

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.*,

Alpine Pacific Utilities, LLC

is authorized to discharge from **Glacier Ranch Subdivision**; Southeast-Southeast ¼, Section 09, Township 29 North, Range 21 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: **TBD**.

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

FOR THE MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

DRAFT

Jon Kenning, Chief
Water Protection Bureau

Issue Date: _____

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I. EFFLUENT LIMITS, MONITORING REQUIREMENTS & OTHER CONDITIONS

A. Description of Discharge Points and Mixing Zones

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

Outfall Description

001 Subsurface discharge structure location:

The discharge structure shall not exceed the footprint of the current drainfield (Fact Sheet, Figure 3).

Latitude: 48.28356°, Longitude: -114.27033°
NENE 1/4 and NWNE 1/4, Section 16, Township 29 North, Range 21 West;
and, SESE 1/4, Section 09, Township 29 North, Range 21 West.
Flathead County

A major modification of this permit is needed to expand the footprint of the current drainfield, or to establish a new discharge structure.

Mixing Zone:

A mixing zone has not been authorized

Treatment Works:

Sequencing batch reactor with extended aeration

B. Effluent Limitations

Upon the effective date of the permit and lasting until the term of the permit; the quality of effluent discharged must, as a minimum, meet the limitations set forth in Table 1. The design capacity of the wastewater system must not exceed 100,000 gallons per day (gpd).

Table 1: Effluent Limits – Outfall 001		
Parameter	Units	Daily Maximum
Nitrogen, Total (as N)	mg/L	0.28
Phosphorus, Total (as P)	mg/L	0.025

C. Influent Monitoring and Reporting Requirements

- Samples representative of influent quality must be collected from:
 - INF-001: Sample port (tee), located between the lift station and the comminutor, prior to the dose tanks.
- Influent samples must be representative of the nature of the monitored discharge.
- Influent sampling requirements are listed in Table 2. The required sample type, sampling frequency, reporting requirements, and reporting frequency is listed in Table 2.
- Total Nitrogen shall be analyzed using a persulfate digestion method, or as otherwise approved by DEQ. The analysis shall be completed by a certified lab capable of meeting the laboratory reporting level of 0.04 mg/l, or as otherwise approved by DEQ.

Total Phosphorus shall be analyzed using Method 365.1, Semi-Automated Colorimetry, or as otherwise approved by DEQ. The analysis shall be completed by a certified lab capable of meeting the laboratory reporting level of 0.005 mg/l, or as otherwise approved by DEQ.

All other parameters must have analytical methods that are in accordance with the Code of Federal Regulations, 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. If no discharge occurs during an individual monitoring period, it shall be stated within the DMR (Outfall 001) that no discharge or overflow occurred.

Table 2: Influent Monitoring and Reporting Requirements – Outfall 001							
Analyte/Measurement/Method	Monitor Location	Units	Sample Type ⁽¹⁾	Minimum Sample Frequency	Reporting Requirements ⁽¹⁾⁽²⁾⁽³⁾	Report Freq	Laboratory Reporting Limit ⁽⁴⁾
Biological Oxygen Demand (BOD ₅)	INF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	-
Count of Daily Samples Collected During Reporting Period	INF-001	-	-	-	Count	Monthly	-
Nitrogen, Nitrite+Nitrate (as N)	INF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.02
Nitrogen, Total Ammonia (as N)	INF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.07
Nitrogen, Total Kjeldahl (TKN)(as N)	INF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.5
Nitrogen, Total (as N) Persulfate Digestion ⁽⁶⁾	INF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.04
		lbs/day ⁽⁸⁾	Calculate	1/Month	Daily Minimum ⁽⁹⁾ Monthly Average ⁽¹⁰⁾ Daily Maximum ⁽¹¹⁾	Monthly	-
Phosphorus, Total (as P) Semi-Automated Colorimetry ⁽⁷⁾	INF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.005
		lbs/day ⁽⁸⁾	Calculate	1/Month	Daily Minimum ⁽⁹⁾ Monthly Average ⁽¹⁰⁾ Daily Maximum ⁽¹¹⁾	Monthly	-
Total Suspended Solids (TSS)	INF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	-

