Major Industrial
Permit No.: MT0031755

# MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

## AUTHORIZATION TO DISCHARGE UNDER THE MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM

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.*,

**Butte Highlands JV, LLC**

is authorized to discharge from its **Butte Highlands Mine**

located at **Intersection of Highlands Road and Camp Creek Road, Latitude 45° 47' 31" N, Longitude 112° 30' 55"**

to receiving waters named, **Basin Creek, tributary to Fish Creek, Middle Fork of Moose Creek, and tributary to Middle Fork of Moose Creek**

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein. Authorization for discharge is limited to those outfalls specifically listed in the permit.

This permit shall become effective: **August 1, 2013.**

This permit and the authorization to discharge shall expire at midnight, **July 31, 2018 .**

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

Bob Habeck

Bob Habeck, Chief
Water Protection Bureau
Permitting & Compliance Division

Issuance Date: 6/30/13

# TABLE OF CONTENTS

Cover Sheet--Issuance and Expiration Dates

**I. EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS & OTHER CONDITIONS 3**

A. Description of Discharge Points and Mixing Zone ..... 3
B. Effluent Limitations ..... 4
C. Monitoring Requirements ..... 7
D. Special Conditions ..... 10

**II. MONITORING, RECORDING AND REPORTING REQUIREMENTS ..... 12**

A. Representative Sampling ..... 12
B. Monitoring Procedures ..... 12
C. Penalties for Tampering ..... 12
D. Reporting of Monitoring Results ..... 12
E. Compliance Schedules ..... 12
F. Additional Monitoring by the Permittee ..... 13
G. Records Contents ..... 13
H. Retention of Records ..... 13
I. Twenty-four Hour Notice of Noncompliance Reporting ..... 13
J. Other Noncompliance Reporting ..... 14
K. Inspection and Entry ..... 14

**III. COMPLIANCE RESPONSIBILITIES ..... 16**

A. Duty to Comply ..... 16
B. Penalties for Violations of Permit Conditions ..... 16
C. Need to Halt or Reduce Activity not a Defense ..... 16
D. Duty to Mitigate ..... 16
E. Proper Operation and Maintenance ..... 16
F. Removed Substances ..... 17
G. Bypass of Treatment Facilities ..... 17
H. Upset Conditions ..... 18
I. Toxic Pollutants ..... 18
J. Changes in Discharge of Toxic Substances ..... 18

**IV. GENERAL REQUIREMENTS ..... 20**

A. Planned Changes ..... 20
B. Anticipated Noncompliance ..... 20
C. Permit Actions ..... 20
D. Duty to Reapply ..... 20
E. Duty to Provide Information ..... 20
F. Other Information ..... 20
G. Signatory Requirements ..... 20
H. Penalties for Falsification of Reports ..... 21
I. Availability of Reports ..... 22
J. Oil and Hazardous Substance Liability ..... 22
K. Property or Water Rights ..... 22
L. Severability ..... 22
M. Transfers ..... 22
N. Fees ..... 23
O. Reopener Provisions ..... 23

**V. DEFINITIONS ..... 25**

# I. EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS & OTHER CONDITIONS

## A. Description of Discharge Points and Mixing Zone

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

| Outfall | Description |
|---|---|
| 001 | **Location:** At the end of the pipe/ditch, discharging into Basin Creek, located at 45° 47' 45" N latitude, 112° 30' 54" W longitude.<br><br>**Mixing Zone:** A mixing zone has not been granted for this outfall.<br><br>**Treatment Works**: Hyperfiltration (Reverse Osmosis) |
| 002 | **Location:** At the end of the pipe/ditch, discharging into a tributary of Fish Creek, located at 45° 47' 34" N latitude, 112° 29' 50" W longitude.<br><br>**Mixing Zone:** A mixing zone has not been granted for this outfall.<br><br>**Treatment Works**: Hyperfiltration (Reverse Osmosis) |
| 003 | **Location:** At the end of the pipe/ditch, discharging into Middle Fork of Moose Creek, located at 45° 47' 09" N latitude, 112° 31' 37" W longitude.<br><br>**Mixing Zone:** A mixing zone has not been granted for this outfall.<br><br>**Treatment Works**: Hyperfiltration (Reverse Osmosis) |
| 004 | **Location:** At the end of the pipe/ditch, discharging into a tributary of Middle Fork of Moose Creek, located at 45° 47' 00" N latitude, 112° 31' 31" W longitude. |

**Mixing Zone:** A mixing zone has not been granted for this outfall.

**Treatment Works**: Hyperfiltration (Reverse Osmosis)

005 **Location:** At the beginning of the land application system, located at approximately 45° 47' 28" N latitude, 112° 31' 11" W longitude with a hydraulic connection to Middle Fork of Moose Creek.

