Minor Industrial Permit No.: MT0000451

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

<u>AUTHORIZATION TO DISCHARGE UNDER THE</u> 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.,

Ash Grove Cement Company

is authorized to discharge from its Montana City Plant

located at 100 Highway 518, Clancy, MT 59634

to receiving waters named Prickly Pear Creek

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: February 1, 2019

This permit and the authorization to discharge shall expire at midnight, January 31, 2024

FOR THE MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

Jon Kenning, Chief Water Protection Bureau

Issuance Date: December 13, 2018

TABLE OF CONTENTS

I.	EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS & OTHER CONDITIONS 3							
	A.	DESCRIPTION OF DISCHARGE POINTS AND MIXING ZONE	3					
	B.	EFFLUENT LIMITATIONS						
	C.	MONITORING REQUIREMENTS	4					
		Outfalls 001 & 002	4					
		Reporting Requirements	6					
	D.	SPECIAL CONDITIONS	7					
II.	MO	NITORING, RECORDING AND REPORTING REQUIREMENTS	9					
	A.	REPRESENTATIVE SAMPLING	9					
	B.	MONITORING PROCEDURES	9					
	C.	PENALTIES FOR TAMPERING	9					
	D.	REPORTING OF MONITORING RESULTS						
	E.	COMPLIANCE SCHEDULES						
	F.	ADDITIONAL MONITORING BY THE PERMITTEE	10					
	G.	RECORDS CONTENTS	10					
	H.	RETENTION OF RECORDS						
	I.	TWENTY-FOUR HOUR NOTICE OF NONCOMPLIANCE REPORTING	10					
	J.	OTHER NONCOMPLIANCE REPORTING						
	K.	Inspection and Entry	11					
	CON	COMPLIANCE RESPONSIBILITIES						
	A.	DUTY TO COMPLY	12					
	B.	PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS						
	C.	NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE						
	D.	DUTY TO MITIGATE	12					
	E.	PROPER OPERATION AND MAINTENANCE						
	F.	REMOVED SUBSTANCES						
	G.	BYPASS OF TREATMENT FACILITIES	13					
	H.	UPSET CONDITIONS	14					
	I.	TOXIC POLLUTANTS	14					
	J.	CHANGES IN DISCHARGE OF TOXIC SUBSTANCES	14					
IV.	GEN	IERAL REQUIREMENTS	16					
	A.	PLANNED CHANGES	16					
	B.	ANTICIPATED NONCOMPLIANCE	16					
	C.	PERMIT ACTIONS	16					
	D.	DUTY TO REAPPLY	16					
	E.	DUTY TO PROVIDE INFORMATION	16					
	F.	OTHER INFORMATION	16					
	G.	SIGNATORY REQUIREMENTS						
	Н.	PENALTIES FOR FALSIFICATION OF REPORTS	17					
	I.	AVAILABILITY OF REPORTS						
	J.	OIL AND HAZARDOUS SUBSTANCE LIABILITY	18					
	K.	PROPERTY RIGHTS						
	L.	Severability	18					
	M.	Transfers	18					
	N.	FEES						
	O.	REOPENER PROVISIONS	19					
V.	DEF	INITIONS	20					

I. EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS & OTHER CONDITIONS

A. <u>Description of Discharge Points and Mixing Zone</u>

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

Location: at the end of the pipe, discharging into Prickly Pear

Creek, located at: latitude 46°32'40" N, longitude 111°55'26" W

Mixing Zone: none.

Treatment Works: settling ponds.

Location: at the end of the pipe, discharging into Prickly Pear

Creek, located at: latitude 46°32'43" N, longitude 111°55'25" W.

Mixing Zone: none.

Treatment Works: settling ponds.

B. Effluent Limitations

Beginning on the effective date of this permit and lasting through the term of this permit, the quality of effluent discharged by the facility shall, as a minimum, meet the limitations as set forth below for Outfalls 001 & 002:

Table1. Effluent Limitations for Outfall 001				
Parameter	Units	Effluent Limitations		
		Average Monthly	Maximum Daily	
Total Commanded Calida	mg/L	50 ⁽¹⁾	50 ⁽¹⁾	
Total Suspended Solids	lb/day	3.0 (2)	NA	
рН	s.u.	Within the range of 6.0 to 9.0 (1)		

Footnotes:

- (1) These effluent limits are not applicable with demonstration of an overflow during a 10-year 24-hour rain event.
- (2) Compliance demonstrated by averaging the calculated daily loads (lb/day), exclusive of eligible exceptions for rain events.