Footnotes:
 Compositing Period: 6 to 24 hours
 CFU = Colony Forming Units
 EFF-001: Description provided in Table 1
 INF-001: Description provided in Table 1
 FM-001: Description provided in Table 1
 If no discharge occurs during the reporting period, "no discharge" shall be recorded on the effluent Discharge Monitoring Report (DMR) report forms.

(1) See definitions in Part V of the permit.
 (2) Daily Minimum: Report lowest measured daily value for the reporting period on Discharge Monitoring Report (DMR).
 (3) Daily Maximum: Report highest measured daily value for the reporting period on Discharge Monitoring Report (DMR).
 (4) The Laboratory Reporting Limit (LRL) is the detection level that must be achieved in reporting effluent monitoring or compliance data to DEQ. The LRL is DEQ's best determination of a standard level of analysis that can be achieved by the majority of the commercial, university, or governmental laboratories. Parameter analytical results shall meet the LRLs listed, or as otherwise approved by DEQ.
 (5) Requires recording device or totalizing meter, must be capable of recording daily effluent volume.
 (6) Total Nitrogen shall be analyzed using a Persulfate Digestion method, or as otherwise approved by DEQ. The analysis shall be completed by a certified lab capable of meeting the laboratory reporting level of 0.04 mg/l, or as otherwise approved by DEQ.
 (7) Total Phosphorus shall be analyzed using Method 365.1, Semi-Automated Colorimetry, or similar. The analysis shall be completed by a certified lab capable of meeting the laboratory reporting level of 0.005 mg/l, or as otherwise approved by DEQ.
 (8) Load calculation: lbs/day = (mg/L) x flow (gpd) x [8.34 x 10⁻⁶].
 (9) Daily Minimum Load calculation: lbs/day = the minimum of all calculated individual daily average loads (lbs/day) recorded during the reporting period.
 (10) Monthly Average Load calculation: lbs/day = the average of all calculated individual daily average loads (lbs/day) recorded during the reporting period.
 (11) Daily Maximum Load calculation: lbs/day = the maximum of all calculated individual daily average loads (lbs/day) recorded during the reporting period.

D. Effluent Monitoring and Reporting Requirements

- Samples representative of effluent quality must be collected from:
 - EFF-001: Drainfield dose tank
- Effluent samples must be representative of the nature of the monitored discharge.
- Effluent sampling requirements are listed in Table 3. The required sample type, sampling frequency, reporting requirements, and reporting frequency is listed in Table 3.
- Total Nitrogen shall be analyzed using a persulfate digestion method, or as otherwise approved by DEQ. The analysis shall be completed by a certified lab capable of meeting the laboratory reporting level of 0.04 mg/l, or as otherwise approved by DEQ.

Total Phosphorus shall be analyzed using Method 365.1, Semi-Automated Colorimetry, or as otherwise approved by DEQ. The analysis shall be completed by a certified lab capable of meeting the laboratory reporting level of 0.005 mg/l, or as otherwise approved by DEQ.

All other parameters must have analytical methods that are in accordance with the Code of Federal Regulations, 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. If no discharge occurs during an individual monitoring period, it shall be stated within the DMR (Outfall 001) that no discharge or overflow occurred.
- Effluent flow rate measurements must be collected from:
 - FM-001: Magnetic Drive Propeller Meter (or similar) located just prior to the sand filter.
- 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.

