

# 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.*,

### **Sanders County Sewer District at Paradise**

is authorized to discharge from,

**Paradise Wastewater Treatment Facility System**  
SWNE Section 20, Township 19 North, Range 25 West  
Latitude: 47.39492, Longitude: -114.805171  
Sanders County

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

This permit shall become effective: **TBD**.

This permit and the authorization to discharge shall expire at midnight, **TBD (five years)**.

FOR THE MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

**DRAFT**

---

Jon Kenning, Chief  
Water Protection Bureau

Issue Date: \_\_\_\_\_

**TABLE OF CONTENTS**

<b>I.</b>	<b>EFFLUENT LIMITATIONS, MONITORING REQUIREMENTS &amp; OTHER CONDITIONS.....</b>	<b>3</b>
	A. DESCRIPTION OF DISCHARGE POINTS AND MIXING ZONES .....	3
	B. EFFLUENT LIMITATIONS AND PROHIBITIONS .....	3
	C. MONITORING AND REPORTING REQUIREMENTS .....	4
	D. SPECIAL CONDITIONS .....	10
<b>II.</b>	<b>MONITORING, RECORDING AND REPORTING REQUIREMENTS.....</b>	<b>13</b>
	A. REPRESENTATIVE SAMPLING .....	13
	B. MONITORING PROCEDURES.....	13
	C. PENALTIES FOR TAMPERING .....	13
	D. REPORTING OF MONITORING RESULTS .....	13
	E. COMPLIANCE SCHEDULES .....	14
	F. ADDITIONAL MONITORING BY THE PERMITTEE.....	14
	G. RECORDS CONTENTS.....	14
	H. RETENTION OF RECORDS.....	14
	I. TWENTY-FOUR HOUR NOTICE OF NONCOMPLIANCE REPORTING .....	15
	J. OTHER NONCOMPLIANCE REPORTING .....	15
	K. INSPECTION AND ENTRY .....	16
<b>III.</b>	<b>COMPLIANCE RESPONSIBILITIES .....</b>	<b>17</b>
	A. DUTY TO COMPLY .....	17
	B. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS .....	17
	C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE.....	17
	D. DUTY TO MITIGATE.....	17
	E. PROPER OPERATION AND MAINTENANCE .....	18
	F. REMOVED SUBSTANCES .....	18
	G. BYPASS OF TREATMENT FACILITIES .....	18
<b>IV.</b>	<b>GENERAL REQUIREMENTS.....</b>	<b>20</b>
	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 .....	20
	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. FEES.....	23
	O. REOPENER PROVISIONS .....	24
<b>V.</b>	<b>DEFINITIONS .....</b>	<b>25</b>

## 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 Part 75-5-632 of the Montana Water Quality Act.

<u>Outfall</u>	<u>Description</u>
----------------	--------------------

**001**

**Subsurface Drainfield**

SWNE Section 20, Township 19 North, Range 25 West  
Latitude: 47.39423, Longitude: -114.80604

**Department Modified Mixing Zone**

A mixing zone has been authorized for nitrogen analytes. The mixing zone bearing N34°W has a standard 500 length and 15 foot depth. The mixing zone incorporates dispersion and is bound by the geologic boundary of the alluvial aquifer.

**Wastewater Treatment System**

A Level II recirculating trickling filter treatment system (or similar) with a subsurface wastewater infiltration system containing a shallow soil absorption area.

### B. Effluent Limitations and Prohibitions

Upon the effective date of the permit and lasting until the term of the permit; the quality of effluent discharged must meet the limitations set forth in Table 1.

DEQ prohibits the connection of wastewater sources that are not domestic-in-nature. Wastewater generators typically associated with domestic activities include: sinks, toilets, showers, and laundry. This does not preclude non-residential connections, so long as the wastewater is domestic-in-nature and of residential strength.

DEQ prohibits the direct connection of any high-strength domestic wastewater sources. This does not preclude high-strength connections that first undergo pretreatment down to residential strength characteristics. Pre-treatment of the wastewater stream must occur prior to joining the community system. All pretreatment systems must be reviewed and approved by the County (as applicable), DEQ engineering, and DEQ discharge permitting programs prior to construction and connection.