**Mixing Zone:** A mixing zone has not been granted for this outfall.

**Treatment Works**: Hyperfiltration (Reverse Osmosis)

006 **Location:** At the beginning of the infiltration pipe, located at approximately 45° 47' 08" N latitude, 112° 31' 27" W longitude with a hydraulic connection to Middle Fork of Moose Creek.

**Mixing Zone:** A mixing zone has not been granted for this outfall.

**Treatment Works**: Hyperfiltration (Reverse Osmosis)

B. Effluent Limitations

**Outfall 001-006**

Beginning on the effective date of this permit and lasting through the term of the permit, the quality of effluent discharged by the facility shall, as a minimum, meet the limitations as set forth below:

**Numeric Discharge Limitations: Outfall 001 [1]**

| Parameter and Code | Units | Average Monthly | Daily Maximum |
|---|---|---|---|
| Ammonia, Total (as N) (00610) | mg/L | 0.011[2] | 0.021[2] |
| Arsenic, Total Recoverable (00978) | µg/L | 5.0 | 10.0 |
| Cadmium, Total Recoverable (01113) | µg/L | 0.02[3] | 0.05 |
| Chromium, Total Recoverable (01118) | µg/L | 0.29[4] | 0.59[4] |
| Copper, Total Recoverable (01119) | µg/L | 1.1[5] | 2.1 |
| Fluoride (00951) | µg/L | 65[6] | 131[6] |
| Lead, Total Recoverable (01114) | µg/L | 0.12[7] | 0.25[7] |
| Mercury, Total Recoverable (71901) | µg/L | 0.006 | 0.012 |
| Nickel, Total Recoverable (01074) | µg/L | 0.13[8] | 0.26[8] |
| Nitrite + Nitrate (as N) (00630) | mg/L | 0.11 | 0.23 |
| Nitrogen, Total (as N) (00600) | mg/L | 0.18 | -- |
| pH (00400) | S.U. | 7.6 | 8.3 |
| Phosphorus, Total (as P) (00665) | mg/L | 0.012 | -- |
| Selenium, Total Recoverable (00981) | µg/L | 0.17[9] | 0.34[9] |
| Total Suspended Solids (TSS) (00530) | mg/L | 3.0 | 6.1 |
| Zinc, Total Recoverable (01094) | µg/L | 2.0[10] | 4.1[10] |

Footnotes:
1. See Definitions section at end of permit for explanation of terms.
2. The permittee will be in compliance with the applicable effluent limitation if ammonia does not exceed the RRV of 0.07 mg/L.
3. The permittee will be in compliance with the applicable effluent limitation if cadmium does not exceed the RRV of 0.03 µg/L.
4. The permittee will be in compliance with the applicable effluent limitation if chromium does not exceed the RRV of 10 µg/L.
5. The permittee will be in compliance with the applicable effluent limitation if copper does not exceed the RRV of 2 µg/L.
6. The permittee will be in compliance with the applicable effluent limitation if fluoride does not exceed the RRV of 200 µg/L.
7. The permittee will be in compliance with the applicable effluent limitation if lead does not exceed the RRV of 0.3 µg/L.
8. The permittee will be in compliance with the applicable effluent limitation if nickel does not exceed the RRV of 2 µg/L.
9. The permittee will be in compliance with the applicable effluent limitation if selenium does not exceed the RRV of 1 µg/L.
10. The permittee will be in compliance with the applicable effluent limitation if zinc does not exceed the RRV of 8 µg/L.