Table 3: Effluent Monitoring and Reporting Requirements – Outfall 001							
Analyte/Measurement/Method	Monitor Location	Units	Sample Type ⁽¹⁾	Minimum Sample Frequency	Reporting Requirements ⁽¹⁾⁽²⁾⁽³⁾	Report Freq	Laboratory Reporting Limit ⁽⁴⁾
Biological Oxygen Demand (BOD ₅)	EFF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	-
Count of Daily Samples Collected During Reporting Period	EFF-001	-	-	-	Count	Monthly	-
Flow Rate, Effluent ⁽⁵⁾	FM-001	gpd	Continuous	Continuous	Daily Minimum Monthly Average Daily Maximum	Monthly	-
Nitrogen, Nitrite+Nitrate (as N)	EFF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.02
Nitrogen, Total Ammonia (as N)	EFF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.07
Nitrogen, Total Kjeldahl (TKN)(as N)	EFF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.5
Nitrogen, Total (as N) Persulfate Digestion ⁽⁶⁾	EFF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.04
		lbs/day ⁽⁸⁾	Calculate	1/Month	Daily Minimum ⁽⁹⁾ Monthly Average ⁽¹⁰⁾ Daily Maximum ⁽¹¹⁾	Monthly	-
Phosphorus, Total (as P) Semi-Automated Colorimetry ⁽⁷⁾	EFF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.005
		lbs/day ⁽⁸⁾	Calculate	1/Month	Daily Minimum ⁽⁹⁾ Monthly Average ⁽¹⁰⁾ Daily Maximum ⁽¹¹⁾	Monthly	-
Total Suspended Solids (TSS)	EFF-001	mg/L	Composite	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	-

Footnotes:
 Compositing Period: 6 to 24 hours
 CFU = Colony Forming Units
 EFF-001: Description provided in Table 1
 INF-001: Description provided in Table 1
 FM-001: Description provided in Table 1
 If no discharge occurs during the reporting period, "no discharge" shall be recorded on the effluent Discharge Monitoring Report (DMR) report forms.
 (1) See definitions in Part V of the permit.
 (2) Daily Minimum: Report lowest measured daily value for the reporting period on Discharge Monitoring Report (DMR).
 (3) Daily Maximum: Report highest measured daily value for the reporting period on Discharge Monitoring Report (DMR).
 (4) The Laboratory Reporting Limit (LRL) is the detection level that must be achieved in reporting effluent monitoring or compliance data to DEQ. The LRL is DEQ's best determination of a standard level of analysis that can be achieved by the majority of the commercial, university, or governmental laboratories. Parameter analytical results shall meet the LRLs listed, or as otherwise approved by DEQ.
 (5) Requires recording device or totalizing meter, must be capable of recording daily effluent volume.
 (6) Total Nitrogen shall be analyzed using a Persulfate Digestion method, or as otherwise approved by DEQ. The analysis shall be completed by a certified lab capable of meeting the laboratory reporting level of 0.04 mg/l, or as otherwise approved by DEQ.
 (7) Total Phosphorus shall be analyzed using Method 365.1, Semi-Automated Colorimetry, or similar. The analysis shall be completed by a certified lab capable of meeting the laboratory reporting level of 0.005 mg/l, or as otherwise approved by DEQ.
 (8) Load calculation: lbs/day = (mg/L) x flow (gpd) x [8.34 x 10⁻⁶].
 (9) Daily Minimum Load calculation: lbs/day = the minimum of all calculated individual daily average loads (lbs/day) recorded during the reporting period.
 (10) Monthly Average Load calculation: lbs/day = the average of all calculated individual daily average loads (lbs/day) recorded during the reporting period.
 (11) Daily Maximum Load calculation: lbs/day = the maximum of all calculated individual daily average loads (lbs/day) recorded during the reporting period.

