Minor POTW
Permit No.: MT0022373

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

AUTHORIZATION TO DISCHARGE UNDER THE MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM

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

City of Colstrip

is authorized to discharge from its **Sewage Treatment Plant**,

located on **Sewage Plant Road,**

to receiving waters named the **East Fork Armells Creek**,

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

This permit shall become effective **January 1, 2012.**

This permit and the authorization to discharge shall expire at midnight **December 31, 2016.**

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

Jenny Chambers, Chief
Water Protection Bureau
Permitting & Compliance Division

Issuance Date: November 10, 2011

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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 East Fork Armells Creek, located at 45° 52' 10" N latitude, 106°32' 22" W longitude. **Mixing Zone:** The maximum extent of the chronic mixing zone in the named receiving waters is 100 feet. The maximum extent of the acute mixing zone in the named receiving waters is as follows: none **Treatment Works**: Oxidation ditch with a design flow of 0.6 MGD.

B. Effluent Limitations

Effluent limitations for Outfall 001

Parameter	Units	Average Monthly Limit[1]	Average Weekly Limit[1]	Maximum Daily Limit [1]
Biochemical Oxygen Demand (BOD_5)	mg/L	30	45	--
	lbs/day	150	225	--
BOD_5 Removal	%	85	85	--
Total Suspended Solids (TSS)	mg/L	30	45	--
	lbs/day	150	225	--
TSS Removal	%	85	85	--
E. coli Bacteria [2]	cfu/100 mL	630	1260	--
Total Ammonia [2]	mg/L	5.9	8.1	--
Nitrate + Nitrite [2]	mg/L	--	--	10
Oil and Grease	mg/L	--	--	10

Footnotes:
1. See Definition section at end of permit for explanation of terms.
2. Applies during the period November 1 through March 31.

pH: Effluent pH from Outfall 001 shall remain between 6.0 and 9.0 standard units (instantaneous minimum and instantaneous maximum) unless a variation is due to natural biological processes. 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 of effluent to the East Fork Armells Creek from April 1 through October 31.

C. Monitoring Requirements

Monitoring requirements for Outfall 001

Monitoring Requirements				
Parameter	Unit	Sample Location	Sample Frequency	Sample Type[1]
Flow	Mgd	Effluent	Continuous	Recorder[2]
5-Day Biochemical Oxygen Demand (BOD_5)	mg/L	Influent	1/Week	Grab
	mg/L	Effluent	3/Week	Grab
	% Removal[3]	Effluent	1/Month	Calculated
	lbs/day	Effluent	1/Month	Grab
Total Suspended Solids (TSS)	mg/L	Influent	1/Week	Grab
	mg/L	Effluent	3/Week	Grab
	% Removal[3]	Effluent	1/Month	Calculated
	lbs/day	Effluent	1/Month	Calculated
pH	s.u.	Effluent	Daily	Instantaneous
Temperature	°C	Effluent	Daily	Instantaneous
E.coli	cfu/100ml	Effluent	3/Week	Grab
Oil and Grease	mg/L	Effluent	1/Quarter	Grab
Total Ammonia	mg/L	Effluent	1/Month	Grab
Nitrate + Nitrite, as N	mg/L	Effluent	1/Month	Grab
Kjeldahl Nitrogen Total, as N	mg/L	Effluent	1/Month	Grab
Total Nitrogen, as N [4]	mg/L	Effluent	1/Month	Calculated
	lbs/day	Effluent	1/Month	Calculated
Total Phosphorus, as P	mg/L	Effluent	1/Month	Grab
	lbs/day	Effluent	1/Month	Calculated
Whole Effluent Toxicity, Acute	% Effluent	Effluent	Semiannual	Grab

Footnotes:
1. See Definition section at end of permit for explanation of terms.
2. Requires recording devise or totalizer.
3. Percent (%) removal shall be calculated using average monthly values.
4. Calculated as the sum of Nitrate + Nitrite as N and Total Kjeldahl Nitrogen as N.

Load and percent removal calculations are required.

Load Calculations

In addition to reporting the concentration values, the monthly loads expressed in lbs/day must be calculated and reported for BOD_5 and TSS. Quarterly loads must be calculated for total phosphorus 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)

For total phosphorus and nitrogen (quarterly sample), use average daily flow for the calendar month in which the samples are collected.

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.