<b>Table 1: Effluent Limitations – Outfall 001</b>		
<b>Parameter</b>	<b>Units</b>	<b>Quarterly Average</b>
Nitrogen, Total [as N]	lbs/day	9.86
Quarterly load calculation: The quarterly average of all individual daily concentrations and quarterly total flows must be used in the load calculations. Calculation rules are provided within the Wastewater Monitoring Tables.		

**C. Monitoring and Reporting Requirements**

**1. Centralized Community Treatment System (CTS-001) Wastewater Sampling and Reporting Requirements**

- Samples representative of wastewater quality must be collected from:
  - INF-001: Influent wastewater sample point located at sample port located just prior to the community septic/pre-anoxic tanks.
  - EFF-001: Effluent wastewater sample point located at sample port located after the drainfield dose tank.
- Effluent samples must be representative of the nature of the monitored discharge.
- Wastewater sampling requirements are listed in Table 2. The required sample type, sampling frequency, reporting requirements, and reporting frequency is listed in Table 2.
- Wastewater samples must be collected and reported if discharge occurred at the outfall at any time during each monitoring period.
- Analytical methods must be in accordance with the Code of Federal Regulations (CFR), Title 40, Part 136, unless specified or otherwise approved by the Department.
- Wastewater sampling must be completed in compliance with the Wastewater Sampling, Analysis, and Reporting Operation Manual.
- Effluent flow rate measurements must be collected from:
  - FM-001: Effluent flow meter located after the drainfield dose tank.
- Effluent flow rate measurements must be representative of the volume of the monitored discharge.
- Effluent flow monitoring and reporting requirements are listed in Table 2.
- Wastewater flow monitoring must be completed in compliance with the Wastewater Sampling, Analysis, and Reporting Operation Manual.
- Submittal of electronic discharge monitoring reports (DMRs) are required regardless of the operational status of the facility. The reporting of no discharge is allowed only if discharge or overflow did not occur at any time during the respective monitoring period. Bench records need to support this activity status.

**Table 2: Influent and Effluent Monitoring and Reporting Requirements – Centralized Community Treatment System (CTS-001)**

Analyte/Measurement	Monitor Location	Units	Sample Type <sup>(1)</sup>	Minimum Sample Frequency	Reporting Requirements <sup>(1)(2)</sup>	Report Frequency
Biochemical Oxygen Demand (BOD <sub>5</sub> )	INF-001 EFF-001	mg/L	Grab	1/Month	Quarterly Average	Quarterly
Flow Rate, Effluent <sup>(3)</sup>	FM-001	gal/day	Contin- uous	Contin- uous	Quarterly Average <sup>(4)</sup>	Quarterly
	FM-001	gal/quarter	Contin- uous	Contin- uous	Quarterly Total	Quarterly
Oils and Grease [HEM]	INF-001 EFF-001	mg/L	Grab	1/Month	Quarterly Average	Quarterly
Nitrogen, Nitrite+Nitrate [as N]	INF-001 EFF-001	mg/L	Grab	1/Month	Quarterly Average	Quarterly
Nitrogen, Total Ammonia [as N]	INF-001 EFF-001	mg/L	Grab	1/Month	Quarterly Average	Quarterly
Nitrogen, Total Kjeldahl (TKN)[as N]	INF-001 EFF-001	mg/L	Grab	1/Month	Quarterly Average	Quarterly
Nitrogen, Total [as N] <sup>(5)</sup>	INF-001 EFF-001	mg/L	Calculate	1/Month	Quarterly Average	Quarterly
		%	Calculate	1/Month	Percent Removal <sup>(6)</sup>	Quarterly
		lbs/day <sup>(7)</sup>	Calculate	1/Month	Quarterly Average <sup>(8)</sup>	Quarterly
Phosphorus, Total [as P]	INF-001 EFF-001	mg/L	Grab	1/Month	Quarterly Average	Quarterly
Total Suspended Solids (TSS)	INF-001 EFF-001	mg/L	Grab	1/Month	Quarterly Average	Quarterly

Footnotes:

EFF-001: Description provided in Table 1 of the Fact Sheet document.

INF-001: Description provided in Table 1 of the Fact Sheet document.

FM-001: Description provided in Table 1 of the Fact Sheet document.

If no discharge occurs through out the reporting period, “no discharge” shall be recorded on the wastewater Discharge Monitoring Report (DMR) report forms.

Parameter analytical methods shall be in accordance with the 40 CFR Part 136 unless specified above or within a deviation authorized by DEQ.