D. Special Condition – Monitoring Well Installation

The permittee is required to install a minimum of one (1) monitoring well (MW-1E) that is representative of the ambient nature of the receiving shallow aquifer. Unless otherwise approved by DEQ, the monitoring well(s) must:

- Be constructed to be representative of the top 20 feet of the shallow water table (first saturated water bearing unit);
- Be secured and accessible over the long term;
- Be located hydraulically upgradient of the proposed drainfield; and,
- Be installed within the DEQ preapproved location identified within the Monitoring Well Installation Map (Figure 4 of Fact Sheet document). The well may not be closer than 125 feet or further than 600 feet away from the existing drainfield (Figure 3 of the Fact Sheet document).

The permittee must create a Monitoring Well Installation Plan. The plan must tentatively address the proposed:

- drilling methods,
- well construction design,
- well construction materials,
- drilling locations,
- well development methods.

The plan must be approved by DEQ prior to well installation. The respective action and reporting due dates are provided in Table 5.

A report documenting the installation of the monitoring well is required. The written report documenting monitoring well installation, must include:

- drilling methods used,
- borehole lithologic logs,
- diagram of well construction details,
- water level measuring point details,
- surveyed base location of all monitoring wells,
- surveyed water level measuring point elevation of all monitoring wells,
- depth to the top contact of the first saturated ground water bearing zone,
- well development records,
- depth to static water level (post development).

This information must be included for each respective monitoring well. The monitoring well installation and report due dates are provided in Table 5.

The new monitoring well has been tentatively identified as MW-1E. Monitoring and reporting requirements for this well is provided in Part I.E.

E. Special Condition – Ground Water Monitoring and Reporting Requirements

- Ground water monitoring and reporting is required for monitoring wells: MW-1A, MW-1B, MW-1C, MW-1D, and MW-1E. Monitoring and reporting for MW-1A, MW-1B, MW-1C, and MW-1D will commence on the permit effective date and will last through the term of this permit. Monitoring and reporting for MW-1E will commence on the respective action date listed in Table 5 and will last through the term of this permit. These wells must be individually sampled at the frequency and with the type of measurement respectively listed in Table 4. Samples must include, but not be limited to, the respective parameters listed in Table 4 for each listed monitoring well. The reporting requirements and reporting frequencies are listed in Table 4.
- Total Nitrogen shall be analyzed using a persulfate digestion method, or as otherwise approved by DEQ. The analysis shall be completed by a certified lab capable of meeting the laboratory reporting level of 0.04 mg/l, or as otherwise approved by DEQ.

Total Phosphorus shall be analyzed using Method 365.1, Semi-Automated Colorimetry, or as otherwise approved by DEQ. The analysis shall be completed by a certified lab capable of meeting the laboratory reporting level of 0.005 mg/l, or as otherwise approved by DEQ.

All other parameters must have analytical methods that are in accordance with the Code of Federal Regulations, Title 40, Part 136, unless specified or otherwise approved by the Department.

- 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.
- Submittal of electronic discharge monitoring reports (DMRs) are required, regardless of the operational status of the facility or of each individual monitoring well. At no time shall the permittee mark or state “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(s).

Table 4: Ground Water Monitoring and Reporting Requirements - Separately for each Individual Well
Action Date: Monitoring and Reporting for MW-1A, MW-1B, MW-1C, and MW-1D will commence on the permit effective date.
Action Date: Monitoring and Reporting for MW-1E will commence on the respective action date listed in Table 5.

