Major POTW
Pretreatment Program
Permit No. MT0022586
Minor Modification

# 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 Billings**

is authorized to discharge from its **Wastewater Treatment Plant**

located at **725 Highway 87 East**

to receiving waters named **Yellowstone 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 **April 1, 2015.**

This permit and the authorization to discharge shall expire at midnight, **March 31, 2020.**

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

Jon Kenning, Chief
Water Protection Bureau
Permitting & Compliance Division

Modification Date: June 9, 2015

## TABLE OF CONTENTS

Cover Sheet--Issuance and Expiration Dates

**I. EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS & OTHER CONDITIONS.4**

A. DESCRIPTION OF DISCHARGE POINTS AND MIXING ZONE....4
B. EFFLUENT LIMITATIONS....4
C. MONITORING REQUIREMENTS....6
D. SPECIAL CONDITIONS....11
E. PRETREATMENT REQUIREMENTS....12
F. COMPLIANCE SCHEDULE....19

**II. MONITORING, RECORDING AND REPORTING REQUIREMENTS....20**

A. REPRESENTATIVE SAMPLING....20
B. MONITORING PROCEDURES....20
C. PENALTIES FOR TAMPERING....20
D. REPORTING OF MONITORING RESULTS....20
E. COMPLIANCE SCHEDULES....21
F. ADDITIONAL MONITORING BY THE PERMITTEE....21
G. RECORDS CONTENTS....21
H. RETENTION OF RECORDS....21
I. TWENTY-FOUR HOUR NOTICE OF NONCOMPLIANCE REPORTING....22
J. OTHER NONCOMPLIANCE REPORTING....22
K. INSPECTION AND ENTRY....23

**III. COMPLIANCE RESPONSIBILITIES....24**

A. DUTY TO COMPLY....24
B. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS....24
C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE....24
D. DUTY TO MITIGATE....24
E. PROPER OPERATION AND MAINTENANCE....24
F. REMOVED SUBSTANCES....25
G. BYPASS OF TREATMENT FACILITIES....25
H. UPSET CONDITIONS....26

**IV. GENERAL REQUIREMENTS....27**

A. PLANNED CHANGES....27
B. ANTICIPATED NONCOMPLIANCE....27
C. PERMIT ACTIONS....27
D. DUTY TO REAPPLY....27
E. DUTY TO PROVIDE INFORMATION....27
F. OTHER INFORMATION....27
G. SIGNATORY REQUIREMENTS....28
H. PENALTIES FOR FALSIFICATION OF REPORTS....29
I. AVAILABILITY OF REPORTS....29
J. OIL AND HAZARDOUS SUBSTANCE LIABILITY....29
K. PROPERTY OR WATER RIGHTS....29
L. SEVERABILITY....29
M. TRANSFERS....29
N. FEES....30

O. REOPENER PROVISIONS ..... 30
**V. DEFINITIONS ..... 32**

# 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 |
|---|---|
| 003 | **Location:** At the end of the pipe, discharging into the Yellowstone River located at 45.80264 N. latitude, -108.46703 W. longitude.<br><br>**Mixing Zone:** The maximum extent of the chronic mixing zone in the Yellowstone River is as follows: 710 feet downstream and 78 feet in width for the following parameters: ammonia and total residual chlorine.<br><br>The maximum extent of the acute mixing zone in the Yellowstone River is as follows: 71 feet downstream; and 39 feet in width for the following parameters: ammonia and total residual chlorine.<br><br>**Treatment Works:** Biological Nutrient Removal A20 system with ultraviolet disinfection. Design flow: 34 million gallons per day (mgd). |

## B. Effluent Limitations

Outfall 003

Effective immediately and lasting through the term of the permit, the quality of effluent discharged through Outfall 003 shall, as a minimum, meet the limitations as set forth below.

