

Major Industrial
Permit No.: MT0000477

**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.*,

Par Montana, LLC

is authorized to discharge from its **privately-owned treatment works**

located at **700 Par Montana Road**

to receiving waters named the **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: **{to be determined}**

This permit and the authorization to discharge shall expire at midnight, **{5 years after effective date}**.

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

DRAFT

Tatiana Davila, Bureau Chief
Water Protection Bureau
Water Quality Division

Issuance Date: **DRAFT**

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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.

<u>Outfall</u>	<u>Description</u>
004	<p>Location: At the end of the diffuser discharging to the Yellowstone River after the overflow weir at Pond 6 at: N 45.820778, W 108.429186</p> <p>Mixing Zone: None</p> <p>Treatment Works: Oil/water separator, neutralization, equalization, induced air flotation, biological oxidation lagoons, and stabilization/polishing ponds</p>
002	<p>Location: Near the end of the “clean water ditch” discharging to the Yellowstone River located at: N 45.819267, W 108.436251</p> <p>Mixing Zone: Segment of the Yellowstone River approximately 0.75 miles downstream of the discharge point.</p> <p>Treatment Works: Noncontact cooling water</p>

B. Effluent Limitations

Beginning on the effective date of this permit and lasting through the term of the permit, the quality of effluent discharged through Outfalls 004 and 002 shall, at a minimum, meet the limitations as set forth below:

Table 1. Effluent Limits – Outfall 004			
Parameter	Units	Average Monthly ¹	Maximum Daily ¹
5-day Biochemical Oxygen Demand (BOD ₅)	lb/day	511	919
Net Total Suspended Solids (TSS) ²	lb/day	409	640
pH	s.u.	6.0 - 9.0	
Chemical Oxygen Demand (COD)	lb/day	3558	6869
Oil and Grease	lb/day	148	279
	mg/L	-	10
Phenolic Compounds	lb/day	2	6.9
Ammonia, as N	lb/day	267	587
Arsenic, Total Recoverable ³	ug/L	10	10
Sulfide, Total	lb/day	2.6	5.8
Chromium, Total Recoverable	lb/day	2.3	6.52
Chromium, Hexavalent	lb/day	0.2	0.43
Acute Whole Effluent Toxicity (WET)	% Effluent	-	>100%

1. See Definitions section at the end of the permit for explanation of terms
2. Use intake water TSS at river pump house and TSS recorded from Outfall 004 to determine "Net" TSS
3. Final effluent limits effective {2 months before permit expiration}. See Section 6.2 "Special Conditions" for Compliance Schedule information.

Table 2. Effluent Limits – Outfall 002			
Parameter	Units	Average Monthly ¹	Maximum Daily ¹
Net Total Organic Carbon (TOC)	mg/L	-	5
pH	s.u.	6.0 - 9.0	
Arsenic, Total Recoverable ²	ug/L	10	10
Temperature, summer ³	°F	-	104
<ol style="list-style-type: none"> 1. See Definitions section at the end of the permit for explanation of terms 2. See Section 6.2 "Special Conditions" for Compliance Schedule information. 3. Limit applies August 1 – October 31 			

There shall be no discharge of floating solids or visible foam other than in trace amounts;
There shall be no discharge which causes visible oil sheen in the receiving stream;
There shall be no discharge that settles to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines.

C. Monitoring and Reporting Requirements

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. Reporting frequency shall be monthly, and the facility must submit the results electronically on NetDMR for each month by the 28th of the following month. If no discharge occurs during the entire monitoring period, it shall be stated on the Discharge Monitoring Report Form that no discharge or overflow occurred.

Sample analyses for any "nondetect" results must meet Required Reporting Values (RRVs) in Circular DEQ-7 and Laboratory Method Limits (MLs) for volatile organics and semi-volatile organics, unless another method is requested and approved by DEQ, in writing. Laboratory results for volatile organics and semi-volatile organics samples must be attached to the DMR for the month in which the sample was obtained.