Analyte/Measurement/Method	Monitor Location ⁽¹⁾	Units	Sample Type ⁽²⁾	Minimum Sampling Frequency	Reporting Requirements ⁽²⁾⁽³⁾⁽⁴⁾⁽⁵⁾	Reporting Frequency	Laboratory Reporting Limit ⁽⁶⁾
Chloride (as Cl)	MW-1A, MW-1B, MW-1C, MW-1D, MW-1E	mg/L	Grab	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	-
Count of Daily Samples Collected During Reporting Period	MW-1A, MW-1B, MW-1C, MW-1D, MW-1E	-	-	-	Count	Monthly	-
<i>Escherichia coli</i> Bacteria	MW-1A, MW-1B, MW-1C, MW-1D, MW-1E	CFU/100ml	Grab	1/Month	Daily Minimum Monthly Average ⁽⁷⁾ Daily Maximum	Monthly	1/100 ml
Nitrogen, Nitrate + Nitrite (as N)	MW-1A, MW-1B, MW-1C, MW-1D, MW-1E	mg/L	Grab	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.02
Nitrogen, Total Ammonia (as N)	MW-1A, MW-1B, MW-1C, MW-1D, MW-1E	mg/L	Grab	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.07
Nitrogen, Total Kjeldahl (TKN)(as N)	MW-1A, MW-1B, MW-1C, MW-1D, MW-1E	mg/L	Grab	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.5
Nitrogen, Total (as N) Persulfate Digestion ⁽⁸⁾	MW-1A, MW-1B, MW-1C, MW-1D, MW-1E	mg/L	Grab	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.04
pH	MW-1A, MW-1B, MW-1C, MW-1D, MW-1E	s.u.	Instantaneous	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	-
Specific Conductivity @ 25°C	MW-1A, MW-1B, MW-1C, MW-1D, MW-1E	µS/cm	Grab or Instantaneous	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	-
Static Water Level (SWL) ⁽⁹⁾	MW-1A, MW-1B, MW-1C, MW-1D, MW-1E	ft-bmp	Instantaneous	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.01
Temperature	MW-1A, MW-1B, MW-1C, MW-1D, MW-1E	°C	Instantaneous	1/Month	Daily Minimum Monthly Average Daily Maximum	Monthly	0.1

Footnotes:
 CFU = Colony Forming Units
 ft-bmp = feet below measuring point
 s.u. = standard units
 At no time shall the permittee mark or state “no discharge” on any monitoring well DMR form.
 Each monitor well to be individually sampled and analyzed for each respective parameter listed above.
 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).
 Submittal of discharge monitoring report forms (DMRs) will be required, regardless of the operational status of the facility or of each individual monitoring well.
 (1) Refer to Table 2 of the Fact Sheet for the existing or proposed location of the monitoring wells.
 (2) See definitions in Part V of the permit.
 (3) Submittal of DMRs will be required, regardless of the installation status of each individual monitoring well. If the monitoring well(s) is not installed for an individual monitoring period, the following shall be stated upon each applicable DMR: “monitoring well has not been installed” (or the respective NODI code as established by DEQ).
 (4) Daily Minimum: Report lowest measured daily value for the reporting period on Discharge Monitoring Report (DMR).
 (5) Daily Maximum: Report highest measured daily value for the reporting period on Discharge Monitoring Report (DMR).
 (6) The Laboratory Reporting Limit (LRL) is the detection level that must be achieved in reporting effluent monitoring or compliance data to DEQ. The LRL is DEQ’s best determination of a standard level of analysis that can be achieved by the majority of the commercial, university, or governmental laboratories. Parameter analytical results shall meet the LRLs listed, or as otherwise approved by DEQ.
 (7) The geometric mean must be reported if more than one sample is taken during a reporting period.
 (8) Total Nitrogen shall be analyzed using a Persulfate Digestion method, or as otherwise approved by DEQ. The analysis shall be completed by a certified lab capable of meeting the laboratory reporting level of 0.04 mg/l, or as otherwise approved by DEQ.
 (9) Measuring point (point of reference) for SWL measurements shall be from top of casing and measured to within 1/100th of one foot.

F. Special Condition – Wastewater Sampling, Analysis, and Reporting Plan

The permittee is required to use best management practices (BMPs) in developing standard operating procedures (SOPs) for sampling and reporting wastewater. The plan needs to be site-specific and result in monitoring and reporting that is representative of the nature and volume of wastewater. The plan will need to provide techniques for consistent identification, monitoring, calibration, sampling, recording, calculating, and reporting. The permittee will need to maintain wastewater sampling records for each sampling event. These records need to document proper composite sampling (representative sample). The plan, along with the wastewater sampling records need to be maintained on-site at all times. The action and reporting dates for the plan are provided in Table 5.