Whole Effluent Toxicity Testing – Acute Toxicity

Semiannual monitoring is required when there is a discharge at Outfall 001 starting in 2012. The permittee shall, at least twice a year, conduct an acute static replacement toxicity test on a composite/grab sample of the effluent. Testing will employ two species and will consist of 5 effluent concentrations (100, 50, 25, 12.5, 6.25 percent effluent) and a control. Dilution water and the control shall consist of the receiving water. Samples shall be collected on a two day progression; i.e., if the first sample is on a Monday, the second sample shall be on a Wednesday, etc. Saturdays, Sundays and holidays will be skipped in the progression.

The static toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of Methods for Measuring the 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 sp. 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 CO2 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 occurs in a routine test, an additional test shall be conducted within 14 days of the date of the initial sample. Should acute toxicity occur in the second test, testing shall occur once a month until further notified by the Department. In all cases, the results of all toxicity tests must be submitted to the Department in accordance with Part II of this permit.

The results from the laboratory shall be reported along with the Discharge Monitoring Report (DMR) form submitted at the end of the reporting period. 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.

D. 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.

E. Pretreatment Requirements

1. Industrial Waste Management

a) The Permittee has the responsibility to protect the Publicly-Owned Treatment Works (POTW) from pollutants which would inhibit, interfere, or otherwise be incompatible with operation of the treatment works including interference with the use or disposal of municipal sludge.

b) Pretreatment Standards (40 CFR Section 403.5) developed pursuant to Section 307 of the Federal Clean Water Act (the Act) require that the Permittee shall not allow, under any circumstances, the introduction of the following pollutants to the POTW from any source of nondomestic discharge:

i) Any pollutant which may cause Pass Through or Interference;

ii) Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than sixty (60) degrees Centigrade (140 degrees Fahrenheit) using the test methods specified in 40 CFR Section 261.21;

iii) Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with a pH of lower than 5.0 s.u., unless the treatment facilities are specifically designed to accommodate such discharges;

iv) Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, or other interference with the operation of the POTW;

v) Any pollutant, including oxygen demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with any treatment process at the POTW;

vi) 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 forty (40) degrees Centigrade (104 degrees Fahrenheit) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits;

vii) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through at the POTW;

viii) 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;

ix) Any trucked or hauled pollutants, except at discharge points designated by the POTW; and

x) Any specific pollutant which exceeds a local limitation established by the Permittee in accordance with the requirements of 40 CFR Section 403.5(c) and (d).

c) EPA shall be the Approval Authority and the mailing address for all reporting and notifications to the Approval Authority shall be: Office of Enforcement, Compliance, and Environmental Justice - Water (8ENF-W-NP), USEPA - Region VIII, 1595 Wynkoop, Denver, CO 80202. Should the State be delegated authority to implement and enforce the Pretreatment Program in the

future, the Permittee shall be notified of the delegation and the Department shall become the Approval Authority.

d) In addition to the general limitations expressed above, more specific pretreatment standards have been and will be promulgated for specific industrial categories under Section 307 of the Act (40 CFR Parts 405-471, 40 CFR Chapter I, subchapter N.).

e) The Permittee must notify the Department and the Approval Authority, of any new introductions by new or existing industrial users or any substantial change in pollutants from any industrial user within sixty (60) days following the introduction or change, as required in 40 CFR 122.42(b)(1-3). Such notice must identify:

(i) Any new introduction of pollutants into the POTW from an industrial user which would be subject to Sections 301, 306, and 307 of the Act if it were directly discharging those pollutants; or

(ii) Any substantial change in the volume or character of pollutants being introduced into the POTW by any industrial user;

(iii) For the purposes of this section, adequate notice shall include information on:

(1) The identity of the industrial user;

(2) The nature and concentration of pollutants in the discharge and the average and maximum flow of the discharge to be introduced into the POTW; and

(3) Any anticipated impact of the change on the quantity or quality of effluent to be discharged from or biosolids produced at such POTW.

(iv) For the purposes of this section, a significant industrial user shall include:

(1) Any discharger subject to Categorical Pretreatment Standards under Section 307 of the Act and 40 CFR chapter I, subchapter N;

(2) Any discharger which has a process wastewater flow of 25,000 gallons or more per day;

(3) Any discharger contributing five percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant;

(4) Any discharger who is designated by the Approval Authority as having a reasonable potential for adversely affecting the POTW's operation or for violating any Pretreatment Standards or requirements;

f) The Permittee shall sample and analyze the effluent for the following pollutants:

Total Arsenic
Total Cadmium
Total Chromium
Total Copper
Total Lead
Total Mercury
Total Molybdenum
Total Nickel
Total Selenium
Total Silver
Total Zinc
Total Cyanide
Total Phenols

The sampling shall commence within thirty (30) days of the effective date of this permit and be performed at least twice during the permit term.

