

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.*,

The Western Sugar Cooperative

is authorized to discharge from its **sugar beet processing facility**

located at **3020 State Avenue, Billings, MT in Yellowstone County**

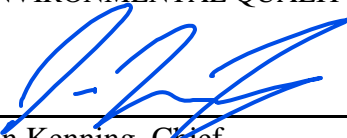
to receiving waters named, **Yegen Drain, Grey Eagle Ditch, and Class II Ground Water**

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

This permit shall become effective: **January 1, 2021**

This permit and the authorization to discharge shall expire at midnight, **December 31, 2025**

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY



Jon Kenning, Chief
Water Protection Bureau
Water Quality Division

Issuance Date: October 29, 2020

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I. EFFLUENT LIMITS, 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>
001	<p>Location: At the end of the pipe, discharging into the Yegen Drain, at 45° 45' 57" N latitude, 108° 29' 40" W longitude.</p> <p>Mixing Zone: No mixing zone is granted.</p> <p>Treatment Works: primary settling and aeration.</p>
002	<p>Location: At the end of the pipe, discharging into the City of Billings' State Avenue storm drainage system (Grey Eagle Ditch), at 45° 46' 10" N latitude, 108° 29' 52" W longitude.</p> <p>Mixing Zone: No mixing zone is granted.</p> <p>Treatment Works: primary settling.</p>
004	<p>Location: Infiltration from the Precipitated Calcium Chloride (PCC) Ponds to Class II Groundwater, at 45° 45' 58" N latitude, 108° 30' 7.6" W longitude.</p> <p>Mixing Zone: No mixing zone is granted.</p> <p>Treatment Works: primary settling.</p>
005	<p>Location: Infiltration from the Ash Pond to Class II Groundwater, 45° 46' 2.6" N latitude, 108° 29' 51" W longitude.</p> <p>Mixing Zone: No mixing zone is granted.</p> <p>Treatment Works: primary settling.</p>
006	<p>Location: Infiltration from the Aeration Ponds (Condenser Ponds #1 & #2) to Class II Groundwater, at 45° 45' 58" N latitude, 108° 29' 48" W longitude.</p> <p>Mixing Zone: No mixing zone is granted.</p> <p>Treatment Works: primary settling and aeration.</p>

007 **Location:** Infiltration from the Mud Finger and Mud Aeration Ponds to Class II Groundwater, at 45° 45' 54" N latitude, 108° 29' 48" W longitude.

Mixing Zone: No mixing zone is granted.

Treatment Works: primary settling.

B. Effluent Limits

1. Interim Limits for Outfalls 001 & 002

Outfalls 001 & 002 - Interim

Beginning on the effective date and lasting through **October 31st, 2025**, the effluent discharged by the facility through Outfalls 001 & 002 shall, at a minimum, meet the following interim limits:

Table 1. Outfall 001 and 002 – Interim Effluent Limits			
Parameter	Units	Effluent Limits	
		Maximum Daily Limit	Average Monthly Limit
Biochemical Oxygen Demand (BOD ₅)	lb/day	6,996 ⁽¹⁾	3,674 ⁽¹⁾
Total Suspended Solids (TSS)	lb/day	6,996 ⁽¹⁾	3,674 ⁽¹⁾
Fecal Coliform Bacteria	MPN/100mL	400	--
<i>E. coli</i> Bacteria, summer ⁽²⁾	#/100 mL	--	126
pH	s.u.	6.0 – 9.0	
Temperature	° F	77.0	
Oil & Grease	mg/L	10	--
Total Residual Chlorine (TRC), net ⁽³⁾	µg/L	19	11
Nitrate plus Nitrite as N	mg/L	10	--
Total Nitrogen, as N (TN)	lb/day	--	486 ⁽⁴⁾
Total Phosphorus, as P (TP)	lb/day	--	50 ⁽⁴⁾
Total Ammonia as N – Outfall 001	mg/L	7.08	2.8

Footnotes:
(1) TSS and BOD₅ load limits are the sum total of loads from all outfalls (surface water Outfalls 001 & 002 and ground water Outfalls 004 - 007).
(2) *E. coli* limit applicable only during the summer, defined as April 1 through October 31.
(3) WSC must use an approved method under 40 CFR 136 and follow the method's procedure for determining interference.
(4) Nutrient limits for TN and TP are the sum of Outfalls 001 & 002 and are effective July 1st through October 31st.