| Final Effluent Limits – Outfall 003 | | | | |
|---|---|---|---|---|
| **Parameter** | **Units** | **Average Monthly Limit [1]** | **Average Weekly Limit [1]** | **Maximum Daily Limit [1]** |
| Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) | mg/L | 25 | 40 | -- |
| | lb/day | 5,421 | 8,674 | -- |
| $CBOD_5$ Removal | % | 85 | -- | -- |
| Total Suspended Solids (TSS) | mg/L | 30 | 45 | -- |
| | lb/day | 6,505 | 9,758 | -- |
| TSS Removal | % | 85 | -- | -- |
| *E. coli* Bacteria [2] | No. /100 mL | 126 | 252 | -- |
| *E. coli* Bacteria [3] | No. /100 mL | 630 | 1,260 | -- |
| Total Residual Chlorine (TRC) [4] | ug/L | 32 | 44 | -- |
| Oil and grease | mg/L | -- | -- | 10 |
| Ammonia as N [5] | mg/L | 4 | 5.5 | -- |
| Total Nitrogen as N [6] | lb/day | 2,513 | -- | -- |
| Total Nitrogen as N [7] | lb/day | 2,517 | -- | -- |
| Total Phosphorus as P [6] | lb/day | 343 | -- | -- |
| pH | s.u. | Between 6.0 and 9.0 | | |
| Acute Whole Effluent Toxicity (WET) | % effluent | -- | -- | >100 % |

Footnotes:
1. See Definition section at end of permit for explanation of terms.
2. This limit applies during the period April 1 through October 31.
3. This limit applies during the period November 1 through March 31.
4. Effective when chlorine is used at the facility. Sampling must occur during and seven days after chlorine is used at the facility. Sampling of the effluent with an analytical result less than 100 ug/L TRC is considered in compliance with the TRC effluent limit. If chlorine is not used during a reporting period, write "not chlorinating" in the comment section of the Discharge Monitoring Report (DMR) form.
5. Effective June 1, 2019.
6. Beginning August 1, 2019 through October 31, 2019 and continuing August 1 through October 31 thereafter.
7. Updated TN load limit including documented increased flow from Lockwood to the Billings WWTP of at least 0.025 mgd (Four pounds of TN is credited for each 0.025 mgd of increased flow from Lockwood.)

There shall be no acute toxicity in the effluent.

The discharge must not create floating solids or visible foam.

The discharge must not create visible oil sheen in the receiving stream.

C. Monitoring Requirements

Outfall 003

As a minimum, upon the effective date of this permit, the following constituents shall be monitored at the frequency and with the type of measurement indicated; samples or measurements shall be representative of the volume and nature of the monitored discharge.

| Monitoring Requirements | | | | |
|---|---|---|---|---|
| Parameter | Unit | Sample Location | Sample Frequency | Sample Type [1] |
| Flow | mgd | Influent | Continuous | Instantaneous [2] |
| | mgd | Effluent | Continuous | Instantaneous [2] |
| 5-Day Carbonaceous Biochemical Demand ($CBOD_5$) | mg/L | Influent | 5/Week | Composite |
| | mg/L | Effluent | 5/Week | Composite |
| | % Removal [3] | -- | 1/Month | Calculated |
| | lbs/day | Effluent | 1/Month | Calculated |
| Total Suspended Solids (TSS) | mg/L | Influent | 5/Week | Composite |
| | mg/L | Effluent | 5/Week | Composite |
| | % Removal [3] | -- | 1/Month | Calculated |
| | lbs/day | Effluent | 1/Month | Calculated |
| pH | s.u. | Effluent | Daily | Instantaneous |
| Temperature | °C | Effluent | Daily | Instantaneous |
| *E. coli* Bacteria | No. /100 mL | Effluent | 5/Week | Grab |
| Oil sheen | Presence | Effluent | Daily | Observation |
| Oil and Grease [4] | mg/L | Effluent | 1/Month | Grab |
| Total Ammonia as N | mg/L | Effluent | 3/Week | Composite |
| Nitrate + Nitrite as N | mg/L | Effluent | 1/Week | Composite |
| Total Kjeldahl Nitrogen as N | mg/L | Effluent | 1/Week | Calculated |
| Total Nitrogen as N [5] | mg/L | Effluent | 1/Week | Composite |
| | lbs/day | -- | 1/Month | Calculated |
| Total Phosphorus as P | mg/L | Effluent | 1/Week | Composite |
| | lbs/day | -- | 1/Month | Calculated |
| Total Dissolved Solids | mg/L | Effluent | 1/Month | Composite |
| Dissolved Oxygen [6] | mg/L | Effluent | 1/Month | Grab |
| Total Residual Chlorine [7] | ug/L | Effluent | Daily | Grab |
| Chemical Oxygen Demand | mg/L | Effluent | 1/Quarter | Grab |
| Whole Effluent Toxicity [8] | % Effluent | Effluent | 2 spec./Quarter | Composite |

