutants listed by the DEQ in this permit to be reported within 24 hours (see ARM 17.30.1344 and 40 CFR 122.44(g)).

Oral notification. The report shall be made orally to the Water Protection Bureau at (406) 444-3080.

Waiver of written notification requirement. The DEQ 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. Written reports shall be submitted to the following address:

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

4.12.7 Other Noncompliance

Instances of noncompliance not required to be reported within 24 hours shall be reported at the time monitoring reports are submitted. The reports shall contain the information listed above for written submissions under "Reporting Requirements—Twenty-four Hour Reporting."

4.12.8 Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the DEQ, it shall promptly submit such facts or information.

4.13 Bypass

Definitions.

a) B*ypass* means the intentional diversion of waste streams from any portion of a treatment facility.

b) S*evere property damage* means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent damage to natural resources that 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.

Bypass Not Exceeding Limitations. The permittee may allow any bypass to occur that 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 "Notice" and "Prohibition of Bypass" below.

Notice.

(a) *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.

(b) *Unanticipated Bypass*. The permittee shall submit notice of an unanticipated bypass as required under "Reporting Requirements—Twenty-four Hour Reporting" above.

Prohibition of Bypass. Bypass is prohibited and the DEQ may take enforcement action against a permittee for a bypass, unless:

(a) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.

(b) 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 that occurred during normal periods of equipment downtime or preventive maintenance.

(c) The permittee submitted notices as required above.

4.14 Upset

Definition. *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.

Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements outlined below under "Conditions Necessary for Demonstration of an Upset" below 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.

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:

An upset occurred and that the permittee can identify the cause(s) of the upset;
The permitted facility was at the time being properly operated;
The permittee submitted notice of the upset as required under "Reporting Requirements—Twenty-four Hour Reporting" above and
The permittee complied with any remedial measures required under "Duty to Mitigate" above.

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

4.15 Fees

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

5 DEFINITIONS AND ABBREVIATIONS

The following definitions and abbreviations apply to terms used in this permit.

5.1 General Definitions and Abbreviations

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

"Acute Toxicity Test" is a test to determine the concentration of effluent or ambient waters that causes an adverse effect (usually death) on a group of test organisms during a short-term exposure (e.g. 24, 48, or 96 hours). Acute toxicity is measured using statistical procedures (e.g. point estimate or a hypothesis text).

"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.

"BOD_5" means the five-day measure of pollutant parameter biochemical oxygen demand.

"$CBOD_5$" means the five-day measure of pollutant parameter carbonaceous biochemical oxygen demand.

"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 the percent effluent represented by the effluent concentration in the receiving water after accounting for any allowable mixing zone.

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

"Composite samples" means a sample composed of two or more discrete aliquots.

"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 discharge of a pollutant.

"Discharge of a pollutant" and "discharge of pollutants" each means any additional of any pollutant or combination of pollutants into state waters from any point source. This definition includes additions of pollutants into water of the state from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person which do not lead to a treatment works. This term does not include an addition of pollutants by any "indirect discharger."

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

"Grab sample" means a sample that 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 measurement" means a single reading, observation, or measurement.

"Lethal Concentration, 50 Percent (LC50) means the toxic or effluent concentration that would cause death in 50 percent of the test organisms over a specified period of time.

"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.

"Method Detection Level" (MDL) is defined at 40 CFR 136, Appendix B.

"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. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all method specific sample weights, volumes and processing step have been followed. The ML may be equivalent to the Required Reporting Value (RRV) unless other wise specified in the permit.

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

"Outfall" means the place where a point source discharges effluent into the receiving water. For each outfall, there typically is at least one monitoring location. Although the monitoring location might or might not be at the actual point of discharge, samples taken at the monitoring location should be representative of the discharge.

"Process Wastewater" means water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by product, or waste product.

"State Waters" is defined at 75-5-103, MCA.

"Toxicity Identification Evaluation" (TIE) is a set of site-specific procedures used to identify the specific chemical(s) causing effluent toxicity.

"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.

"Toxicity Reduction Evaluation" (TRE) means a site-specific study conducted in a step-wise process to identify the causative agents of effluent toxicity, isolate the source of the toxicity, evaluate the effectiveness of the toxicity control options, and then confirm the reduction in effluent toxicity after the control measures are put in place.

"TSS" means the pollutant parameter total suspended solids.

"Whole Effluent Toxicity" (WET) means the aggregate toxicity of an effluent measured by a toxicity text.

"WET Permit Limit" means the water quality-based effluent limitation for WET, established by either an EPA or state permit-writer that is used to trigger accelerated WET monitoring or TREs.

"Wet Permit Trigger" means the threshold level for WET in an NPDES permit, established by either an EPA or state permit-writer that is used to trigger accelerated WET monitoring or TREs when there is no reasonable potential for WET and no WET permit limits.

5.2 Specialized Definitions and Abbreviations

"Active mining area" is a place where work or other activity related to the extraction, removal, or recovery of metal ore is being conducted, except, with respect to surface mines, any area of land on or in which grading has been completed to return the earth to desired contour and reclamation work has begun.

"Mill" is a preparation facility within which the metal ore is cleaned, concentrate, or otherwise processed before it is shipped to the customer, refiner, smelter, or manufacturer. A mill includes all ancillary operations and structures necessary to clean, concentrate or otherwise process metal ore, such as ore and gangue storage areas and loading facilities.

"Mine" is an active mining area, including all land and property placed under, or above the surface of such land, used in or resulting from the work of extracting metal ore or minerals from their natural deposits by and means or method, including secondary recovery of metal ore from refuse or other storage piles, wastes, or rock dumps and mill tailings derived from the mining, cleaning, or concentration of metal ores.

"Mine Drainage" means any water drained, pumped, or siphoned from a mine.