Idaho Pollutant Discharge Elimination System Draft Discharge Permit No. ID0030031

Idaho Department of Environmental Quality

Water Quality Division
IPDES Program
1410 N. Hilton
Boise, ID 83706

In compliance with the provisions of the State of Idaho Environmental Protection and Health Act Title 39, Chapter 1, “Rules Regulating the Idaho Pollutant Discharge Elimination System Program” (IDAPA 58.01.25) and the Federal Water Pollution Control Act (Clean Water Act) Title 33 United States Code, Section 1251 et seq.

Idaho Wildlife and Water Quality Group, LLC
Mason Creek Activated Wetland Pilot Project

is authorized to discharge in accordance with the permit conditions that follow.

| Facility Location: Caldwell, Idaho 83605 | Receiving Water: Mason Slough |
| Outfall Name: Outfall 001 | Latitude: 43.686490 | Longitude: -116.641785 |

Treatment Process: Activated Wetland Nutrient Removal Pilot Study

NAICS Code: 813312 – Environment, Conservation and Wildlife Organizations

Mary Anne Nelson, PhD
Administrator, Surface and Wastewater Division
Idaho Department of Environmental Quality
# Submission Schedule

The following list contains a summary of some of the items the permittee must complete and/or submit to the Idaho Department of Environmental Quality (DEQ) during the term of this Idaho Pollutant Discharge Elimination System (IPDES) permit. Please refer to the permit sections for specific submittal requirements.

<table>
<thead>
<tr>
<th>Permit Section</th>
<th>Submittal Item</th>
<th>Frequency</th>
<th>Initial Submittal Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.2.7</td>
<td>24-Hour Notice of Noncompliance</td>
<td>As required</td>
<td>—</td>
</tr>
<tr>
<td>2.2.8</td>
<td>5-Day Written Submission for Noncompliance</td>
<td>As required</td>
<td>—</td>
</tr>
<tr>
<td>2.2.5</td>
<td>Notice of New Introduction of Toxic Pollutants</td>
<td>As required</td>
<td>—</td>
</tr>
<tr>
<td>Table 4</td>
<td>Receiving Water Monitoring Station Approval Request</td>
<td>One/permit cycle</td>
<td>January 1, 2022</td>
</tr>
<tr>
<td>2.2.3</td>
<td>Discharge Monitoring Report (DMR)</td>
<td>Monthly</td>
<td>January 20, 2022</td>
</tr>
<tr>
<td>3.3</td>
<td>Annual Report</td>
<td>Annually</td>
<td>February 1, 2023 (then annually following initial submittal)</td>
</tr>
<tr>
<td>4.2.2</td>
<td>Permit Renewal Application</td>
<td>One/permit cycle</td>
<td>May 30, 2026</td>
</tr>
<tr>
<td>4.1.1</td>
<td>Quality Assurance Project Plan (QAPP) Notification</td>
<td>One/permit cycle</td>
<td>June 1, 2022</td>
</tr>
<tr>
<td>4.1.2</td>
<td>Operation and Maintenance (O&amp;M) Manual Notification</td>
<td>One/permit cycle</td>
<td>June 1, 2022</td>
</tr>
</tbody>
</table>
# Table of Contents

Submission Schedule ...................................................................................................................... 2

1 Effluent Limits .......................................................................................................................... 5
   1.1 Discharge Authorization ................................................................................................... 5
   1.2 Effluent Limits and Associated Monitoring Requirements .............................................. 5
      1.2.1 Narrative Limits ....................................................................................................... 6
   1.3 Regulatory Mixing Zone ................................................................................................. 6

2 Monitoring and Reporting Requirements ............................................................................... 6
   2.1 Monitoring Schedules and Requirements ......................................................................... 7
      2.1.1 Intake Monitoring ..................................................................................................... 7
      2.1.2 Effluent Monitoring .................................................................................................. 10
      2.1.3 Receiving Water Monitoring .................................................................................. 13
      2.1.4 Analytical and Sampling Procedures ....................................................................... 15

   2.2 Recording and Reporting Requirements ........................................................................ 16
      2.2.1 Recording of Results ............................................................................................... 16
      2.2.2 Reporting Procedures .............................................................................................. 16
      2.2.3 Discharge Monitoring Report ................................................................................... 18
      2.2.4 Permit Submittals and Schedules ........................................................................... 18
      2.2.5 Changes in Discharge of Toxic Pollutants ............................................................... 18
      2.2.6 Elective Monitoring by Permittee ........................................................................... 19
      2.2.7 24-Hour Notice of Noncompliance Reporting ......................................................... 19
      2.2.8 5-Day Written Submission for Noncompliance ..................................................... 19
      2.2.9 Other Noncompliance Reporting ............................................................................ 20

   2.3 Permit Renewal ............................................................................................................. 20

3 Special Conditions ..................................................................................................................... 20
   3.1 Water Quality Trading ................................................................................................. 20
   3.2 Intake Credit .................................................................................................................... 20
   3.3 Annual Report ................................................................................................................ 20

4 Standard Conditions ............................................................................................................... 21
   4.1 Documents Applicable to all Permits ............................................................................. 21
      4.1.1 Quality Assurance Project Plan ............................................................................. 21
      4.1.2 Operation and Maintenance Manual ....................................................................... 22
   4.2 Conditions Applicable to All Permits ........................................................................... 23
      4.2.1 Duty to Comply ....................................................................................................... 23
      4.2.2 Duty to Reapply ...................................................................................................... 23
      4.2.3 Need to Halt or Reduce Activity Not a Defense ................................................... 23
      4.2.4 Duty to Mitigate ..................................................................................................... 23
      4.2.5 Proper Operation and Maintenance .................................................................... 23
4.2.6 Permit Actions............................................................................................................24
4.2.7 Property Rights ........................................................................................................24
4.2.8 Duty to Provide Information ..................................................................................24
4.2.9 Inspection and Entry ...............................................................................................24
4.2.10 Retention of Records ............................................................................................24
4.2.11 Signatory Requirements .......................................................................................25
4.2.12 Bypass of Treatment Facilities ............................................................................26
4.2.13 Upset Terms and Conditions ...............................................................................26
4.2.14 Penalties for Violations of Permit Conditions ....................................................27
4.2.15 Planned Changes ...................................................................................................27
4.2.16 Anticipated Noncompliance .................................................................................28
4.2.17 Toxic Pollutants ....................................................................................................28
4.2.18 Permit Modification ..............................................................................................28
4.2.19 Omitted/Erroneous Information ..........................................................................28
4.2.20 Availability of Reports ........................................................................................28
4.2.21 Transfers ...............................................................................................................29
4.2.22 State Laws .............................................................................................................29
5 Definitions .......................................................................................................................30
Appendix A. Significant Figures and Place Values .............................................................34