G. Special Condition – Ground Water Sampling, Analysis, and Reporting Plan

The permittee is required to use best management practices (BMPs) in developing standard operating procedures (SOPs) for sampling and reporting of groundwater. The plan needs to be site-specific and result in sampling and reporting that is representative of the nature of groundwater. The plan will need to provide techniques for consistent identification, well development, monitoring, calibration, sampling, recording, calculating, and reporting. The permittee will need to maintain groundwater monitoring records for each sampling event. These records need to document proper monitoring well development for each sampling event. The plan, along with the ground water monitoring records need to be maintained on-site at all times. The action and reporting dates for the plan are provided in Table 5.

H. Compliance Schedule

Table 5: Compliance Schedule			
Action	Freq.	Scheduled Completion Date of Action⁽¹⁾	Scheduled Report Due Date.⁽²⁾
Develop and implement a site-specific Wastewater Sampling, Analysis, and Reporting Plan. ⁽³⁾	Single event	<i>Within six (6) 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>
Develop and implement a site-specific Ground Water Sampling, Analysis, and Reporting Plan. ⁽³⁾	Single event	<i>Within six (6) 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>
Complete a Monitoring Well Installation Plan. ⁽³⁾	Single event	<i>Within six (6) 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>
Complete the installation of the monitoring well(s). ⁽⁴⁾	Single event	<i>Within one (1) year of the effective date of the permit.</i>	<i>Due on or before the 28th day of the month following the completion date.</i>
Commence monitoring and reporting of the newly installed monitoring well(s).	Single event	<i>Within fifteen (15) 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>
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 Section 5. (3) The completed plan (action), in place of a written report, must be received by the DEQ on or before the scheduled report due date. (4) The written report documenting monitoring well installation must include: drilling methods used; borehole lithologic logs; diagram of well construction details; measuring point details; surveyed base location of all monitoring wells; surveyed measuring point elevation of all monitoring wells; depth to the top contact of the first saturated ground water bearing zone; well development records; depth to static water level (post development). This information must be included for each respective monitoring well.			

II. MONITORING, RECORDING AND REPORTING REQUIREMENTS

A. Representative Sampling

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

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 no later than the 28th day of the month following the completion due date, unless otherwise specified. 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 to the Department in either electronic or paper format and be postmarked no later than 14 days following each schedule date unless otherwise specified in this permit.

F. Additional Monitoring by the Permittee

If the permittee monitors any additional parameters or any parameter 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 analysis 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 must 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 the 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; or
 - 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 must 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 must be reported at the time that monitoring reports for Part II.D. of this permit are submitted. The reports must 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, 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 shall 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(9)(a) also provides for administrative penalties not to exceed \$10,000 for each day of violation and up to a maximum not to exceed \$100,000 for any related series of violations. Except as provided in 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, sludge, or other pollutants removed in the course of treatment must be disposed of in such a manner so as to prevent any pollutant from entering any waters of the state or creating a health hazard.

G. Bypass of Treatment Facilities

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts III.G.2. and III.G.3. of this permit.
2. Notice:
 - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the date of the bypass.
 - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.I. of this permit, "Twenty-Four Hour Reporting."
3. Prohibition of bypass:
 - a. Bypass is prohibited, and the Department may take enforcement action against a permittee for a bypass, unless:
 - 1) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - 2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - 3) The permittee submitted notices as required under Part III.G.2. of this permit.
 - b. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in Part III.G.3.a. of this permit.

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 shall 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 must 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; or
 - 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 must be available for public inspection at the offices of the Department and the EPA. Permit applications, permits and effluent data must not be considered confidential and must 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, any invasion of personal rights, or 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, must 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 the 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; or
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. **“BOD₅”** 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.