1. Outfall 004 Monitoring Requirements

Starting with the effective date of the permit and lasting for the duration of the permit cycle, self-monitoring must be conducted at the following location, unless another location is requested and approved by DEQ in writing:

Monitoring for compliance determination of WQBELs:

Final retention pond overflow (Pond 6) at 45.82052, -108.42911

Monitoring for compliance determination of TBELs:

To determine compliance with TBELs, the wastestream must be monitored prior to commingling with other process or non-process wastestreams (such as hydrotest water and groundwater). Internal monitoring prior to the addition of these wastestreams is required. Par Montana must notify DEQ of its designated monitoring location in writing.

Table 3. Monitoring Requirements for Outfall 004					
Parameter	Units	Monitoring Frequency	Sample Type ¹	Reporting Requirements	RRV ¹
Flow rate	mgd	Continuous	Recorded	Monthly Avg Daily Max	-
5-Day Biochemical Oxygen Demand (BOD ₅)	mg/L	1/Week	Composite	Monthly Avg Daily Max	2
	lb/day	1/Week	Calculate	Monthly Avg Daily Max	2
Total Suspended Solids (Effluent)	mg/L	1/Week	Grab	Monthly Avg Daily Max	10
Total Suspended Solids (Influent)	mg/L	1/ Week	Grab	Monthly Avg Daily Max	10
Net Total Suspended Solids	mg/L	1/Week	Calculate	Monthly Avg Daily Max	10
	lb/day	1/Week	Calculate	Monthly Avg Daily Max	10
pH	s.u.	1/Day	Instantaneous	Daily Min Daily Max	0.1
Oil and Grease	mg/L	1/Week	Grab	Daily Max	1
Temperature	°F	1/Week	Instantaneous	Monthly Avg Daily Max	1
Sulfide, Total	µg/L	1/Week	Composite	Monthly Avg Daily Max	-
	lb/day	1/Week	Calculate	Monthly Avg Daily Max	-
Sulfide, Dissolved	µg/L	1/Week	Composite	Monthly Avg	-
Hydrogen Sulfide (H ₂ S)	µg/L	1/Week	Calculate	Monthly Avg	20
Total Ammonia, as N	mg/L	1/Week	Composite	Monthly Avg Daily Max	0.07
Nitrate + Nitrite, as N ¹	mg/L	1/Month	Composite	Monthly Avg Daily Max	0.02
Total Kjeldahl Nitrogen ¹	mg/L	1/Week	Composite	Monthly Avg Daily Max	0.225
Total Nitrogen ¹	mg/L	1/Week	Calculate	Monthly Avg Daily Max	-
Total Phosphorus, as P ¹	mg/L	1/Month	Composite	Monthly Avg Daily Max	0.003
Chemical Oxygen Demand (COD)	mg/L	1/Week	Composite	Monthly Avg Daily Max	5
	lb/day	1/Week	Calculate	Monthly Avg Daily Max	5
Dissolved Oxygen	mg/L	1/Month	Grab	Monthly Avg Daily Max	0.3
Aluminum, Dissolved	µg/L	1/Month	Composite	Monthly Avg Daily Max	9
Antimony, Total Recoverable	µg/L	1/Quarter	Composite	Single Sample	0.5

Arsenic, Total Recoverable	µg/L	1/Month	Composite	Monthly Avg Daily Max	1
Barium	µg/L	1/Quarter	Composite	Single Sample	3
Copper, Total Recoverable	µg/L	1/Quarter	Composite	Single Sample	2
Cyanide, Total Recoverable	µg/L	1/Month	Composite	Monthly Avg Daily Max	3
Fluoride, Total Recoverable	µg/L	1/Month	Composite	Monthly Avg Daily Max	200
Mercury, Total Recoverable	µg/L	1/Month	Composite	Monthly Avg Daily Max	0.005
Nickel, Total Recoverable	µg/L	1/Quarter	Composite	Single Sample	2
Selenium, Total Recoverable	µg/L	1/Month	Composite	Monthly Avg Daily Max	2
Thallium	µg/L	1/Quarter	Composite	Single Sample	0.2
Zinc, Total Recoverable	µg/L	1/Quarter	Composite	Single Sample	8
Phenolic Compounds	µg/L	1/Week	Grab	Monthly Avg Daily Max	10
	lb/day	1/Week	Calculate	Monthly Avg Daily Max	10
Chromium, Total	µg/L	1/Month	Composite	Monthly Avg Daily Max	10
	lb/day	1/Month	Calculate	Monthly Avg Daily Max	10
Chromium, Hexavalent	µg/L	1/Month	Composite	Monthly Avg Daily Max	10
	lb/day	1/Month	Calculate	Monthly Avg Daily Max	10
Acrolein	µg/L	1/Quarter	Composite	Single Sample	3
Dibenzo (a,h) anthracene	µg/L	1/Quarter	Composite	Single Sample	0.1
Hexachlorobenzene	µg/L	1/Quarter	Composite	Single Sample	0.03
Hexachlorocyclopentadiene	µg/L	1/Quarter	Composite	Single Sample	5
Indeno (1,2,3-cd) pyrene	µg/L	1/Quarter	Composite	Single Sample	0.08
3,3-dichlorobenzidine	µg/L	1/Quarter	Composite	Single Sample	5
1,2-diphenylhydrazine	µg/L	1/Quarter	Composite	Single Sample	0.04
Volatile Organics	µg/L	1/Quarter	Grab	Single Sample	-
Semi-Volatile Compounds	µg/L	1/Quarter	Composite	Single Sample	-
Whole Effluent Toxicity, Acute	% Effluent	1/Quarter	Composite	Pass/Fail	-
^{1.} See Definitions ^{2.} Required July 1 – October 31					