List of Tables

Table 1. Monitoring site locations ......................................................................................6
Table 2. Influent monitoring from Intake 101 at Mason Creek .............................................8
Table 3. Effluent monitoring for Outfall 001 to Mason Slough ............................................11
Table 4. Receiving water monitoring site start date requirements ....................................13
Table 5. Receiving water monitoring requirements for REC1 Mason Slough upstream .....14
1 Effluent Limits

1.1 Discharge Authorization

During the effective period of this permit, the permittee is authorized to discharge pollutants at the permitted locations in Table 1, subject to compliance with the limits shown in Table 2, and all other conditions of this permit. This permit authorizes discharge of only those pollutants resulting from facility processes, waste streams, and operations clearly identified in the permit application process.

This permit authorizes discharge from January 01 to December 31.

Compliance with this permit during its term constitutes compliance, for purposes of enforcement, with Clean Water Act §§ 301, 302, 306, 307, 318, 403, and 405(a) through (b); except for any toxic effluent standards and prohibitions imposed under the Clean Water Act section 307, and standards for sewage sludge use or disposal under the Clean Water Act section 405(d).

The issuance of, or coverage under, this permit does not convey any property rights or any exclusive privilege, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations (including but not limited to Clean Water Act § 311, Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) § 106, 40 CFR 503, IDAPA 58.01.16, and IDAPA 58.01.17). The issuance of, or coverage under, this permit does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity, and does not excuse the permit holder from the obligation to obtain and comply with any other necessary approvals, authorizations, or permits.

1.2 Effluent Limits and Associated Monitoring Requirements

The permittee must operate the facility to limit pollutant discharges from monitoring points described in Table 1. This permit also requires the permittee to monitor discharges at effluent monitoring locations described in Table 1 to verify compliance with the permit limits. The permittee must comply with the monitoring and reporting requirements specified in Table 3 at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.
Table 1. Monitoring site locations.

<table>
<thead>
<tr>
<th>Site Name</th>
<th>Site Location</th>
<th>Site Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intake 101</td>
<td>Intake from Mason Creek</td>
<td>Mason Creek diversion located east of the constructed wetland (43.687700°, -116.638352°)</td>
</tr>
<tr>
<td>Outfall 001</td>
<td>Discharge to Mason Slough</td>
<td>Discharge to Mason Slough, a tributary of the Lower Boise River. Discharge occurs at the northwest corner of constructed wetland project (43.686490°, -116.641785°)</td>
</tr>
<tr>
<td>REC1</td>
<td>Mason Slough upstream of Outfall 001</td>
<td>Receiving water (Mason Slough) monitor upstream of Outfall 001</td>
</tr>
</tbody>
</table>

The permittee must report all effluent data with units of measure and level of precision (and significant figures, when applicable) identified in section 1.2 and report effluent monitoring results on the appropriate discharge monitoring report (DMR) as described in section 2.2.3. For all effluent monitoring, the permittee must use sufficiently sensitive analytical methods that achieve a minimum level (ML) less than the effluent limit unless otherwise specified in Appendix A.

1.2.1 Narrative Limits

The permittee must comply with all narrative criteria at IDAPA 58.01.02.200. The permittee must observe the receiving water one time(s) per week in the vicinity of where the effluent enters the surface water. The permittee must maintain a log of each observation that includes photos when available, date, time, observer, and whether there is presence of floating, suspended or submerged matter; or other indication that the discharge causes a violation of IDAPA 58.01.02.200 narrative criteria. The log must be retained onsite and made available to DEQ upon request.

1.3 Regulatory Mixing Zone

There is no regulatory mixing zone authorized for this discharge.

2 Monitoring and Reporting Requirements

For all intake, effluent, and receiving water monitoring, the permittee must use sufficiently sensitive analytical methods:

- To detect and quantify the pollutant to a level of precision that is at or below the level of the applicable water quality criterion for parameters without effluent limits.

- For parameters that have effluent limits the method used must have an ML equal to or below the required limit. When a specific ML for any parameter is prescribed in permit section 2.1.6 the method used must be able to achieve in ML less than or equal to that which is specified.
• The permittee may request different MLs in writing, subject to DEQ approval.

All samples and measurements collected under this permit must be representative of the waste stream or receiving water at the monitoring point in Table 1. In order to verify that the effluent limits set forth in this permit are not violated, the permittee must collect additional samples at times other than when routine samples are taken at the appropriate outfall whenever any discharge occurs that may reasonably be expected to cause or contribute to a violation that is unlikely to be detected by a routine sample. The permittee must analyze the additional samples for those parameters likely to be present in the discharge and limited in section 1.2 in accordance with section 2.1.4. The permittee must collect such additional samples as soon as any spill, discharge, or bypassed effluent reaches an appropriate monitoring point. The permittee must report all additional monitoring in accordance with section 2.2.

2.1 Monitoring Schedules and Requirements

The permittee must monitor in accordance with the requirements specified in this section.

2.1.1 Intake Monitoring

The permittee must monitor intake at Mason Creek from Table 1 and report results on the appropriate DMR as listed in Table 2.
Table 2. Intake monitoring from Intake 101 at Mason Creek.

