Major Industrial
Permit No.: MT0000264

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.*,

CHS, Inc.

is authorized to discharge from its **Laurel Refinery**

located at **802 Highway 212 South, Laurel, MT,**

to receiving waters named, **Italian Drain and 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: **November 1, 2015.**

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

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY

Jon Kenning, Chief
Water Protection Bureau
Permitting & Compliance Division

Issuance Date: September 16, 2015

TABLE OF CONTENTS

Cover Sheet--Issuance and Expiration Dates

I. EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS & OTHER CONDITIONS 3
A. Description of Discharge Points and Mixing Zone 3
B. Effluent Limitations 4
C. Monitoring Requirements 7
D. Special Conditions 10
E. Compliance Schedule 11

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS 12
A. Representative Sampling 12
B. Monitoring Procedures 12
C. Penalties for Tampering 12
D. Reporting of Monitoring Results 12
E. Compliance Schedules 12
F. Additional Monitoring by the Permittee 13
G. Records Contents 13
H. Retention of Records 13
I. Twenty-four Hour Notice of Noncompliance Reporting 13
J. Other Noncompliance Reporting 14
K. Inspection and Entry 14

III. COMPLIANCE RESPONSIBILITIES 15
A. Duty to Comply 15
B. Penalties for Violations of Permit Conditions 15
C. Need to Halt or Reduce Activity not a Defense 15
D. Duty to Mitigate 15
E. Proper Operation and Maintenance 15
F. Removed Substances 16
G. Bypass of Treatment Facilities 16
H. Upset Conditions 16
I. Toxic Pollutants 17
J. Changes in Discharge of Toxic Substances 17

IV. GENERAL REQUIREMENTS 19
A. Planned Changes 19
B. Anticipated Noncompliance 19
C. Permit Actions 19
D. Duty to Reapply 19
E. Duty to Provide Information 19
F. Other Information 19
G. Signatory Requirements 19
H. Penalties for Falsification of Reports 20
I. Availability of Reports 20
J. Oil and Hazardous Substance Liability 21
K. Property or Water Rights 21
L. Severability 21
M. Transfers 21
N. Fees 21
O. Reopener Provisions 22

V. DEFINITIONS 23

I. EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS & OTHER CONDITIONS

A. Description of Discharge Points and Mixing Zone

The authorization to discharge provided under this permit is limited to those outfalls specially designated below as discharge locations. Discharges at any location not authorized under an MPDES permit is a violation of the Montana Water Quality Act and could subject the person(s) responsible for such discharge to penalties under the Act. Knowingly discharging from an unauthorized location or failing to report an unauthorized discharge within a reasonable time from first learning of an unauthorized discharge could subject such person to criminal penalties as provided under Section 75-5-632 of the Montana Water Quality Act.

Outfall	Description
001	**Location:** At the end of the pipe/ditch, discharging into the Italian Drain, located at 45°39'28" N latitude, 108°45'09" W longitude. **Mixing Zone:** None **Treatment Works**: Refinery wastewater treatment plant.
002	**Location (Future):** At the end of a single port diffuser, discharging into the Yellowstone River, located at 45°39'23.4" N latitude, 108°45'07.2" W longitude. **Mixing Zone:** The maximum extent of the **chronic/human health** mixing zone in the named receiving waters is as follows: 1,000 feet downstream for the following parameters: ammonia, nitrate+nitrite, nitrogen, phosphorus, fluoride, hydrogen sulfide, cyanide, lead, mercury, and selenium. The maximum extent of the **acute** mixing zone in the named receiving waters is as follows: 100 feet downstream for the following parameters: ammonia and selenium. **Treatment Works**: Refinery wastewater treatment plant.

B. Effluent Limitations

Interim Effluent Limits – Outfall 001 Italian Ditch

Beginning on the effective date of this permit and lasting through **October 31, 2019**, the quality of effluent discharged from Outfall 001 by the facility shall, at a minimum, meet the limitations as set forth below:

Outfall 001 - Interim Numeric Discharge Limitations [1]			
Parameter	**Units**	**Maximum Daily**	**Average Monthly**
5-Day Biochemical Oxygen Demand (BOD_5)	lb/day	620	331
Net Total Suspended Solids (TSS)	lb/day	532	339
Chemical Oxygen Demand (COD)	lb/day	4,425	2,288
Oil and Grease	mg/L	10	--
	lb/day	242	128
Phenol	lb/day	4.5	2.2
Ammonia, Total as N	lb/day	418	191
Sulfide	lb/day	3.9	1.8
Chromium, Total Recoverable (TR)	lb/day	9.1	5.2
Hexavalent Chromium	lb/day	1.0	0.36
Total Nitrogen (TN) [2]	lb/day	--	181
pH	s.u.	Between 6.0 and 9.0, all times	
Whole Effluent Toxicity, Acute, LC_{50}	% effluent	No acute toxicity [3]	

Footnotes:
(1) See Definitions section at end of permit for explanation of terms.
(2) TN limits applicable August 1st – October 31st.
(3) Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration.