Notes: $CBOD_5$, TSS, *Escherichia coli,* and total ammonia samples must be taken on separate days.
1. See Definition section at end of permit for explanation of terms.
2. Requires recording device or totalizer; permittee shall report daily maximum and daily average flow on DMR.
3. See narrative discussion of permit for additional details.
4. Use EPA Method 1664, Revision A: N-Hexane Extractable Material (HEM) or equivalent.
5. Calculated as the sum of Nitrate + Nitrite (as N) and Total Kjeldahl Nitrogen (as N) concentrations.
6. DO samples must be obtained from the outfall structure prior to discharge enter the river.
7. Sample during and for 7 days after chlorine is used at the facility. If chlorine is not used during a reporting period, write "not chlorinating" in the comment section of the DMR form.
8. See Whole Effluent Toxicity Testing – Acute Toxicity section in this permit.

| (Continued) Monitoring Requirements | | | | |
|---|---|---|---|---|
| Parameter | Unit | Sample Frequency | Sample Type [1] | RRV |
| Antimony, Total Recoverable [2] | µg/L | 2/Year [3] | Composite | 0.5 |
| Arsenic, Total Recoverable [2] | µg/L | [8] | Composite | 1 |
| Beryllium, Total Recoverable [2] | µg/L | 2/Year [3] | Composite | 1 |
| Cadmium, Total Recoverable [2] | µg/L | 2/Year [3] | Composite | 0.03 |
| Chromium, Total Recoverable [2] | µg/L | 2/Year [3] | Composite | 10 |
| Chromium, Hexavalent | µg/L | 2/Year [3] | Composite | 2 |
| Copper, Total Recoverable [2] | µg/L | 2/Year [3] | Composite | 2 |
| Lead, Total Recoverable [2] | µg/L | 2/Year [3] | Composite | 0.3 |
| Mercury, Total Recoverable [2] | µg/L | 2/Year [3] | Composite | 0.005 |
| Nickel, Total Recoverable [2] | µg/L | 2/Year [3] | Composite | 2 |
| Selenium, Total Recoverable [2] | µg/L | 2/Year [3] | Composite | 1 |
| Silver, Total Recoverable [2] | µg/L | 2/Year [3] | Composite | 0.2 |
| Thallium, Total Recoverable [2] | µg/L | 2/Year [3] | Composite | 0.2 |
| Zinc, Total Recoverable [2] | µg/L | 2/Year [3] | Composite | 8 |
| Cyanide, Total | µg/L | 2/Year [3] | Grab | 3 |
| Phenols, Total | µg/L | 2/Year [3] | Grab | 10 |
| Sulfide | mg/L | 2/Year [3] | Grab | 1 |
| Hardness, Total (as $CaCO_3$) | mg/L | 2/Year [3] | Grab | 1 |
| Volatile Organic Pollutants [4] | µg/L | 2/Year [5] | Composite | See footnote [6] |
| Semi-Volatile, Acid Compounds [7] | µg/L | 2/Year [5] | Composite | See footnote [6] |
| Semi-Volatile, Base Neutral [7] | µg/L | 2/Year [5] | Composite | See footnote [6] |

Footnotes:

1. See Definition section at end of permit for explanation of terms.
2. Metals shall be analyzed as total recoverable, use EPA Method (Section) 4.1.4 [EPA 600/4-79-020, March 1983] or equivalent.
3. Samples must be collected in the first and third calendar quarters of the calendar year.
4. 40 CFR 122, Appendix J, Table 2, use EPA Method 1624 Revision B, or equivalent.
5. Sampling required only in second and third calendar years after the effective date of the permit. This information will not be entered on the DMR form; a copy of the analytical laboratory report must be attached to the DMR for the applicable reporting period.
6. See approved method for minimum level (ML) or RRV.
7. 40 CFR 122, Appendix J, Table 2, use EPA Method 1625 Revision B, or equivalent.
8. Samples for arsenic must be obtained at the same frequency as influent samples obtained at Point 001 for Phillips 66 at the headworks or at least monthly.

