Minor Industrial
Permit No.: MT0000019
Issued September 16, 2009

# MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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

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

**BNSF Railway Company**

is authorized to discharge from its **Whitefish Rail Yard Wastewater Treatment Facility**

located at **500 Depot Street, Whitefish, MT**

to receiving waters named the **Whitefish River,**

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. The wasteload allocation specified herein support and serve to define the total maximum daily load for affected receiving water.

This permit shall become effective: **November 1, 2009**

This permit and the authorization to discharge shall expire at **midnight, October 31, 2014.**

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

Jenny Chambers, Chief
Water Protection Bureau
Permitting & Compliance Division

Modification Date: August 30, 2010

## 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 ..... 5
D. Special Conditions ..... 13

**II. MONITORING, RECORDING AND REPORTING REQUIREMENTS ..... 15**

A. Representative Sampling ..... 15
B. Monitoring Procedures ..... 15
C. Penalties for Tampering ..... 15
D. Reporting of Monitoring Results ..... 15
E. Compliance Schedules ..... 15
F. Additional Monitoring by the Permittee ..... 16
G. Records Contents ..... 16
H. Retention of Records ..... 16
I. Twenty-four Hour Notice of Noncompliance Reporting ..... 16
J. Other Noncompliance Reporting ..... 17
K. Inspection and Entry ..... 17

**III. COMPLIANCE RESPONSIBILITIES ..... 19**

A. Duty to Comply ..... 19
B. Penalties for Violations of Permit Conditions ..... 19
C. Need to Halt or Reduce Activity not a Defense ..... 19
D. Duty to Mitigate ..... 19
E. Proper Operation and Maintenance ..... 19
F. Removed Substances ..... 20
G. Bypass of Treatment Facilities ..... 20
H. Upset Conditions ..... 21
I. Toxic Pollutants ..... 21
J. Changes in Discharge of Toxic Substances ..... 21

**IV. GENERAL REQUIREMENTS ..... 23**

A. Planned Changes ..... 23
B. Anticipated Noncompliance ..... 23
C. Permit Actions ..... 23
D. Duty to Reapply ..... 23
E. Duty to Provide Information ..... 23
F. Other Information ..... 23
G. Signatory Requirements ..... 23
H. Penalties for Falsification of Reports ..... 24
I. Availability of Reports ..... 25
J. Oil and Hazardous Substance Liability ..... 25
K. Property or Water Rights ..... 25
L. Severability ..... 25
M. Transfers ..... 25
N. Fees ..... 26
O. Reopener Provisions ..... 26

**V. DEFINITIONS ..... 28**

# 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, discharging into the Whitefish River, located at 48° 24' 43" N latitude, 114° 20' 39" W longitude.<br><br>**Mixing Zone:** No mixing zone is granted.<br><br>**Treatment Works**: Three-celled lagoon system with oil/water separator and intermittent discharge. |

B. Effluent Limitations

**Outfall 001**

Interim Limitations
Beginning on the effective date of this permit and lasting through midnight December 31, 2012, the quality of effluent discharged by the facility shall, as a minimum, meet the limitations as set forth below:

| Parameter | Units | Maximum Daily Limit (1) |
|---|---|---|
| 5-Day Biochemical Oxygen Demand ($BOD_5$) | mg/L | 30 |
| | lb/day | 16 |
| Total Suspended Solids (TSS) | mg/L | 30 |
| | lb/day | 16 |
| Total Nitrogen | mg/L | -- |
| | lb/day | 20 |
| Total Phosphorus as P | mg/L | 1.0 |
| | lb/day | 0.6 |
| Cadmium, Total Recoverable | mg/L | 0.0207 |
| Oil and Grease | mg/L | Less Than 10 |

Footnotes:
(1) See Definitions section at end of permit for explanation of terms.

Effluent pH from Outfall 001 shall remain between 6.0 and 9.0 standard units (instantaneous minimum and instantaneous maximum). For compliance purposes, any single analysis or measurement beyond this limitation shall be considered a violation of the conditions of this permit.

There shall be no discharge which causes visible oil sheen in the receiving stream.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

There shall be no discharge of wastewater which reacts or settles to form an objectionable sludge deposit or emulsion beneath the surface of the receiving stream or upon adjoining shorelines.