There shall be no discharge of floating solids or visible foam other than trace amounts.

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

There shall be no discharge of wastewater which reacts or settles to form an objectionable sludge deposit or emulsion beneath the surface of the receiving stream or upon adjoining shorelines.

There shall be no discharge from Outfall 002 at any time there is discharge from Outfall 001.

Final Effluent Limits Outfall 001- Italian Ditch

Beginning **November 1, 2019**, until the end of the permit, CHS Laurel Refinery will be required to meet the following effluent limits at Outfall 001:

Outfall 001 - Final Numeric Discharge Limitations [1]			
Parameter	Units	Effluent Limits	
		Maximum Daily	Average Monthly
BOD_5	lb/day	620	331
Net TSS	lb/day	532	339
COD	lb/day	4,425	2,288
Oil and Grease	mg/L	10	--
	lb/day	242	128
Phenol	lb/day	4.5	2.2
Ammonia, Total as N	mg/L	3.8	1.2
	lb/day	418	191
Nitrate + Nitrite	mg/L	10	10
Fluoride	mg/L	4.0	4.0
Sulfide	lb/day	3.9	1.8
Hydrogen Sulfide (H_2S) [1]	µg/L	3.2	1.7
Arsenic, TR	µg/L	10	10
Chromium, TR	lb/day	9.1	5.2
Hexavalent Chromium	lb/day	1.0	0.36
Selenium, TR	µg/L	8.2	4.1
Total Nitrogen (TN) [2]	lb/day	--	181
pH	s.u.	Between 6.0 and 9.0, all times	
Whole Effluent Toxicity, Acute, LC_{50}	% effluent	No acute toxicity [3]	

Footnote:
(1) Any results that show "nondetect" at the RRV of 20 µg/L is considered compliance with the effluent limit.
(2) Nutrient limits (TN) applicable August 1st – October 31st.
(3) Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration.

There shall be no discharge of floating solids or visible foam other than trace amounts.

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

There shall be no discharge of wastewater which reacts or settles to form an objectionable sludge deposit or emulsion beneath the surface of the receiving stream or upon adjoining shorelines.

There shall be no discharge from Outfall 002 at any time there is discharge from Outfall 001.

Outfall 002 – Yellowstone River

Effective upon commencement of discharge through Outfall 002, until the end of the permit, CHS Laurel Refinery will be required to meet the following effluent limits at Outfall 002:

Outfall 002 - Final Effluent Limits			
Parameter	**Units**	**Effluent Limits**	
		Maximum Daily	**Average Monthly**
BOD_5	lb/day	620	331
Net TSS	lb/day	532	339
COD	lb/day	4,425	2,288
Oil and Grease	mg/L	10	--
	lb/day	242	128
Phenol	lb/day	4.5	2.2
Ammonia, Total as N	lb/day	418	191
Sulfide	lb/day	3.9	1.8
Hydrogen Sulfide (H_2S) (1,2)	µg/L	3.3	1.6
Arsenic, TR (2)	µg/L	11.3	11.3
Chromium, TR	lb/day	9.1	5.2
Hexavalent Chromium	lb/day	1.0	0.36
pH	s.u.	Between 6.0 and 9.0, all times	
Total Nitrogen (TN) (3)	lb/day	--	181
Whole Effluent Toxicity, Acute, LC_{50}	% effluent	No acute toxicity (4)	

Footnote:
(1) Any results that show "nondetect" at the RRV of 20 µg/L is considered compliance with the effluent limit.
(2) Effective November 1, 2019.
(3) Nutrient limits (TN) applicable August 1st – October 31st.
(4) Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration.

There shall be no discharge of floating solids or visible foam other than trace amounts.

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

There shall be no discharge of wastewater which reacts or settles to form an objectionable sludge deposit or emulsion beneath the surface of the receiving stream or upon adjoining shorelines.

There shall be no discharge from Outfall 001 at any time there is discharge from Outfall 002.