(1) See definitions in Part V of the permit unless defined within this table or by a permit condition.

(2) Quarterly Average: The average of all individual daily concentrations (mg/L) analyzed during the quarterly reporting period.

(3) Requires recording device or totalizing meter, must be capable of recording daily and quarterly effluent volumes.

(4) Quarterly Average Flows: Determine total flows (gal/quarter) that occurred during the quarterly reporting period. Divide total flow by the number of calendar days in the Quarterly reporting period to get a unit of daily flow (gal/day).

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

(6) Calculated as  $\{[(\text{Influent TN} - \text{Effluent TN})/\text{Influent TN}] * 100\}$  using the corresponding quarterly average values for the reporting period.

(7) Load calculation:  $\text{lbs/day} = \text{concentration (mg/L)} \times \text{flow (gal/day)} \times [8.34 \times 10^{-6}]$ .

(8) Quarterly Load Calculation. Determine concentration (mg/L): Use the average of all individual daily concentrations (mg/L) analyzed during the quarterly reporting period. Determine totalized quarterly flows (gal/quarter): Total flow that occurred during the quarterly reporting period. Convert to a daily flow average (gal/day): Divide the total quarterly flow (gal/quarter) by the total calendar days (days) of the quarterly reporting period.

## **2. High Strength Pretreatment Systems (PTS) Wastewater Connection, Monitoring, and Reporting Requirements**

- Monitoring and reporting must be completed separately for each individual pretreatment system.
- Samples representative of wastewater quality must be collected from:
  - Influent wastewater sample point located prior to the pretreatment system.
  - Effluent wastewater sample point located after the pretreatment system but before the connection with the centralized wastewater system.
  - Influent and effluent sampling locations shall be established within an approved Wastewater Sampling, Analysis, and Reporting Operation Manual for each individual pretreatment system.
- Effluent samples must be representative of the nature of the monitored discharge prior to flow into the community system.
- Wastewater sampling requirements are listed in Table 3. The required sample type, sampling frequency, reporting requirements, and reporting frequency is listed in Table 3.
- Wastewater samples must be collected and reported if wastewater flows occur at any time during each monitoring period.
- Parameter analytical methods must be in accordance with the CFR, Title 40, Part 136, unless specified or otherwise approved by the Department.
- Wastewater sampling must be completed in compliance with the Wastewater Sampling, Analysis, and Reporting Operation Manual.
  
- Effluent flow rate measurements must be collected from:
  - Effluent flow meter located after the pretreatment system but before connection with the centralized wastewater system. The meter specifications and location shall be established within an approved Wastewater Sampling, Analysis, and Reporting Operation Manual for each individual pretreatment System.
- Effluent flow rate measurements must be representative of the volume of the monitored discharge.
- Effluent flow monitoring and reporting requirements are listed in Table 3.
- Wastewater flow monitoring must be completed in compliance with the Wastewater Sampling, Analysis, and Reporting Operation Manual.
  
- Upon establishment, submittal of electronic discharge monitoring reports (DMRs) are required regardless of the operational status of the facility. The reporting of no discharge is allowed only if discharge or overflow did not occur at any time during the respective monitoring period. Bench records need to support this activity status.