During months when noncontact cooling water is diverted from the cooling water ditch (Outfall 002) to Pond 6 to melt ice and increase the pond water temperature, a copy of the log sheet recording the start and stop pumping times and estimated volume of cooling water pumped to Pond 6 must be attached to the monthly netDMR form.

Process wastewater from Pond 6 above Outfall 004 may be used as emergency make up water for non-contact cooling water and the fire water system (e.g., maintenance, flushing fire water mains/monitors and HF Alkylation unit mitigation system.) Amounts of wastewater used for non-contact cooling water shall be reported to DEQ with the

monthly DMR. The mass shall be calculated for the limited parameters in the wastewater diverted from Pond 6 to the non-contact cooling water Outfall 002 and shall be added to the mass reported for Outfall 004. The permittee shall contact DEQ in advance if possible, but no later than one working day after treated process wastewater is used for non-contact cooling make up water. The report shall be made to the Water Protection Bureau at (406) 444-5546.

2. Outfall 004 – Whole Effluent Toxicity Testing, Acute

Starting in the first calendar quarter following the effective date of the permit, the permittee must, at least once each calendar quarter, conduct an acute static renewal toxicity test on a composite sample of the effluent. Testing will employ 2 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 and must be collected upstream of the discharge. Samples shall be collected on a two day progression; i.e., if the first quarterly sample is on a Monday, the second quarter sample shall be on a Wednesday, etc. Saturdays, Sundays, and Holidays will be skipped in the progression.

The static toxicity tests must be conducted in general accordance with the procedures set out in the latest version 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 Test* testing protocols. 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*). The control of pH in the toxicity test utilizing CO₂ enriched atmospheres is allowed to prevent rising pH drift. The target pH selected must represent the pH value of the receiving water at the time of sample collection.

Acute toxicity occurs when 50% or more mortality is observed for either species at any effluent concentration. If more than 10% 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 DEQ. This exception may be granted if less than 10% 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, Par Montana shall follow the requirements in Part I.D.3 and accelerated testing shall occur once a month for the affected species until further notified by DEQ. In all cases, the results of all toxicity tests must be submitted to DEQ in accordance with Part II of this permit.

The quarterly results from the laboratory shall be reported along with the Discharge Monitoring Report (DMR) 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 respectively). The format for the laboratory report shall be consistent with the latest revision of the *Region VIII Guidance for Acute Whole Effluent Reporting* and shall include all chemical and physical data as specified.

If the results for four consecutive quarters of testing indicate no acute toxicity, the permittee may request a reduction to semi-annual (twice yearly) two-species acute toxicity testing. DEQ may approve or deny the request based on the results and other

available information without an additional public notice. If the request is approved, the test procedures are to be the same as specified above for the test species.