| Numeric Discharge Limitations: Outfall 002 [1] | | | |
|---|---|---|---|
| Parameter and Code | Units | Average Monthly | Daily Maximum |
| Cadmium, Total Recoverable (01113) | µg/L | 0.02[2] | 0.03 |
| Copper, Total Recoverable (01119) | µg/L | 0.4[3] | 0.7[3] |
| Lead, Total Recoverable (01114) | µg/L | 0.1[4] | 0.1[4] |
| Mercury, Total Recoverable (71901) | µg/L | 0.006 | 0.012 |
| Nitrogen, Total (as N) (00600) | mg/L | 0.08 | -- |
| pH (00400) | S.U. | 7 | 8.5 |
| Phosphorus, Total (as P) (00665) | mg/L | 0.02 | -- |
| Selenium, Total Recoverable (00981) | µg/L | 0.61[3] | 1.23 |
| Total Suspended Solids (TSS) (00530) | mg/L | 0.4 | 0.9 |
| Zinc, Total Recoverable (01094) | µg/L | 4.6[6] | 9.2 |

Footnotes:
1. See Definitions section at end of permit for explanation of terms.
2. The permittee will be in compliance with the applicable effluent limitation if cadmium does not exceed the RRV of 0.03 µg/L.
3. The permittee will be in compliance with the applicable effluent limitation if copper does not exceed the RRV of 2 µg/L.
4. The permittee will be in compliance with eh applicable effluent limitation if lead does not exceed the RRV of 0.3 µg/L.
5. The permittee will be in compliance with the applicable effluent limitation if selenium does not exceed the RRV of 1 µg/L.
6. The permittee will be in compliance with the applicable effluent limitation if zinc does not exceed the RRV of 8 µg/L.

| Numeric Discharge Limitations: Outfall 003, 005, 006 [1] | | | |
|---|---|---|---|
| Parameter and Code | Units | Average Monthly | Daily Maximum |
| Arsenic, Total Recoverable (00978) | µg/L | 2.0 | 3.9 |
| Cadmium, Total Recoverable (01113) | µg/L | 0.06 | 0.11 |
| Copper, Total Recoverable (01119) | µg/L | 2.1 | 4.3 |
| Lead, Total Recoverable (01114) | µg/L | 1 | 2 |
| Mercury, Total Recoverable (71901) | µg/L | 0.006 | 0.012 |
| Nitrogen, Total (as N) (00600) | mg/L | 0.27 | -- |
| pH (00400) | S.U. | 7 | 8.5 |
| Phosphorus, Total (as P) (00665) | mg/L | 0.008 | -- |
| Selenium, Total Recoverable (00981) | µg/L | 0.61[2] | 1.23 |
| Total Suspended Solids (TSS) (00530) | mg/L | 1.0 | 2.0 |
| Zinc, Total Recoverable (01094) | µg/L | 27.6 | 55.5 |

Footnotes:
1. See Definitions section at end of permit for explanation of terms.
2. The permittee will be in compliance with the applicable effluent limitation if selenium does not exceed the RRV of 1 µg/L.

| Numeric Discharge Limitations: Outfall 004 [1] | | | |
|---|---|---|---|
| Parameter and Code | Units | Average Monthly | Daily Maximum |
| Arsenic, Total Recoverable (00978) | µg/L | 3.0 | 6.1 |
| Cadmium, Total Recoverable (01113) | µg/L | 0.04 | 0.08 |
| Copper, Total Recoverable (01119) | µg/L | 1.4[2] | 2.8 |
| Lead, Total Recoverable (01114) | µg/L | 0.5 | 1.0 |
| Mercury, Total Recoverable (71901) | µg/L | 0.006 | 0.012 |
| Nitrogen, Total (as N) (00600) | mg/L | 0.14 | -- |
| pH (00400) | S.U. | 7 | 8.5 |
| Phosphorus, Total (as P) (00665) | mg/L | 0.012 | -- |
| Selenium, Total Recoverable (00981) | µg/L | 0.61[3] | 1.23 |
| Total Suspended Solids (TSS) (00530) | mg/L | 1.5 | 3.0 |
| Zinc, Total Recoverable (01094) | µg/L | 14.7 | 29.5 |

Footnotes:
1. See Definitions section at end of permit for explanation of terms.
2. The permittee will be in compliance with the applicable effluent limitation if copper does not exceed the RRV of 2 µg/L.
3. The permittee will be in compliance with the applicable effluent limitation if selenium does not exceed the RRV of 1 µg/L.