Sampling and analytical procedures shall be in accordance with guidelines established in 40 CFR Part 136. Where sampling methods are not specified the effluent samples collected shall be composite samples consisting of at least twelve (12) aliquots collected at approximately equal intervals over a representative 24 hour period and composited according to flow. Where a flow proportioned composite sample is not practical, the Permittee shall collect at least four (4) grab samples, taken at equal intervals over a representative 24 hour period. Lagoon treatment systems may collect a single effluent grab sample.

The results of all analyses shall be attached to, and reported along with the Discharge Monitoring Report (DMR) submitted for the end of that reporting period.

g) At such time as a specific pretreatment limitation becomes applicable to an industrial user of the Permittee, the Department and/or Approval Authority may, as appropriate:

(i) Amend the Permittee's discharge permit to specify the additional pollutant(s) and corresponding effluent limitation(s) consistent with the applicable Pretreatment Standards; or,

(ii) Amend the Permittee's discharge permit to require the Permittee to develop and submit an approvable Pretreatment program under a compliance schedule, in accordance with procedures in 40 CFR 403.8(e). The modification of a POTW's NPDES Permit for the purposes of incorporating a POTW Pretreatment Program approved in accordance with the procedure in §403.11 shall be deemed a minor Permit modification subject to the procedures in 40 CFR 122.63(g); or,

(iii) Require the Permittee to specify, by ordinance, order, or other enforceable means, the type of pollutant(s) and the maximum amount which may be discharged to the Permittee's POTW for treatment. Such requirement shall be imposed in a manner consistent with the POTW program development requirements of the General Pretreatment Regulations at 40 CFR Part 403; and/or,

(iv) Require the Permittee to monitor its discharge for any pollutant which may likely be discharged from the Permittee's POTW, should the industrial user fail to properly pretreat its waste.

h) The Department and the Approval Authority retains, at all times, the right to take legal action against any source of nondomestic discharge, whether directly or indirectly controlled by the Permittee, for violations of a permit, order or similar enforceable mechanism issued by the Permittee, violations of any Pretreatment Standard or requirement, or for failure to discharge at an acceptable level under national standards issued by EPA under 40 CFR, chapter I, subchapter N. In those cases where a permit violation has occurred because of the failure of the Permittee to properly develop and enforce Pretreatment Standards and requirements as necessary to protect the POTW, the Department and/or Approval Authority shall hold the Permittee and/or industrial user responsible and may take legal action against the Permittee as well as the industrial user(s) contributing to the permit violation..

F. Compliance Schedule

The permittee, shall develop and implement a Best Management Practices (BMP) Plan for the PBGC to prevent or minimize the generation and the potential for the release of pollutants from the facility to State waters through normal operations and ancillary activities. The BMP Plan shall achieve the objectives and the specific requirements listed below. The permittee shall update and amend the BMP Plan as needed.

The permittee shall develop the BMP Plan consistent with the following objectives for the control of pollutants:

1. The number and quantity of pollutants and the toxicity of effluent generated, discharged, potentially discharged, or land applied at the facility shall be minimized by the permittee to the extent feasible by managing each influent waste stream in the most appropriate manner.

2. Under the BMP Plan, and any Standard Operating Procedures (SOPs) included in the plan, the permittee shall ensure proper operation and maintenance of the treatment facility as required by 40 CFR 122.41(e).

3. The permittee shall establish specific objectives for the control of pollutants by conducting the following evaluations:

- Each facility component or system shall be examined for its waste minimization opportunities and its potential for causing a release of significant amounts of pollutants to State waters due to equipment failure, improper operation, and natural phenomena such as rain or snowfall. The examination shall include all normal operations and ancillary activities including operation of the piping and valve system from the Colstrip STP, site runoff, sprinkler maintenance and operation, crop removal and drainage from land application of wastewater.

- Where experience indicates a reasonable potential for equipment failure (e.g., sprinkler shutoff or control), natural conditions (precipitation), or other circumstances that may result in significant amounts of pollutants reaching surface waters, the program should include a prediction of the direction, rate of flow and total quantity of pollutants that could be discharged from the facility as a result of each condition or circumstance.