3. Outfall 002/002B Monitoring Requirements

Outfall 002

Starting with the effective date of the permit and lasting for the duration of the permit cycle, self-monitoring at Outfall 002 must be conducted at the following location, unless another location is requested and approved by DEQ in writing:

Monitoring station on the “clean water ditch”

The permittee shall provide and maintain an infrared monitoring system or equivalent for the monitoring and detection of oil sheen events upstream of Outfall 002. This early warning system shall conform to all operating, calibration, and maintenance procedures developed by the refinery.

Any time oil sheen reaches the Yellowstone River from Outfall 002, the following incident investigation procedures will be conducted:

- a. Following regulatory notification and oil spill response/cleanup, an investigation team will be assembled that includes subject matter experts trained in root cause investigation techniques. Participants in the investigation may include environmental, safety, and process representatives. In addition, employees and contractors knowledgeable in the process area where the incident occurred may be participants in the investigation.
- b. The incident investigation will compile factual data regarding the incident including, but not limited to, eyewitness interviews, process data, and incident and mitigation timelines.
- c. Based on the factual data gathered, root cause analysis tool will be applied, and a final incident report generated, which will include recommendations to prevent similar future events. Reporting will be conducted pursuant to Section II of the permit.

Outfall 002B – Culvert to Inlet Bay

Once through cooling water from Pond 1 may be diverted to Inlet Bay via a culvert to be recycled if the facility is unable to access sufficient river water. For permitting purposes, the culvert will be designated Outfall 002B.

“Discharge” from Outfall 002B into the Inlet Bay may occur under the following conditions:

- The valve on the culvert shall remain closed unless river levels have dropped to a level requiring recycling of the once through cooling water to continue operations. In such situations, the water in Pond 1 to be “discharged” via Outfall 002B must be sampled for the parameters listed in **Table 4** prior to entering the Inlet Bay.
- The gate on the Inlet Bay and the gates on the River side of the River Water Pump House shall remain closed to ensure water from Pond 1 enters the Inlet Bay and into the River Water Pump House. The diverted once through cooling water shall be recycled; cooling water shall not be discharged to the Yellowstone River from any location other than Outfall 002.
- The permittee shall contact DEQ in advance, if possible, but no later than one working day after the culvert has been used to enable once through cooling water

return to be recycled. The report shall be made to the Water Protection Bureau at (406) 444-5546.

Table 4. Monitoring Requirements for Outfall 002/002B					
Parameter	Units	Monitoring Frequency	Sample Type	Reporting Requirement	RRV
Flow rate	mgd	1/Week	Instantaneous	Monthly Avg Daily Max	-
pH	s.u.	1/Day	Instantaneous	Monthly Avg Daily Max	0.1
Temperature	°F	Continuous	Instantaneous	Monthly Avg Daily Max	1
Oil and Grease	Yes/No	1/Week	Visual	Present/Absent	-
Oil and Grease	mg/L	1/Week	Grab	Monthly Avg Daily Max	1
Total Organic Carbon (Effluent)	mg/L	1/Week	Grab	Monthly Avg Daily Max	2
Total Organic Carbon (Intake)	mg/L	1/Week	Grab	Monthly Avg Daily Max	2
Net Total Organic Carbon	mg/L	1/Week	Grab	Monthly Avg Daily Max	2
Total Residual Chlorine (TRC) ¹	mg/L	1/Day	Instantaneous	Monthly Avg Daily Max	0.1
Arsenic, Total Recoverable ²	ug/L	1/Month	Grab	Monthly Avg Daily Max	1
¹ . When chlorine is used as a biocide, daily TRC monitoring is required for one week after the last day chlorine is used.					

4. Ambient Monitoring Requirements

Monitoring must take place at a consistent location upstream and outside the influence of Outfalls 004 and 002 with sample type, frequency, and RRVs as identified in **Table 5**. The sampling point must also be located on the main stem of the receiving water (i.e. not from a peripheral feature such as a vernal swale). The value will be reported on the facility's DMRs for the representative monitoring period and Par Montana shall submit analytical reports that include the method and detection limit for each analysis and any calculations made for hydrogen sulfide concentrations. Par Montana may choose to collect ambient data for additional parameters during the permit term if they plan to request a mixing zone for that parameter.