**Table 3: Influent and Effluent Monitoring and Reporting Requirements – Pretreatment Wastewater Systems: (PTS-002)**

Analyte/Measurement	Monitor Location	Units	Sample Type <sup>(1)</sup>	Minimum Sample Frequency	Reporting Requirements <sup>(1)(2)</sup>	Report Frequency
Biochemical Oxygen Demand (BOD <sub>5</sub> )	INF-002 EFF-002	mg/L	Grab	1/Month	Monthly Average	Monthly
Flow Rate, Effluent <sup>(3)</sup>	FM-002	gal/day	Contin- uous	Contin- uous	Monthly Average <sup>(4)</sup>	Monthly
	FM-002	gal/month	Contin- uous	Contin- uous	Monthly Total	Monthly
	FM-002	gal/year	Contin- uous	Contin- uous	Annual Total	Monthly
Oils and Grease [HEM]	INF-002 EFF-002	mg/L	Grab	1/Month	Monthly Average	Monthly
Nitrogen, Nitrite+Nitrate [as N]	INF-002 EFF-002	mg/L	Grab	1/Month	Monthly Average	Monthly
Nitrogen, Total Ammonia [as N]	INF-002 EFF-002	mg/L	Grab	1/Month	Monthly Average	Monthly
Nitrogen, Total Kjeldahl (TKN)[as N]	INF-002 EFF-002	mg/L	Grab	1/Month	Monthly Average	Monthly
Nitrogen, Total [as N] <sup>(5)</sup>	INF-002 EFF-002	mg/L	Calculate	1/Month	Monthly Average	Monthly
		%	Calculate	1/Month	Percent Removal <sup>(6)</sup>	Monthly
		lbs/day <sup>(7)</sup>	Calculate	1/Month	Monthly Average <sup>(8)</sup>	Monthly
Phosphorus, Total [as P]	INF-002 EFF-002	mg/L	Grab	1/Month	Monthly Average	Monthly
Total Suspended Solids (TSS)	INF-002 EFF-002	mg/L	Grab	1/Month	Monthly Average	Monthly

Footnotes:

EFF-002: Description provided in Table 1 of the Fact Sheet document.

INF-002: Description provided in Table 1 of the Fact Sheet document.

FM-002: Description provided in Table 1 of the Fact Sheet document.

If no discharge occurs through out the reporting period, “no discharge” shall be recorded on the wastewater Discharge Monitoring Report (DMR) forms.

Parameter analytical methods shall be in accordance with the 40 CFR Part 136, unless specified above or within a deviation authorized by DEQ.

(1) See definitions in Part V of the permit unless defined within this table or by a permit condition.

(2) Monthly Average: The average of all individual daily concentrations (mg/L) analyzed during the monthly reporting period.

(3) Requires recording device or totalizing meter, must be capable of recording daily and monthly effluent volumes.

(4) Monthly Average Flows: Determine total flows (gal/month) that occurred during the monthly reporting period. Divide total flow by the number of calendar days in the monthly reporting period to get a unit of daily flow.

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

(6) Calculated as  $\{[(\text{Influent TN} - \text{Effluent TN})/\text{Influent TN}] * 100\}$  using the corresponding monthly average values for the reporting period.

(7) Load calculation:  $\text{lbs/day} = \text{concentration (mg/L)} \times \text{flow (gal/day)} \times [8.34 \times 10^{-6}]$ .

(8) Monthly Load Calculation. Determine concentration (mg/L): Use the average of all individual daily concentrations (mg/L) analyzed during the monthly reporting period. Determine totalized monthly flows (gal/month): Total flow that occurred during the monthly reporting period. Convert to a daily flow average (gal/day): Divide the total monthly flow (gal/month) by the total calendar days (days) of the monthly reporting period.

### **3. Ground Water Monitoring and Reporting Requirements**

- Ground Water Monitoring and Reporting is required for monitoring wells: MW-5, MW-6, and MW-7. These wells must be individually monitored at the frequency and with the type of measurement respectively listed in Table 4. Samples must include, but not be limited to, the respective analytes listed in Table 4 for each monitoring well. The reporting requirements and reporting frequencies are listed in Table 4.
- Monitoring and reporting must be completed in accordance with a Ground Water Monitoring, Analysis, and Reporting Operational Manual. The manual shall provide for the consistent identification, development, monitoring, sampling, calculating, recording, and reporting of each monitoring well.
- Monitoring wells must not be sampled until after they are properly purged. The purge volumes and procedures for each well must be determined within the Ground Water Monitoring, Analysis, and Reporting Operational Manual. Monitoring well development records need to be maintained on-site that document the proper development of the wells for each monitoring event.
- The permittee shall document the methodology and equipment used to sample monitoring wells for each event. Self-monitoring records shall be maintained on-site.
- Monitoring must take place even when the facility is nonoperational.
- Analytical methods must be in accordance with CFR Title 40, Part 136, unless specified or otherwise approved by the Department.
- Submittal of electronic discharge monitoring reports (DMRs) are required, regardless of the operational status of the facility or the condition of each individual monitoring well. At no time shall the permittee report "No Discharge" within any monitoring well DMR.
- If any of the monitoring wells are abandoned, destroyed, decommissioned or non-viable; or are no longer able to be sampled due to fluctuations in the ground water table; the permittee shall install (or rehab) a new well to replace the abandoned, destroyed, decommissioned, or non-viable well.
- All temporary piezometers and boreholes shall be properly plugged and abandoned prior to construction of the drainfield.