<table>
<thead>
<tr>
<th>Item or Parameter</th>
<th>Monitoring Period</th>
<th>Units</th>
<th>Monthly Average</th>
<th>Instantaneous Minimum</th>
<th>Instantaneous Maximum</th>
<th>Daily Maximum</th>
<th>Maximum Daily Average</th>
<th>Quarterly Maximum</th>
<th>Sample Type</th>
<th>Sample Frequency</th>
<th>Reporting Period (DMR Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow</td>
<td>01/01-12/31</td>
<td>mgd</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report&lt;sup&gt;a&lt;/sup&gt;</td>
<td>—</td>
<td>Grab&lt;sup&gt;b&lt;/sup&gt; or Recording</td>
<td>1/week or Continuous&lt;sup&gt;c,d&lt;/sup&gt;</td>
<td>Monthly&lt;sup&gt;e&lt;/sup&gt; (All Months)</td>
</tr>
<tr>
<td>Temperature</td>
<td>01/01-12/31</td>
<td>°C</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab&lt;sup&gt;b&lt;/sup&gt; or Recording</td>
<td>1/week or Continuous&lt;sup&gt;c,d&lt;/sup&gt;</td>
<td>Monthly&lt;sup&gt;e&lt;/sup&gt; (All Months)</td>
</tr>
<tr>
<td>pH</td>
<td>01/01-12/31</td>
<td>Standard units (s.u.)</td>
<td>Report</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1/week</td>
<td>Monthly&lt;sup&gt;e&lt;/sup&gt; (All Months)</td>
</tr>
<tr>
<td>Phosphorus (Total as P)</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1/week</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lb/day</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Calculation&lt;sup&gt;e&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Total Suspended Solids (TSS)</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1/week</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lb/day</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Calculation&lt;sup&gt;e&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Total Copper</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>Grab&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lb/day</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>Calculation&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>Total Lead</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>Grab&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lb/day</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>Calculation&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>Total Mercury</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>Grab&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lb/day</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>Calculation&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>Total Zinc</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>Grab&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lb/day</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>Calculation&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>Hardness, as CaCO&lt;sub&gt;3&lt;/sub&gt;</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>Grab&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>E. coli</td>
<td>01/01-12/31</td>
<td>#/100 mL</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>Grab&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1/quarter</td>
</tr>
<tr>
<td>Chemical Oxygen Demand (COD)</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>Grab&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>
a. The maximum daily average flow should be calculated for each calendar week and reported in DMR’s. The weekly flow measurement would be reported as the maximum daily average until continuous flow measurement is implemented.

b. A grab sample is an individual sample collected over a 15-minute period or less.

c. Continuous flow and temperature monitoring must begin within six months of the effective date of this permit. Until that time, weekly temperature and flow monitoring must be conducted.

d. Continuous means uninterrupted measurement during discharge except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 60 minutes.

e. When the facility does not discharge during a month, it must report No Data Indicator (NODI) code “C” on the monthly DMR.

f. Calculation means figured concurrently with the respective sample, using the following formula: Concentration (in mg/L) X Flow (in mgd) X Conversion Factor (8.34) = lb/day

g. Quarters are January—March, April—June, July—September, and October—December. DMRs are due the 20th day of the month following the quarter.
2.1.2 Effluent Monitoring

All parameters have effluent limits and monitoring requirements in section 1.2. There are no additional effluent monitoring requirements.

Parameters that must be monitored for averaging periods not associated with effluent limits are presented in Table 3. The permittee must monitor effluent at the location specified in Table 1 and report results on the DMR as identified in Table 3.
Table 3. Effluent monitoring for Outfall 001 to Mason Slough.

<table>
<thead>
<tr>
<th>Item or Parameter</th>
<th>Monitoring Period</th>
<th>Units</th>
<th>Monthly Average</th>
<th>Instantaneous Minimum</th>
<th>Instantaneous Maximum</th>
<th>Daily Maximum</th>
<th>Daily Average</th>
<th>Quarterly Maximum</th>
<th>Sample Type</th>
<th>Sample Frequency</th>
<th>Reporting Period (DMR Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow</td>
<td>01/01-12/31</td>
<td>mgd</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report³</td>
<td>—</td>
<td>Grab⁵ or Recording</td>
<td>1/week or Continuous⁶⁷</td>
<td>Monthly⁸ (All Months)</td>
</tr>
<tr>
<td>Temperature</td>
<td>01/01-12/31</td>
<td>°C</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>Grab⁵ or Recording</td>
<td>1/week or Continuous⁶⁷</td>
<td>Monthly⁸ (All Months)</td>
</tr>
<tr>
<td>pH</td>
<td>01/01-12/31</td>
<td></td>
<td>Standard units (s.u.)</td>
<td>Report</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab⁵</td>
<td>1/week</td>
<td>Monthly⁸ (All Months)</td>
</tr>
<tr>
<td>Phosphorus (Total as P)</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab⁵</td>
<td>1/week</td>
<td>Monthly⁸ (All Months)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lb/day</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab⁶</td>
<td>Calculation⁹</td>
<td>1/week</td>
<td>Monthly⁸ (All Months)</td>
</tr>
<tr>
<td>Net TP's % Removal</td>
<td>01/01-12/31</td>
<td>%</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Calculation⁹</td>
<td>1/week</td>
<td>Monthly⁸ (All Months)</td>
</tr>
<tr>
<td>Net TP’s Removal Load</td>
<td>01/01-12/31</td>
<td>lb/day</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Calculation⁹</td>
<td>1/week</td>
<td>Monthly⁸ (All Months)</td>
</tr>
<tr>
<td>Total Suspended Solids (TSS)</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab⁵</td>
<td>1/week</td>
<td>Monthly⁸ (All Months)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lb/day</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Calculation⁹</td>
<td>1/week</td>
<td>Monthly⁸ (All Months)</td>
</tr>
<tr>
<td>Total Copper</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab⁵</td>
<td>1/quarter</td>
<td>Quarterly¹ (January, April, July, October)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lb/day</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Calculation⁹</td>
<td>1/quarter</td>
<td>Quarterly¹ (January, April, July, October)</td>
</tr>
<tr>
<td>Total Lead</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab⁵</td>
<td>1/quarter</td>
<td>Quarterly¹ (January, April, July, October)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lb/day</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Calculation⁹</td>
<td>1/quarter</td>
<td>Quarterly¹ (January, April, July, October)</td>
</tr>
<tr>
<td>Total Mercury</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab⁵</td>
<td>1/quarter</td>
<td>Quarterly¹ (January, April, July, October)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lb/day</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Calculation⁹</td>
<td>1/quarter</td>
<td>Quarterly¹ (January, April, July, October)</td>
</tr>
<tr>
<td>Total Zinc</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab⁵</td>
<td>1/quarter</td>
<td>Quarterly¹ (January, April, July, October)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>lb/day</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Calculation⁹</td>
<td>1/quarter</td>
<td>Quarterly¹ (January, April, July, October)</td>
</tr>
<tr>
<td>Hardness, as CaCO₃</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab⁵</td>
<td>1/quarter</td>
<td>Quarterly¹ (January, April, July, October)</td>
</tr>
<tr>
<td>E. coli</td>
<td>01/01-12/31</td>
<td>#/100 mL</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab⁵</td>
<td>1/quarter</td>
<td>Quarterly¹ (January, April, July, October)</td>
</tr>
<tr>
<td>Item or Parameter</td>
<td>Monitoring Period</td>
<td>Units</td>
<td>Monthly Average</td>
<td>Instantaneous Minimum</td>
<td>Instantaneous Maximum</td>
<td>Daily Maximum</td>
<td>Maximum Daily Average</td>
<td>Quarterly Maximum</td>
<td>Sample Type</td>
<td>Sample Frequency</td>
<td>Reporting Period (DMR Months)</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------</td>
<td>-------</td>
<td>-----------------</td>
<td>-----------------------</td>
<td>-----------------------</td>
<td>--------------</td>
<td>----------------------</td>
<td>------------------</td>
<td>-------------</td>
<td>------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Chemical Oxygen Demand (COD)</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Report</td>
<td>Grab&lt;sup&gt;b&lt;/sup&gt;</td>
<td>1/quarter</td>
<td>Quarterly (January, April, July, October)</td>
</tr>
</tbody>
</table>