Reporting Requirements

**Load Calculations**

Effluent limitations or monitoring requirements that are expressed in terms of load (lb/day), must be based on total mass of the discharge in accordance with the definition of daily discharge in Part V of this permit. If the permit specifies that the effluent flow rate be monitored on a continuous basis, the total mass shall be calculated using the following equation:

$$\text{Load (lb/day)} = \text{Daily Discharge (mg/L)} \times \text{Daily Flow (MGD)} \times 8.34$$

If the permit specifies that the effluent flow rate be measured on an instantaneous basis, the total mass shall be estimated using the following equation:

$$\text{Load (lb/day)} = \text{Daily Discharge (mg/L)} \times \text{Daily Flow (GPM)} \times 0.012$$

The daily flow used to calculate the load must be measured in the same calendar day or 24-hour period in which the effluent sample is collected for either method.

**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.

**Composite Sample**

Composite samples shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. 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, with sample volume proportional to flow rate at time of sampling.
b. Constant time interval between samples, with 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, with time interval between samples proportional to flow (i.e. sample taken every "X" gallons of flow).
d. Continuous collection of sample, with sample collection rate proportional to flow rate.

Whole Effluent Toxicity Testing – Acute Toxicity

Starting in the first calendar quarter following the effective date of the permit, the permittee shall, at least once each quarter conduct an acute static-renewal toxicity test on a composite sample of the effluent. Testing will employ two species per quarter and will consist of 5 effluent concentrations (100, 50, 25, 12.5, 6.25 percent effluent) and a control. Dilution water and the control shall consist of the receiving water.

The acute static-renewal 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 Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA-821-R-02-012 and the "Region VIII EPA NPDES Acute Test Conditions-Static Renewal Whole Effluent Toxicity". The permittee shall conduct an acute 48-hour static renewal toxicity test using *Ceriodaphnia dubia* and an acute 96-hour static-renewal toxicity test using fathead minnows (*Pimephales promelas*) as the alternating species. The control of pH in the toxicity test utilizing $CO_2$ enriched atmospheres is allowed to prevent rising pH drift. The target pH selected must represent the pH value of the receiving water at the time of sample collection.

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

If acute toxicity 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 quarterly results from the laboratory shall be reported along with the Discharge Monitoring Report (DMR) form submitted for the end of the reporting

calendar quarter (e.g., whole effluent results for the reporting quarter ending March 31 shall be reported with the March DMR due April 28th with the remaining quarterly reports submitted with the June, September, and December DMR's). 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.

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

D. Special Conditions

1. Sewage Sludge

The use or disposal of sewage sludge must be in conformance with 40 CFR Part 503.

2. Toxicity Identification Evaluation/Toxicity Reduction Evaluation (TIE-TRE)

Should acute toxicity be detected in the required resample, a TIE-TRE shall be undertaken by the permittee to establish the cause of the toxicity, locate the source(s) of the toxicity, and develop control or treatment for the toxicity. Failure to initiate or conduct an adequate TIE-TRE, or delays in the conduct of such tests, shall not be considered a justification for noncompliance with the whole effluent toxicity limits contained in Part I.B of this permit. A TIE-TRE plan needs to be submitted to the Department within 45 days after confirmation of the continuance of effluent toxicity (resample).

3. Pretreatment Service Agreement with Phillips 66 Refinery

The city may terminate the Pretreatment Service Agreement with the Phillips 66 refinery if Phillips 66 violates any city codes, regulations, or special conditions required in the agreement. If the city terminates the Phillips 66 agreement, the city is required to notify the Department 30 days before the termination date. If the city terminates the agreement, the Department may reopen the permit and remove the additional TN load from the refinery that was added to the city's total allowable TN load (ARM 17.30.1361).

