Minor POTW
Without Pretreatment
Permit No.: MT0020036
Issued: March 3, 2010

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.*,

City of Columbia Falls

is authorized to discharge from its **domestic wastewater treatment plant**

located at **600 Veterans Drive, Columbia Falls, Flathead County, MT**

to receiving waters named **Flathead 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.

This permit shall become effective **May 1, 2010.**

This permit and the authorization to discharge shall expire at midnight, **April 30, 2015.**

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

Jenny Chambers

Jenny Chambers, Chief
Water Protection Bureau
Permitting & Compliance Division

Modification Date: April 21, 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 6
E. SPECIAL CONDITIONS 9
F. PRETREATMENT REQUIREMENTS 10

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS 13

A. REPRESENTATIVE SAMPLING 13
B. MONITORING PROCEDURES 13
C. PENALTIES FOR TAMPERING 13
D. REPORTING OF MONITORING RESULTS 13
E. COMPLIANCE SCHEDULES 13
F. ADDITIONAL MONITORING BY THE PERMITTEE 14
G. RECORDS CONTENTS 14
H. RETENTION OF RECORDS 14
I. TWENTY-FOUR HOUR NOTICE OF NONCOMPLIANCE REPORTING 14
J. OTHER NONCOMPLIANCE REPORTING 15
K. INSPECTION AND ENTRY 15

III. COMPLIANCE RESPONSIBILITIES 17

A. DUTY TO COMPLY 17
B. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS 17
C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE 17
D. DUTY TO MITIGATE 17
E. PROPER OPERATION AND MAINTENANCE 17
G. BYPASS OF TREATMENT FACILITIES 18
H. UPSET CONDITIONS 19

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 21
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 24

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 Flathead River, located at approximately 48°21'23" N latitude, 114°12'53" W longitude. Mixing Zone: The maximum extent of the standard mixing zone extends 6,000 feet down stream from the point of discharge for total ammonia as N and total residual chlorine. Treatment Works: Minor activated sludge treatment system with alum phosphorus removal and chlorine gas disinfection, design flow 0.550 million gallons per day (mgd).

B. Effluent Limitations

Outfall 001

Interim Limitations
Effective immediately and lasting through midnight, June 30, 2011, the quality of effluent discharged through Outfall 001 shall, as a minimum, meet the limitations as set forth below:

Parameter	Units	Average Monthly Limitation (1)	Average Weekly Limitation (1)	Maximum Daily Limitation
Carbonaceous Biochemical Oxygen Demand ($cBOD_5$)	mg/L	25	40	--
	lb/day	115	183	--
Total Suspended Solids (TSS)	mg/L	30	45	--
	lb/day	138	206	--
E. coli Bacteria	cfu/100 mL	220,500 (2)	441,000 (2)	--
Total Phosphorus as P	mg/L	1.0	--	--
Total Residual Chlorine	mg/L	--	--	0.50
Oil and Grease (O&G)	mg/L	--	--	<10

Footnotes:
(1) See Definition section at end of permit for explanation of terms.
(2) Geometric mean value.
(3) Calculated as the sum of Nitrate + Nitrite as N and TKN concentrations.

pH: 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.

85 Percent (%) Removal Requirement for $cBOD_5$: The arithmetic mean of the $cBOD_5$ concentration for effluent samples collected in a period of 30 consecutive days shall not exceed 15% of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (85% removal). This is in addition to the concentration limitations on $cBOD_5$.

85 Percent (%) Removal Requirement for TSS: The arithmetic mean of the TSS concentration for effluent samples collected in a period of 30 consecutive days shall not exceed 15% of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (85% removal). This is in addition to the concentration limitations on TSS.

