

**MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY**

AUTHORIZATION TO DISCHARGE UNDER THE
MONTANA GROUND WATER POLLUTION CONTROL SYSTEM

In compliance with Montana Water Quality Act, Title 75, Chapter 5, Montana Code Annotated (MCA) and the Administrative Rules of Montana (ARM) 17.30. Subchapter 5, Subchapter 7, and Subchapter 10 *et seq.*,

Plum Creek Manufacturing, Inc.

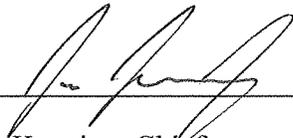
is authorized to discharge from the **Plum Creek Manufacturing, Inc., Columbia Falls Operations**, located in Section 7, Township 30 North, Range 20 West, Flathead County, to receiving waters, **Class I ground water**,

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein. Authorization for discharge is limited to those outfalls specifically listed in the permit. The numeric effluent limits, water quality standards, and special conditions specified herein support the protection of the affected receiving water.

This permit shall become effective: **July 01, 2014.**

This permit and the authorization to discharge shall expire at midnight, **June 30, 2019.**

FOR THE MONTANA DEPARTMENT OF
ENVIRONMENTAL QUALITY



Jon Kenning, Chief
Water Protection Bureau
Permitting and Compliance Division

Issue Date: May 9, 2014

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.	EFFLUENT MONITORING AND REPORTING REQUIREMENTS	6
D.	SPECIAL CONDITIONS - GROUND WATER MONITORING	9
E.	SPECIAL CONDITIONS - OTHER	12
II.	MONITORING, RECORDING AND REPORTING REQUIREMENTS.....	15
A.	REPRESENTATIVE SAMPLING	15
B.	MONITORING PROCEDURES	15
C.	PENALTIES FOR TAMPERING	15
D.	REPORTING OF MONITORING RESULTS	15
E.	COMPLIANCE SCHEDULES.....	15
F.	ADDITIONAL MONITORING BY THE PERMITTEE	16
G.	RECORDS CONTENTS.....	16
H.	RETENTION OF RECORDS	16
I.	TWENTY-FOUR HOUR NOTICE OF NONCOMPLIANCE REPORTING	16
J.	OTHER NONCOMPLIANCE REPORTING	17
K.	INSPECTION AND ENTRY	17
III.	COMPLIANCE RESPONSIBILITIES.....	18
A.	DUTY TO COMPLY.....	18
B.	PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS.....	18
C.	NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE.....	18
D.	DUTY TO MITIGATE	18
E.	PROPER OPERATION AND MAINTENANCE.....	18
F.	REMOVED SUBSTANCES.....	19
G.	BYPASS OF TREATMENT FACILITIES	19
IV.	GENERAL REQUIREMENTS	20
A.	PLANNED CHANGES	20
B.	ANTICIPATED NONCOMPLIANCE.....	20
C.	PERMIT ACTIONS.....	20
D.	DUTY TO REAPPLY.....	20
E.	DUTY TO PROVIDE INFORMATION.....	20
F.	OTHER INFORMATION	21
G.	SIGNATORY REQUIREMENTS.....	21
H.	PENALTIES FOR FALSIFICATION OF REPORTS	22
I.	AVAILABILITY OF REPORTS	22
J.	OIL AND HAZARDOUS SUBSTANCE LIABILITY	22
K.	PROPERTY OR WATER RIGHTS	22
L.	SEVERABILITY.....	23
M.	TRANSFERS	23
N.	FEEES	23
O.	REOPENER PROVISIONS.....	23
V.	DEFINITIONS	24

I. EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS & OTHER CONDITIONS

A. Description of Discharge Points and Mixing Zones

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

<u>Outfall</u>	<u>Description</u>
003	<p>Location: Infiltration pond located at southeast $\frac{1}{4}$ of Section 7, Township 30 North, Range 20 West; or 48° 22' 30.4" North Latitude and -114° 12' 18.4" West Longitude.</p> <p>Mixing Zone: The Department authorizes a standard ground water mixing zone (500 foot length, 15 foot depth, bearing SSE) for arsenic, nitrogen, and phenol.</p> <p>Treatment Works: None proposed</p>
004	<p>Location: Infiltration overflow area located at northwest $\frac{1}{4}$ of Section 7, Township 30 North, Range 20 West; or 48° 22' 42.4" North Latitude and -114° 12' 32.6" West Longitude.</p> <p>Mixing Zone: The Department authorizes a standard ground water mixing zone (500 foot length, 15 foot depth, bearing SSW) for arsenic, nitrogen, and phenol.</p> <p>Treatment Works: None proposed</p>

006 **Location:** Disposal ditch located at southeast ¼ of Section 7, Township 30 North, Range 20 West; or 48° 22' 34.5" North Latitude and -114° 11' 57.7" West Longitude.

Mixing Zone: Not authorized

Treatment Works: None proposed

007 **Location:** Infiltration pond at northeast ¼ of Section 7, Township 30 North, Range 20 West; or 48° 22' 40.04" North Latitude and -114° 11' 53.78" West Longitude.

Mixing Zone: The Department authorizes a standard ground water mixing zone (500 foot length, 15 foot depth, bearing SSE) for arsenic, nitrogen, and phenol.

Treatment Works: None proposed

B. Effluent Limitations

Upon the effective date of the permit and lasting until the term of the permit, the quality of effluent discharged shall, as a minimum, meet the limitations set forth in Tables 1-4.

Table 1: Effluent Limits - Outfall 003		
Parameter	Units	Effluent Limitations
		Daily Maximum⁽¹⁾
Arsenic, Dissolved	mg/L	0.012
Total Nitrogen (as N)	mg/L	12.0
Phenol (TRP)	mg/L	0.38
Footnotes:		
(1) See definition in Part V of permit.		

Table 2: Effluent Limits - Outfall 004		
Parameter	Units	Effluent Limitations
		Daily Maximum⁽¹⁾
Arsenic, Dissolved	mg/L	0.010
Total Nitrogen (as N)	mg/L	10.0
Phenol (TRP)	mg/L	0.30
Footnotes:		
(1) See definition in Part V of permit.		

Table 3: Effluent Limits - Outfall 006		
Parameter	Units	Effluent Limitations
		Daily Maximum⁽¹⁾
Cadmium, Dissolved	mg/L	0.005
Footnotes:		
(1) See definition in Part V of permit.		

Table 4: Effluent Limits - Outfall 007		
Parameter	Units	Effluent Limitations
		Daily Maximum⁽¹⁾
Arsenic, Dissolved	mg/L	0.012
Total Nitrogen (as N)	mg/L	11.8
Phenol (TRP)	mg/L	0.37
Footnotes:		
(1) See definition in Part V of permit.		

C. Effluent Monitoring and Reporting Requirements

1. Samples representative of effluent quality must be collected from:
 - EFF-003: The intake log deck pump of the log pond (lower);
 - EFF-004: The end of the discharge pipe for the overflow area;
 - EFF-006: The end of the discharge pipe for the boiler ditch; and
 - EFF-007: The intake log deck pump of the upper log pond.
2. Effluent samples must be representative of the volume and nature of the monitored discharge. Effluent samples must be collected using best management practices or in accordance with the sampling operation procedure manual (Part I.E.5.).
3. Effluent sampling requirements are listed in Table 5 and Table 6 for all outfalls. The required sampling frequency is listed in Table 5 and Table 6 for each respective parameter. The required sample type is listed in Table 5 and Table 6 for each respective parameter. The permittee shall report the required monitoring data to the Department at the frequency respectively listed in Table 5 and Table 6 for each parameter.
4. Parameter analytical methods must be in accordance with the Code of Federal Regulations, 40 CFR Part 136, unless approved by the Department.
5. Submittal of discharge monitoring report forms (DMR) is required regardless of the operational status of the facility. If no discharge occurs during an individual monitoring period, it shall be stated on the DMR that no discharge or overflow occurred.
6. Effluent flow rate, and determination of non-discharging events, must be determined using best management practices or in accordance with the wastewater flow rate monitoring and reporting plan (Part I.E.1.). Reporting shall be documented using best management practices or with wastewater flow rate reports (Part I.E.2.).