C. Monitoring Requirements

1. Outfall 001 and Outfall 002

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

Self-monitoring of effluent discharged from Outfall 001 or Outfall 002 shall be conducted at the Flow Meter & Sampling Building following final treatment, unless another location is requested and approved by the Department in writing. Samples will reflect the nature of the discharge. Samples shall be collected, preserved and analyzed in accordance with approved procedures listed in 40 CFR 136. The data submitted to the Department must meet the Required Reporting Value (RRV), which is the detection level that must be achieved as listed in Circular DEQ-7.

Outfalls 001 and 002 - Effluent Monitoring Requirements[1]				
Parameter	**Units**	**Monitoring Frequency**	**Type**	**Reporting Requirement**
Flow	MGD	Continuous	Instantaneous [2]	Daily Max & Mo Avg
BOD_5	mg/L	2/Week [3]	Composite	Daily Max & Mo Avg
	lb/day	1/Month	Calculated	Daily Max & Mo Avg
TSS – Intake Water	mg/L	2/Week [3]	Composite	None
TSS – Effluent Gross	mg/L	2/Week [3]	Composite	None
TSS – Net [4]	lb/day	1/Month	Calculated	Daily Max & Mo Avg
COD	mg/L	2/Week [3]	Composite	Daily Max & Mo Avg
	lb/day	1/Month	Calculated	Daily Max & Mo Avg
Oil and Grease	mg/L	2/Week [3]	Grab	Daily Max & Mo Avg
	lb/day	1/Month	Calculated	Daily Max & Mo Avg
Phenol	µg/L	1/Week	Grab	Daily Max & Mo Avg
	lb/day	1/Month	Calculated	Daily Max & Mo Avg
Ammonia (as N)	mg/L	2/Week [3]	Composite	Daily Max & Mo Avg
	lb/day	1/Month	Calculated	Daily Max & Mo Avg
Sulfide	µg/L	1/Week	Composite	Daily Max & Mo Avg
	lb/day	1/Month	Calculated	Daily Max & Mo Avg
Hydrogen Sulfide (H_2S)	µg/L	1/Week	Composite	Daily Max & Mo Avg
Chromium, TR	µg/L	1/Week	Composite	Daily Max & Mo Avg
	lb/day	1/Month	Calculated	Daily Max & Mo Avg
Chromium, Hexavalent	µg/L	1/Week	Composite	Daily Max & Mo Avg
	lb/day	1/Month	Calculated	Daily Max & Mo Avg
pH	s.u.	1/Day	Instantaneous	Daily Min & Daily Max

Outfalls 001 and 002 - Effluent Monitoring Requirements[1]				
Parameter	**Units**	**Monitoring Frequency**	**Type**	**Reporting Requirement**
Fluoride	mg/L	1/Month	Composite	Daily Max & Mo Avg
Arsenic, TR	µg/L	1/Month	Composite	Daily Max & Mo Avg
Selenium, TR	µg/L	1/Month	Composite	Daily Max & Mo Avg
Cyanide	µg/L	2/Year [3]	Grab	Report
Lead, TR	µg/L	2/Year [3]	Composite	Report
Mercury, TR	µg/L	2/Year [3]	Composite	Report
Total Residual Chlorine	mg/L	1/Month	Grab	Report
Nitrate + Nitrite (Nov 1 – July 31)	mg/L	1/Month	Composite	Daily Max & Mo Avg
Nitrate + Nitrite (Aug 1 – Oct 31)	mg/L	1/Week [5]	Composite	Daily Max & Mo Avg
Total Kjeldahl Nitrogen (TKN)	mg/L	1/Week [5]	Composite	Mo Avg
TN [6]	lb/day	1/Month [5]	Calculated	Mo Avg
TP	mg/L	1/Month [5]	Composite	Mo Avg
	lb/day	1/Month [5]	Calculated	Mo Avg
Temperature	degrees C	1/Week	Instantaneous	Daily Max & Mo Avg
Whole Effluent Toxicity, Acute [7]	% Effluent	1/Quarter	Grab	Pass/Fail

Footnotes:
(1) The effluent monitoring location must be after all treatment has been completed (*i.e.*, downstream from all treatment units, and prior to entry to the receiving waters).
(2) Requires recording device or totalizer.
(3) Samples required 2/week must be taken at least two days apart, and samples required 2/year must be taken at least four months apart.
(4) Mass-based net TSS calculated by first determining mass-based net TSS discharge on a daily basis, then determining daily maximum and monthly average for the month.
(5) Monitoring required only during the summer season of August 1 – October 31st.
(6) TN is the sum of Nitrate+Nitrite and TKN.
(7) Two species conducted quarterly. At minimum, failure of any acute WET test requires that the permittee comply with the Permit's Special Conditions.

