Major Lagoon
Permit No.: MT0022616

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 Deer Lodge

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

located at **198 North Frontage Road, Deer Lodge, MT**

to receiving waters named the **Clark Fork River**,

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein. Authorization for discharge is limited to those outfalls specifically listed in the permit. The wasteload allocation specified herein support and serve to define the total maximum daily load for affected receiving water.

This permit shall become effective **March 1, 2013.**

This permit and the authorization to discharge shall expire at **midnight February 28, 2018.**

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

Bob Habeck

Bob Habeck, Chief
Water Protection Bureau
Permitting & Compliance Division

Modification Date: **February 7, 2014**

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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 Clark Fork River, located at 46°25'44" N latitude, 112°44'18" W longitude. **Mixing Zone:** The maximum extent of the mixing zone in the named receiving waters is as follows: 720 feet downstream. **Treatment Works**: 1.50 mgd aerated lagoon system with UV disinfection.

B. Effluent Limitations

Outfall 001

Final Limitations

Upon the permit effective date and lasting through the term of the permit, the quality of effluent discharged through Outfall 001 shall, as a minimum, meet the limitations as set forth below:

Final Effluent Limitations: Outfall 001

Parameter	Units	Average Monthly Limit [1]	Average Weekly Limit [1]	Maximum Daily Limit [1]
Biological Oxygen Demand (BOD_5)	mg/L	30	45	NA
	lb/day	375	563	NA
Total Suspended Solids (TSS)	mg/L	45	65	NA
	lb/day	563	813	NA
E. coli Bacteria [2, 3]	cfu/100 mL	126	252	NA
E. coli Bacteria [3, 4]	cfu/100 mL	630	1,260	NA
Total Ammonia	mg/L	1.2	2.0	.
Arsenic, Total Recoverable	µg/L	NA	NA	10
Copper, Total Recoverable	µg/L	14	NA	28
Oil and Grease	mg/L	NA	NA	10

Footnotes:
1. See Definition section at end of permit for explanation of terms.
2. This limit applies during the period April1 through October 31.
3. Report Geometric Mean if more than one sample is collected during reporting period.
4. This limit applies during the period November 1 through March 31.

There shall be no discharge of wastewater to the Clark Fork River between June 1 and September 30, inclusive.

Effluent pH from Outfall 001 shall remain between 6.5 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.

85 Percent (%) Removal Requirement for BOD_5: The arithmetic mean of the BOD_5 for effluent samples collected in a period of 30 consecutive days shall not exceed 15% of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (85% removal). This is in addition to the concentration limitations on BOD_5.

65 Percent (%) Removal Requirement for TSS: The arithmetic mean of the TSS for effluent samples collected in a period of 30 consecutive days shall not exceed 35% of the arithmetic mean of the values for influent samples collected at approximately the same times during the same period (65% removal). This is in addition to the concentration limitations on TSS.

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

C. Monitoring Requirements

All analytical procedures must comply with the specifications of 40 CFR Part 136. Samples shall be collected, preserved and analyzed in accordance with approved procedures listed in 40 CFR 136.

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. Self-monitoring samples shall be collected at the discharge structure. If no discharge occurs during the entire monitoring period, it shall be stated on the Discharge Monitoring Report Form (EPA No. 3320-1) that no discharge or overflow occurred.

Influent samples shall be collected at a point representative of the total influent upstream of any recycle return flows.

Instream samples must be collected in the Clark Fork River upstream of, and outside the area influenced by, the facility discharge. Instream samples must be collected at the same location each sampling event.

All analytical procedures must comply with the applicable RRV in Department Circular DEQ-7 unless specified otherwise in this permit.