a. The maximum daily average flow should be calculated for each calendar week and reported in DMR’s. The weekly flow measurement would be reported as the maximum daily average until continuous flow measurement is implemented.
b. A grab sample is an individual sample collected over a 15-minute period or less.
c. Continuous flow and temperature monitoring must begin within six months of the effective date of this permit. Until that time, weekly flow and temperature monitoring must be conducted.
d. Continuous means uninterrupted measurement during discharge except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 60 minutes.
e. When the facility does not discharge during a month, it must report No Data Indicator (NODI) code “C” on the monthly DMR.
f. Calculation means load in lb/day calculated concurrently with the respective sample, using the following formula: Concentration (in mg/L) X Monthly Average Flow (in mgd) X Conversion Factor (8.34) = lb/day.
g. Net TP means Net Total Phosphorus.
h. Calculation means Net TP % Removal = \( \frac{(Influent \ TP \ (\frac{mg}{L}) - Effluent \ TP \ (\frac{mg}{L}))}{Influent \ TP \ (\frac{mg}{L})} \times 100\% \).
i. Calculation means:Net TP Removal Load \( \left( \frac{lb}{day} \right) = [(TP_i \times Q_i) - (TP_e \times Q_e)] \times Conversion \ Factor \ (8.34), \) where \( Q = \) Weekly Maximum Daily Average Flow in mgd, \( Q_e = \) Weekly Maximum Daily Average Effluent Flow in mgd, \( TP_i = TP \) (Influent) in mg/l, \( TP_e = TP \) (Effluent) in mg/l.
j. Quarters are January—March, April—June, July—September, and October—December. DMR’s are due the 20<sup>th</sup> day of the month following the quarter.
2.1.3 Receiving Water Monitoring

The permittee must conduct receiving water monitoring at the locations and dates in Table 4 for parameters identified for each site in Table 5. Monitoring must begin by the monitoring start dates listed in Table 4. Monitoring must meet the following requirements:

Table 4. Receiving water monitoring site start date requirements.

<table>
<thead>
<tr>
<th>Receiving Water</th>
<th>Location</th>
<th>Location Approval Type</th>
<th>Location Approval Request Due Date</th>
<th>REC1 Site Name</th>
<th>Monitoring Start Date</th>
<th>Monitoring Description</th>
<th>Monitoring Start Date</th>
<th>Monitoring Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mason Slough</td>
<td>Upstream of Outfall 001</td>
<td>Location must be submitted</td>
<td>01/01/2022</td>
<td>Mason Slough</td>
<td>At least by: 06/01/2022</td>
<td>For the duration of the permit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Submit the request for monitoring station location approval through the IPDES E-Permitting System no later than one month after the permit effective date. The request must contain a map, GPS coordinates, photos, and narrative description of the location.
2. Results must be reported on the appropriate DMR as specified in Table 5.
3. A failure to obtain DEQ approval of receiving water monitoring stations does not relieve the permittee of the receiving water monitoring requirements of this permit.
4. To the extent practicable, receiving water sample collection must occur on the same day as effluent sample collection.
5. When flow monitoring is required in Table 5, the flow rate must be measured as near as practicable to the time that other ambient parameters are sampled.
6. Samples must be analyzed for the parameters listed in Table 5.
7. Quality assurance project plans (QAPPs) must address all receiving water monitoring.
8. Samples for metals, pH, ammonia, temperature, dissolved organic carbon, conductivity, and hardness, if applicable, must be collected on the same day (see Table 5).
9. The permittee must submit all receiving water monitoring results for the current permit year for all parameters in the receiving water monitoring report spreadsheet that is uploaded to the IPDES E-Permitting System 14 months after the effective date of the permit and annually thereafter. The file must be in the format of one analytical result per row and include the following information: name and contact information of laboratory, sample identification number, sample location in latitude and longitude (decimal degrees format), method of location determination (e.g., GPS, survey), date and time of sample collection, water quality parameter (or characteristic being measured), analytical result, result unit, detection limit and definition (e.g., method detection limit [MDL]), analytical method, date completed, and any applicable notes.