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

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

Final Limitations

Effective July 1, 2011 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	Average Monthly Limitation (1)	Average Weekly Limitation (1)	Maximum Daily Limitation (1)
Carbonaceous Biochemical Oxygen Demand ($cBOD_5$)	mg/L	25	40	--
	lb/day	115	183	--
Total Suspended Solids (TSS)	mg/L	30	45	--
	lb/day	138	206	--
E. coli Bacteria, summer (2)	cfu/100 mL	126 (3)	252 (3)	--
E. coli Bacteria, winter (4)	cfu/100 mL	630 (3)	1,260 (3)	--
Total Nitrogen (5)	lb/day	37.1	63.5	--
Total Phosphorus as P	mg/L	1.0	--	--
	lb/day	4.6	--	--
Total Residual Chlorine	mg/L	0.23	--	0.29
Total Ammonia as N	mg/L	30.7	40.9	--
Oil and Grease	mg/L	--	--	<10

Footnotes:
(1) See Definition section at end of permit for explanation of terms.
(2) Summer period is April 1 through October 31.
(3) Geometric mean value.
(4) Winter period is November 1 through March 31.
(5) Calculated as the sum of Nitrate + Nitrite as N and TKN concentrations.

pH: 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.

85 Percent (%) Removal Requirement for $cBOD_5$: The arithmetic mean of the $cBOD_5$ concentration for effluent samples collected in a period of 30 consecutive days shall not exceed 15% of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (85% removal). This is in addition to the concentration limitations on $cBOD_5$.

85 Percent (%) Removal Requirement for TSS: The arithmetic mean of the TSS concentration for effluent samples collected in a period of 30 consecutive days shall

not exceed 15% of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (85% removal). This is in addition to the concentration limitations on TSS.

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

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

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

C. Monitoring Requirements

As a minimum, upon the effective date and through the term 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 (DMR) form (EPA No. 3320-1) that no discharge or overflow occurred.

Influent samples shall be monitored and collected at the headworks prior to any return or recycle flows. Effluent samples shall be monitored and collected after disinfection at the last point of control prior to discharge to the receiving water.

The permittee will monitor total recoverable metals concentrations in the effluent annually, assuring that annual samples are scheduled to be collected for each calendar quarter of the year throughout the permit cycle. For example when planning a monitoring schedule, in the first calendar year of the permit cycle the sample is to be collected during the last month of the first calendar quarter; in the second calendar year of the permit cycle the sample is to be collected during the last month of the second calendar quarter; and in the third calendar year of the permit cycle the sample is to be collected during the last month of the third calendar quarter, etc.

The Required Reporting Value (RRV) is the detection level that must be achieved in reporting surface water monitoring or compliance data to the Department as listed in Circular DEQ-7, February 2008. The RRV is the Department's best determination of a level of analysis that can be achieved by the majority of the commercial, university, or governmental laboratories using EPA-approved methods or methods approved by the Department.

Parameter	Units	Sample Location	Sample Frequency	Sample Type (1)	RRV
Flow	mgd	Influent	Daily (2)	Instantaneous	---
	mgd	Effluent	Continuous	(3)	---
$cBOD_5$	mg/L	Influent	1/Month	Composite	5
	mg/L	Effluent	1/Week	Composite	5
	% Removal	Effluent	1/Month	Calculated	---
	lb/day	Effluent	1/Month	Calculated	---
TSS	mg/L	Influent	1/Month	Composite	10
	mg/L	Effluent	1/Week	Composite	10
	% Removal	Effluent	1/Month	Calculated	---
	lb/day	Effluent	1/Month	Calculated	---
pH	s.u.	Effluent	Daily	Instantaneous	0.1 s.u.
Temperature	°C	Effluent	Daily	Instantaneous	---
E. coli Bacteria	cfu/100 mL	Effluent	1/Week	Grab	1/100 mL
Oil and Grease (4)	mg/L	Effluent	1/Month	Grab	1
Total Residual Chlorine (5)	mg/L	Effluent	Daily	Grab	0.01
Total Ammonia as N	mg/L	Effluent	1/Week	Composite	0.05
Nitrate + Nitrite as N	mg/L	Effluent	1/Week	Composite	0.01
Total Kjeldahl Nitrogen	mg/L	Effluent	1/Week	Composite	---
Total Nitrogen (6)	mg/L	Effluent	1/Month	Calculated	---
	lb/day	Effluent	1/Month	Calculated	---
Total Phosphorus as P	mg/L	Effluent	1/Week	Composite	0.001
	lb/day	Effluent	1/Month	Calculated	---
Total Dissolved Solids	mg/L	Effluent	1/Quarter	Composite	10
Dissolved Oxygen (DO)	mg/L	Effluent	1/Week	Instantaneous	0.05