Final Limitations
Beginning on January 1, 2013 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:

| Parameter | Units | Maximum Daily Limit (1) |
|---|---|---|
| $BOD_5$ | mg/L | 30 |
| | lb/day | 16 |
| TSS | mg/L | 30 |
| | lb/day | 16 |
| Total Nitrogen | mg/L | -- |
| | lb/day | 20 |
| Total Phosphorus as P | mg/L | 1.0 |
| | lb/day | 0.6 |
| Cadmium, Total Recoverable | mg/L | 0.0018 |
| Oil and Grease | mg/L | Less Than 10 |

Footnotes:
(1) See Definitions section at end of permit for explanation of terms.

Effluent pH from Outfall 001 shall remain between 6.0 and 9.0 standard units (instantaneous minimum and instantaneous maximum). For compliance purposes, any single analysis or measurement beyond this limitation shall be considered a violation of the conditions of this permit.

There shall be no discharge which causes visible oil sheen in the receiving water.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

There shall be no discharge of wastewater which reacts or settles to form an objectionable sludge deposit or emulsion beneath the surface of the receiving stream or upon adjoining shorelines.

C. Monitoring Requirements

**Outfall 001 for Rainfall and/or Snowmelt-driven Discharges**
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. 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. Analysis results must achieve the Required Reporting Values listed in Department Circular DEQ-7, February 2008.

These monitoring requirements apply to any discharge(s) resulting from a measurable precipitation event greater than 0.1 inch rainfall (or snowmelt of equivalent volume) and at least 72 hours from the previous measurable precipitation (or equivalent snowmelt) event.

| Parameter | Unit | Sample Location | Sample Frequency | Sample Type (1) |
|---|---|---|---|---|
| Flow | Million gallons per day (mgd) | Effluent | 1/Day | Instantaneous |
| | | | Continuous | (2) |
| Total Duration of Discharge(s) | Days (3) | Effluent | 1/Month | Calculated |
| pH | Standard Units | Effluent | 1/Day | Instantaneous |
| Temperature | °C | Effluent | 1/Day | Instantaneous |
| Oil & Grease (O&G) (4) | mg/L | Effluent | 1/Discharge | Grab |
| Total Hardness | mg/L as $CaCO_3$ | Effluent | 1/Discharge | Grab |
| 5-Day Biochemical Oxygen Demand ($BOD_5$) | mg/L | Effluent | 1/Discharge | Grab |
| | lb/day | Effluent | 1/Month | Calculated |
| Total Suspended Solids (TSS) | mg/L | Effluent | 1/Discharge | Grab |
| | lb/day | Effluent | 1/Month | Calculated |
| Nitrate + Nitrite as N | mg/L | Effluent | 1/Discharge | Grab |
| Total Kjeldahl Nitrogen | mg/L | Effluent | 1/Discharge | Grab |
| Total Nitrogen (5) | mg/L | Effluent | 1/Discharge | Calculated |
| | lb/day | Effluent | 1/Month | Calculated |
| Total Phosphorus as P | mg/L | Effluent | 1/Discharge | Grab |
| | lb/day | Effluent | 1/Month | Calculated |
| Whole Effluent Toxicity Testing, Acute (6) | Percent Effluent | Effluent | 1/Discharge | Grab |

Footnotes:
(1) See Definitions section at end of permit for explanation of terms.
(2) Requires recording device or totalizer by midnight, April 30, 2011; permittee shall report daily maximum flow and 30-day average flow (in mgd) on DMR.
(3) Duration of discharge(s) shall be reported to the nearest 0.25 days.
(4) Use EPA Method 1664, Revision A: N-Hexane Extractable Material (HEM), or equivalent.
(5) Calculated as the sum of Nitrate + Nitrite as N and Total Kjeldahl Nitrogen concentrations.
(6) Results of WET testing will be reported quarterly with DMR.