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

There shall be no acute toxicity in the effluent.

Outfalls 004 – 007 - Interim

Beginning on the effective date and lasting through **October 31st, 2025**, the effluent discharged by the facility through Outfalls 004 - 007 shall, at a minimum, meet the following interim limits:

Table 2: Outfall 004 - Outfall 007 Interim Effluent Limits		
Parameter	Unit	Average Monthly Limit
Biochemical Oxygen Demand (BOD ₅)	lb/day	3,674 ⁽¹⁾
Total Suspended Solids (TSS)	lb/day	3,674 ⁽¹⁾
Temperature	° F	90
pH	s.u.	6.0 - 9.0
Fecal Coliform	MPN/100 mL	400
Specific Conductance	µS/cm	2,500
Footnotes: (1) TSS and BOD ₅ load limits are the sum total of loads from all outfalls (surface water Outfalls 001 & 002 and ground water Outfalls 004 - 007).		

2. Final Limits

Outfalls 001 & 002 - Final

Beginning **November 1, 2025**, and lasting through the term of the permit, the quality of effluent discharged by the facility through Outfalls 001 & 002 shall, at a minimum, meet the final limits as set forth below:

Table 3. Outfall 001 and 002 – Final Effluent Limits			
Parameter	Units	Effluent Limits	
		Maximum Daily Limit	Average Monthly Limit
Both Outfall 001 & 002			
Biochemical Oxygen Demand (BOD ₅)	lb/day	6,996 ⁽¹⁾	3,674 ⁽¹⁾
Total Suspended Solids (TSS)	lb/day	6,996 ⁽¹⁾	3,674 ⁽¹⁾
Fecal Coliform Bacteria	MPN/100mL	400	--
<i>E. coli</i> Bacteria, summer ⁽²⁾	#/100 mL	--	126
pH	s.u.	6.0 – 9.0	
Temperature	° F	77.0	
Oil & Grease	mg/L	10	--
Total Residual Chlorine (TRC), net ⁽³⁾	µg/L	19	11

Table 3. Outfall 001 and 002 – Final Effluent Limits			
Parameter	Units	Effluent Limits	
		Maximum	Average
Nitrate plus Nitrite as N	mg/L	10	--
Total Nitrogen, as N (TN)	lb/day	--	486 ⁽⁴⁾
Total Phosphorus, as P (TP)	lb/day	--	50 ⁽⁴⁾
Outfall 001			
Total Ammonia as N – Outfall 001	mg/L	4.4	2.9
Outfall 002			
Total Ammonia as N – Outfall 002	mg/L	2.9	1.4
Footnotes:			
(1) TSS and BOD ₅ load limits are the sum total of daily loads from all outfalls (surface water Outfalls 001 & 002 and ground water Outfalls 004 - 007).			
(2) <i>E. coli</i> limit applicable only during the summer, defined as April 1 through October 31.			
(3) WSC must use an approved method under 40 CFR 136 and follow the method's procedure for determining interference.			
(4) Nutrient limits for TN and TP are the sum of Outfalls 001 & 002 and are effective July 1 st through October 31 st .			

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

There shall be no acute toxicity in the effluent.