C. Monitoring Requirements

**Outfalls 001-006**

As a minimum, upon the effective date of this permit, the following constituents shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharge. With the exception of flow measurements (see Monitoring Requirements table Footnote No. 2 below), effluent monitoring samples shall be taken from the distribution valve box prior to the pipes routing to each outfall. Continuous flow monitoring for total effluent flow and Outfalls 001 through 004 must occur. 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 or overflow occurred.

All effluent and ambient monitoring must be conducted in accordance with test procedures approved under 40 CFR 136, unless another method is specified in 40 CFR Subchapter N. Analytical methods must achieve the required reporting value (RRV) specified in Circular DEQ-7, unless otherwise specified in the permit. The permittee may use any approved analytical method capable of achieving the RRV specified in the permit.

| Monitoring Requirements–Monitoring Location 001–006[1] | | | | |
|---|---|---|---|---|
| **Parameter and Code** | **Units** | **Minimum Monitoring Frequency** | **Sample Type** | **Basis** |
| Flow rate[2] (00056) | mgd | Continuous | Recorded | ARM 17.30.1351 |
| pH, maximum (00400) | SU | Weekly | Instantaneous | Effluent Limitation |
| pH, minimum (00400) | SU | Weekly | Instantaneous | Effluent Limitation |
| Temperature (00011) | °C | Weekly | Instantaneous | Monitor |
| Ammonia, Total (as N) (00610) | mg/L | Weekly | Grab | Effluent Limitation |
| Arsenic, Total Recoverable (00978) | µg/L | Weekly | Grab | Effluent Limitation |
| Cadmium, Total Recoverable (01113) | µg/L | Weekly | Grab | Effluent Limitation |
| Chromium, Total Recoverable (01118) | µg/L | Weekly | Grab | Effluent Limitation |
| Copper, Total Recoverable (01119) | µg/L | Weekly | Grab | Effluent Limitation |
| Fluoride (00951) | µg/L | Weekly | Grab | Effluent Limitation |
| Hardness, Total (as CaCO3) (00900) | mg/L | Quarterly | Grab | Monitor |
| Lead, Total Recoverable (01114) | µg/L | Weekly | Grab | Effluent Limitation |
| Mercury, Total Recoverable (71901) | µg/L | Weekly | Grab | Effluent Limitation |
| Nickel, Total Recoverable (01074) | µg/L | Weekly | Grab | Effluent Limitation |
| Total Kjeldahl Nitrogen (00625) | mg/L | Weekly | Grab | Monitor (part of Eff. Limit) |
| Nitrite-Nitrate (as N) (00630) | mg/L | Weekly | Grab | Effluent Limitation |
| Nitrogen, Total (as N)[3] (00600) | mg/L | Weekly | Calculate | Effluent Limitation |
| | lbs/day | -- | -- | |
| Phosphorus, Total (as P) (00665) | mg/L | Weekly | Grab | Effluent Limitation |
| | lbs/day | -- | -- | |
| Oil & Grease – Total Recoverable (00552) | mg/L | Quarterly | Grab | Monitor |
| Selenium, Total Recoverable (00981) | µg/L | Weekly | Grab | Effluent Limitation |
| Sulfate, Total (as SO4) (00945) | mg/L | Quarterly | Grab | Monitor |
| Total Suspended Solids (TSS) (00530) | mg/L | Weekly | Grab | Effluent Limitation |
| Zinc, Total Recoverable (01094) | µg/L | Weekly | Grab | Effluent Limitation |

1. Effluent samples for Outfalls 001–006 will be taken at the distribution valve box.
2. Total effluent flow and individual flow for each of Outfalls 001 through 004 must be recorded continuously. Average and maximum weekly flow will be reported on DMRs.
3. An RRV of 0.15 mg/L must be achieved for total nitrogen (i.e. if the sum of nitrite-nitrate plus total Kjeldahl nitrogen is used to calculate total nitrogen, each component parameter analysis must achieve an RRV of 0.15 mg/L).