4. Dissolved Oxygen (DO) Study Plan

The city must prepare a DO study plan to collect additional diel DO effluent and instream data. The DO study plan will collect data during the critical months of July and August for three years when effluent and receiving stream temperatures are expected to be highest and DO concentrations are expected to be lowest. The DO study plan must be submitted to the Department for review and approval by April 1, 2016.

E. Pretreatment Requirements

1. The Permittee shall operate an industrial pretreatment program in accordance with the following permit requirements developed pursuant to Section 402(b)(8) of the Clean Water Act, the General Pretreatment Regulations (40 CFR Part 403), and the approved pretreatment program submitted by the Permittee. The pretreatment program was approved in October 1985 and has subsequently incorporated substantial modifications as approved by the Approval Authority. The approved pretreatment program, and any approved modifications thereto, is hereby incorporated by reference and shall be implemented in a manner consistent with the following requirements:

   a. Industrial user information shall be updated at a minimum of once per year or at that frequency necessary to ensure that all Industrial Users are properly permitted and/or controlled. The records shall be maintained and updated as necessary.

   b. The Permittee shall sample and inspect each Significant Industrial User (SIU) at least once per calendar year (40 CFR Section 403.8(f)(2)(v)). This is in addition to any industrial self-monitoring activities;

   c. The Permittee shall evaluate, at least every two years, whether each Significant Industrial User needs a plan to control slugs or spills or needs to update such a plan. Where needed, the Permittee shall require the SIU to prepare or update, and then implement the plan. Where a slug prevention plan is required, the Permittee shall ensure that the plan contains at least the minimum elements required in 40 CFR Section 403.8(f)(2)(vi);

   d. The Permittee shall investigate instances of non-compliance with Pretreatment Standards and requirements indicated in reports and notices required under 40 CFR Section 403.12, or indicated by analysis, inspection, and surveillance activities.

   e. The Permittee shall enforce all applicable Pretreatment Standards and requirements and obtain remedies for noncompliance by any industrial user;

f. The Permittee shall control, through the legal authority in the approved pretreatment program, the contribution to the POTW by each industrial user to ensure compliance with applicable Pretreatment Standards and requirements. In the case of industrial users identified as significant under 40 CFR Section 403.3(v), this control shall be achieved through permit, order, or similar means and shall contain, at a minimum, the following conditions:

1) Statement of duration (in no case more than five (5) years);

2) Statement of non-transferability without, at a minimum, prior notification to the Permittee and provision of a copy of the existing control mechanism to the new owner or operator;

3) Effluent limits based on applicable Pretreatment Standards, Categorical Pretreatment Standards, local limits, and State and local law;

4) Self-monitoring, sampling, reporting, notification and recordkeeping requirements, including an identification of the pollutants to be monitored, sampling location, sampling frequency, and sample type, based on the applicable Pretreatment Standards in 40 CFR Part 403, Categorical Pretreatment Standards, local limits, and State and local law; and,

5) Statement of applicable civil and criminal penalties for violation of Pretreatment Standards and requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond deadlines mandated by federal statute or regulation.

g. The Permittee shall provide adequate staff, equipment, and support capabilities to carry out all elements of the pretreatment program as required by 40 CFR Section 403.8(f)(3);

h. The approved program shall not be substantially modified by the Permittee without the approval of the EPA. Substantial and non-substantial modifications shall follow the procedures outlined in 40 CFR Section 403.18;

i. The Permittee shall develop, implement, and maintain an enforcement response plan as required by 40 CFR Section 403.8(f)(5); and

j. The Permittee shall notify all Industrial Users of the users' obligations to comply with applicable requirements under Subtitles C and D of the

Resource Conservation and Recovery Act (RCRA) as required by 40 CFR Section 403.8(f)(2)(iii).

2. The Permittee shall establish and enforce specific local limits to implement the provisions of 40 CFR Section 403.5(a) and (b), as required by 40 CFR Section 403.5(c). The Permittee shall continue to develop these limits as necessary and effectively enforce such limits.