Outfall 001 Self-Monitoring Requirements				
Parameter	Unit	Sample Location	Sample Frequency	Sample Type (1)
Flow	mgd	Influent	Continuous	(2)
	mgd	Effluent	Continuous	(2)
5-Day Biological Oxygen Demand (BOD_5)	mg/L	Influent	1/Week	Composite
	mg/L	Effluent	1/Week	Composite
	% Removal (3)	NA	1/Month	Calculated
	lb/day	Effluent	1/Month	Calculated
Total Suspended Solids (TSS)	mg/L	Influent	1/Week	Composite
	mg/L	Effluent	1/Week	Composite
	% Removal (3)	NA	1/Month	Calculated
	lb/day	Effluent	1/Month	Calculated
pH	s.u.	Effluent	1/Week	Instantaneous
Temperature	°C	Effluent	1/Week	Instantaneous
E. coli Bacteria	cfu/100 mL	Effluent	3/Week	Grab
Arsenic, Total Recoverable	µg/L	Effluent	1/Month	Composite
Copper, Total Recoverable	µg/L	Effluent	1/Month	Composite
Mercury, Total Recoverable	µg/L	Effluent	1/Month	Composite
Cyanide, Total	µg/L	Effluent	1/Month	Grab
Total Ammonia as N	mg/L	Effluent	1/Month	Composite
Nitrate + Nitrite as N	mg/L	Effluent	1/Month	Composite
Total Kjeldahl Nitrogen	mg/L	Effluent	1/Month	Composite
Total Nitrogen (4)	mg/L	NA	1/Month	Calculated
	lb/day	NA	1/Month	Calculated
Total Phosphorus as P	mg/L	Effluent	1/Month	Composite
	lb/day	NA	1/Month	Calculated
Oil and Grease (5)	mg/L	Effluent	1/Month	Grab
Oil and Grease, visual	Presence	Effluent	1/Week	Visual
Whole Effluent Toxicity, Acute (3)	% Effluent	Effluent	2/Year	Composite

Footnotes:
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 in this section of permit for additional details.
4. Calculated as the sum of Nitrate + Nitrite as N and Total Kjeldahl Nitrogen concentrations.
5. Use EPA Method 1664, Revision A: N-Hexane Extractable Material (HEM), or equivalent. Only required when visual sheen is present.

Upstream Monitoring in the Clark Fork River (CFR)				
Parameter	Unit	Sample Frequency	Sample Type(1)	RRV(2)
Copper, total recoverable	µg/L	1/Quarter	Grab	2
Mercury, total recoverable	µg/L	1/Quarter	Grab	0.005
Cyanide, total	µg/L	1/Quarter	Grab	3

Footnotes:
1. See Definition section at end of permit for explanation of terms.
2. Required reporting value (RRV) listed in Circular DEQ-7

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 equations:

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

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.

Whole Effluent Toxicity Testing – Acute Toxicity

The permittee shall conduct an acute static replacement toxicity test on a composite/grab sample of the effluent. Testing will employ two species per monitoring period 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 replacement 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 acute 48-hour static renewal toxicity tests using *Ceriodaphnia dubia* and 96-hour tests with fathead minnow (*Pimephales promelas*).

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 and the permittee shall be subject to the requirements of Part I.D.2 of this permit. 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 DMRs). 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.

2. Toxicity Reduction Evaluation / Toxicity Identification Evaluation:

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 TRE plan needs to be submitted to the Department within 45 days after confirmation of the continuance of effluent toxicity (resample).

3. Land Application of Treated Effluent

Land application of wastewater has the potential to discharge pollutants to surface water through over-land flow from application of wastewater in excess of the hydraulic capacity of the soils or from storm water runoff during precipitation events. Surface disposal of wastewater also has the potential to discharge pollutants to ground water through infiltration or percolation (ground water recharge).

Land application was permitted via Outfall 002 and Outfall 003 in the previous permit renewal cycle. However, the Department has determined that it should be permitted as a special condition as long as the wastewater is applied at an agronomic rate. Any surface water runoff from the land application area is considered to be agricultural storm water runoff rather than a point source discharge [ARM 17.30.1304(41)] and is not regulated.