Table 2. Effluent Limitations for Outfall 002					
Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily		
T-4-1 C 4- 1 C-1: 1-	mg/L	50	50		
Total Suspended Solids	lb/day	13.3 (1)	NA		
рН	s.u.	Within the range of 6.0 to 9.0			
Footnotes:					
(1) Compliance with average monthly limits demonstrated by averaging the calculated daily loads (lb/day).					

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

There shall be no discharge which causes visible oil sheen in the receiving water (or be present in concentrations at or in excess of 10 milligrams per liter).

Ash Grove is not allowed to discharge any wastewater that is defined as "Process Water" under 40 CFR 411 Subpart A without applying for a permit modification.

C. Monitoring Requirements

Outfalls 001 & 002

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

- Outfall 001 at the last point of control prior to Prickly Pear Creek, after all regulated storm water inputs (including pumped storm water from the previous Outfall 003 drainage) and treatment has occurred. Ash Grove shall sample within the first 30 minutes of a discharge from Outfall 001.
- Outfall 002 at the last point of control prior to Prickly Pear Creek, after all regulated storm water inputs and treatment has occurred.

As an alternative to a single grab sample, the permittee may take a flow-weighted composite of either the entire discharge or the first three hours of the discharge. For flow-weighted composite, only one analysis of the composited aliquots is required. Flow weighted composite samples are not allowed for pH and oil and grease.

All analytical procedures must comply with the specifications of 40 CFR Part 136 and the analyses must have a detection or meet any Required Reporting Values (RRVs) listed in Circular DEQ-7, unless otherwise specified. Samples shall be collected, preserved and analyzed in accordance with approved procedures listed in 40 CFR Part 136. Samples will reflect the nature and effect of the discharge at the frequency presented in the table, below:

Table 3. Outfalls 001 & 002 Monitoring and Reporting Requirements (1)					
Parameter	Units	Sample Type ⁽²⁾	Min. Sample Frequency	Reporting Metric	RRV (3)
Flow	mgd	Instantaneous or Grab	1/Week	Daily Maximum/ Monthly Average	+/- 10%
	NA	Visual	2/Week	Flow estimate log (4)	NA
Flow Duration	days	Calculated	1/Month	Number of Days	1
Total Suspended Solids	mg/L	Grab	1/Month (5)	Daily Maximum Monthly Average	NA
рН	s.u.	Instantaneous	1/Week	Daily Maximum Daily Minimum	NA
Oil Sheen	Presence	Observation	3/Week	Present/Absent	NA
Oil and Grease	mg/L	Grab	(6)	Value	NA
Sulfates	mg/L	Grab	1/Month (5)	Daily Maximum Monthly Average	NA
Ammonia, Total as N	mg/L	Grab	Quarterly	Value	0.07
Nitrate + Nitrite, as N – non-summer	mg/L	Grab	Quarterly	Value	0.020
Nitrate + Nitrite, as N – summer (7)			2/Month (7)	Monthly Average	0.020
Total Kjeldahl Nitrogen (TKN) (7)	mg/L	Grab	2/Month (7)	Monthly Average	0.225
Total Nitrogen, as N (TN) (7)	mg/L	Calculated	2/Month (7)	Monthly Average	NA
	lbs/day	Calculated	1/Month (7)	Monthly Average	NA
Arsenic, Total Recoverable	μg/L	Grab	Quarterly	Daily Maximum Monthly Average	1
Copper, Total Recoverable	μg/L	Grab	1/Month (5)	Daily Maximum Monthly Average	2
Lead, Total Recoverable	μg/L	Grab	Quarterly	Daily Maximum Monthly Average	0.3
Zinc, Total Recoverable	μg/L	Grab	Quarterly	Daily Maximum Monthly Average	8

Footnotes:

- (1) Monitoring only required during periods with discharge. If unsafe conditions occur, Ash Grove may pursue other options as identified below. See Definition section at end of permit for explanation of terms.
- (2) Ash Grove may take flow-weighted composite samples in lieu of grab samples.
- (3) See Circular DEQ-7 or DEQ-12A for more information on the Required Reporting Values (RRVs). Analysis must achieve these, or lower, reporting limits. Flow must be measured +/- 10% of actual discharge rates.
- (4) The visual flow observation log must include flow observations for Outfall 002 and the gypsum pile. The log must be available for inspection.
- (5) If a sample was not already taken for the month, a sample should be taken as soon as possible after a storm event and no later than the next business day.
- (6) Oil & grease analysis must be conducted anytime a visual sheen is observed in the effluent.
- (7) Total Nitrogen is calculated by the sum of TKN plus Nitrate+Nitrite (N+N). Sampling of TKN and N+N to calculate TN is required twice per month during the summer months of July, August, and September; the samples must be taken at least one week apart.

If conditions are unsafe at the primary sampling location, Ash Grove can attempt to sample at the inlet to the discharge pipe and note it in the comments of the DMR. If the secondary monitoring location is also unsafe, Ash Grove will be allowed to report on the NetDMRs using the appropriate NODI code (i.e. NODI 5 – Frozen Conditions, NODI V – Weather Conditions) and specify the reason no sample was collected in the comments.

Ash Grove shall conduct and log a visual flow observation as required in **Table 3**, two additional times per week. As part of the log, Ash Grove shall include:

- Date of any measurable rain or snow melt since the last visual flow observation.
- Outfall 002 flow observation either from the primary monitoring location at the pipe outlet across the road or, if unsafe, the secondary monitoring location at the entrance to the discharge pipe before it crosses under the road. The visual monitoring must include both flow and the oil & grease observation.
- Gypsum Pile Observations of whether there has been any storm water runoff from the gypsum pile area, and if so where it flowed.

The log must be made available for inspection.

In addition to the above monitoring, Ash Grove must conduct monitoring required by Form 2C Section V to have the required data for the renewal package, including at least one analysis for: Part A - each parameter; Part B - each parameter believed present including Total Phosphorus; and Part C - each parameter believed present at $>10~\mu g/L$.

Reporting Requirements

Load Calculations

Effluent limitations or monitoring requirements that are expressed in terms of load (lb/day), must be based on total mass of the discharge in accordance with the definition of daily discharge in Part V of this permit. The total mass shall be calculated using the following equations:

Load (lb/day) =
$$\begin{array}{c} Daily \\ Discharge \\ (mg/L) \end{array}$$
 x $\begin{array}{c} Daily Flow \\ (MGD) \end{array}$ x 8.34

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

Average Monthly Limit (AML)

The AML or 30-day average is the Arithmetic Average or mean of all of the Daily Discharge samples collected during a calendar month, as defined in Part V of the permit. If only one sample is collected then it is considered the 30-day average.

D. Special Conditions

1. 10-year 24-hour Rainfall Event – Outfall 001

If a rainfall event at or above the 10-year 24-hour rainfall event occurs, Ash Grove is not required to meet the TBEL effluent limits for Outfall 001 (TSS and pH). However, Ash Grove is responsible for submitting, with any DMR that indicates such an occurrence, documentation that the precipitation event did exceed the 10-year 24-hour rainfall event. Acceptable methods of precipitation documentation include onsite rain gauge records or any official rainfall records from the National Weather Service.

2. Storm Water Pollution Prevention Plan (SWPPP) and Best Management Practices (BMPs)

Ash Grove shall maintain and follow a SWPPP to address the two outfalls covered under this permit. The SWPPP must comply with the SWPPP requirements in the most recent *Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity*, Permit Number MTR000000, and address both structural and behavioral BMPs to minimize the discharge of pollutants.

3. Pollutant Source Reduction

Ash Grove shall investigate the source(s) of sulfate and total recoverable arsenic, copper, lead, and zinc and evaluate options for minimizing discharge of these pollutants. The evaluation shall cover both storm water and non-storm water, including settling vaults and holding pond clean out; control of gypsum; minimizing mill room pollutant entrainment in the wastewater; and general housekeeping procedures that could affect the quantity and quality of pollutants entering the wastewater.