| Parameter | Unit | Sample Frequency | Sample Type (1) | RRV or ML |
|---|---|---|---|---|
| Aluminum, Dissolved | µg/L | 1/Discharge | Grab | 30 |
| Antimony, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 3 |
| Arsenic, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 3 |
| Barium, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 5 |
| Beryllium, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 1 |
| Cadmium, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 0.08 |
| Chromium, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 1 |
| Copper, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 1 |
| Iron, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 50 |
| Lead, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 0.5 |
| Manganese, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 5 |
| Mercury, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 0.01 |
| Nickel, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 10 |
| Selenium, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 1 |
| Silver, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 0.5 |
| Thallium, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 0.2 |
| Zinc, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 10 |
| Volatile Organic Compounds (3, 4) | µg/L | 1/Discharge | Grab | (5) |
| Semi-Volatile, Acid Compounds (3, 6) | µg/L | 1/Discharge | Grab | (5) |
| Semi-Volatile, Base Neutral (3, 6) | µg/L | 1/Discharge | Grab | (5) |
| PCBs (3, 6, 7) | µg/L | 1/Discharge | Grab | (5) |

Footnotes:

(1) See Definition section at end of permit for explanation of terms.
(2) Metals shall be analyzed as total recoverable, unless otherwise indicated; use EPA Method (Section) 4.1.4 [EPA 600/4-79-020, March 1983] or equivalent.
(3) This information will not be entered on the DMR form; a copy of the analytical laboratory report must be attached to the DMR for the applicable reporting period.
(4) 40 CFR 122, Appendix J, Table 2, use EPA Method 624, or equivalent.
(5) See Required Reporting Value (RRV) in Circular DEQ-7 and approved method for Minimum Level (ML).
(6) 40 CFR 122, Appendix J, Table 2, use EPA Method 625, or equivalent.
(7) Analysis limited to PCB-1016, PCB-1221, PCB-1232, PCB-1242, PBC-1248, PCB-1254, and PCB-1260.

**Outfall 001 for Controlled Discharges**

Interim Monitoring Requirements

As a minimum, upon the effective date of this permit and lasting through midnight, April 30, 2011, 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. 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. Analysis results must achieve the Required Reporting Values listed in Department Circular DEQ-7, February 2008.

| Parameter | Unit | Sample Location | Sample Frequency | Sample Type (1) |
|---|---|---|---|---|
| Flow | Million gallons per day (mgd) | Effluent | 1/Day | Instantaneous (2) |
| Total Duration of Discharge(s) | Days (3) | Effluent | 1/Month | Calculated |
| pH | Standard Units | Effluent | 1/Day | Instantaneous |
| Temperature | °C | Effluent | 1/Day | Instantaneous |
| Oil & Grease (O&G) (4) | mg/L | Effluent | 1/Discharge | Grab |
| Total Hardness | mg/L as $CaCO_3$ | Effluent | 1/Discharge | Grab |
| 5-Day Biochemical Oxygen Demand ($BOD_5$) | mg/L | Effluent | 1/Discharge | Grab |
| | lb/day | Effluent | 1/Month | Calculated |
| Total Suspended Solids (TSS) | mg/L | Effluent | 1/Discharge | Grab |
| | lb/day | Effluent | 1/Month | Calculated |
| Nitrate + Nitrite as N | mg/L | Effluent | 1/Discharge | Grab |
| Total Kjeldahl Nitrogen | mg/L | Effluent | 1/Discharge | Grab |
| Total Nitrogen (5) | mg/L | Effluent | 1/Discharge | Calculated |
| | lb/day | Effluent | 1/Month | Calculated |
| Total Phosphorus as P | mg/L | Effluent | 1/Discharge | Grab |
| | lb/day | Effluent | 1/Month | Calculated |
| Whole Effluent Toxicity Testing, Acute (6) | Percent Effluent | Effluent | 1/Discharge | Grab |

Footnotes:
(1) See Definitions section at end of permit for explanation of terms.
(2) Requires recording device or totalizer by midnight, April 30, 2011; permittee shall report daily maximum flow and 30-day average flow (in mgd) on DMR.
(3) Duration of discharge(s) shall be reported to the nearest 0.25 days.
(4) Use EPA Method 1664, Revision A: N-Hexane Extractable Material (HEM), or equivalent.
(5) Calculated as the sum of Nitrate + Nitrite as N and Total Kjeldahl Nitrogen concentrations.
(6) Results of WET testing will be reported quarterly with DMR.