Outfalls 004 – 007 - Final

Beginning **November 1, 2025**, and lasting through the term of the permit, the quality of effluent discharged by the facility through Outfalls 004 - 007 shall, at a minimum, meet the final limits as set forth below:

Table 4: Outfall 004 - Outfall 007 Final Effluent Limits		
Parameter	Unit	Average Monthly Limit
Biochemical Oxygen Demand (BOD ₅)	lb/day	3,674 ⁽¹⁾
Total Suspended Solids (TSS)	lb/day	3,674 ⁽¹⁾
Temperature	° F	90
pH	s.u.	6.0 - 9.0
Fecal Coliform	MPN/100 mL	400
Specific Conductance	µS/cm	2,500
Footnote:		
(1) TSS and BOD ₅ load limits are the sum total of loads from all outfalls (surface water Outfalls 001 & 002 and ground water Outfalls 004 - 007).		

C. Monitoring Requirements

At 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 discharges. If no discharge occurs during the entire monitoring period, it shall be stated on the Discharge Monitoring Report (DMR) Form that no discharge or overflow occurred. Samples shall be collected, preserved and analyzed in accordance with approved procedures listed in 40 CFR 136. Unless WSC requests and DEQ agrees to another reporting level in writing, data supplied by WSC for each parameter must either have a detection or meet the Required Reporting Value (RRV) in Circular DEQ-7 as provided below.

1. Outfalls 001 and 002 Monitoring

Monitoring of discharges from Outfalls 001 and 002 shall be conducted after all treatment, prior to discharge. Monitoring for Outfall 001 shall be conducted in or near the shed located at 45.76664N, -108.49553W and for Outfall 002 shall be conducted in or near the shed located at 45.76962N, -108.49796W, unless other sampling locations are requested and approved by DEQ in writing. At a minimum, WSC shall monitor for the following required parameters:

Table 5. Outfall 001 and Outfall 002 Monitoring Requirements ⁽¹⁾					
Parameter	Unit	Min. Sample Frequency	Sample Type	Reporting Metric	RRV ⁽²⁾
Discharge flow rate	mgd	Continuous ⁽³⁾	Instantaneous	Daily Max / Mo Avg	---
No. days with discharge	#days	Daily	Calculate	Days/Month	--
Sugar Production	1,000 lbs	Daily	Calculate	Daily Max / Mo Avg	--
Biochemical Oxygen Demand (BOD ₅)	mg/L	3/Week	Composite	Daily Max / Mo Avg	2
	lb/day ⁽⁴⁾	1/Month	Calculated	Daily Max / Mo Avg	--
Total Suspended Solids (TSS)	mg/L	3/Week	Composite	Daily Max / Mo Avg	1
	lb/day ⁽⁴⁾	1/Month	Calculated	Daily Max / Mo Avg	--
Fecal coliform bacteria	MPN/100 mL	1/Week	Grab	Max Daily	1
<i>E. coli</i> bacteria ⁽⁵⁾	#/100 mL	1/Week	Grab	Monthly Geometric Mean	1
pH	s.u.	3/Week	Instantaneous	Min / Max	---
Temperature	° F	3/Week	Instantaneous	Min / Max	---
Oil & grease – visual ⁽⁶⁾	Y/N	1/Month	Instantaneous	Present/Absent	--
Total Residual Chlorine (TRC) ⁽⁷⁾	µg/L	1/Month	Grab	NA	100
Net TRC ⁽⁷⁾	µg/L	1/Month	Calculate	Daily Max / Mo Avg	100
Total Ammonia as N	mg/L	1/Week	Composite	Daily Max / Mo Avg	0.07
Nitrate + Nitrite as N (N+N)	mg/L	1/Month	Composite	Value	0.02
N+N - July 1 st to Oct 31 st		1/Week ⁽⁸⁾		Daily Max / Mo Avg	
Total Kjeldahl Nitrogen	mg/L	1/Week ⁽⁸⁾	Composite	NA	0.225
Total Nitrogen, as N	mg/L	1/Month ⁽⁸⁾	Calculate	Mo Avg	0.245
	lb/day	1/Month ⁽⁸⁾	Calculate	Mo Avg	--