Current Land Application Operations
The Deer Lodge WWTF currently discharges a portion of the treated wastewater to two parcels on the Grant Kohrs National Historic Ranch (GK). The land application of treated effluent is limited to the period from June to September, inclusive. The reported combined flow rate (average) for both parcels is approximately 1 mgd. Through this special condition, the

permittee is required to apply wastewater at an agronomic rate by complying with the June 8, 1998 Spray Irrigation Authorization Circular DEQ-2 review letter and any subsequent updates, as issued by the Department. In addition, the permittee is required to follow Best Management Practices (BMPs) that they summarize in a facility-specific land application plan (see *Land Application Plan Requirements* below). The permittee shall update and amend their plan and, as needed, submit a notification letter to the Department providing the date and an overview of any changes. The 2009 *City of Deer Lodge Wastewater Treatment Facility Land Application Operation and Maintenance Manual and Groundwater Monitoring Sampling and Analysis Plan* may be used for this purpose. Any significant land application changes may require a new review under Circular DEQ-2.

Future Land Application Operations
The permittee is required to submit a new facility-specific land application plan to the Department for any other proposed land applications. The Department must approve the new application(s), in writing, prior to the permittee initiating this land application. In addition, any new land application may require a new review under Circular DEQ-2.

Land Application Plan Requirements
The permittee shall maintain a land application plan(s) for any applicable land application operations. The plan shall achieve the objective to manage the quantity and quality of the land-applied effluent to optimize vegetative uptake and reduce the risk of runoff to surface water or groundwater infiltration/percolation. It should 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 plan shall include discussion of:

a. Hydraulic Capacity
The permittee must periodically evaluate the land application target hydraulic loading rate, in order to optimize crop uptake and to prevent the discharge of pollutants to state surface waters and to groundwater. The permittee must also maintain records to demonstrate conformance with the plan.

b. Pollutants
The permittee must periodically evaluate their target pollutant uptake and maintain records to demonstrate conformance with these rates.

c. Buffer Zones
Buffer distances are established to protect the public from unnecessary exposure to land applied wastewater and to protect drinking water supplies and surface waters. The permittee is required to periodically review and maintain appropriate buffer zones.

d. Monitoring and Recordkeeping
The permittee shall include a discussion in the plan of the parameters to be self-monitored, monitoring frequency, and triggers resulting in an action (i.e., change of application rates), as well as the recordkeeping, for the following:

a) Land applied wastewater,

b) Soil monitoring, and

c) Groundwater monitoring.

The permittee shall maintain land application records for three (3) years and make them available for inspection by Department personnel upon request.

4. Pretreatment Requirements

1. The Permittee shall not allow any user to introduce into a POTW any pollutants, which cause Pass Through or Interference. These general prohibitions and the specific prohibitions in Part I.E.2 of this rule apply to all non-domestic sources introducing pollutants into a POTW whether or not the source is subject to other national pretreatment standards or any national, state or local pretreatment requirements.

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

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

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

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

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

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

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

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

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

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

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

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

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

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

A. Representative Sampling

Samples taken in compliance with the monitoring requirements established under Part I 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 addresses:

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

(b) U.S. Environmental Protection
Agency Region 8 MT Office
10 W. 15th Street
Suite 3200
Helena, Montana 59626
Telephone: (406) 457-5000

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 and the Regional Administrator advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance.

B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed $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. Any sludges removed from the facility shall be disposed of in accordance with 40 CFR 503, 258 or other applicable rule. EPA and MDEQ shall be notified at least 180 days prior to such disposal taking place.

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.

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

3. TMDL or Wasteload Allocation: TMDL requirements or a wasteload allocation is developed and approved by the Department and/or EPA for incorporation in this permit.

4. Water Quality Management Plan: A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit.

5. 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.

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"** Composite samples shall, as a minimum, be composed of four or more discrete aliquots (samples) of equal volume and time collected in a 24 hour period. The aliquots shall be combined in a single container for analysis (simple composite). 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.

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.