| Parameter | Unit | Sample Frequency | Sample Type (1) | RRV or ML |
|---|---|---|---|---|
| Aluminum, Dissolved | µg/L | 1/Discharge | Grab | 30 |
| Antimony, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 3 |
| Arsenic, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 3 |
| Barium, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 5 |
| Beryllium, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 1 |
| Cadmium, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 0.08 |
| Chromium, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 1 |
| Copper, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 1 |
| Iron, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 50 |
| Lead, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 0.5 |
| Manganese, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 5 |
| Mercury, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 0.01 |
| Nickel, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 10 |
| Selenium, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 1 |
| Silver, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 0.5 |
| Thallium, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 0.2 |
| Zinc, Total Recoverable (2) | µg/L | 1/Discharge | Grab | 10 |
| Volatile Organic Compounds (3, 4) | µg/L | 1/Discharge | Grab | (5) |
| Semi-Volatile, Acid Compounds (3, 6) | µg/L | 1/Discharge | Grab | (5) |
| Semi-Volatile, Base Neutral (3, 6) | µg/L | 1/Discharge | Grab | (5) |
| PCBs (3, 6, 7) | µg/L | 1/Discharge | Grab | (5) |

Footnotes:

(1) See Definition section at end of permit for explanation of terms.
(2) Metals shall be analyzed as total recoverable, unless otherwise indicated; use EPA Method (Section) 4.1.4 [EPA 600/4-79-020, March 1983] or equivalent.
(3) This information will not be entered on the DMR form; a copy of the analytical laboratory report must be attached to the DMR for the applicable reporting period.
(4) 40 CFR 122, Appendix J, Table 2, use EPA Method 624, or equivalent.
(5) See Required Reporting Value (RRV) in Circular DEQ-7 and approved method for Minimum Level (ML).
(6) 40 CFR 122, Appendix J, Table 2, use EPA Method 625, or equivalent.
(7) Analysis limited to PCB-1016, PCB-1221, PCB-1232, PCB-1242, PBC-1248, PCB-1254, and PCB-1260.

Final Monitoring Requirements

As a minimum, starting May 1, 2011, 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. 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. Analysis results must achieve the Required Reporting Values listed in Department Circular DEQ-7, February 2008

| Parameter | Unit | Sample Location | Sample Frequency | Sample Type (1) |
|---|---|---|---|---|
| Flow | Million gallons per day (mgd) | Effluent | Continuous | (2) |
| Total Duration of Discharge(s) | Days (3) | Effluent | 1/Month | Calculated |
| pH | Standard Units | Effluent | 1/Day | Instantaneous |
| Temperature | °C | Effluent | 1/Day | Instantaneous |
| Oil & Grease (O&G) (4) | mg/L | Effluent | 1/Discharge | Grab |
| Total Hardness | mg/L as $CaCO_3$ | Effluent | 1/Discharge | Grab |
| 5-Day Biochemical Oxygen Demand ($BOD_5$) | mg/L | Effluent | 1/Discharge | Composite |
| | lb/day | Effluent | 1/Month | Calculated |
| Total Suspended Solids (TSS) | mg/L | Effluent | 1/Discharge | Composite |
| | lb/day | Effluent | 1/Month | Calculated |
| Nitrate + Nitrite as N | mg/L | Effluent | 1/Discharge | Composite |
| Total Kjeldahl Nitrogen | mg/L | Effluent | 1/Discharge | Composite |
| Total Nitrogen (5) | mg/L | Effluent | 1/Discharge | Calculated |
| | lb/day | Effluent | 1/Month | Calculated |
| Total Phosphorus as P | mg/L | Effluent | 1/Discharge | Composite |
| | lb/day | Effluent | 1/Month | Calculated |
| Whole Effluent Toxicity Testing, Acute (6) | Percent Effluent | Effluent | 1/Discharge | Composite |

Footnotes:
(1) See Definitions section at end of permit for explanation of terms.
(2) Requires recording device or totalizer by midnight, April 30, 2011; permittee shall report daily maximum flow and 30-day average flow (in mgd) on DMR.
(3) Duration of discharge(s) shall be reported to the nearest 0.25 days.
(4) Use EPA Method 1664, Revision A: N-Hexane Extractable Material (HEM), or equivalent.
(5) Calculated as the sum of Nitrate + Nitrite as N and Total Kjeldahl Nitrogen concentrations.
(6) Results of WET testing will be reported quarterly with DMR.