Table 5. Outfall 001 and Outfall 002 Monitoring Requirements ⁽¹⁾

Parameter	Unit	Min. Sample Frequency	Sample Type	Reporting Metric	RRV ⁽²⁾
Total Phosphorus as P	mg/L	1/Week ⁽⁸⁾	Composite	Mo Avg	0.003
	lb/day	1/Month ⁽⁸⁾	Calculate	Mo Avg	--
Arsenic, Total Recoverable (TR)	µg/L	1/Month	Composite	Value	1
Iron, TR	µg/L	1/Month	Composite	Value	20
Lead, TR	µg/L	1/Month	Composite	Value	0.3
Mercury, TR	µg/L	1/Month	Composite	Value	Value
Selenium, TR	µg/L	1/Month	Composite	Value	1
Aluminum, Dissolved	µg/L	Semi-Annual	Composite	Value	9
Antimony, TR	µg/L	Semi-Annual	Composite	Value	0.5
Barium, TR	µg/L	Semi-Annual	Composite	Value	3
Beryllium, TR	µg/L	Semi-Annual	Composite	Value	0.8
Cadmium, TR	µg/L	Semi-Annual	Composite	Value	0.03
Chromium, TR	µg/L	Semi-Annual	Composite	Value	10
Copper, TR	µg/L	Semi-Annual	Composite	Value	2
Nickel, TR	µg/L	Semi-Annual	Composite	Value	2
Thallium, TR	µg/L	Semi-Annual	Composite	Value	0.2
Zinc, TR	µg/L	Semi-Annual	Composite	Value	8
Fluoride	mg/L	Semi-Annual	Composite	Value	0.2
Sulfate	mg/L	Semi-Annual	Composite	Value	100
Chloride	mg/L	Semi-Annual	Composite	Value	1
Hardness (as CaCO ₃)	mg/L	Semi-Annual	Composite	Value	10
Specific Conductivity	µS/cm	Semi-Annual	Instantaneous	Value	--
Whole Effluent Toxicity, Acute	% Effluent	1/Quarter ⁽⁹⁾	Composite	Pass/Fail	--

Footnotes:

- (1) See Definition section at end of permit for explanation of terms. **Monitoring is required for any period with a discharge.**
- (2) Based on Circular DEQ-7 or DEQ-12A. For any results with nondetect, the analysis must achieve these, or lower, reporting limits. Flow must be measured +/- 10% of actual discharge rates.
- (3) Requires recording device or totalizer; for flow, permittee shall report maximum daily and average monthly flow rates on DMR.
- (4) BOD₅ and TSS daily loads are calculated by the discharge flow rate (mgd) x discharge concentration (mg/L) x 8.34. In **Table 6**, the loads from ground water are added with the loads from surface water to demonstrate compliance with the facility-wide load limits.
- (5) Effluent monitoring for *E. coli* is only required for discharges during the summer season (April 1 through October 31). Report geometric mean if more than one sample is collected during the reporting period.
- (6) Oil & Grease visual monitoring – a grab sample must be taken and analyzed in conformance with 40 CFR 136 whenever there are visual signs of oil and grease in the effluent.
- (7) In order to account for interference from manganese and other oxidizers, monthly correlated samples must be taken in accordance with Standard Methods 4500-CI G or other applicable method in order to document the net TRC concentration. Demonstration of nondetect at the RRV or below for the net TRC concentration is a demonstration of compliance.
- (8) Total Nitrogen is calculated as the sum of TKN and N+N. Monitoring for nutrients is weekly during July 1st – October 31st. Monitoring for N+N is monthly November 1st – June 30th.
- (9) Quarterly two-species acute WET tests are required in conformance with the Permit. After passing four consecutive WET tests, WSC can request to decrease to semi-annual two-species test.