Table 5: Effluent Monitoring and Reporting Requirements - Separately for Outfall 003, Outfall 004, and Outfall 007

Parameter/Code	Monitor Location	Units	Sample Type	Minimum Sample Frequency	Reporting Requirements ⁽¹⁾⁽²⁾	Report Freq.
Alkalinity, Total (as CaCO ₃)/00410	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Aluminum, Dissolved/01106	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Ammonia, Total (as N)/51446	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Month	Daily Maximum Monthly Average	Monthly
Arsenic, Dissolved/01000	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Month	Daily Maximum Monthly Average	Monthly
Barium, Dissolved/01005	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
BOD ₅ /00318	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Cadmium, Dissolved/01025	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Chloride (as Cl)/46225	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Fluoride/00949	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Formaldehyde/71880	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Iron, Dissolved/01046	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Kjeldahl Nitrogen, Total/49579	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Month	Daily Maximum Monthly Average	Monthly
Manganese, Dissolved/01056	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Nitrate + Nitrite (as N)/51450	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Month	Daily Maximum Monthly Average	Monthly
Nitrogen, Total (as N) ⁽³⁾ /51425	EFF-003, EFF-004, EFF-007	mg/L	Calculate	1/Month	Daily Maximum Monthly Average	Monthly
Oil & Grease (1664A, HEM)	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
pH	EFF-003, EFF-004, EFF-007	s.u.	Instantaneous or Grab	1/Month	Monthly Average	Monthly
Phenol (TRP) (distillation)/32730	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Month	Daily Maximum Monthly Average	Monthly
Phosphorus, Total (as P)/00665	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Specific Conductivity	EFF-003, EFF-004, EFF-007	µS/cm	Instantaneous or Grab	1/Quarter	Quarterly Average	Quarterly
Sulfate/81020	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Toluene/34010	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Total Dissolved Solids (TDS)/70296	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
TPH/82181	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Zinc, Dissolved/01090	EFF-003, EFF-004, EFF-007	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly

Footnotes:

"Dissolved" metal parameters will be analyzed using the dissolved portion (0.45 micron filter), ARM 17.30.1006(6).

Wastewater samples collected at EFF-003, EFF-004, and EFF-007 are individually designated as being representative of effluent characteristics discharged to state water.

BOD₅ = Biochemical Oxygen Demand, 5-day

s.u. = standard units

TPH = Total Petroleum Hydrocarbons

TRP = Total Recoverable Phenolics (distilled)

VOC = Volatile Organic Compound

(1) See definitions in Part V of the permit.

(2) Daily Maximum: Report highest measured daily value for the reporting period on Discharge Monitoring Report (DMR).

(3) Total Nitrogen is the sum of Nitrate + Nitrite and Total Kjeldahl Nitrogen.

Table 6: Effluent Monitoring and Reporting Requirements - Outfall 006

Parameter/Code	Monitor Location	Units	Sample Type	Minimum Sample Frequency	Reporting Requirements ⁽¹⁾⁽²⁾	Report Freq.
Alkalinity, Total (as CaCO ₃)/00410	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Aluminum, Dissolved/01106	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Ammonia, Total (as N)/51446	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Arsenic, Dissolved/01000	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Barium, Dissolved/01005	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
BOD ₅ /00318	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Cadmium, Dissolved/01025	EFF-006	mg/L	Grab	1/Month	Daily Maximum Monthly Average	Monthly
Chloride (as Cl)/46225	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Fluoride/00949	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Formaldehyde/71880	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Iron, Dissolved/01046	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Kjeldahl Nitrogen, Total/49579	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Manganese, Dissolved/01056	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Nitrate + Nitrite (as N)/51450	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Nitrogen, Total (as N) ⁽³⁾ /51425	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Oil & Grease (1664A, HEM)	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
pH	EFF-006	s.u.	Instantaneous or Grab	1/Month	Monthly Average	Monthly
Phenol (TRP) (distillation)/32730	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Phosphorus, Total (as P)/00665	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Specific Conductivity	EFF-006	µS/cm	Instantaneous or Grab	1/Quarter	Quarterly Average	Quarterly
Sulfate/81020	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Toluene/34010	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Total Dissolved Solids (TDS)/70296	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
TPH/82181	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Zinc, Dissolved/01090	EFF-006	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly

Footnotes:

"Dissolved" metal parameters will be analyzed using the dissolved portion (0.45 micron filter), ARM 17.30.1006(6).

Wastewater samples collected at EFF-006 are designated as being representative of effluent characteristics discharged to state water.

BOD₅ = Biochemical Oxygen Demand, 5-day

s.u. = standard units

TPH = Total Petroleum Hydrocarbons

TRP = Total Recoverable Phenolics (distilled)

VOC = Volatile Organic Compound

(1) See definitions in Part V of the permit.

(2) Daily Maximum: Report highest measured daily value for the reporting period on Discharge Monitoring Report (DMR).

(3) Total Nitrogen is the sum of Nitrate + Nitrite and Total Kjeldahl Nitrogen.

D. Special Conditions - Ground Water Monitoring

1. Ground water monitoring for monitoring wells 003-MW, 004-MW, and 006-MW must be individually sampled at the frequency and with the type of measurement respectively listed in Table 7. Samples shall include, but not be limited to, the respective parameters listed in Table 7 for each listed monitoring well. The reporting requirements and reporting frequencies for each individual monitoring well are listed in Table 7.
2. Ground water monitoring for monitoring well BG-MW must be individually sampled at the frequency and with the type of measurement respectively listed in Table 8. Samples shall include, but not be limited to, the respective parameters listed in Table 8. The reporting requirements and reporting frequencies are listed in Table 8.
3. Ground water monitoring of monitoring well 007-MW will commence upon installation. Monitoring well 007-MW must be individually sampled at the frequency and with the type of measurement respectively listed in Table 7. Samples shall include, but not be limited to, the respective parameters listed in Table 7. Reporting requirements for 007-MW will solely take place within ground water quality monitoring reports (Part I.E.6.). DMR forms are not required for 007-MW.
4. Parameter analytical methods must be in accordance with the Code of Federal Regulations, 40 CFR Part 136.
5. The permittee shall document the methodology and equipment used to sample monitoring wells during all sampling events. Self monitoring records shall be maintained in accordance with Part II.H. of this permit.
6. Submittal of DMRs will be required, regardless of the status of each individual monitoring well. At no time shall the permittee mark or state "No Discharge" on any monitoring well DMR forms. DMR forms are not required for 007-MW.
7. If any monitoring well(s) are abandoned, destroyed or decommissioned, or are no longer able to be sampled due to fluctuations in the ground water table; the permittee shall install a new well to replace the abandoned, destroyed, decommissioned, or non-viable well(s).

Table 7: Ground Water Monitoring and Reporting Requirements - Downgradient

Parameter	Location ⁽¹⁾	Analyses	Units	Sample Type ⁽²⁾	Minimum Sampling Frequency	Reporting ⁽²⁾ Requirements	Reporting Frequency
Ammonia, Total (as N)	003-MW 004-MW 006-MW 007-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Arsenic	003-MW 004-MW 006-MW 007-MW	Diss	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Cadmium	006-MW	Diss	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Kjeldahl Nitrogen, Total	003-MW 004-MW 006-MW 007-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Nitrite+Nitrate (as N)	003-MW 004-MW 006-MW 007-MW	-	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Nitrogen, Total ⁽³⁾	003-MW 004-MW 006-MW 007-MW	Calculate	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Phenol (TRP) (distillation)	003-MW 004-MW 007-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Specific Conductivity @ 25°C	003-MW 004-MW 006-MW 007-MW		µmhos/cm	Instantaneous or Grab	1/Quarter	Quarterly Average	Quarterly
Static Water Level (SWL) ⁽⁴⁾	003-MW 004-MW 006-MW 007-MW		ft-bmp	Instantaneous	1/Quarter	Quarterly Average	Quarterly
Total Dissolved Solids	003-MW 004-MW 006-MW 007-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly

Footnotes:
 Installation, Monitoring and Reporting requirement for 007-MW are listed in Part I.E.
 All metal parameters will be analyzed using the dissolved portion (0.45 micron filter), ARM 17.30.1006(6).
 Diss = Dissolved
 ft-bmp = feet below measuring point
 s.u. = standard units
 TRP = Total Recoverable Phenolics (distilled), Phenol
 (1) Refer to Section II of the Fact Sheet for the location of these monitoring wells.
 (2) See definitions in Part V of the permit.
 (3) Total Nitrogen is the sum of Nitrate + Nitrite and Total Kjeldahl Nitrogen.
 (4) Measuring point (point of reference) for SWL measurements shall be from top of casing and measured to within 1/100th of one foot.

Table 8: Ground Water Monitoring and Reporting Requirements - Ambient

Parameter	Location ⁽¹⁾	Analyses	Units	Sample Type ⁽²⁾	Minimum Sampling Frequency	Reporting Requirements ⁽²⁾	Reporting Frequency
Alkalinity, Total (as CaCO ₃)	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Aluminum	BG-MW	Diss	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Ammonia, Total (as N)	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Arsenic	BG-MW	Diss	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Barium	BG-MW	Diss	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
BOD ₅	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Cadmium	BG-MW	Diss	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Chloride (as Cl)	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
COD	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Fluoride	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Formaldehyde	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Iron	BG-MW	Diss	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Kjeldahl Nitrogen, Total	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Manganese	BG-MW	Diss	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Nitrite+Nitrate (as N)	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Nitrogen, Total ⁽³⁾	BG-MW	Calculate	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
pH	BG-MW		s.u.	Instantaneous or Grab	1/Quarter	Quarterly Average	Quarterly
Phenol (TRP) (distillation)	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Phosphorus, Total (as P)	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Specific Conductivity @ 25°C	BG-MW		µmhos/cm	Instantaneous or Grab	1/Quarter	Quarterly Average	Quarterly
Static Water Level (SWL) ⁽⁴⁾	BG-MW		ft-bmp	Instantaneous	1/Quarter	Quarterly Average	Quarterly
Sulfate	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Toluene	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Total Dissolved Solids	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
TPH	BG-MW		mg/L	Grab	1/Quarter	Quarterly Average	Quarterly
Zinc	BG-MW	Diss	mg/L	Grab	1/Quarter	Quarterly Average	Quarterly

Footnotes:
 All metal parameters will be analyzed using the dissolved portion (0.45 micron filter), ARM 17.30.1006(6).
 At no time shall the permittee report "no discharge" on any monitoring well DMR.
 BG-MW is representative of background (ambient) receiving (shallow) ground water quality.
 BOD₅ = Biochemical Oxygen Demand
 COD = Chemical Oxygen Demand
 Diss = Dissolved
 ft-bmp = feet below measuring point
 s.u. = standard units
 TPH = Total Petroleum Hydrocarbons
 TRP = Total Recoverable Phenolics (distilled), Phenol
 (1) Refer to Section II.M. of the Fact Sheet for the existing location of the monitoring well.
 (2) See definitions in Part V of the permit.
 (3) Total Nitrogen is the sum of Nitrate + Nitrite and Total Kjeldahl Nitrogen.
 (4) Measuring point (point of reference) for SWL measurements shall be from top of casing and measured to within 1/100th of one foot.