| Parameter | Unit | Sample Frequency | Sample Type (1) | RRV or ML |
|---|---|---|---|---|
| Aluminum, Dissolved | µg/L | 1/Discharge | Composite | 30 |
| Antimony, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 3 |
| Arsenic, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 3 |
| Barium, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 5 |
| Beryllium, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 1 |
| Cadmium, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 0.08 |
| Chromium, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 1 |
| Copper, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 1 |
| Iron, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 50 |
| Lead, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 0.5 |
| Manganese, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 5 |
| Mercury, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 0.01 |
| Nickel, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 10 |
| Selenium, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 1 |
| Silver, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 0.5 |
| Thallium, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 0.2 |
| Zinc, Total Recoverable (2) | µg/L | 1/Discharge | Composite | 10 |
| Volatile Organic Compounds (3, 4) | µg/L | 1/Discharge | Composite | (5) |
| Semi-Volatile, Acid Compounds (3, 6) | µg/L | 1/Discharge | Composite | (5) |
| Semi-Volatile, Base Neutral (3, 6) | µg/L | 1/Discharge | Composite | (5) |
| PCBs (3, 6, 7) | µg/L | 1/Discharge | Composite | (5) |

Footnotes:

(1) See Definition section at end of permit for explanation of terms.
(2) Metals shall be analyzed as total recoverable, unless otherwise indicated; use EPA Method (Section) 4.1.4 [EPA 600/4-79-020, March 1983] or equivalent.
(3) This information will not be entered on the DMR form; a copy of the analytical laboratory report must be attached to the DMR for the applicable reporting period.
(4) 40 CFR 122, Appendix J, Table 2, use EPA Method 624, or equivalent.
(5) See Required Reporting Value (RRV) in Circular DEQ-7 and approved method for Minimum Level (ML).
(6) 40 CFR 122, Appendix J, Table 2, use EPA Method 625, or equivalent.
(7) Analysis limited to PCB-1016, PCB-1221, PCB-1232, PCB-1242, PBC-1248, PCB-1254, and PCB-1260.

1. Whole Effluent Toxicity Testing – Acute Toxicity

At least once per discharge as described in the applicable self-monitoring requirements of this Permit for the type of discharge involved, the Permittee shall conduct an acute static replacement toxicity test on a grab sample of the effluent. Toxicity testing will employ two species per batch and will consist of five (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.

The static toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of *Methods for Measuring the Acute Toxicity of Effluent to Freshwater and Marine Organisms*, EPA-600/4-90/027 and the "Region VIII EPA NPDES Acute Test Conditions-State Renewal Whole Effluent Toxicity". The permittee shall conduct an acute 48-hour static renewal toxicity test using *Ceriodaphnia dubia* and an acute 96-hour static renewal toxicity test using fathead minnows (*Pimephales promelas*) as the alternating species. 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.

Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration. If more than 10 percent control mortality occurs, the test is considered invalid and shall be repeated until satisfactory control survival is achieved, unless a specific individual exception is granted by the Department. This exception may be granted if less than 10 percent mortality was observed at the dilutions containing high effluent concentrations.

If acute toxicity is shown to occur in two consecutive routine tests, the permittee will be required to conduct a Toxicity Identification Evaluation/Toxicity Reduction Evaluation (TIE/TRE) in accordance with Part I.D.1. of this permit. If acute toxicity has occurred in any one test, the permittee must be prepared for potential failure of the next batch discharge toxicity test which would trigger a TIE/TRE. To meet this requirement, the permittee shall collect an effluent composite sample of the next batch discharge following any failed test that is of sufficient volume to conduct the required compliance toxicity testing and any potential TIE/TRE. In all cases, the results of all toxicity tests must be submitted to the Department in accordance with Part II of this permit.

The batch discharge results from the laboratory shall be reported quarterly along with the Discharge Monitoring Report (DMR) form submitted for the applicable reporting period (e.g., results for the reporting quarter ending March 31 shall be reported with the March DMR due April 28, with the remaining quarterly reports submitted with the June, September, and December DMR. The format for the laboratory report shall be consistent with the latest revision of Region VIII Guidance for Acute Whole Effluent Reporting, and shall include all chemical and physical data as specified.