2. Facility-wide TBEL-SUM

WSC shall calculate and report the daily maximum and monthly average of the daily loads for BOD₅ and TSS as a sum for all facility outfalls as described below:

Table 6. TBEL-SUM Reporting					
Parameter	Unit	Min. Sample Frequency	Sample Type	Reporting Metric	RRV
Biochemical Oxygen Demand (BOD ₅) ⁽¹⁾	lb/day	1/Month	Calculated	Daily Max / Mo Avg	--
Total Suspended Solids (TSS) ⁽²⁾	lb/day	1/Month	Calculated	Daily Max / Mo Avg	--
Footnotes:					
(1) BOD ₅ - SUM are the facility-wide BOD ₅ loads (Addition of loads for Outfalls 001 & 002 and 004 through 007).					
(2) TSS -SUM are the facility-wide TSS loads (Addition of loads for Outfalls 001 & 002 and 004 through 007).					

3. Ground Water Monitoring

Ground water daily loads are based on the following equation and the calculated infiltration rates at the locations provided below, *unless WSC requests a different location or supplied infiltration rate and DEQ agrees, in writing:*

GW Load (lb/day) = infiltration flow rate (mgd) x discharge concentration (mg/L) x 8.34

- *Outfall 004 PCC Pond Area* (mud decant water infiltration) - monitoring at the discharge into the PCC ponds when operating or the mud ditch or mud sump when not operating but wastewater is present in the PCC pond area.
 - Load is calculated based on 0.087 mgd x concentration x 8.34
- *Outfall 005 Ash Ponds* - monitoring at Outfall 002 if discharging; if not, from the ash pond return line if operating, or the ash pond if not discharging but wastewater is present.
 - Load is calculated based on 0.050 mgd x concentration x 8.34.
- *Outfall 006 Aeration Ponds* - monitoring at Outfall 001 if discharging or at the aeration pond if not discharging but wastewater is present.
 - Load is calculated based on 0.01 mgd x concentration x 8.34
- *Outfall 007 Mud Ponds* - monitoring at mud pond recirculation / return pipe when operating, otherwise monitor aerated mud pond when not operating but wastewater is present.
 - Load is calculated based on 0.012 mgd x concentration x 8.34.

At a minimum, WSC shall monitor ground water discharges for the required parameters as described below in **Table 7**.

Table 7. Monitoring for Discharges from Ground Water (Outfalls 004 to 007) ⁽¹⁾				
Parameter	Unit	Minimum Sample Frequency	Sample Type	RRV
Biochemical Oxygen Demand (BOD ₅)	mg/L	1/Month	Grab	2
	lb/day ⁽²⁾	1/Month	Calculated	--
Total Suspended Solids (TSS)	mg/L	1/Month	Grab	1
	lb/day ⁽²⁾	1/Month	Calculated	--
Temperature	° F	1/Month	Instantaneous	---
pH	s.u.	1/Month	Instantaneous	---
Fecal coliform bacteria	MPN/100 mL	1/Month	Grab	1
Specific Conductivity	µS/cm	Quarterly	Instantaneous	--
Ammonia, Total as N [Outfall 004, 006, and 007]	mg/L	Quarterly	Grab	0.07
Arsenic, Dissolved	µg/L	Quarterly	Grab	1
Iron, Dissolved	µg/L	Quarterly	Grab	20
Selenium, Dissolved	µg/L	Quarterly	Grab	1
Fluoride	mg/L	Semi-Annual	Grab	0.2
Sulfate	mg/L	Semi-Annual	Grab	100
Nitrate + Nitrite	mg/L	Semi-Annual	Grab	0.02
Footnote: (1) These ground water monitoring requirements are for Outfalls 004 through 007 unless otherwise described above, and apply year-round if there is water infiltration. During months when wastewater is present in a pond but WSC is not actively contributing wastewater into the pond, monitoring is required for all TBEL parameters except fecal coliform and temperature. (2) BOD ₅ and TSS loads calculated based on the calculated infiltration rate x pollutant concentration x 8.34, as shown above. These daily loads are included in facility-wide daily load calculations to demonstrate compliance with these load-based TBELs.				