At the time of permit development, DEQ did not have adequate information to determine whether the effluent causes, has a reasonable potential to cause, or contribute to, a violation of the water quality standards for metals, sediment, and temperature. The permittee must monitor the final effluent and receiving water at the frequency specified in Table 3 and Table 5. DEQ will use the information to determine whether a mixing zone is appropriate and calculate any necessary effluent limits.
Table 5. Receiving water monitoring requirements for REC1 Mason Slough upstream.

<table>
<thead>
<tr>
<th>Item or Parameter</th>
<th>Monitoring Period</th>
<th>Units</th>
<th>Monthly Average</th>
<th>Instantaneous Minimum</th>
<th>Instantaneous Maximum</th>
<th>Daily Maximum</th>
<th>Quarterly Maximum</th>
<th>Maximum Daily Average</th>
<th>Sample Type</th>
<th>Sample Frequency</th>
<th>Reporting Period (DMR Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature</td>
<td>01/01-12/31</td>
<td>°C</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab or Recording</td>
<td>1/week or Continuous</td>
<td>Monthly (All Months)</td>
</tr>
<tr>
<td>pH</td>
<td>01/01-12/31</td>
<td>Standard units (s.u.)</td>
<td>Report</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab</td>
<td>1/week</td>
<td>Monthly (All months)</td>
</tr>
<tr>
<td>Phosphorus (Total as P)</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab</td>
<td>1/week</td>
<td>Monthly (All months)</td>
</tr>
<tr>
<td>Total Suspended Solids (TSS)</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab</td>
<td>1/week</td>
<td>Monthly (All months)</td>
</tr>
<tr>
<td>Hardness, as CaCO₃</td>
<td>01/01-12/31</td>
<td>mg/L</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab</td>
<td>1/quarter</td>
<td>Quarterly (January, April, July, October)</td>
</tr>
<tr>
<td>E. coli</td>
<td>01/01-12/31</td>
<td>#/100 mL</td>
<td>Report</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>Grab</td>
<td>1/quarter</td>
<td>Quarterly (January, April, July, October)</td>
</tr>
</tbody>
</table>

a. A grab sample is an individual sample collected over a 15-minute period or less.
b. Continuous flow and temperature monitoring must begin within six months of the effective date of this permit. Until that time, weekly flow and temperature monitoring must be conducted.
c. Continuous means uninterrupted measurement during discharge except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance. The time interval for the associated data logger must be no greater than 60 minutes.
d. When the facility does not discharge during a month, it may report No Data Indicator (NODI) code “C” on the monthly DMR.
e. Calculation means figured concurrently with the respective sample, using the following formula: Concentration (in mg/L) X Flow (in mgd) X Conversion Factor (8.34) = lb/day.
f. Quarters are January—March, April—June, July—September, and October—December. DMRs are due the 20th day of the month following the quarter.
2.1.3.1 Receiving Water Continuous Monitoring

No later than 6 months after the effective date of the permit, the permittee must collect continuously record temperature data. Data collection must meet the following minimum requirements:

1. Methods for temperature monitoring in the receiving water must be adequately addressed in the QAPP sampling plan (see section 4.1.1).
2. Begin monitoring on or before the specified start listed in Table 4 for the receiving water monitoring site.
3. Recording devices must be set to record at 60-minute intervals or more frequently.
4. Submitted continuous monitoring data must include the following information for both deployment and retrieval:
   a. Date
   b. Time
   c. Device manufacturer ID
   d. Location
   e. Depth
   f. Parameter measured
   g. Any other details that may explain data anomalies
5. DEQ-approved temperature monitoring devices and calibration techniques must be used. DEQ’s Protocol for Placement and Retrieval of Temperature Data Loggers contains protocols for continuous temperature sampling. This document is available online at https://www2.deq.idaho.gov/admin/LEIA/api/document/download/15037

2.1.4 Analytical and Sampling Procedures

Required monitoring must be conducted according to test procedures approved under 40 CFR 136, unless:

- Another method is required under 40 CFR subchapters N or O; or
- This permit requires the use of specific EPA approved method for a particular parameter.

For parameters with effluent limits, the permittee must use methods that can achieve a minimum level (ML) less than the current applicable effluent limit. For parameters that do not have effluent limits or have effluent limits that are less than the most sensitive 40 CFR 136 approved method, and DEQ has not specified a ML in Appendix A for that parameter, the permittee must use sufficiently sensitive methods.

2.1.4.1 Laboratory Quality Assurance and Quality Control

The permittee must develop and implement a QAPP that conforms to the quality assurance and quality control requirements of 40 CFR 136.7. The requirements for a QAPP are in section 4.1.1 of this permit.
If a sample or measurement (analysis) does not meet the QAPP requirements, the permittee must reanalyze the sample. If the original sample cannot be reanalyzed, the permittee must resample and analyze at the earliest possible opportunity. All samples/measurements results not meeting the QAPP requirements must still be maintained by the permittee along with a notation (data qualifier) and explanation of unmet QAPP requirements. The permittee must not use this result in any calculation required by this permit unless authorized by the DEQ.

2.2 Recording and Reporting Requirements

The permittee must record and report information to DEQ as specified in the following subsections.

2.2.1 Recording of Results

For each measurement or sample taken, the permittee must record the following information:

1. The date, exact place, and time of sampling or measurements
2. The name(s) of the individual(s) who performed the sampling or measurements
3. The date(s) analyses were performed
4. The names of the individual(s) who performed the analyses
5. The analytical techniques or methods used
6. The results of all analyses
7. The record of the information collected in 1 - 6 of this section must be maintained and made available to DEQ upon request

2.2.2 Reporting Procedures

1. If the permittee did not discharge wastewater, no data indicator (NODI) code “C” (No Discharge) should be entered for the outfall DMR during a given reporting period. Receiving water monitoring and reporting may be required during months with no effluent discharge.

2. If the permittee did not discharge wastewater for all days of a reporting period:
   a. Calculate values using the actual number of samples collected and include a comment on the DMR indicating the shortened discharge time and sample results obtained.
   b. When the days with discharge are insufficient to calculate a geometric mean for E. coli according to IDAPA 58.01.02.251, the permittee should enter the NODI Code “F” (Insufficient Flow for Sampling) and include collected sample values in a comment on the reporting period DMR.