E. Special Conditions - Other

1. Best Management Practices – Wastewater Flow Rate Monitoring and Reporting Plan

The permittee shall develop (or update) and implement a site specific Wastewater Flow Rate Monitoring and Reporting Plan for the Columbia Falls Operations (CFO). The plan must document best management practices to be used for consistent collection, documentation, and reporting of wastewater flow rate data. At minimum, the plan must include the following:

- Identification of all potential contributions, losses, or conveyances (in-flows) for all wastewater streams;
- Daily flow rate estimations for all contributions, losses, and conveyances;
- Infiltration (discharge) rates at each outfall; and,
- Determination of non-discharging events.

All flow rates must include seasonal variation estimates. The plan will be used as guidance in reporting annual Wastewater Flow Rate Reports (Part I.E.2.). A copy of the plan shall be kept on site at CFO at all times.

The plan, in place of a written report, must be received by DEQ. The respective completion and reporting dates are listed within Table 9. Any subsequent amended plans must also be reported to DEQ.

2. Best Management Practices – Wastewater Flow Rate Report

A Wastewater Flow Rate Report must be completed annually. The report must be constructed using the Wastewater Flow Rate Monitoring and Reporting Plan (Part I.E.1.). The report must include all information listed within Part I.E.1. The respective completion and reporting dates are listed within Table 9.

3. Best Management Practices - Water Balance Line Diagram

The permittee shall develop (or update) a Water Balance Line Diagram. The diagram must include all potential contributions, losses and conveyances for all wastewater streams. The diagram must include design flow between intakes, operations, treatment units, flow measurement location(s), sampling locations, conveyance structures, and discharge structures. If a complete water balance cannot be determined, a partial diagram may be supplemented with a pictorial description estimating the nature and estimated amount of any contributions, losses or conveyances of water.

The diagram, in place of a written report, must be received by DEQ. The respective completion and reporting dates are listed within Table 9. Any subsequent amended diagrams must also be reported to DEQ.

4. Best Management Practices - Sampling Operation Procedure Manual

The permittee shall develop (or update) a sampling operation procedure (SOP) manual. The manual will be used as a guide in preparing and collecting effluent samples (at minimum) from EFF-003 and EFF-007. A copy of the procedure manual shall be kept on site at CFO at all times.

A report documenting development and implementation of the manual must be received by DEQ. The respective completion and reporting dates are listed within Table 9. Any subsequent amended manuals must also be reported to DEQ.

5. Monitoring Well Installation - 007-MW

A minimum of one (1) monitoring well (007-MW) must be installed. The monitoring well must be constructed to be representative of the shallow ground water bearing unit located hydraulically downgradient of the Outfall 007 mixing zone.

A report must be received by DEQ and must include the final location, drilling methods used, borehole lithologic log, well construction details, elevation of measuring point, and the depth to the top contact of the first ground water bearing zone. The respective completion and reporting dates are listed within Table 9.

6. Ground Water Quality Monitoring Reports - 007-MW

A ground water quality monitoring report for monitoring well 007-MW must be completed annually. The report must summarize the respective sampling events and reporting requirements as listed in Table 7 for 007-MW. The reporting frequency for 007-MW will be on an annual basis (instead of quarterly). DMR forms are not required for 007-MW. The respective completion and reporting dates are listed within Table 9.

Table 9: Compliance Schedule			
Action	Permit	Scheduled Completion Date of Action⁽¹⁾	Scheduled Report Due Date⁽²⁾
Develop (or update) and implement a facility site specific Wastewater Flow Rate Monitoring and Reporting Plan.	Part I.E.1.	June 30, 2015	July 28, 2015
Complete a Wastewater Flow Rate Report.	Part I.E.2.	June 30, 2016 June 30, 2017 June 30, 2018	July 28, 2016 July 28, 2017 July 28, 2018
Complete (or update) a facility Water Balance Line Diagram.	Part I.E.3.	June 30, 2015	July 28, 2015
Develop (or update) and implement a Sampling Operation Procedure Manual.	Part I.E.4.	June 30, 2015	July 28, 2015
Install monitoring well 007-MW.	Part I.E.5.	June 30, 2015	July 28, 2015
Complete 007-MW monitoring reports.	Part I.E.6.	June 30, 2016 June 30, 2017 June 30, 2018	July 28, 2016 July 28, 2017 July 28, 2018
Footnotes:			
(1) The actions must be completed on or before the scheduled completion dates.			
(2) Reports must be received by DEQ on or before the scheduled report due dates. The reports must include all information as required for each applicable action as listed in Part I.E.			