   In accordance with EPA policy and with the requirements of 40 CFR sections 403.8(f)(4) and 403.5(c), the Permittee shall determine if existing technically based local limits are adequate to implement the general and specific prohibitions of 40 CFR sections 403.5(a) and (b).

   If a local limits re-evaluation is necessary, this evaluation should be conducted in accordance with the latest revision of the "EPA Region VIII Strategy for Developing Technically Based Local Limits", and after review of the "Guidance Manual on the Development and implementation of Local Discharge Limitations Under the Pretreatment Program" December 1987. Where the Permittee determines that revised or new local limits are necessary, the Permittee shall submit the proposed local limits to the EPA in approvable form based upon the findings of the technical evaluation within two-hundred and seventy (270) days from the effective date of this permit.

3. Additional Requirements:

   a. The Permittee shall analyze the treatment facility influent and effluent for the presence of the toxic pollutants listed in 40 CFR Part 122 Appendix D (NPDES Application Testing Requirements) Table II at least once per year and the toxic pollutants in Table III at least four times per year. If, based upon information available to the Permittee, there is reason to suspect the presence of any toxic or hazardous pollutant listed in Table V, or any other pollutant in a quantity or concentration known or suspected to adversely affect POTW operation, receiving water quality, or solids disposal procedures, analysis for those pollutants shall be performed at least four times per year on both the influent and the effluent.

      Along with the Permittee's pretreatment annual report, the Permittee will submit a list of compounds included in Table V that are suspected or known to be present in its influent wastewater. This determination shall be based on a review of the Permittee's pretreatment program records. The EPA and/or the Department may review and comment on the list and the list may be revised if in the opinion of the EPA and/or the Department the list is incomplete. The Permittee will perform analysis four times a year on the influent for the revised list of compounds for which there are acceptable testing procedures.

b. Where the pollutants monitored in accordance with this section are reported as being above the method detection limit, the results for these pollutants shall be reported in the Permittee's pretreatment annual report.

c. The Permittee shall analyze the treatment facility sludge (biosolids) prior to disposal, for the presence of the toxic pollutants listed in 40 CFR Part 122 Appendix D (NPDES Application Testing Requirements) Table III at least once per year. If the Permittee does not dispose of biosolids during the calendar year, the Permittee shall certify to that in the Pretreatment Annual Report and the monitoring requirements in this paragraph shall be suspended for that calendar year.

   The Permittee shall review the pollutants in 40 CFR Part 122, Appendix D, Tables II and V. If any of the pollutants in these tables were above detection in the influent samples during the previous 2 years or last 2 analyses, whichever is greater, the Permittee shall sample and analyze sewage sludge for these pollutants. The Permittee shall perform this evaluation and analysis at least once per year. Pollutants that are analyzed by method 601, Purgeable Halocarbons, are excluded from this requirement.

   The Permittee shall use sample collection and analysis procedures as approved for use under 40 CFR Part 503.

   The Permittee shall report the results for these pollutants in the Permittee's pretreatment annual report.

d. All analyses shall be in accordance with test procedures established in 40 CFR Part 136. Where analytical techniques are not specified or approved under 40 CFR Part 136, the Permittee shall use its best professional judgment and guidance from the State and EPA regarding analytical procedures. All analytical procedures and method detection limits must be specified when reporting the results of such analyses. Sampling methods shall be those defined in 40 CFR Part 136, 40 CFR Part 403, as defined in this permit, or as specified by the Approval Authority. Where sampling methods are not specified, the influent and 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 automated composite sampling is inappropriate, at least four (4) grab samples shall be manually taken at equal intervals over a representative 24-hour period, and composited prior to analysis using approved methods.

4. The Permittee shall prepare annually a list of industrial users which, during the preceding twelve (12) months, have significantly violated Pretreatment Standards or Requirements. This list is to be published annually in the largest newspaper in the Permittee's service area as required by 40 CFR Section 403.8(f)(2)(viii).