**Table 4: Ground Water Monitoring and Reporting Requirements**

Analyte/Measurement	Monitor Location	Units	Sample Type <sup>(1)</sup>	Minimum Sampling Frequency	Reporting <sup>(2)</sup> Requirements	Report Frequency
Chloride [as Cl]	MW-5 MW-6 MW-7	mg/L	Grab	1/Month	Quarterly Average	Quarterly
<i>Escherichia coli</i> Bacteria	MW-5 MW-6 MW-7	CFU/100ml	Grab	1/Month	Quarterly Average <sup>(3)</sup>	Quarterly
Nitrogen, Nitrite+Nitrate [as N]	MW-5 MW-6 MW-7	mg/L	Grab	1/Month	Quarterly Average	Quarterly
Nitrogen, Total Ammonia [as N]	MW-5 MW-6 MW-7	mg/L	Grab	1/Month	Quarterly Average	Quarterly
Nitrogen, Total Kjeldahl (TKN)[as N]	MW-5 MW-6 MW-7	mg/L	Grab	1/Month	Quarterly Average	Quarterly
Nitrogen, Total [as N] <sup>(5)</sup>	MW-5 MW-6 MW-7	mg/L	Calculate	1/Month	Quarterly Average	Quarterly
pH	MW-5 MW-6 MW-7	s.u.	Grab or Instantaneous	1/Month	Quarterly Average	Quarterly
Specific Conductivity @ 25°C	MW-5 MW-6 MW-7	µS/cm	Grab or Instantaneous	1/Month	Quarterly Average	Quarterly
Temperature	MW-5 MW-6 MW-7	°C	Instantaneous	1/Month	Quarterly Average	Quarterly
Static Water Level (SWL) <sup>(4)</sup>	MW-5 MW-6 MW-7	ft-bmp	Instantaneous	1/Month	Quarterly Average	Quarterly
Well Depth	MW-5 MW-6 MW-7	ft-bmp	Instantaneous	1/Month	Quarterly Average	Quarterly

Footnotes:

CFU = Colony Forming Units

ft-bmp = feet below measuring point

s.u. = standard units

A description of each monitoring well can be found in Table 1 of the Fact Sheet document.

At no time shall the permittee mark or state “no discharge” on any monitoring well DMR form.

Each monitor well to be individually monitored and sampled for the analyte and measurements respectively listed.

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).

Monitoring for the wells listed above shall commence upon the permit effective date.

Parameter analytical methods shall be in accordance with the 40 CFR Part 136, unless specified above.

Samples must not be collected until after the well casing is properly purged as determined by the DEQ approved Ground Water Monitoring Operational Manual.

Submission of discharge monitoring report forms (DMRs) will be required, regardless of the operational status of the facility or of each individual monitoring well.

(1) See definitions in Part V of the permit unless defined within this table or by a permit condition.

(2) Quarterly Average: The average of all individual daily concentrations (mg/L) analyzed during the quarterly reporting period.

(3) The geometric mean must be reported if more than one sample is taken during a reporting period.

(4) Measuring point (point of reference) for SWL measurements shall be from top of inner casing or as established by the Operational Manual and measured to within 1/100th of one foot.

D. Special Conditions

1. **Ground Water Monitoring, Analysis, and Reporting Operational Manual**

The permittee shall use Best Management Practices (BMPs) in developing SOPs (Standard Operating Procedures) for monitoring and reporting ground water characteristics. The SOP manual must be site-specific and result in monitoring and reporting that is representative of the nature of the shallow ground water bearing zones. The manual must provide for consistent identification, development, monitoring, sampling, calculating, recording, and reporting of the monitoring wells. The manual must provide for guidance on: determining and documenting dry-well occurrences; and determining well viability.

The completion and submittal date of the manual is listed in Table 5. The manual must be reviewed and approved by DEQ prior to implementation. The permittee shall maintain a copy of the manual, monitoring well development records, dry well occurrence records, sampling records, and calibration records at the facility at all times. All subsequent amended manuals must be reported to DEQ.

2. **Monitoring Well Viability**

The permittee shall monitor and collect representative ground water samples from the shallow water bearing zones. If any of the monitoring wells are abandoned, destroyed, decommissioned, or non-viable; or are no longer able to be monitored due to obstructions or fluctuations in the ground water table; the permittee shall rehab the non-viable well or replace with the installation of a new well.