Composite samples shall, as a minimum, be composed of two or more discrete aliquots (samples) of equal volume and time collected in a 24 hour period. The aliquots shall be combined in a single container for analysis (simple composite). The time between the collection of the first sample and the last sample shall not be less than six (6) hours nor more than 24 hours.

2. *Whole Effluent Toxicity Monitoring – Acute Toxicity*

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

The toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, EPA-821-R-02-012 and the *Region VIII EPA NPDES Acute Test Conditions - Static Renewal Whole Effluent Toxicity Test* testing protocols. The permittee shall conduct an acute 48-hour static renewal toxicity test using *Ceriodaphnia sp.* and an acute 96-hour static renewal toxicity test using fathead minnows (*Pimephales promelas*). The control of pH in the toxicity test utilizing CO_2 enriched atmospheres is allowed to prevent rising pH drift. The target pH selected must represent the pH value of the receiving water at the time of sample collection.

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

If acute toxicity occurs in a routine test, an additional test shall be conducted within 14 days of the date of the initial sample. Should acute toxicity occur in the second test, accelerated testing shall occur once a month for the affected species. If no acute toxicity occurs for six (6) consecutive months for the affected species, CHS shall notify DEQ and the WET testing will revert back to a frequency of once each calendar quarter. In all cases, the results of all toxicity tests must be submitted to the Department in accordance with Part II of this permit.

Failure to initiate, or conduct an adequate Toxicity Identification Evaluation / Toxicity Reduction Evaluation (TIE/TRE), or delays in the conduct of such tests, shall not be considered a justification for noncompliance with the whole effluent toxicity limits contained in Part I.B of this permit. A TRE plan needs to be submitted to the permitting authority within 45 days after confirmation of the continuance of the effluent toxicity.

The quarterly results from the laboratory shall be reported along with the DMR form submitted for the end of the reporting calendar quarter (e.g., whole effluent results for the reporting quarter ending March 31 shall be reported with the March DMR due April 28th with the remaining quarterly reports submitted with the June, September, and December DMR's). The format for the laboratory report shall be consistent with the latest revision of the EPA form *Region VIII Guidance for Acute Whole Effluent Reporting*, and shall include all chemical and physical data as specified.

If the results for eight consecutive quarters of testing indicate no acute toxicity, the permittee may request a reduction to semi-annual acute toxicity testing on two species. The Department 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 (TIE/TRE)*

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

2. *Notification Regarding Outfalls 001 and 002*

CHS Laurel Refinery currently discharges under Outfall 001. Once CHS constructs Outfall 002, they are required to notify the Department in writing at least 30 days in advance before discharge commences at Outfall 002.

CHS will be authorized to discharge from either outfall, but not both simultaneously. As a result, DMR submittals and annual fees will apply to each outfall. For any reporting period that CHS discharges through both outfalls, CHS shall include a daily log that documents the amount of effluent discharged through each outfall as well as indicates the effluent monitoring that is conducted. This is necessary since Outfalls 001 and 002 have different effluent limits and CHS must comply with the applicable effluent limit for each outfall.

3. *Storm Water Management*

CHS Laurel Refinery has two outfalls for storm water which are currently covered under Montana storm water industrial general permit (GP) authorization MTR000099. The GP excludes storm water discharges subject to 40 CFR 419. Although CHS Laurel Refinery submitted a certified Notice of Intent (NOI) that the two storm water outfalls are 'non-process' areas that meet the GP requirement, review of the NOI description provides reasonable doubt that all of the area covered under the GP can be excluded from the definition of "contaminated runoff." If any of these non-process areas includes contaminated runoff, the storm water discharge from this area cannot be authorized by the storm water industrial GP and must be covered under an individual permit.

CHS Laurel Refinery is required to evaluate whether discharge from the two storm water outfalls that are currently authorized under the GP should be classified as "contaminated" and permitted under this individual MPDES permit or "uncontaminated" and eligible to remain authorized under the GP. By no later than **July 1, 2018**, CHS Laurel Refinery shall either:

- submit a report evaluating the storm water runoff, including providing TOC and oil & grease concentrations and sources of potential contamination, and explain why continued coverage under the GP is appropriate; or

- submit the appropriate permit application forms and relevant information to request modification of this individual permit to include these two storm water outfalls and terminate coverage under the GP.