Table 5. Yellowstone River Ambient Monitoring¹					
Parameter	Unit	Monitoring Frequency	Type	Reporting Requirement	RRV
pH	s.u.	1/Quarter	Instantaneous	Single Sample	0.1
Temperature	F	1/Quarter	Instantaneous	Single Sample	0.1
Ammonia, as N	mg/L	1/Quarter	Grab	Single Sample	0.07
Selenium, total recoverable	µg/L	1/Quarter	Grab	Single Sample	1
Sulfide, dissolved ³	µg/L	1/Quarter	Grab	Single Sample	20
Hydrogen Sulfide ⁴	µg/L	1/Quarter	Calculated	Single Sample	20
Conductivity ²	µmhos/cm	1/Quarter	Instantaneous	Single Sample	10

Kjeldahl Nitrogen, as N ⁵	mg/L	1/Month	Grab	Monthly Avg Daily Max	0.225
Nitrate + Nitrite, as N ⁵	mg/L	1/Month	Grab	Monthly Avg Daily Max	0.02
Nitrogen, Total ⁵	mg/L	1/Month	Calculate	Monthly Avg Daily Max	-
Phosphorus, Total ⁵	mg/L	1/Month	Composite	Monthly Avg Daily Max	0.003
Arsenic	µg/L	1/Quarter	Grab	Single Sample	1
Hardness, Total (as CaCO ₃)	µg/L	1/Month	Grab	Monthly Avg Daily Max	10

- ¹. Sample location must be upstream of the diffuser. Monitoring in accordance with the above frequency is required year-round, regardless of whether Par Montana is discharging to the Yellowstone River.
- ². Ambient dissolved sulfide and conductivity monitoring required only if Par Montana uses the alternative method in Standard Methods 4500 S2-H to calculate ambient H₂S concentrations by using Table 2330:I to calculate ionic strength. Otherwise indicate n/a.
- ³. For dissolved sulfide, use the most appropriate method 4500 S2-*Standard Methods for the Examination of Water and Wastewater*.
- ⁴. For hydrogen sulfide, use method 4500 S2-H. *Standard Methods for the Examination of Water and Wastewater*, unless another method is requested and approved in writing. The field pH must be recorded and noted with the sample.
- ⁵. Required July 1 – October 31

5. Reporting Requirements

- i. **Load Calculations:** Effluent limits or monitoring requirements that are expressed in terms of load (lbs/day) must be based on total mass of the discharge in accordance with the definition of daily discharge in Part V of this permit. The total mass will be calculated using the following equation:

$$\text{Load} = \text{effluent flow rate} \times \text{parameter concentration} \times \text{conversion factor}$$

$$\frac{\text{lb}}{\text{day}} = \text{mgd} \times \frac{\text{mg}}{\text{L}} \times 8.34 \frac{\text{lb} \cdot \text{L}}{\text{Mgal} \cdot \text{mg}}$$

- ii. **Percent Removal:** The percent removal will be calculated using the following formula:

$$\text{percent removal} = \frac{\text{influent concentration} - \text{effluent concentration}}{\text{influent concentration}} \times 100$$

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.

- iii. **Average Monthly Limit (AML):** The AML or monthly average is the arithmetic average or mean (except E. coli) of all the daily discharge samples collected during a calendar month, as defined in Part V of the permit. If only one sample is collected, then it is considered the monthly average and reported on the Discharge Monitoring Report.
- iv. **Average Weekly Limit (AWL):** The AWL or weekly average is the arithmetic average or mean (except E. coli) of all the daily discharge samples collected during a calendar week, as defined in Part V of the permit. If only one sample is collected during the calendar week, it is considered the weekly average. The highest weekly

average of the monitoring period shall be reported on the weekly average blank on the Discharge Monitoring Report. In cases where only one sample is collected during the entire monitoring period, that sample shall be reported as both the monthly and weekly average.

- v. Composite Sample: Composite samples will, 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 must be combined in a single container for analysis (simple composite). The time between the collection of the first sample and the last sample will not be less than 6 hours nor more than 24 hours.

D. Special Conditions

1. Arsenic

This permit includes final effluent limits for arsenic effective {2 months before the permit expiration date}. Par Montana must submit an annual report summarizing their progress towards meeting the future limits. The annual report must be post-marked no later than January 28th of each year, beginning in 2024. The report must include actions taken in the previous year and planned actions for the upcoming year for each parameter, including identification of potential options, design, and installation of the selected option. Failure to submit a plan or program as described above, or the submittal of a plan or program judged inadequate by DEQ shall not excuse the permittee from meeting the limits contained in Part I.B. of this permit.