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 \$25,000, 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. 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 DEQ 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 this permit shall be submitted no later than 14 days following each schedule date, unless otherwise specified in 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 MGWPCS permit must be maintained on site during the duration of activity at the permitted location.

I. Twenty-four Hour Notice of Noncompliance Reporting

1. The permittee shall report any serious incidents of noncompliance affecting the environment as soon as possible, but no later than twenty-four (24) hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Protection Bureau at (406) 444-3080 or the Office of Disaster and Emergency Services at (406) 841-3911. The following examples are considered serious incidents:

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

J. Other Noncompliance Reporting

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

K. Inspection and Entry

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

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance, any substances or parameters at any location.

III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Montana Water Quality 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", nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. Need to Halt or Reduce Activity not a Defense

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

D. Duty to Mitigate

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

E. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of

back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.

F. Removed Substances

Collected screenings, grit, solids, sludges, or other pollutants removed in the course of treatment shall be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard.

G. Bypass of Treatment Facilities

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

2. Notice:

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least 10 days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.I of this permit, "Twenty-four Hour Reporting".

3. Prohibition of bypass:

a. Bypass is prohibited and the Department may take enforcement action against a permittee for a bypass, unless:

1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

3) The permittee submitted notices as required under Part III.G.2 of this permit.

b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part III.G.3.a of this permit.

IV. GENERAL REQUIREMENTS

A. Planned Changes

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

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

B. Anticipated Noncompliance

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

C. Permit Actions

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

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application must be submitted at least 90 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 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 specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or an individual occupying a named position.)
3. Changes to authorization. If an authorization under Part IV.G.2 of this permit is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part IV.G.2 of this permit must be submitted

to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this section shall make the following certification:

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

H. Penalties for Falsification of Reports

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

I. Availability of Reports

All reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department and the EPA. Permit applications, permits and effluent data shall not be considered confidential and shall also be available for public inspection.

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 additional fee assessment(s) computed at the rates 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, excluding mixing zones designated by ARM 17.30.501-518, for parameters included in the permit or others, the department may modify the effluent limits or water management plan.

V. DEFINITIONS

1. **"30-day (monthly) average"** other than for fecal coliform bacteria, means the arithmetic average of all samples collected during a consecutive 30-day period or calendar month, whichever is applicable. Geometric means shall be calculated for fecal coliform bacteria. The calendar month shall be used for purposes of reporting self-monitoring data.
2. **"90-day (quarterly) average"** other than for fecal coliform bacteria, means the arithmetic average of all samples collected during a consecutive 90-day period or calendar quarter, whichever is applicable. Geometric means shall be calculated for fecal coliform bacteria. The calendar quarter shall be used for purposes of reporting self-monitoring data.
3. **"Annual Average Load"** means the arithmetic mean of all 30-day or monthly average loads reported during the calendar year for a monitored parameter.
4. **"Annual Maximum Limit"** means the maximum allowable discharge of a pollutant during a calendar year.
5. **"BOD5"** means the five-day measure of pollutant parameter biochemical oxygen demand.
6. **"Bypass"** means the intentional diversion of waste streams from any portion of a treatment facility.
7. **"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.
8. "**Continuous**" means the measurement of effluent flow which occurs without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance process changes, or other similar activities.
 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**" 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.
 12. "**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.
 13. "**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.
 14. "**Instantaneous**" measurement, for monitoring requirements, means a single reading, observation, or measurement.
 15. "**Load Limits**" are mass-based discharge limits expressed in units such as lb/day

16. **"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.
17. **"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.
18. **"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.
19. **"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.
20. **"TSS"** means the pollutant parameter total suspended solids.