3. **Wastewater Sampling, Analysis, and Reporting Operational Manual – Community System**

The permittee shall use Best Management Practices (BMPs) in developing SOPs (Standard Operating Procedures) for sampling, analyzing, and reporting wastewater characteristics from the community system (CTS). The manual needs to be site-specific and result in monitoring and reporting that is representative of the nature of the wastewater streams. The manual must develop procedures for:

- Equipment calibration.
- Preparing and collecting wastewater influent (INF-001) and effluent (EFF-001) wastewater samples.
- Analyte calculations.
- Recording and reporting wastewater characteristics.
- Recording and reporting wastewater flows.

The completion and submittal date for the manual is listed in Table 5. The manual must be reviewed and approved by DEQ prior to implementation. The permittee shall maintain a copy of the operational manual, sampling, and calibration records at the community facility at all times. All subsequent amended manuals must be reported to DEQ.

#### **4. Pretreatment Wastewater Systems**

Pretreatment wastewater systems are required for any connection that is high-strength. Review and approval by DEQ (under this permit) must be completed before the source is connected to the community system. The system must be operated and maintained long-term to provide for treatment down to residential strength characteristics.

#### **5. Wastewater Sampling, Analysis, and Reporting Operation Manual – Pretreatment Systems**

The permittee shall require all pretreatment systems (PTS) develop SOPs for sampling, analyzing, and reporting wastewater characteristics. Each manual must be site-specific and result in monitoring and reporting that is representative of the nature of the pretreatment wastewater streams prior to blending into the community system. A separate manual must be developed for each pretreatment system. The manual must be used as a guide in:

- Establishing a wastewater treatment system capable of treating down to residential strength levels.
- Establishing influent, effluent, and flow metering structures, equipment, and locations.
- Establishing structures for blending or equalization with the community system.
- Analyte calculations.
- Recording and reporting wastewater characteristics.
- Recording and reporting wastewater flows.

The completion and submittal date for the manual is listed in Table 5. The manual must be reviewed and approved by DEQ prior to implementation. The permittee shall maintain a copy of the operational manual at the community facility at all times. A copy must also be maintained at the pretreatment facility. All subsequent amended manuals must be reported to DEQ.

#### **6. Wastewater Flow Line Diagram**

DEQ must receive an updated wastewater flow line diagram prior to the connection of any pretreatment system. The diagram must include the community and pretreatment systems. The diagram of each pretreatment system must include and support details as documented within the Wastewater Sampling, Analysis, and Reporting Operation Manuals.

<b>Table 5: Compliance Schedule</b>			
<b>Action</b>	<b>Frequency</b>	<b>Completion Date of Action</b>	<b>Reporting Due Date</b>
<b>Develop and implement a Ground Water Monitoring, Analysis, and Reporting Operational Manual.</b>	Single event	<i>Within six months of the effective date of the permit.</i>	<i>Due on or before the 28th day of the month following the completion date.</i>
<b>Develop and implement a Wastewater Sampling, Analysis, and Reporting Operation Manual for the Community Wastewater System.</b>	Single event	<i>Within six months of the effective date of the permit.</i>	<i>Due on or before the 28th day of the month following the completion date.</i>
<b>Develop and implement a Wastewater Sampling, Analysis, and Reporting Operation Manual for each Pretreatment System.</b>	Single event(s)	<i>Prior to the construction of each Pretreatment System.</i>	<i>Prior to the construction of each Pretreatment System.</i>
<b>Waste Water Flow Line Diagram.</b>	Single event(s)	<i>Prior to the construction of each Pretreatment System.</i>	<i>Prior to the construction of each Pretreatment System.</i>

## 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 (CFR), 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. Monitoring reports must be electronically signed and certified in accordance with Part IV.G. "Signatory Requirements" of this permit.

All other reports (e.g. special conditions, compliance actions) must be submitted in accordance to the reporting requirements of Part I of this permit. Unless otherwise approved by DEQ, all 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

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 this 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) 444-5546 or the Office of Disaster and Emergency Services at (406) 324-4777. The following examples are considered serious incidents:
  - a. Any noncompliance which may seriously endanger health or the environment;
  - b. Any unanticipated bypass which exceeds any effluent limitation in the permit (See Part III.G of this permit, "Bypass of Treatment Facilities");
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) 444-5546.
4. Reports shall be submitted to the addresses in Part II.D of this permit, "Reporting of Monitoring Results".