1. Whole Effluent Toxicity Monitoring – Chronic Toxicity

Starting in the first 6 months following the effective date of the permit, the permittee shall, at least semiannually conduct a chronic toxicity static renewal test on a grab sample of the effluent from Outfall 001. Testing will employ two species 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 receiving water collected upstream from Outfall 003 (tributary to Fish Creek). If the tributary to Fish Creek upstream of Outfall 003 is shown to be toxic or dry, moderately hard reconstituted laboratory water may be substituted. Samples shall be collected on a two day progression; i.e., if the first semiannual 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.

The static toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of Methods for Measuring the Chronic Toxicity of Effluent to Freshwater and Marine Organisms, EPA-821-R-02-013 and the "*Region VIII NPDES Whole Effluent Toxics Control Program, August 1997*". The permittee shall conduct a three-brood (seven day) survival and reproduction static renewal toxicity test using *Ceriodaphnia dubia* (test method 1002.0) and a seven day growth and survival static renewal toxicity test using *Pimephales promelas* (test method 1000.0). The control of pH in the toxicity test utilizing $CO_2$ enriched atmospheres is allowed to prevent rising pH drift. The target pH selected must represent the pH value of the receiving water at the time of sample collection.

There is not a chronic toxicity limit in this permit, but the effluent is being screened for toxicity. 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.

If chronic toxicity occurs in a routine test, an additional test shall be conducted within 14 days of the date of the initial sample. Should chronic 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 Part II of this permit.

Semiannual results from the laboratory shall be reported along with the Discharge Monitoring Report (DMR) form submitted for the end of the reporting six month period (e.g., whole effluent results for the reporting period ending June 30 shall be reported with the June DMR due July 28th and the remaining semiannual report submitted with the December DMR's due January 28 of the following year). The format for the laboratory report shall be consistent with the

latest revision of Region VIII Guidance for Chronic Whole Effluent Reporting, and shall include all chemical and physical data as specified.

D. Special Conditions

1. Toxicity Reduction Evaluation / Toxicity Identification Evaluation

Should chronic toxicity be detected in the required resample, a TIE-TRE shall be undertaken by the permittee within 14 days to establish the cause of the toxicity, locate the source(s) of the toxicity, and develop control or treatment for the toxicity. Failure to initiate or conduct an adequate TIE-TRE, or delays in the conduct of such tests, shall not be considered a justification for noncompliance with this permit.

The permittee shall initiate a TRE using as guidance, based on the type of treatment facility, 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).

2. Best Management Practices:

The permit establishes the requirement that the permittee develop and implement a BMP Plan that achieves the objectives and specific requirements listed below. A copy of the plan must be submitted to DEQ within six months of the effective date of the permit. The Plan must be implemented as soon as possible but no later than nine months from the effective date of the permit. The purpose of the plan is to control runoff from land application areas.

Objectives:

The discharge from Outfall 005 meets the nondegradation water quality standards, so the normal requirements for land application of waste water do not apply. For Outfall 005, the BMP plan will document:

a. the land application procedures that ensure that runoff from the land application area does not contribute to excessive sedimentation of the stream.
b. how the permittee will prevent the soil's water holding capacity from being exceeded.

3. Ambient Monitoring Requirements:

For Outfalls 001-006, the permittee is required to collect at a minimum, baseline conditions of stream bed composition at two locations for each receiving stream and conduct annual monitoring of stream bed composition at each monitoring location. The annual monitoring reports must be included

with the renewal application and will be used to evaluate discharge volume during the permit renewal.

4. Plan Submission

Within 90 days of issuance of this permit or prior to commencing discharge from the facility, whichever is sooner, the permittee will submit:

- plans detailing how continuous flow monitoring for total effluent flow and individual effluent flow for Outfalls 1 through 4 will be performed and
- an updated engineering drawing(s) showing the treatment system, distribution valve box location (effluent sampling location), and flow measurement locations.

## II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

### A. Representative Sampling

Samples taken in compliance with the monitoring requirements established under Part I of the permit shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.