   In addition, on or before March 28, the Permittee shall submit a pretreatment program annual report to the EPA and the Department which contains the following information:

   a. An updated list of all Significant Industrial users as defined at 40 CFR 403.3(v). For each Significant Industrial User listed, the following information shall be included:

      1) All applicable Standard Industrial Classification (SIC) codes and categorical determinations, as appropriate. In addition, a brief description of the industry and general activities;

      2) Whether each significant Industrial User has an unexpired control mechanism and an explanation as to why any SIUs are operating without a current, unexpired control mechanism (e.g. permit);

      3) A summary of all monitoring activities performed within the previous twelve (12) months. The following information shall be reported:

         Total number of Significant Industrial Users inspected; and
         Total number of Significant Industrial Users sampled

   b. Additional Requirements:

      1) For all industrial users that were in Significant Non-Compliance during the previous twelve (12) months, provide the name of the violating industrial user, indicate the nature of the violations, the type and number of actions taken (warning letter, notice of violation, administrative order, criminal or civil suit, fines or penalties collected, etc.) and current compliance status. If the industrial user was put on a schedule to attain compliance with effluent limits, indicate the date the schedule was issued and the date compliance is to be attained. Determination of Significant Non-Compliance shall be performed as defined at 40 CFR Section 403.8(f)(2)(viii).

      2) A summary of all enforcement actions not covered by the paragraph above conducted in accordance with the approved Enforcement Response Plan.

c. A list of all Significant Industrial Users whose authorization to discharge was terminated or revoked during the preceding twelve (12) month period and the reason for termination;

d. A report on any Interference, Pass Through, upset or MPDES permit violations known or suspected to be caused by non-domestic discharges of pollutant and actions taken by the Permittee in response;

e. Verification of publication of industrial users in Significant Non-compliance;

f. Identification of the specific locations, if any, designated by the Permittee for receipt (discharge) of trucked or hauled waste;

g. Information as required by the EPA or the Department on the discharge to the POTW from the following activities:

   1) Ground water clean-up from underground storage tanks;
   2) Trucked or hauled waste; and,
   3) Groundwater cleanup from RCRA or Superfund sites.

h. A description of all changes made during the previous calendar year to the Permittee's pretreatment program that were not submitted as substantial or non-substantial modifications to the EPA.

i. The Permittee shall evaluate actual pollutants loadings against the approved Maximum Allowable Head works Loadings (MAHLs). Where the actual loading exceeds the MAHL, the Permittee shall immediately begin a program to either revise the existing local limit and/or undertake such other studies as necessary to evaluate the cause(s) of the exceedence. The Permittee shall provide a summary of its intended action.

j. Other information that may be deemed necessary by EPA.

5. The Permittee shall prohibit the introduction of the following pollutants into the POTW:

   a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (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;

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

c. 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;

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

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;

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

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

j. Any other pollutant which may cause Pass Through or Interference.

6. The Permittee shall provide EPA and the Department with adequate notice of any substantial change in the volume or character of pollutants being introduced into the treatment works by any Significant Industrial User introducing pollutants into the treatment works at the time of application for the discharge permit. For the purposes of this section, "substantial change" shall mean a level of change which has a reasonable probability of affecting the Permittee's ability to comply with its permit conditions or to cause a violation of stream standards applied to the receiving water.

   Adequate notice shall include information on:

a. The quality and quantity of effluent to be introduced into the treatment works, and,

b. Any anticipated impact of the change on the quality or quantity of effluent to be discharged from the publicly owned treatment works.

7. Section 309(f) of the Clean Water Act provides that the EPA may issue a notice to the POTW stating that a determination has been made that appropriate enforcement action must be taken against an industrial user for noncompliance with any Pretreatment Standards and requirements. The notice provides the POTW with thirty (30) days to commence such action. The issuance of such permit notice shall not be construed to limit the authority of the permit issuing authority or Approval Authority.

8. The EPA and the Department retain, at all times, the right to take legal action against any source of non-domestic 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 the EPA under 40 CFR, Chapter I, Subchapter N. In those cases where a MPDES 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, EPA and/or the Department shall hold the Permittee responsible and may take legal action against the Permittee as well as the sources(s) of non-domestic discharge contributing to the permit violation.