J. Other Noncompliance Reporting

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

K. Inspection and Entry

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

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



### III. COMPLIANCE RESPONSIBILITIES

A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the 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 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 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 (and Monthly) Average”** other than for *E. coli* bacteria, means the arithmetic average of all individual daily discharge measurements during a consecutive 30-day period or calendar month, whichever is applicable (see Daily Discharge). The arithmetic average must not include any individual daily measurements collected on days in which discharge did not occur (e.g. flow measurements). Geometric means must be calculated for the *E. coli* bacteria parameter.
2. **“90-day (and Quarterly) Average”** other than for *E. coli* bacteria, means the arithmetic average of all individual daily discharge measurements during a consecutive 90-day period or calendar quarter, whichever is applicable (see Daily Discharge). The arithmetic average must not include any individual daily measurements collected on days in which discharge did not occur (e.g. flow measurements). Geometric means must be calculated for the *E. coli* bacteria parameter.
3. **“180-day (and Six-Month or Semi-Annual) Average”** other than for *E. coli* bacteria, means the arithmetic average of all individual daily discharge measurements collected during a consecutive 180-day period or calendar half-year, whichever is applicable (see Daily Discharge). The arithmetic average must not include any individual daily measurements collected on days in which discharge did not occur (e.g. flow measurements). Geometric means must be calculated for the *E. coli* bacteria parameter.
4. **"Act"** means the Montana Water Quality Act, Title 75, chapter 5, MCA.
5. **“Annual Average Load”** means the arithmetic mean of all calculated individual daily average loads (lbs/day) recorded during the calendar year, multiplied by 365 (days/year) for a monitored parameter.
6. **“Annual Maximum Limit”** means the maximum allowable discharge of a parameter during a calendar year (or defined 365 day period).
7. **"Best management practices" ("BMPs")** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of state waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

8. **“BOD<sub>5</sub>”** means the five-day measure of the biochemical oxygen demand parameter.
9. **“Bypass”** means the intentional diversion of waste streams from any portion of a treatment facility.
10. **“Composite Sample”** means a sample that consists of two or more discrete aliquots. Composite samples must be flow proportioned. The composite sample must, 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 must 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.
11. **“CFR”** means Code of Federal Regulations.
12. **“CFU”** means Colony Forming Units.
13. **“Continuous”** means a measurement occurring without interruption throughout the operating hours of the facility, except for infrequent shutdowns for maintenance process changes, or other similar activities.
14. **“Daily Discharge”** means the discharge of a parameter (or pollutant) measured during a calendar day (or any 24-hour period that reasonably represents the calendar day for purposes of sampling). For parameters with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the parameter discharged over the day. For parameters with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic average of all measurements (or samples) collected over the day.

15. **“Daily Maximum”** means the highest individual measured daily value occurring in a defined reporting period (see Daily Discharge).
16. **“Daily Maximum Limit”** means the maximum allowable discharge of a parameter for any calendar day (see Daily Discharge).
17. **“DEQ”** means the Montana Department of Environmental Quality.
18. **“Department”** means the Montana Department of Environmental Quality.
19. **“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.
20. **“Grab Sample”** means a sample which is taken from a waste stream on a one-time basis without consideration of flow rate of the effluent or without consideration for time.
21. **“Instantaneous”** means a single reading, observation, or measurement.
22. **“Load Limits”** are mass-based discharge limits expressed in units such as lbs/day.
23. **“Mixing Zone”** means a limited area of a surface water body or ground water bearing zone where initial dilution of a discharge takes place and where certain water quality standards may be exceeded.

24. **“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 design capacity or limitations established under or determined from a permit or approval issued by the Department prior to April 29, 1993.
25. **“RRV”** means Required Reporting Values (DEQ Circular 7).
26. **“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.
27. **“TSS”** means the total suspended solids parameter.
28. **“Total Inorganic Nitrogen (TIN)”** means the arithmetic sum of Nitrate + Nitrite and Ammonia.
29. **“Total Nitrogen (TN)”** means the arithmetic sum of Nitrate + Nitrite and Total Kjeldahl Nitrogen.