4. Ground Water Property Boundary Monitoring

Additional monitoring at the property boundary will be required to ensure that ground water standards are protected outside the property boundary. Unless other monitoring wells are requested and approved by DEQ in writing, WSC shall conduct ground water monitoring at MW-4, MW-5, MW-6, and MW-9, as presented in **Table 8**:

Table 8: Ground Water Monitoring (MW-4, MW-5, MW-6, and MW-9)				
Parameter	Unit	Sample Frequency	Sample Type ⁽¹⁾	Required Reporting Level ⁽²⁾
Static water level	Feet	1/Quarter	Instantaneous	---
Water temperature	°F	1/Quarter	Instantaneous	---
pH	s.u.	1/Quarter	Instantaneous	---
Specific Conductivity	µS/cm	1/Quarter	Instantaneous	---
Ammonia, Total as N	mg/L	1/Quarter	Grab	0.07
Nitrate + Nitrite	mg/L	Semi-annual	Grab	0.02
Arsenic, dissolved	µg/L	Semi-annual	Grab	1
Iron, dissolved	µg/L	Semi-annual	Grab	20
Selenium, dissolved	µg/L	Semi-annual	Grab	1

Footnotes:
(1) See Definition section at end of permit for explanation of terms.
(2) Based on Circular DEQ-7. For any results with nondetect, the analysis must achieve these, or lower, reporting limits unless a different reporting level is requested and agreed to by DEQ, in writing.

5. Effluent Monitoring Requirements

Composite Sampling

Composite samples shall be flow proportioned. The composite sample shall, as a minimum, contain at least four (4) samples collected over the compositing period. The time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours. Acceptable methods for preparation of composite samples are as follows:

- a. Constant time interval between samples, with sample volume proportional to flow rate at time of sampling.
- b. Constant time interval between samples, with sample volume proportional to total flow (volume) since last sample. For the first sample, the flow rate at the time the sample was collected may be used.
- c. Constant sample volume, with time interval between samples proportional to flow (i.e. sample taken every “X” gallons of flow).
- d. Continuous collection of sample, with sample collection rate proportional to flow rate.

Load Calculations

Effluent limits 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. The total mass shall be calculated using the following equations:

$$\text{Load (lb/day)} = \frac{\text{Daily Discharge Concentration (mg/L)}}{1000} \times \text{Daily Flow (MGD)} \times 8.34$$

Also see Part I.C.3 for specifics for calculating ground water discharge loads.

6. Whole Effluent Toxicity (WET) Monitoring – Acute Toxicity

Starting in the first calendar quarter following the effective date of the permit, the permittee shall conduct an acute static replacement toxicity test on a composite sample of the effluent. Testing will employ two species and will consist of five 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 (moderately hard, or a laboratory reconstituted water that matches the hardness of the receiving water, may be used in accordance with WET methods).

Samples shall be collected on a two-day progression; i.e., if the first quarterly sample is on a Monday, the second quarterly sample shall be on a Wednesday, etc. Saturdays, Sundays and Holidays will be skipped in the progression.

The static renewal WET tests shall be conducted in general accordance with the procedures set out in the latest revision of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms* (EPA 821/R-02/012) and the *Region VIII EPA NPDES Acute Test Conditions - Static Renewal Whole Effluent Toxicity Test*. 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*). Test solutions must be renewed every 24 hours. The control of pH in the WET test utilizing CO₂ enriched atmospheres is allowed to prevent rising pH drift. The target pH selected must represent the pH value of the receiving water at the time of sample collection.

Acute toxicity occurs when 50 percent or more mortality is observed for either test 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 DEQ. 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, resampling for an additional test (a resample test) shall be conducted within 14 days of the date the permittee is informed of the test failure. If acute toxicity occurs in the resample test, then the permittee is required to:

- a. Increase the WET testing frequency from quarterly to monthly until further notified by DEQ; and
- b. Undertake a Toxicity Identification Evaluation (TIE) /Toxicity Reduction Evaluation (TRE).