Footnotes:

(1) See Definition section at end of permit for explanation of terms.

(2) Permittee shall report average monthly flow in mgd and daily maximum flow in mgd on DMR through midnight December 31, 2010.

(3) Requires recording device or totalizer on January 1, 2011; permittee shall report daily maximum and daily average flow on DMR.

(4) Use EPA Method 1664, Revision A: N-Hexane Extractable Material (HEM).

(5) The Permittee is only required to sample for total residual chlorine if chlorine is used as a disinfectant in the treatment process. If chlorine is *not* used, write "NA" on the DMR for this parameter.

(6) Calculated as the sum of Nitrate + Nitrite as N and TKN concentrations.

Parameter	Units	Sample Frequency	Sample Type (1)	RRV
Aluminum, Dissolved (2)	µg/L	1/Month	Composite	30
Antimony, Total Recoverable (2)	µg/L	Annual	Composite	3
Arsenic, Total Recoverable (2)	µg/L	Annual	Composite	3
Beryllium, Total Recoverable (2)	µg/L	Annual	Composite	1
Cadmium, Total Recoverable (2)	µg/L	Annual	Composite	0.08
Chromium, Total Recoverable (2)	µg/L	Annual	Composite	1.0
Copper, Total Recoverable (2)	µg/L	Annual	Composite	1
Lead, Total Recoverable (2)	µg/L	Annual	Composite	0.5
Mercury, Total Recoverable (2)	µg/L	Annual	Composite	0.01
Nickel, Total Recoverable (2)	µg/L	Annual	Composite	10
Selenium, Total Recoverable (2)	µg/L	Annual	Composite	1
Silver, Total Recoverable (2)	µg/L	Annual	Composite	0.5
Thallium, Total Recoverable (2)	µg/L	Annual	Composite	0.2
Zinc, Total Recoverable (2)	µg/L	Annual	Composite	10
Hardness, Total (as $CaCO_3$)	mg/L	Annual	Grab	10

Footnotes:
(1) See Definition section at end of permit for explanation of terms.
(2) Metals shall be analyzed as total recoverable with the exception of aluminum which is measured in the dissolved form. Use EPA Method (Section) 4.1.4 [EPA 600/4-79-020, March 1983] or equivalent.

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 $cBOD_5$, 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 (**gpm**) x (0.012)

or

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

Percent (%) Removal

The percent removal shall be calculated using the following formula:

$$\% \text{ Removal} = \frac{(\textit{Influent Concentration})-(\textit{Effluent Concentration})}{(\textit{Influent Concentration})} \times 100$$

Where:

Influent Concentration = Corresponding 30-day average influent concentration based on the analytical results of the reporting period.

Effluent Concentration = Corresponding 30-day average effluent concentration based on the analytical results of the reporting period.

Average Monthly Limitation (AML)

The AML or 30-day average is the Arithmetic Average or mean (except for *E. coli* bacteria) of all of the Daily Discharge samples collected during a calendar month, as defined in Part V of the permit. If only one sample is collected then it is considered the 30-day average and reported on the DMR.

Average Weekly Limitation (AWL)

The AWL or 7-day average is the Arithmetic Average or mean (except for *E. coli* bacteria) of all of the Daily Discharge samples collected during a calendar week, as defined in Part V of the permit. If only one sample is collected during the calendar week it is considered the 7-day average. The highest 7-day average of the monitoring period shall be reported on the 7-day average blank on the DMR. In cases where only one sample is collected during the entire monitoring period, that sample shall be reported as both the 30-day and 7-day average.