E. Compliance Schedule

1. By no later than **November 1, 2016**, CHS Laurel Refinery shall submit a plan for compliance with the Outfall 001 and Outfall 002 final effluent limits to the Department. The plan shall include, as appropriate:

   - An evaluation of each process contributing to parameters which have expected concentrations greater than the final effluent limits;
   - An evaluation of control methods and technology to reduce the pollutants from each contributing process; and
   - A projected schedule for ensuring compliance as of **November 1, 2019**.

   Until the final compliance date of **November 1, 2019**, CHS Laurel Refinery must submit an annual report summarizing their progress towards meeting each of the effluent limits to the Department. The annual report must be post-marked no later than January 28th of each year, and include actions taken in the previous year and planned actions for the upcoming year.

2. By no later than **November 1, 2017**, CHS will submit the results of lab analyses to document the concentrations of TRC and, as necessary, magnesium oxide, in order to demonstrate whether TRC can be expected present and at what concentrations, as well as whether and to what extent magnesium oxide may cause interference with the lab tests.

   Until the compliance date of **November 1, 2017**, CHS Laurel Refinery must submit an annual report summarizing their progress towards meeting these requirements to the Department. The annual report must be post-marked no later than January 28th of each year, and include actions taken in the previous year and planned actions for the upcoming year.

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

A. Representative Sampling

Samples taken in compliance with the monitoring requirements established under Part I of the permit shall be collected from the effluent stream prior to discharge into the receiving waters. Samples and measurements shall be representative of the volume and nature of the monitored discharge.

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. 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 $10,000, or by imprisonment for not more than six months, or by both.

D. Reporting of Monitoring Results

Monitoring results must be reported on a Discharge Monitoring Report (DMR) EPA form 3320-1. Monitoring results must be submitted in either electronic or paper format and be postmarked no later than the 28th day of the month following the end of the monitoring period. Whole effluent toxicity (biomonitoring) results must be reported with copies of the laboratory analysis report on forms from the most recent version of EPA Region VIII's "Guidance for Whole Effluent Reporting."

If no discharge occurs during the reporting period, "no discharge" must be reported on the report form. Legible copies of these, and all other reports required herein, must be signed and certified in accordance with Part IV.G 'Signatory Requirements' of this permit and submitted to the Department at the following address:

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

E. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit must be submitted to the Department 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) 444-3080 or the Office of Disaster and Emergency Services at (406) 324-4777. The following examples are considered serious incidents:
   a. Any noncompliance which may seriously endanger health or the environment;
   b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.G of this permit, "Bypass of Treatment Facilities"); or

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

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

   a. a description of the noncompliance and its cause;

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

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

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

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

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

J. Other Noncompliance Reporting

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

K. Inspection and Entry

The permittee shall allow the head of the Department or the 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 or the Regional Administrator advance notice of any planned changes at the permitted facility or of an activity which may result in permit noncompliance.

B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed $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 $50,000 per day of violation, or by imprisonment for not more than 2 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.

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 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.

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 that $25,000 per violation, or by imprisonment for not more than six months per violation, or by both.

I. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public

inspection at the offices of the Department. As required by the Clean Water Act, permit applications, permits and effluent data shall not be considered confidential.

J. Oil and Hazardous Substance Liability

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

K. Property or Water Rights

The issuance of this permit does not convey any property or water rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

L. Severability

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

M. Transfers

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

1. The current permittee notifies the Department at least 30 days in advance of the proposed transfer date;
2. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them;
3. The Department does not notify the existing permittee and the proposed new permittee of an intent to revoke or modify and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part IV.M.2 of this permit; and
4. Required annual and application fees have been paid.

N. Fees

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

1. Impose an additional assessment 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.
    c. The TRE/TIE results indicated that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits.
    d. Following the implementation of numerical controls on toxicants, a modified whole effluent protocol is needed to compensate for those toxicants that are controlled numerically.
    e. The TRE/TIE revealed other unique conditions or characteristics which, in the opinion of the Department, justify the incorporation of unanticipated special conditions in 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 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.

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 (see Part I.C.), is significantly less (at the 95 percent confidence level) than that observed for the control specimens.

8. **"Composite samples"** means a sample composed of two or more discrete aliquots (samples). The aggregate sample will reflect the average quality of the water or wastewater in the compositing or sample period. Composite sample may be composed of constant volume aliquots collected at regular intervals (simple composite) or flow proportioned.

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 other wise specified in the permit. (ARM 17.30.702(22))

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.