The BMP Plan shall be consistent with the general guidance contained in the publication entitled *Guidance Manual for Developing Best Management Practices (BMPs)*, EPA 833-B-93-004, or any subsequent revisions to the guidance document. The BMP Plan shall:

a. Be documented in narrative form, shall include any necessary plot plans, drawings or maps, and shall be developed in accordance with good engineering practices. The BMP Plan shall be organized and written with the following structure:

- Name and location of the facility.
- Statement of BMP policy.
- Structure, functions and procedures of the BMP Committee.
- Specific management practices and standard operating procedures to achieve the above objectives, including, but not limited to, the following:

- modification of equipment, facilities, technology, processes, and procedures,
- reformulation or redesign of products,
- substitution of materials, and
- improvement in management, inventory control, materials handling or general operational phases of the facility.
-

- Risk identification and assessment.
- Reporting of BMP incidents.
- Materials compatibility.
- Good housekeeping.
- Preventive maintenance.
- Inspections and records.
- Security.
- Employee training.

b. Include the following provisions concerning BMP Plan review:

- Review by plant engineering staff and the plant manager.

- Review and endorsement by the permittee's BMP Committee.
- A statement that the above reviews have been completed and that the BMP Plan fulfills the requirements set forth in this permit. The statement shall include the dated signatures of each BMP Committee member as certification of the reviews.

c. Establish specific best management practices to meet the objectives identified in the BMP Plan above, addressing each component or system capable of generating or causing a release of significant amounts of pollutants and identifying specific preventive or remedial measures to be implemented.

d. Determine if continued ground water monitoring of wells 935A, 936A and 937A is necessary to meet the objectives of the BMP Plan.

B. Lagoon Storage Cells

Quarterly ground water monitoring of wells L-1, L-2 and L-3 at lagoon cells 2 and 3 is required.

Ground Water Monitoring Requirements for Wells L-1, L-2 and L-3

Parameter, units	**Units**	**Frequency**	**Sample Type[1]**
Static water level (SWL)	Feet	Quarterly	Instantaneous
Specific Conductivity	µmhos/cm	Quarterly	Grab
E-Coli Bacteria	cfu/100 mL	Quarterly	Grab
Chloride	mg/L	Quarterly	Grab
pH	s.u.	Quarterly	Grab
Ammonia as N	mg/L	Quarterly	Grab
Total Kjeldahl Nitrogen (TKN)	mg/L	Quarterly	Grab
Nitrite + Nitrate, as N	mg/L	Quarterly	Grab
Total Nitrogen	mg/L	Quarterly	Calculated
Total Phosphorus	mg/L	Quarterly	Grab
1. See definitions in Part V of the permit.			

Quarterly ground water samples from monitoring wells L-1, L-2 and L-3 must be collected in the last month of each quarter: March, June, September, and December. Each well must be purged (3 casing volumes or until specific conductance, pH and temperature stabilize during the purging process). Ground water sample collection, preservation and analysis shall be conducted according to ARM 17.30.1007 and "Non-Point Source Water Quality Standard Operating Procedures" (DEQ. April 4, 1995). Measurement of the static water level from the top of the monitoring well casing is required.

Quarterly ground water monitoring must begin the first quarter of 2012. Quarterly ground water monitoring data for wells L-1, L-2 and L-3 must be submitted to the Department by January 28 of each year for the previous year (data for 2012 is due January 28, 2013). Ground water monitoring data for wells L-1, L-2 and L-3 will be summarized in a report form. These data will not be submitted on DMR forms.

Compliance Schedule	
Milestone	Due Date
Submit a BMP Plan for the PBGC.	Twelve months after effective date of permit.
Implement the BMP Plan for the PBGC.	Fifteen months after effective date of permit.
Submit annual ground water monitoring data.	January 28 of each year for data collected the previous year

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. 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 of this permit 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. Whole effluent toxicity (biomonitoring) results must be reported with copies of the laboratory analysis report on forms from the most recent version of EPA Region VIII's "Guidance for Whole Effluent Reporting". If no discharge occurs during the reporting period, "no discharge" shall be reported on the report form. 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 incidents 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");

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, at (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 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

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 60 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.

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 and the EPA. 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.

1. 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.

2. 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.

3. 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.

4. 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.

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.

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 reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.

13. **"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.

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. **"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.

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

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

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

20. **"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.

21. **"Indirect discharger"** means a non-domestic discharger introducing pollutants to a publicly owned treatment works.

22. **"Instantaneous Maximum Limit"** means the maximum allowable concentration of a pollutant determined from the analysis of any discrete or composite sample collected, independent of the flow rate and the duration of the sampling event.

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

27. **"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.

28. **"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.

29. **"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).

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

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

32. **"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.

33. **"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.

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

35. **"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.

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

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

38. **"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.