3. The permittee must report, at least, the same level of precision (and significant figures, when applicable) as the permit limit for a given parameter. Level of precision of a permit limit refers to the place value of the last significant digit in the permit limit for a given parameter. Regardless of the rounding conventions used by the permittee, the permittee must use the conventions consistently.

4. To calculate average pollutant concentrations, assign zero for each individual lab result that is less than the MDL, and use the numeric value of the MDL for each individual lab
result that is between the MDL and the ML. When concentration data are equal to or greater than the ML, use the laboratory reported value to calculate the average pollutant concentration. The resulting average value must be compared to the permit limit in assessing compliance.

5. To calculate the geometric mean pollutant concentration when an individual result is reported as:
   a. ‘< {numeric value}’, use the {numeric value} to calculate the geometric mean concentration. On the DMR, the permittee must report the geometric mean as ‘< {calculated geometric mean}’.
   b. ‘> {numeric value}’, use the {numeric value} to calculate the geometric mean concentration. On the DMR, the permittee must report the geometric mean as ‘> {calculated geometric mean}’.

6. For reporting on the DMR for a single sample or average concentration, if a value is less than the MDL, the permittee must report “< {numeric value of the MDL}.” If a value is less than the ML but greater than the MDL, the permittee must report “< {numeric value of the ML}.” If a value is equal to or greater than the ML, report and use the actual value. For example, if the MDL is 1.0 µg/L and the result is ND (not detected), report “<1.0 µg/L” on the DMR.

7. The permittee must calculate mass loads on each day the parameter is monitored using the following equation:

\[
Flow \ (mgd) \times Concentration \ (\frac{mg}{L}) \times 8.34 \left( \frac{lb \times L}{mg \times MG} \right) = lb \ per \ day
\]

Calculating and reporting mass loads must consider the following:
   a. When concentration data are greater than or equal to the MDL but less than the ML: Use the ML to calculate the mass load, then report as less than (<) the calculated mass load. For example, if flow is 2 mgd and the reported sample result is <0.0050 mg/L (<5.0 µg/L), for mass load on the DMR: 2 mgd * 0.0050 mg/L * 8.34 (conversion factor) = 0.0834 lb/day, round to 0.08 lb/day, and report “<0.08 lb/day.”
   b. When concentration data are below the MDL: Use the MDL to calculate the mass load, then report the mass load as less than the calculated mass load. For example, if flow is 2 mgd and the reported sample result is ND at 0.0010 mg/L (1.0 µg/L), for mass load on the DMR: 2 mgd * 0.0010 mg/L * 8.34 (conversion factor) = 0.01668 lb/day, round off to 0.02 lb/day, and report to “<0.02 lb/day.”
   c. To report a “daily maximum” load, use the day’s parameter concentration and the corresponding day’s average flow in the equation above. Compare each day’s calculation and report the maximum of the daily loads for the month. The maximum daily load reported may not necessarily occur on the same day as the maximum daily parameter concentration.
   d. To report a “monthly average” load, use the average of all flow data and the average of all concentration data in the equation above.

8. To calculate monthly averages, add all individual lab results or calculated mass loadings, adjusted as necessary per section 2.2.2, item 4 or 6, for the entire calendar month being reported and divide by the number of analytical results.
9. To calculate weekly averages, add all individual results for each week (Sunday-Saturday per 2.2.2 item 3 or item 6) and divide by the number of samples in the calendar week. Partial weeks at the end of a calendar month (one to six days) should be included in the following month’s weekly average calculation. Assess the resulting averages and report the maximum value for the reporting period.

10. The reported minimum daily value on the DMR is the smallest individual result for the reporting period.

11. The reported maximum daily value on the DMR is the largest individual result for the reporting period.

12. The mean weekly maximum temperature (MWMT) is the mean of the daily maximum temperatures measured over a period of seven consecutive days (Sunday-Saturday). The reported value on the DMR is the maximum of these calculated seven-day values for the reporting period.

2.2.3 Discharge Monitoring Report

NetDMR Submittal—The permittee must submit intake, effluent, and receiving water monitoring data electronically using NetDMR, an EPA web-based tool that allows permittees to electronically submit DMRs. All other reports must be submitted electronically to DEQ through the IPDES E-Permitting System.

Monitoring data must be submitted electronically using NetDMR no later than the 20th of the month following the completed reporting period. All other reports required under this permit must be submitted as legible electronic documents to DEQ’s IPDES E-Permitting System. The permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of section 4.2.11.

2.2.4 Permit Submittals and Schedules

The permittee must use the IPDES E-Permitting System (unless otherwise specified in the permit) to submit all other written reports by the date specified in the permit.

2.2.5 Changes in Discharge of Toxic Pollutants

The permittee must notify DEQ as soon as it knows, or has reason to believe:

10. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

   a. One hundred micrograms per liter (100 µg/L);

   b. Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile;

   c. Five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and 2- methyl-4,6-dinitrophenol;

   d. One milligram per liter (1 mg/L) for antimony;
e. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with IDAPA 58.01.25.105.07; or

f. The level established by DEQ in accordance with IDAPA 58.01.25.302.08.

11. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit if that discharge will exceed the highest of the following notification levels:
   a. Five hundred micrograms per liter (500 µg/L);
   b. One milligram per liter (1 mg/L) for antimony;
   c. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with IDAPA 58.01.25.105.07; or
   d. The level established by DEQ in accordance with IDAPA 58.01.25.302.08.

The permittee must submit the notification to DEQ using the IPDES E-Permitting System.

2.2.6 Elective Monitoring by Permittee

If the permittee monitors any pollutant more frequently than required by this permit, using test procedures approved under 40 CFR 136, or as specified in this permit, the permittee must include the results of this monitoring in the calculation and reporting of the data submitted in the DMR. If requested by DEQ, the permittee must submit results of any sampling, regardless of the parameter monitored or test method used.