Compliance Schedule			
Compliance Schedule Purpose	Final Compliance Date	Milestones and Dates	Justification for Compliance Schedule
Implement final arsenic effluent limits	2 months before permit expiration date	Submit annual reports from 2024 through 2028 before January 28 th of each year. The annual reports must describe progress made toward compliance with the final effluent limits.	Allow time to plan, design, and construct an improved treatment system.

2. 316(b) CWIS Requirements

The cooling water intake structure (CWIS) for Par Montana is subject to the final Clean Water Act (CWA) section 316(b) rule. The rule requires facilities to implement appropriate technology(ies) to minimize impingement and entrainment of aquatic species at the CWIS.

The permittee shall achieve compliance with the effluent limitations and monitoring requirements specified for discharges in accordance with the following schedule.

Compliance Schedule	
Activity	Schedule
Submit a sampling plan for the <i>impingement technology performance optimization study</i>	30 days from the effective date of the permit.

required at 40 CFR 122.21(r)(6)(ii) to DEQ for review and approval.	DEQ will review and approve within 30 days of receipt.
Permittee must submit the information required in the <i>impingement technology performance optimization study</i> at 40 CFR 122.21(r)(6)(ii). Additionally, the permittee shall submit the information as applicable in 40 CFR 122.21(r)(8)(iii) related to the operational status of each generating, production, or process unit that uses cooling water.	Three and a half years from the effective date of the permit. DEQ will review and approve within 30 days of receipt.
If the <i>impingement technology performance optimization study</i> DOES NOT demonstrate that the permittee is in compliance with the BTA Standards for Impingement Mortality: The permittee shall submit a plan and schedule to comply with the BTA Standards for Impingement Mortality found at 40 CFR 125.94(c) for each specified CWIS. The schedule shall include a final compliance date no later than expiration date of permit.	Within 60 days from the receipt of the notification letter from DEQ.
If the <i>impingement technology performance optimization study</i> DOES NOT demonstrate that the permittee is in compliance with the BTA Standards for Impingement Mortality: The permittee shall submit quarterly progress reports for achieving compliance with the BTA Standards for Impingement Mortality found at 40 CFR 125.94(c) for each specified CWIS.	The first quarterly reports required under this section shall be submitted to DEQ beginning three months after the approval of the plan to comply with the BTA Standards for Impingement Mortality.
Other Requirements	
Submit Annual Certification Statement and Report	The annual report must be post-marked no later than January 28th of each year, beginning in 2025. See Part II.E for additional submittal instructions.
Submit request to reduce the 316(b) application information required in permit renewal application.	A request for reduced application material requirements must be submitted to DEQ at least two years and six months prior to permit expiration. The request must identify each element of the 40 CFR 122.21(r) application studies that has not substantially changed since the previous permit application and the basis for the determination. DEQ has the discretion to accept or reject any part of the request.

3. Toxicity Identification Evaluation (TIE) / Toxicity Reduction Evaluation (TRE):

If toxicity is detected in a routine WET test and confirmed in the 14-day follow up test, the permittee shall initiate a TIE/TRE immediately thereafter. The purpose of the TIE/TRE will be to establish the cause(s) of the toxicity, locate the source(s) of the toxicity, and control or provide treatment for the toxicity.

If the TIE/TRE establishes that the toxicity cannot be eliminated, the permittee shall submit a proposed compliance plan to DEQ. The plan shall include the proposed approach to control toxicity and a proposed compliance schedule for achieving control.

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

- a. Submit an alternative control program for compliance with the numerical requirements;
- b. If necessary, provide a modified whole effluent testing protocol which compensates for the pollutant(s) being controlled numerically.

If acceptable to DEQ, this permit may be reopened and modified to incorporate any additional numerical limitations, a modified compliance plan and schedule, and/or a modified whole effluent protocol.

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 within a Discharge Monitoring Report (DMR). Monitoring results must be submitted electronically (NetDMR web-based application) no later than the 28th day of the month following the end of the monitoring period. If no discharge occurs during the entire reporting period, "No Discharge" must be reported within the respective DMR. All other reports 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

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 unless otherwise specified in the permit.