E. Special Conditions

1. Sewage Sludge:

The use or disposal of sewage sludge must be in conformance with the Environmental Protection Agency (EPA) General Permit MTG650000 or an equivalent permit issued pursuant to 40 CFR 503. A notice of intent must be filed with the EPA and the Department in accordance with the timeframes and procedures identified in the applicable permit. All materials required by the General Permit to be submitted to the Department shall be signed in accordance with Part IV.G and sent to the address provided in Part II.D of this permit.

The permittee shall not dispose of sewage sludge such that any portion thereof enters any state water, including ground water. The permittee shall notify the Department in writing 45 days prior to any change in sludge management at the facility.

2. Final *Escherichia coli (E. coli)* Bacteria Effluent Limitations

   Year-round final effluent limitations for *E. coli* bacteria will be effective July 1, 2011.

   a. Schedule: Starting the first year of the permit cycle (2010) and lasting for the duration of the Special Condition, quarterly reports shall be submitted with the applicable DMR (by April 28, 2010; July 28, 2010; October 28, 2010; January 28, 2011; and April 28, 2011). The reports shall describe the milestones accomplished and the steps planned for each quarter towards compliance with the final effluent *E. coli* bacteria limitations.

3. Final Total Ammonia as N Effluent Limitations

   Final effluent limitations for total ammonia as N will be effective July 1, 2011.

   a. Schedule: Starting the first year of the permit cycle (2010) and lasting for the duration of the Special Condition, quarterly reports shall be submitted with the applicable DMR (by April 28, 2010; July 28, 2010; October 28, 2010; January 28, 2011; and April 28, 2011). The reports shall describe the milestones accomplished and the steps planned for each quarter towards compliance with the final effluent total ammonia as N limitations.

4. Final Effluent Flow Monitoring

   Final effluent flow monitoring will be effective January 1, 2011. The permittee must install an effluent flow measuring system that has:

   i. the ability to monitor effluent flow at all flow levels experienced by the wastewater treatment plant;
   ii. has recorder or totalizer capabilities; and
   iii. is capable of routine flow verification by the permittee and/or appropriate regulatory personnel.

   a. Schedule: Starting the first year of the permit cycle (2010) and lasting for the duration of the Special Condition, quarterly reports shall be submitted with the applicable Discharge Monitoring Report (due by April 28, 2010; July 28, 2010; October 28, 2010; and January 28, 2011). The reports shall describe the milestones accomplished and the steps planned for each quarter towards compliance with the final effluent flow monitoring expectations.

F. <u>Pretreatment Requirements</u>

1. The Permittee shall not allow any user to introduce into a Publicly-Owned Treatment Works (POTW) any pollutants which cause Pass Through or Interference. These general prohibitions and the specific prohibitions in Part

I.E.2 of this rule apply to all non-domestic sources introducing pollutants into a POTW whether or not the source is subject to other national pretreatment standards or any national, state or local pretreatment requirements.

2. In addition, the following pollutants may not be introduced into a POTW:

   a. Pollutants which create a fire or explosion hazard in the POTW, including waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Celsius using the test methods specified in 40 CFR 261.21;

   b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the treatment works is specifically designed to accommodate such discharges;

   c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;

   d. Any pollutant, including oxygen-demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW;

   e. Heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 degrees Celsius (104 degrees Fahrenheit) unless the department, upon request of the POTW, approves alternative temperature limitations;

   f. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;

   g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

   h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

3. Publicly-Owned Treatment Works. All POTWs must provide adequate notice to the Department of the following:

   a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to federal effluent guidelines and standards [40CFR Subchapter N] if it were directly discharging those pollutants; and

b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

c. For the purposes of this paragraph, adequate notice shall include information on:

(1) The quality and quantity of effluent introduced into the POTW, and

(2) Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

A. Representative Sampling

Samples taken in compliance with the monitoring requirements established under Part I 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. Sludge samples shall be collected at a location representative of the quality of sludge immediately prior to use-disposal practice.