2.2.7 24-Hour Notice of Noncompliance Reporting

The permittee must report the following occurrences of noncompliance by telephone within 24 hours of the time the permittee becomes aware of the circumstances:
   1. Any noncompliance which may endanger public health or the environment;
   2. Any unanticipated bypass which exceeds any permit effluent limit;
   3. Any upset which exceeds any permit effluent limit; or
   4. Any violation of a maximum daily effluent limit for pollutants identified in Section 1.2.

The permittee must report these occurrences to DEQ at 1-833-IPDES24 (473-3724) or speak directly with the regional IPDES compliance officer.

Additionally, for any industrial wastewater overflow, whether process or non-process wastewater, that discharges to a municipal separate storm sewer system (MS4), the permittee must notify the appropriate MS4 owner or operator.

2.2.8 5-Day Written Submission for Noncompliance

For any event requiring 24-hour notification as specified in Section 2.2.7, the permittee must provide a written submission within 5 days of the time the permittee becomes aware of the event. Computation of the 5 day period must comply with the computation of time in IDAPA 58.01.25.050. The submission must contain:
1. A description of the noncompliance and its cause
2. The period of noncompliance, including exact dates and times
3. The estimated time noncompliance is expected to continue if it has not been corrected
4. Steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance

Five-day written reports must be submitted through the IPDES E-Permitting System.

2.2.9 Other Noncompliance Reporting

The permittee must report all instances of noncompliance not required to be reported under 2.2.7 or 2.2.8 concurrently with the DMR submittal. The permittee must immediately take action to stop, contain, and clean up unauthorized discharges or otherwise stop the noncompliance and correct the problem.

2.3 Permit Renewal

The permittee must submit a completed permit renewal application through the IPDES E-Permitting System as required in section 4.2.2 at least 240 days before expiration, if the permittee wishes to renew this permit.

If the permittee becomes aware that they failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to DEQ, the permittee must submit the correct facts or information promptly as required in IDAPA 58.01.25.300.12.h.

3 Special Conditions

3.1 Water Quality Trading

Pollutant trading is recognized in IDAPA 58.01.02.055.06 and described in DEQ’s Water Quality Trading Guidance (DEQ, 2016)\(^1\). Although the permittee is collecting data for a future water quality trading project, a water quality trading framework must be approved before water quality trading can be authorized.

3.2 Intake Credit

In accordance with IDAPA 58.01.25.303.07, intake credits are not authorized.

3.3 Annual Report

The permittee must submit annual reports containing additional monitor data from the intake, effluent, and receiving water not submitted with DMRs; a project summary; and any additional

---

data to be considered for future activated wetland projects with the substrates tested in this pilot project. All analytical data must be acquired in accordance with the permittee’s QAPP (see section 4.1.1).

The permittee must submit an annual report by 14 months after the effective date of this permit and annually thereafter through the IPDES E-Permitting System.

4 Standard Conditions

4.1 Documents Applicable to all Permits

4.1.1 Quality Assurance Project Plan

The permittee must develop a Quality Assurance Project Plan (QAPP) for all monitoring required by this permit. The permittee must submit the QAPP Notification (upload signature page) to DEQ through the IPDES E-Permitting System that the plan has been developed and implemented by 6 months from the effective date of this permit. Any existing QAPPs may be modified for compliance with this section.

1. The QAPP must be designed to assist in planning for the collection and analysis of intake, effluent, and receiving water samples in support of the permit and in explaining data anomalies when they occur.

2. Throughout all sample collection and analysis procedures, the permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in *EPA Requirements for Quality Assurance Project Plans* (EPA/QA/R-5) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5). The QAPP must be prepared in the format that is specified in these documents.

3. At a minimum, the QAPP must include the following:
   a. Details on the number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantitation limits for each target compound, type, and number of quality assurance field samples (e.g., blanks, spikes, etc.), precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.
   b. Map(s) indicating the location of each sampling point.
   c. Qualification and training of personnel (appropriately licensed operators).
   d. Name(s), address(es) and telephone number(s) of the laboratories used by or proposed to be used by the permittee.

4. Any changes to the monitoring or laboratory operations must be concurrently reflected within the QAPP.

5. Copies of the QAPP must be retained on site and made available to DEQ upon request.
4.1.2 Operation and Maintenance Manual

The permittee must prepare or update the operation and maintenance (O&M) manual to describe the processes and procedures that will be taken to ensure proper operation and regularly scheduled maintenance of all treatment processes at the facility.

A. Operation and Maintenance (O&M) manual components:

1. A detailed operation and maintenance manual must be prepared for an industrial facility that includes mechanical components. The purpose of the manual is to present technical guidance and regulatory requirements to the operator to enhance operation under both normal and emergency conditions.

2. The operation and maintenance manual shall include the following topics:
   a. The names and phone numbers of the responsible individuals.
   b. A description of facility type, flow pattern, operation, and efficiency expected.
   c. The principal design criteria.
   d. A process description of each facility unit that includes function, relationship to other facility units, and schematic diagrams.
   e. An explanation of the operational objectives for the various wastewater parameters, such as sludge age, settleability, etc.
   f. A discussion of the detailed operation of each unit and a description of various controls, recommended settings, fail-safe features, etc.
   g. A discussion of how the facilities are to be operated during anticipated startups and shutdowns, maintenance procedures, and less than design loading conditions, to maintain efficient treatment.
   h. A section on laboratory procedures that includes sampling techniques, monitoring requirements, and sample analysis. This includes using devices and equipment as directed by the manufacturer and non-expired reagents.
   i. Recordkeeping procedures and sample forms to be used.
   j. A maintenance schedule that incorporates manufacturer's recommendations, preventative maintenance and housekeeping schedules, and special tools and equipment usage. This includes establishing a calibration frequency for each device or instrument that conforms to the frequency recommended by the manufacturer. Flow-monitoring devices should be calibrated according to manufacturer’s specification or at least annually.
   k. A section on safety.
   l. A section that contains the spare parts inventory, address of local suppliers, equipment warranties, and appropriate equipment catalogues.
   m. Emergency plans and procedures.