### B. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under Part 136, Title 40 of the Code of Federal Regulations, unless other test procedures have been specified in this permit. All flow-measuring and flow-recording devices used in obtaining data submitted in self-monitoring reports must indicate values within 10 percent of the actual flow being measured.

### C. 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 $10,000, or by imprisonment for not more than six months, or by both.

### D. Reporting of Monitoring Results

Self-Monitoring results will be reported monthly. Monitoring results obtained during the previous reporting period 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 reporting period. Whole effluent toxicity (biomonitoring) results must be reported on forms from the most recent version of EPA Region VIII's "Guidance for Whole Effluent Reporting" with copies of the laboratory analysis report. If no discharge occurs during the reporting period, "no discharge" shall be reported. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the "Signatory Requirements" (see Part IV.G of this permit), and submitted to the Department and the Regional Administrator at the following addresses:

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

(b) U.S. Environmental Protection Agency
301 South Park Avenue
Drawer 10096
Helena, Montana 59626
Phone: (406) 441-1123

### E. Compliance Schedules

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

F. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using approved analytical methods as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency shall also be indicated.

G. Records Contents

Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;

2. The initials or name(s) of the individual(s) who performed the sampling or measurements;

3. The date(s) analyses were performed;

4. The time analyses were initiated;

5. The initials or name(s) of individual(s) who performed the analyses;

6. References and written procedures, when available, for the analytical techniques or methods used; and

7. The results of such analyses, including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine these results.

H. 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. This period may be extended by request of the Department at any time. Data collected on site, copies of Discharge Monitoring Reports, and a copy of this MPDES permit must be maintained on site during the duration of activity at the permitted location.

I. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee shall report any serious incidents of noncompliance as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Protection Bureau at (406) 444-3080 or the Office of Disaster and Emergency Services at (406) 324-4777. The following examples are considered serious incidents:

a. Any noncompliance which may seriously endanger health or the environment;

b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.G of this permit, "Bypass of Treatment Facilities"); or

c. Any upset which exceeds any effluent limitation in the permit (see Part III.H of this permit, "Upset Conditions").

2. 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; and

d. steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

3. 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.

4. Reports shall be submitted to the addresses in Part II.D of this permit, "Reporting of Monitoring Results".

J. Other Noncompliance Reporting

Instances of noncompliance not required to be reported within 24 hours shall be reported at the time that monitoring reports for Part II.D of this permit are submitted. The reports shall contain the information listed in Part II.I.2 of this permit.

K. Inspection and Entry

The permittee shall allow the head of the Department or the Director, or an authorized representative thereof, upon the presentation of credentials and other documents as may be required by law, to:

1. 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;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance, any substances or parameters at any location.

## III. COMPLIANCE RESPONSIBILITIES

### A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the 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 give the Department or the Regional Administrator advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance.

### B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed $10,000 per day of such violation. Any person who willfully or negligently violates permit conditions of the Act is subject to a fine of not more than $50,000 per day of violation, or by imprisonment for not more than 2 years, or both, for subsequent convictions. MCA 75-5-611(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. Except as provided in permit conditions on Part III.G of this permit, "Bypass of Treatment Facilities" and Part III.H of this permit, "Upset Conditions", nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

### C. Need to Halt or Reduce Activity not a Defense

It shall 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.

### D. 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.

### E. 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. However, the permittee shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.

F. Removed Substances

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard.

G. Bypass of Treatment Facilities

1. 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 of Parts III.G.2 and III.G.3 of this permit.

2. 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 10 days before the date of the bypass.

   b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.I of this permit, "Twenty-four Hour Reporting".

3. Prohibition of bypass:

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

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

      2) 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

      3) The permittee submitted notices as required under Part III.G.2 of this permit.

   b. 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 in Part III.G.3.a of this permit.

H. Upset Conditions

1. 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 Part III.H.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 (i.e. Permittees will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with technology-based permit effluent limitations).

2. 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:

   a. An upset occurred and that the permittee can identify the cause(s) of the upset;

   b. The permitted facility was at the time being properly operated;

   c. The permittee submitted notice of the upset as required under Part II.I of this permit, "Twenty-four Hour Notice of Noncompliance Reporting"; and

   d. The permittee complied with any remedial measures required under Part III.D of this permit, "Duty to Mitigate".