Ash Grove shall submit a summary of this evaluation by no later than **November 1**, **2020**, to DEQ. In addition to submittal of the report, Ash Grove may wish to arrange to meet with DEQ to discuss the progress to-date, and proposed future steps.

4. Mixing Zone Evaluation

Ash Grove must determine whether they want to request either a Standard Mixing Zone (ARM 17.30.516) or Source-Specific Mixing Zone (ARM 17.30.518) or do not want to request a mixing zone for the next permit renewal. Ash Grove shall inform DEQ by no later than **November 1, 2020** of what actions they intend to take for defending the granting of additional dilution in evaluating RP and any future WQBELs.

If Ash Grove requests a mixing zone, upstream monitoring data for three calendar years with the sample type, frequency, and RRVs as identified in **Table 4** must be included in the request. Monitoring must take place at a consistent location upstream and outside the influence of the facility and identified on a topographic map or aerial photo submitted to DEQ.

Part I

Page 8 of 22

Permit No.: MT0000451

Table 4. Upstream Monitoring and Reporting (1)					
Parameter	Units	Sample Type	Minimum Sample Frequency (2)	Required Reporting Value (3)	
Arsenic, Total Recoverable	μg/L	Grab	Quarterly	1	
Copper, Total Recoverable	μg/L	Grab	Quarterly	2	
Lead, Total Recoverable	μg/L	Grab	Quarterly	0.3	
Zinc, Total Recoverable	μg/L	Grab	Quarterly	8	
Sulfate, Total	mg/L	Grab	Quarterly	1	
Hardness, Total as CaCO ₃	mg/L	Grab	Quarterly	1	
Total Nitrogen (4)	mg/L	Grab	Monthly (4)	0.245	
Nitrate + Nitrite (N+N) (4)	mg/L	Grab	Monthly (4)	0.020	
Total Kjeldahl Nitrogen (TKN) (4)	mg/L	Grab	Monthly (4)	0.225	

Footnotes:

- (1) See Definition section at end of permit for explanation of terms.
- (2) If a mixing zone is requesting, Ash Grove needs to supply monitoring for three (3) full years.
- (3) See Circular DEQ-7 for more information on RRVs. Analysis must achieve these, or lower, reporting limits.
- (4) Analysis for Total Nitrogen is during the summer months of July, August, and September. Total Nitrogen is calculated by the sum of TKN plus N+N or by the persulfate method (in which case analysis of TKN and N+N is not required).

Ash Grove must submit the mixing zone request and any mixing zone study reports, including the upstream monitoring results for each applicable parameter, in compliance with the requirements in the applicable mixing zone regulations by no later than 180 days prior to the expiration of this permit.

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. <u>Monitoring Procedures</u>

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 \$25,000, or by imprisonment for not more than six months, or by both.

D. Reporting of Monitoring Results

Monitoring results must be reported within a Discharge Monitoring Report (DMR). Monitoring results must be submitted electronically (NetDMR web-based application) no later than the 28th day of the month following the end of the monitoring period. If no discharge occurs during the entire reporting period, "No Discharge" must be reported within the respective DMR. All other reports must be signed and certified in accordance with Part IV.G 'Signatory Requirements' of this permit and submitted to DEQ at the following address:

Montana Department of Environmental Quality Water Protection Bureau PO Box 200901 Helena, Montana 59620- 0901 Telephone: (406) 444-5546

E. <u>Compliance Schedules</u>

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Additional Monitoring by the Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using approved analytical methods as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharge Monitoring Report. Such increased frequency shall also be indicated.

G. Records Contents

Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;
- b. The initials or name(s) of the individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The time analyses were initiated;
- e. The initials or name(s) of individual(s) who performed the analyses;
- f. References and written procedures, when available, for the analytical techniques or methods used; and
- g. 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. <u>Twenty-four Hour Notice of Noncompliance Reporting</u>

- 1. The permittee shall report any serious incident of noncompliance affecting the environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Protection Bureau at (406) 444-5546 or the Office of Disaster and Emergency Services at (406) 841-3911. The following examples are considered serious incidents:
 - a. Any noncompliance which may seriously endanger health or the environment;
 - b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.G of this permit, "Bypass of Treatment Facilities"); or
 - c. Any upset which exceeds any effluent limitation in the permit (See Part III.H of this permit, "Upset Conditions").