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) 444-5546 or the Office of Disaster and Emergency Services at (406) 841-3911. The following examples are considered serious incidents:
 - a. Any noncompliance which may seriously endanger health or the environment;
 - b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.G of this permit, "Bypass of Treatment Facilities"); or
 - c. Any upset which exceeds any effluent limitation in the permit (See Part III.H of this permit, "Upset Conditions").
2. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been corrected; and
 - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
3. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-3080.
4. Reports shall be submitted to the addresses in Part II.D of this permit, "Reporting of Monitoring Results."

J. Other Noncompliance Reporting

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

K. Inspection and Entry

The permittee shall allow the head of the Department or the Regional Administrator, or an authorized representative upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance, any substances or parameters at any location.

III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the Department 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(a) also provides for administrative penalties not to exceed \$10,000 for each day of violation and up to a maximum not to exceed \$100,000 for any related series of violations. Except as provided in permit conditions on Part III.G of this permit, "Bypass of Treatment Facilities" and Part III.H of this permit, "Upset Conditions", nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

E. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.

F. Removed Substances

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard. Sludge shall not be directly blended with or enter either the final plant discharge and/or waters of the United States.

G. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.G.2 and III.G.3 of this permit.

2. Notice:
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass.
 - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.I of this permit, "Twenty-four Hour Reporting".
3. Prohibition of bypass:
 - a. Bypass is prohibited and the Department may take enforcement action against a permittee for a bypass, unless:
 - 1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - 2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - 3) The permittee submitted notices as required under Part III.G.2 of this permit.
 - b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part III.G.3.a of this permit.

H. Upset Conditions

1. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part III.H.2 of this permit are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review (i.e., Permittees will have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with technology-based permit effluent limitations).
2. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required under Part II.I of this permit, "Twenty-four Hour Notice of Noncompliance Reporting"; and
 - d. The permittee complied with any remedial measures required under Part III.D of this permit, "Duty to Mitigate."
3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

IV. GENERAL REQUIREMENTS

A. Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

1. The alteration or addition could significantly change the nature or increase the quantity of pollutant discharged. This notification applies to pollutants which are not subject to effluent limitations in the permit; or
2. There are any planned substantial changes to the existing sewage sludge management practices of storage and disposal. The permittee shall give the Department notice of any planned changes at least 180 days prior to their implementation.

B. Anticipated Noncompliance

The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

C. Permit Actions

This permit may be 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 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 than \$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 Director. 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 Rights

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

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. "BOD₅" 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. "CBOD₅" means the five-day measure of pollutant parameter carbonaceous biochemical oxygen demand.
11. "Composite samples" shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. Unless otherwise specified, the time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:
 - a. Constant time interval between samples, sample volume proportional to flow rate at time of sampling;
 - b. Constant time interval between samples, sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used;
 - c. Constant sample volume, time interval between samples proportional to flow (i.e. sample taken every "X" gallons of flow); and,
 - d. Continuous collection of sample, with sample collection rate proportional to flow rate.
12. "Daily Discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the day.
13. "Daily Maximum Limit" means the maximum allowable discharge of a pollutant during a calendar day. Expressed as units of mass, the daily discharge is cumulative mass discharged over the course of the day. Expressed as a concentration, it is the arithmetic average of all measurements taken that day.

14. "Department" means the Montana Department of Environmental Quality (MDEQ). Established by 2-15-3501, MCA.
15. "Director" means the Director of the Montana Department of Environmental Quality.
16. "Discharge" means the injection, deposit, dumping, spilling, leaking, placing, or failing to remove any pollutant so that it or any constituent thereof may enter into state waters, including ground water.
17. "EPA" means the United States Environmental Protection Agency.
18. "Federal Clean Water Act" means the federal legislation at 33 USC 1251, *et seq.*
19. "Geometric Mean" means the value obtained by taking the Nth root of the product of the measured values.
20. "Grab Sample" means a sample which is taken from a waste stream on a one-time basis without consideration of flow rate of the effluent or without consideration for time.
21. "Indirect 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 136. In most cases the ML is equivalent to the Required Reporting Value (RRV) unless otherwise specified in the permit. (ARM 17.30.702(22))
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.