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

2. Reporting Requirements

**Load Calculations**
In addition to reporting the concentration values, the monthly loads expressed in pounds per day (lb/day) must be calculated and reported for $BOD_5$, TSS, total phosphorus as P, and total nitrogen. The monthly loads must be calculated using the average daily flow rate and daily average parameter concentration as shown in the following equations:

Load (lb/day) =

Parameter concentration (mg/L) x Effluent Flow Rate (mgd) x (8.34)

D. Special Conditions

1. Toxicity Identification Evaluation/Toxicity Reduction Evaluation (TIE/TRE)

If toxicity is detected in two consecutive discharges, and it is determined by the Department that a TIE/TRE is necessary, the permittee shall be so notified and shall initiate a TIE/TRE immediately thereafter. The purpose of the TIE/TRE will be to establish the cause(s) of the toxicity, locate the source(s) of the toxicity, and control or provide treatment for the toxicity.

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

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

a. Submit an alternative control program for compliance with the numerical requirements;

b. If necessary, provide a modified whole effluent testing protocol which compensates for the pollutant(s) being controlled numerically.

If acceptable to the Department, this permit may be reopened and modified to incorporate any additional numerical limitations, a modified compliance schedule if judged necessary by the Department, and/or a modified whole effluent protocol.

2. Effluent Flow Monitoring

The permittee must install and operate continuous flow recording/totalizing capability on Outfall 001 by midnight April 30, 2011.

## 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 address:

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

### 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) 841-3911. 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 judgement 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 μg/L);

b. 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;

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 μg/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 that $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 consisting of 15% of the fee plus interest on the required fee computed at the rate established under 15-31-510(3), MCA, or

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 TIE/TRE results indicated that compliance with the toxic limits will require an implementation schedule past the date for compliance and the permit issuing authority agrees with the conclusion.

c. The TIE/TRE results indicated that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits, and the permit issuing authority agrees that numerical controls are the most appropriate course of action.

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

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

## V. DEFINITIONS

1. **"30-day (and monthly) average"**, other than for fecal coliform bacteria, means the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for fecal coliform bacteria. The calendar month shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms.

2. **"7-day (and weekly) average,"** other than for fecal coliform bacteria, means the arithmetic mean of all samples collected during a consecutive 7-day period or calendar week, whichever is applicable. Geometric means shall be calculated for fecal coliform bacteria. The 7-day averages are applicable only to those effluent characteristics for which there are 7-day average effluent limitations. The calendar week which begins on Sunday and ends on Saturday, shall be used for purposes of reporting self-monitoring data on discharge monitoring report forms. Weekly averages shall be calculated for all calendar weeks in the month that has at least four days. For example, if a calendar week overlaps two months, the weekly average is calculated only in the month that contains four or more days of that week.

3. **"Acute Toxicity"** means 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 20 percent or less for the effluent results to be considered valid.

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

5. **"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.

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

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

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

9. **"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.

10. **"Composite samples"** shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first

sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:

a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;

b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;

c. Constant sample volume, time interval between samples proportional to flow (i.e. Sample taken every "X" gallons of flow); and,

d. Continuous collection of sample, with sample collection rate proportional to flow rate.

11. **"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.

12. **"Department"** means the Montana Department of Environmental Quality (MDEQ).

13. **"Director"** means the Director of the United States Environmental Protection Agency's Water Management Division.

14. **"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.

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

16. **"Grab"** sample, for monitoring requirements, means a single "dip and take" sample collected at a representative point in the discharge stream.

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

18. **"Load limits"** are mass-based discharge limits expressed in units such as lb/day.

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)]

20. **"Mixing zone"** means a limited area of a surface water body or aquifer where initial dilution of a discharge takes place and where water quality changes may occur. Also recognized as an area where certain water quality standards may be exceeded.

21. **"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.

22. **"Regional Administrator"** means the administrator of the EPA Region with Jurisdiction over federal water pollution control activities in the State of Montana.

23. **"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.

24. **"Sewage Sludge"** means any solid, semi-solid or liquid residue that contains materials removed from domestic sewage during treatment. Sewage sludge includes, but is not limited to, primary and secondary solids and sewage sludge products.

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

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

27. **"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.

28. **"TSS"** means the parameter total suspended solids.

29. **"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.