In all cases, the results of all WET tests must be submitted to DEQ in accordance with Part II of this permit.

The WET test results from the laboratory shall be reported along with the DMR submitted for the end of the reporting period (e.g., the WET test results for the reporting quarter ending on March 31st shall be reported with the March DMR due April 28th; the remaining quarterly WET test results shall be 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 WET testing indicate no acute toxicity, the permittee may request a reduction to semi-annual acute WET testing for the two species. 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.

D. Special Conditions

1. Toxicity Identification Evaluation / Toxicity Reduction 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

A TRE plan needs to be submitted to DEQ within 45 days after confirmation of the continuance of effluent toxicity (resample). If the TRE/TIE 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 the implementation of the proposed approach. If the approach and schedule are acceptable to DEQ, this permit may be reopened and modified.

2. Strategy Implementation for Reducing Discharges of Pollutants of Concern

WSC shall submit by **January 14, 2023** a comprehensive strategy to ensure reductions in discharge of all pollutants of concern. This strategy shall include a commitment to complete specific projects by a certain timeframe. WSC must complete construction and/or fully implement the specified projects by **September 1, 2025**.

Table 9: Special Conditions Due Dates		
Action	Scheduled Completion Date of Action	Report Due Date
Comprehensive Pollutant Reduction Strategy Implementation		
Complete Plan and Submit	January 1, 2023	January 14, 2023
Complete Projects	September 1, 2025	September 14, 2025
Annual Report	Annual	January 28 th until completion

E. Compliance Schedule for New Ground Water Specific Conductance and Surface Water Ammonia Limits

WSC shall meet the new effluent limits for ground water specific conductance and surface water ammonia by no later than **November 1, 2025** in accordance with the following schedule:

- By **January 14, 2023**, WSC shall complete and submit the proposed actions the facility commits to take to ensure compliance with new limits.
- By **September 1, 2025**, WSC shall complete construction of all projects.
- By **November 1, 2025**, WSC shall comply with the new limits.

WSC shall submit an annual report documenting what progress has been made during the previous year and what actions are planned for the upcoming year by January 28th of each year until WSC complies with these limits.

Table 9: Compliance Schedule			
Action	Frequency	Scheduled Completion Date of Action ⁽¹⁾	Report Due Date ⁽²⁾
Complete and submit proposed actions ammonia (surface water) and specific conductance (ground water) compliance	once	January 1, 2023	January 14, 2023
Complete construction	once	September 1, 2025	September 14, 2025
Comply with limits all	once	November 1, 2025	November 14, 2025
Annual Report	Annually through January 2025	January 28 th	January 28 th
Footnotes: NA = Not Applicable (1) The actions must be completed on or before the scheduled completion dates. (2) This notification must be received by the DEQ on or before the scheduled due date.			

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.

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.

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. 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 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 the permit must be submitted to DEQ in either electronic or paper format and be postmarked 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 incidents of noncompliance 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) 324-4777. The following examples are considered serious incidents:
 - a. Any noncompliance which may seriously endanger health or the environment;
 - b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.G of this permit, "Bypass of Treatment Facilities"); or
 - c. Any upset which exceeds any effluent limitation in the permit (see Part III.H of this permit, "Upset Conditions").

2. A written submission shall also be provided within five days of the time that the permittee becomes aware of the circumstances. The written submission shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times;
 - c. The estimated time noncompliance is expected to continue if it has not been corrected; and
 - d. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
3. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Protection Bureau, by phone, (406) 444-5546.
4. Reports shall be submitted to the addresses in Part II.D of this permit, "Reporting of Monitoring Results."

J. Other Noncompliance Reporting

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

K. Inspection and Entry

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

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

III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the Department advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance.

B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates permit conditions of the Act is subject to a fine of not more than \$25,000 per day of violation, or by imprisonment for not more than 2 years, or both, for subsequent convictions. MCA 75-5-611(9)(a) also provides for administrative penalties not to exceed \$10,000 for each day of violation and up to a maximum not to exceed \$100,000 for any related series of violations. Except as provided in permit conditions on 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.