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

J. Other Noncompliance Reporting

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

K. Inspection and Entry

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

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

III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

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

B. Penalties for Violations of Permit Conditions

The Montana Water Quality Act provides that any person who violates a permit condition of the Act is subject to civil or criminal penalties not to exceed \$25,000 per day or one year in prison, or both, for the first conviction, and \$50,000 per day of violation or by imprisonment for not more than two years, or both, for subsequent convictions. MCA 75-5-611(a) also provides for administrative penalties not to exceed \$10,000 for each day of violation and up to a maximum not to exceed \$100,000 for any related series of violations. Except as provided in permit conditions on Part III.G of this permit, "Bypass of Treatment Facilities" and Part III.H of this permit, "Upset Conditions", nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. Need to Halt or Reduce Activity not a Defense

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

D. <u>Duty to Mitigate</u>

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

- 1. 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.
- 2. Any sludges removed from the facility shall be disposed of in accordance with 40 CFR 503, 258 or other applicable rule.

G. Bypass of Treatment Facilities

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

2. Notice:

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten (10) days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.I of this permit, "Twenty-four Hour Reporting".

3. Prohibition of bypass:

- a. Bypass is prohibited and the Department may take enforcement action against a permittee for a bypass, unless:
 - 1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - 2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - 3) The permittee submitted notices as required under Part III.G.2 of this permit.
- b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part III.G.3.a of this permit.

H. Upset Conditions

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

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);
 - 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

Part III Page 15 of 22 Permit No.: MT0000451

- 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 μ g/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:

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

B. Anticipated Noncompliance

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

C. Permit Actions

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

D. <u>Duty to Reapply</u>

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

E. Duty to Provide Information

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

F. Other Information

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

G. Signatory Requirements

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

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

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

H. Penalties for Falsification of Reports

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

I. Availability of Reports

Except for data determined to be confidential under 40 CFR Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department. 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, nor does it authorize any injury to private property.

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 additional fee assessment(s) computed at the rates established under ARM 17.30.201; and

Part IV Page 19 of 22 Permit No.: MT0000451

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

O. Reopener Provisions

terminated.

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.

V. DEFINITIONS

- 1. "Act" means the Montana Water Quality Act, Title 75, chapter 5, MCA.
- 2. "Administrator" means the administrator of the United States Environmental Protection Agency.
- 3. **"Acute Toxicity"** occurs when 50 percent or more mortality is observed for either species (See Part I.C of this permit) at any effluent concentration. Mortality in the control must simultaneously be 10 percent or less for the effluent results to be considered valid.
- 4. "Annual Average Load" means the arithmetic mean of all 30-day or monthly average loads reported during the calendar year for a monitored parameter.
- 5. "Arithmetic Mean" or "Arithmetic Average" for any set of related values means the summation of the individual values divided by the number of individual values.
- 6. "Average monthly limitation" means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
- 7. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- 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 (MDEQ) 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. **"Indirect discharge"** means the introduction of pollutants into a POTW from any non-domestic source regulated under Section 307(b), (c) or (d) of the Federal Clean Water Act.
- 18. "Industrial User" means a source of Indirect Discharge.
- 19. **"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.
- 20. "Instantaneous Measurement", for monitoring requirements, means a single reading, observation, or measurement.
- 21. "Maximum daily discharge limitation" means the highest allowable daily discharge.
- 22. "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))

- 23. "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.
- 24. "Noncontact cooling water" means water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product or finished product. (40 CFR 401.11 (n))
- 25. "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.
- 26. **"Process waste water"** means any water which, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, by-product, or waste product. (40 CFR 401.11(q)).
- 27. **"Regional Administrator"** means the administrator of Region VIII of EPA, which has jurisdiction over federal water pollution control activities in the state of Montana.
- 28. "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.
- 29. "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.
- 30. "TSS" means the pollutant parameter total suspended solids.
- 31. "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.