F. Compliance Schedule

Beginning in 2015 the facility must provide annual reports to the Department by December 31 of each year describing progress made in designing and constructing the Biological Nutrient Removal plant until the plant is completed.

## 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

Monitoring results must be reported on a Discharge Monitoring Report (DMR) EPA form 3320-1. Monitoring results must be submitted in either electronic or paper format and be postmarked no later than the 28th day of the month following the end of the monitoring 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" must be reported on the report form. Legible copies of these, and all other reports required herein, must be signed and certified in accordance with Part IV.G 'Signatory Requirements' of this permit and submitted to DEQ 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) 324-4777. The following examples are considered serious incidents:

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

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

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

2. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:

   a. A description of the noncompliance and its cause;

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

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

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

3. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-3080.

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

J. Other Noncompliance Reporting

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

K. Inspection and Entry

The permittee shall allow the head of the Department or the 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 and the Director 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(9)(a) also provides for administrative penalties not to exceed $10,000 for each day of violation and up to a maximum not to exceed $100,000 for any related series of violations. Except as provided in permit conditions on P art 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 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.

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

## D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application must be submitted at least 180 days before the expiration date of this permit.

## E. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

## F. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Department, it shall promptly submit such facts or information with a narrative explanation of the circumstances of the omission or incorrect submittal and why they weren't supplied earlier.

G. Signatory Requirements

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

1. All permit applications shall be signed by either a principal executive officer or ranking elected official.

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

   a. The authorization is made in writing by a person described above and submitted to the Department; and

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

3. Changes to authorization. If an authorization under Part IV.G.2 of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part IV.G.2 of this permit must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this section shall make the following certification:

   "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

H. Penalties for Falsification of Reports

The Montana Water Quality Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more that $25,000 per violation, or by imprisonment for not more than six months per violation, or by both.

I. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. As required by the Clean Water Act, permit applications, permits and effluent data shall not be considered confidential.

J. Oil and Hazardous Substance Liability

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

K. Property or Water Rights

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

L. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

M. Transfers

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

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

2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them;

3. The Department does not notify the existing permittee and the proposed new permittee of an intent to revoke or modify and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part IV.M.2 of this permit; and
4. Required annual and application fees have been paid.

N. Fees

The permittee is required to submit payment of an annual fee as set forth in ARM 17.30.201. If the permittee fails to pay the annual fee within 90 days after the due date for the payment, the Department may:

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

2. Suspend the processing of the application for a permit or authorization or, if the nonpayment involves an annual permit fee, suspend the permit, certificate or authorization for which the fee is required. The Department may lift suspension at any time up to one year after the suspension occurs if the holder has paid all outstanding fees, including all penalties, assessments and interest imposed under this sub-section. Suspensions are limited to one year, after which the permit will be terminated.

O. Reopener Provisions

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary), or other appropriate requirements if one or more of the following events occurs:

1. Water Quality Standards: The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.

2. Water Quality Standards are Exceeded: If it is found that water quality standards or trigger values in the receiving stream are exceeded either for parameters included in the permit or others, the department may modify the effluent limits or water management plan.

3. TMDL or Wasteload Allocation: TMDL requirements or a wasteload allocation is developed and approved by the Department and/or the 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.

6. 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.

7. Toxicity Limitations: Change in the whole effluent protocol, or any other conditions related to the control of toxicants have taken place, or if one or more of the following events have occurred:

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

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

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

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

   e. The TRE/TIE revealed other unique conditions or characteristics which, in the opinion of the Department, justify the incorporation of unanticipated special conditions in 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. 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, with sample volume proportional to flow rate at time of sampling.

b. Constant time interval between samples, with 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, with time interval between samples proportional to flow (i.e. sample taken every "X" gallons of flow).
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 Section 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 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.

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

23. **"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.

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

25. **"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.

26. **"Maximum daily discharge limitation"** means the highest allowable daily discharge.

27. **"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 Part 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))

28. **"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.

29. **"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.

30. **"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).

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

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

33. **"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.

34. **"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.

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

36. **"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.

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

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

39. **"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.