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 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 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.

I. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

J. Changes in Discharge of Toxic Substances

Notification shall be provided to the Department as soon as the permittee knows of, or has reason to believe:

1. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - a. One hundred micrograms per liter (100 µg/L);
 - b. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - c. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
 - d. The level established by the Department in accordance with 40 CFR 122.44(f).
2. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in

the permit, if that discharge will exceed the highest of the following “notification levels”:

- a. Five hundred micrograms per liter (500 µg/L);
- b. One milligram per liter (1 mg/L) for antimony;
- c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
- d. The level established by the Department in accordance with 40 CFR 122.44(f).

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 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.

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 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 or the EPA shall be signed and certified.

1. All permit applications shall be signed as follows:

- a. For a corporation: by a responsible corporate officer:

- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
 - c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.
2. All reports required by the permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is considered a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above and submitted to the Department; and
 - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or an individual occupying a named position.)
3. Changes to authorization. If an authorization under Part IV.G.2 of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part IV.G.2 of this permit must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

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

H. Penalties for Falsification of Reports

The Montana Water Quality Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished

by a fine of not more 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. 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 fee assessment computed at the rate established under ARM 17.30.201; and,

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

O. Reopener Provisions

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

1. **Water Quality Standards:** The water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit.
2. **Water Quality Standards are Exceeded:** If it is found that water quality standards or trigger values in the receiving stream are exceeded either for parameters included in the permit or others, the department may modify the effluent limits or water management plan.
3. **TMDL or Wasteload Allocation:** TMDL requirements or a wasteload allocation is developed and approved by the Department and/or 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. **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.
6. **Toxicity Limitation:** Change in the whole effluent protocol, or any other conditions related to the control of toxicants have taken place, or if one or more of the following events have occurred:
 - a. Toxicity was detected late in the life of the permit near or past the deadline for compliance.
 - b. The TRE/TIE results indicated that compliance with the toxic limits will require an implementation schedule past the date for compliance and the permit issuing authority agrees with the conclusion.
 - c. The TRE/TIE results indicated that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits, and the permit issuing

authority agrees that numerical controls are the most appropriate course of action.

- d. Following the implementation of numerical controls on toxicants, the permit issuing authority agreed that a modified whole effluent protocol is needed to compensate for those toxicants that are controlled numerically.
- e. The TRE/TIE revealed other unique conditions or characteristics which, in the opinion of the permit issuing authority, justify the incorporation of unanticipated special conditions in the 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. **“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.
5. **“Average Monthly Limit”** 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.
6. **"Bypass"** means the intentional diversion of waste streams from any portion of a treatment facility.
7. **“Chronic Toxicity”** means when the survival, growth, or reproduction, as applicable, for either test species, at the effluent dilution(s) designated in this permit, is significantly less (at the 95 percent confidence level) than that observed for the control specimens.
8. **“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.

9. **“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.
10. **"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.
11. **"Department"** means the Montana Department of Environmental Quality (DEQ). Established by 2-15-3501, MCA.
12. **"Director"** means the Director of the Montana Department of Environmental Quality.
13. **“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.
14. **"EPA"** means the United States Environmental Protection Agency.
15. **“Federal Clean Water Act”** means the federal legislation at 33 USC 1251, *et seq.*
16. **"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.
17. **“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.
18. **"Instantaneous Measurement”**, for monitoring requirements, means a single reading, observation, or measurement.
19. **“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.
19. **"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.

20. **"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.
21. **"Regional Administrator"** means the administrator of Region VIII of EPA, which has jurisdiction over federal water pollution control activities in the state of Montana.
22. **"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.
23. **"TIE"** means a toxicity identification evaluation.
24. **"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.
25. **"TRE"** means a toxicity reduction evaluation.
26. **"TSS"** means the pollutant parameter total suspended solids.
27. **"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.