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. See Part I.C. for any applicable sludge monitoring procedures. 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 $25,000, or by imprisonment for not more than six months, or by both.

D. Reporting of Monitoring Results

Effluent monitoring results obtained during the previous month(s) shall be summarized for each month 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. 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 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 incident of noncompliance affecting the environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. 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 Regional Administrator, or an authorized representative 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 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 $25,000 per day or one year in prison, or both, for the first conviction, and $50,000 per day of violation or by imprisonment for not more than two years, or both, for subsequent convictions. MCA 75-5-611(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

1. 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. Sludge shall not be directly blended with or enter either the final plant discharge and/or waters of the United States.

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 ten (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.

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:

1. 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; or

2. There are any planned substantial changes to the existing sewage sludge management practices of storage and disposal. The permittee shall give the Department notice of any planned changes at least 180 days prior to their implementation.

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 revoked, modified 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 shall be signed and certified.

1. All permit applications shall be signed 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 specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or an individual occupying a named position.)

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 fee assessment plus interest computed at the rate established under ARM 17.30.201, 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 limitations than contained in this permit.

2. Water Quality Standards are Exceeded: If it is found that water quality standards or trigger values in the receiving stream are exceeded either for parameters included in the permit or others, the department may modify the effluent limitations or 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. Sewage Sludge: There have been substantial changes (or such changes are planned) in sludge use or disposal practices; applicable management practices or numerical limitations for pollutants in sludge have been promulgated which are more stringent than the requirements in this permit; and/or it has been determined that the permittee's sludge use or disposal practices do not comply with existing applicable state or federal regulations.

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. **"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. **"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.

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

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

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

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

11. **"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.

12. **"Daily Discharge"** means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonable 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.

13. **"Daily Maximum Limitation"** 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.

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

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

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

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

18. **"Geometric Mean"** means the value obtained by taking the Nth root of the product of the measured values.

19. **"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.

20. **"Indirect Discharge"** means the introduction of pollutants into a POTW from any non-domestic source regulated under Section 307(b), (c) or (d) of the Federal Clean Water Act.

21. **"Industrial User"** means a source of Indirect Discharge.

22. **"Instantaneous Maximum Limitation"** 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.

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

24. **"Interference"** means a discharge which, alone or in conjunction with other contributing discharges

    a. Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal; and

    b. Therefore causes a violation of any requirement of the POTW's MPDES permit (including an increase in the magnitude or duration of a violation) or causes the prevention of sewage sludge use or disposal in compliance with the following statutes and regulations: Section 405 of the Clean Water Act; 40 CFR Part 503 - Standards for the Use and Disposal of Sewage Sludge; Resource Conservation and Recovery Act (RCRA); 40 CFR Part 258 - Criteria for Municipal Solid Waste Landfills; and/or any State regulations regarding the disposal of sewage sludge.

25. **"Maximum Daily Discharge Limitation"** means the highest allowable daily discharge.

26. **"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.

27. **"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 limitations established under or determined from a permit or approval issued by the Department prior to April 29, 1993.

28. **"Pass Through"** means a discharge which exits the POTW into waters of the State of Montana in quantities or concentrations which, alone or in conjunction with other discharges, is a cause of a violation of any requirement of the POTW's MPDES permit (including an increase in the magnitude or duration of a violation).

29. **"POTW"** means a publicly owned treatment works.

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

31. **"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.

32. **"Sewage Sludge"** means any solid, semi-solid or liquid residue generated during the treatment of domestic sewage and/or a combination of domestic sewage and industrial waste of a liquid nature in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the incineration of sewage sludge or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

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

34. **"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.

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

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

37. **"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.