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

I. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act 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.

J. Changes in Discharge of Toxic Substances

Notification shall be provided to the Department as soon as the permittee knows of, or has reason to believe:

1. 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":

   a. One hundred micrograms per liter (100 mg/L);

b. Two hundred micrograms per liter (200 mg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 mg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

c. 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

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

2. 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":

a. Five hundred micrograms per liter (500 mg/L);

b. One milligram per liter (1 mg/L) for antimony;

c. 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

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

# IV. GENERAL REQUIREMENTS

A. Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when the alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit.

B. 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.

C. 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.

D. 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 apply for and obtain a new permit. The application must be submitted at least 180 days before the expiration date of this permit.

E. 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 revoking, modifying 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.

F. Other Information

When 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 with a narrative explanation of the circumstances of the omission or incorrect submittal and why they weren't supplied earlier.

G. Signatory Requirements

All applications, reports or information submitted to the Department or the EPA shall be signed and certified.

1. All permit applications shall be signed as follows:

   a. For a corporation: by a responsible corporate officer;

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.

2. All reports required by the permit and other information requested by the Department 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 and submitted to the Department; and

   b. The authorization specified 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 a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or an individual occupying a named position.)

3. Changes to authorization. If an authorization under Part IV.G.2 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 Part IV.G.2 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.

4. 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."

H. 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 than $25,000 per violation, or by imprisonment for not more than six months per violation, or by both.

I. Availability of Reports

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. As required by the Clean Water Act, permit applications, permits and effluent data shall not be considered confidential.

J. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

K. Property or Water Rights

The issuance of this permit does not convey any property or water rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

L. 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.

M. Transfers

This permit may be automatically transferred to a new permittee if:

1. The current permittee notifies the Department at least 30 days in advance of the proposed transfer date;

2. 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;

3. 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 Part IV.M.2 of this permit; and

4. Required annual and application fees have been paid.

N. Fees

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:

1. Impose an additional assessment computed at the rate established under ARM 17.30.201; and,

2. 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 sub-section. Suspensions are limited to one year, after which the permit will be terminated.

O. 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 limits 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 limits or water management plan.

3. TMDL or Wasteload Allocation: TMDL requirements or a wasteload allocation is developed and approved by the Department and/or EPA 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 Section 307(a) of the Clean Water Act 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 Limitation: Change in the whole effluent protocol, or any other conditions related to the control of toxicants have taken place, or if one or more of the following events have occurred:

a. Toxicity was detected late in the life of the permit near or past the deadline for compliance.

b. The TRE/TIE results indicated that compliance with the toxic limits will require an implementation schedule past the date for compliance.

c. The TRE/TIE results indicated that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits.

d. Following the implementation of numerical controls on toxicants, a modified whole effluent protocol is needed to compensate for those toxicants that are controlled numerically.

e. The TRE/TIE revealed other unique conditions or characteristics which, in the opinion of the Department, justify the incorporation of unanticipated special conditions in the permit.

## V. DEFINITIONS

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

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

3. **"Acute Toxicity"** occurs when 50 percent or more mortality is observed for either species (See Part 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.

4. **"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.

5. **"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.

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

7. **"Chronic Toxicity"** means when the survival, growth, or reproduction, as applicable, for either test species, at the effluent dilution(s) designated in this permit (see Part I.C.), is significantly less (at the 95 percent confidence level) than that observed for the control specimens.

8. **"Composite samples"** means a sample composed of two or more discrete aliquots (samples). The aggregate sample will reflect the average quality of the water or wastewater in the compositing or sample period. Composite sample may be composed of constant volume aliquots collected at regular intervals (simple composite) or flow proportioned.

9. **"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.

10. **"Daily Maximum Limit"** means the maximum 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.

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

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

13. **"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.

14. **"EPA"** means the United States Environmental Protection Agency.

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

16. **"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.

17. **"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.

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

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

19. **"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.

20. **"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.

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

22. **"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.

23. **"TIE"** means a toxicity identification evaluation.

24. **"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.

25. **"TRE"** means a toxicity reduction evaluation.

26. **"TSS"** means the pollutant parameter total suspended solids.

27. **"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.