B. O&M manual submittal requirements:

In addition to the requirements specified in section 4.2.5, the permittee must submit an Operation and Maintenance (O&M) manual notification to DEQ by 6 months from the effective date of this permit through the IPDES E-Permitting System that an O&M manual for the current industrial facility has been developed and implemented. The manual must be retained on site and made available to DEQ upon request. Any changes occurring in the daily operation of the facility’s process or non-process wastewater must be reflected within the O&M manual.
4.2 Conditions Applicable to All Permits

The following conditions apply to all IPDES permits. 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 established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act.

4.2.1 Duty to Comply

The permittee must comply with all permit requirements. Any permit noncompliance constitutes a violation of Idaho law, the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

4.2.2 Duty to Reapply

If the permittee intends to continue an activity regulated by this permit after the expiration date, the permittee must apply for a new permit by the date below. In accordance with IDAPA 58.01.25, and unless DEQ authorizes the permittee to submit the application at a later date, the permittee must submit a new, complete application on or before 240 days before the permit expiration date. If the permittee complies with the application date requirements of IDAPA 58.01.25.105, and a permit is not issued prior to the permit’s expiration date, the permit shall remain in force as stipulated in IDAPA 58.01.25.101.02.

4.2.3 Need to Halt or Reduce Activity Not a Defense

The permittee cannot assert as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this permit.

4.2.4 Duty to Mitigate

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

4.2.5 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) that are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance (O&M) also includes adequate laboratory controls and appropriate quality assurance procedures. The O&M manual required in section 4.1.2 describes how the facility will ensure proper operation and maintenance. The permittee must operate backup or auxiliary facilities or similar systems that are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
4.2.6 Permit Actions

This permit may be modified, revoked, and reissued or terminated for cause as specified in IDAPA 58.01.25.201 and 58.01.25.203. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or notification of planned changes or anticipated noncompliance does not stay any permit condition.

4.2.7 Property Rights

The issuance of, or coverage under, an IPDES permit does not convey any property rights or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local laws or regulations. The issuance of, or coverage under, an IPDES permit does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity, and does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

4.2.8 Duty to Provide Information

The permittee must furnish to DEQ, within the time specified in the request, any information that DEQ may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee must also furnish to DEQ, upon request, copies of records this permit requires.

4.2.9 Inspection and Entry

Pursuant to Idaho Code §39-108, the permittee shall allow DEQ’s compliance, inspection, and enforcement (CIE) personnel, or authorized representative (including an authorized contractor acting as a representative of DEQ), 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 the 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
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise required by the Clean Water Act, any substances or parameters at any location.

4.2.10 Retention of Records

The permittee must retain records of all monitoring information, including all calibration and maintenance records, all original strip chart recordings for continuous monitoring instrumentation, electronic data files for continuous monitoring instruments, copies of all reports required by this permit, copies of DMRs, a copy of the IPDES permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. The permittee's sewage sludge use and disposal
activities shall be retained for a period of at least five (5) years or longer as required by 40 CFR 503. The retention period may be extended at DEQ’s request at any time.

### 4.2.11 Signatory Requirements

All applications, reports, or information submitted to DEQ must be signed and certified as follows:

1. All permit applications must be signed as follows:
   a. For a corporation, by a responsible corporate officer as specified in IDAPA 58.01.25.090.
   b. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively.
   c. For a municipality, or other public agency, by either a principal executive officer or ranking elected official

2. Any reports or information required by this permit, a notice of intent, monitoring and reporting provisions, and any other information requested by DEQ must be signed by a person described in item 1 or by a duly authorized representative of that person. A person is a duly authorized representative only if the following is true:
   a. The authorization is made in writing by a person described in item 1 above;
   b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company; and
   c. The written authorization is submitted to DEQ.

3. Changes to authorization If an authorization is no longer accurate due to a change in staffing or personnel for the overall operation of the facility, a new authorization satisfying the requirements of IDAPA 58.01.25.090.01 must be submitted to DEQ before or together with any report, information, or application to be signed by an authorized representative.

4. Certification. Any person signing a document under this section must 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.

5. The permittee must ensure that any electronic submission of any report or information required by this permit, notice of intent, monitoring and reporting provisions, and information requested by DEQ satisfies all of the relevant requirements of 40 CFR 3 (Cross-Media Electronic Reporting) and 40 CFR 127 (NPDES Electronic Reporting Requirements)
4.2.12 Bypass of Treatment Facilities

Bypasses are prohibited. DEQ 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. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that 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;

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 backup 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 sections 2.2.7 and 2.2.8 of this permit if the bypass was unanticipated.

If the permittee knows in advance of the need for a bypass, it must submit a prior written anticipated bypass notification through the IPDES E-Permitting System, if possible at least 10 days before the date of the bypass. DEQ may approve an anticipated bypass, after considering its adverse effects, if the director determines that it will meet the conditions in this permit.

A bypass that does not cause effluent limits to be exceeded is allowed to occur and is not subject to the notice requirements in section 2.2.7 and 2.2.8, but only if it also is for essential maintenance to assure efficient operation.

4.2.13 Upset Terms and Conditions

An upset is an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

1. Effect of an upset -- An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limits if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence the following:
   a. An upset occurred and the cause(s) of the upset;
   b. The permitted facility was at the time being properly operated;
   c. The permittee submitted notice of the upset as required under section 2.2.7 and 2.2.8.
   d. The permittee timely complied with any remedial measures required under section 4.2.4.
2. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

3. Burden of proof—In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

4.2.14 Penalties for Violations of Permit Conditions

If the permittee violates any permit condition, filing or reporting requirement, duty to allow or carry out inspections, entry, or monitoring requirements, or any other provision in this permit the permittee is subject to administrative, civil or criminal enforcement.

Pursuant to Idaho Code §39-175E and §39-108, any person who violates any rule, permit or order related to the IPDES program shall be liable for a civil penalty not more than $10,000 per violation or $5,000 for each day of a continuing violation, whichever is greater.

Pursuant to Idaho Code §39-175E, §39-108 and §39-117, any person who willfully or negligently violates any IPDES standard or limit, permit condition or filing requirement shall be guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not more than $10,000 per violation or for each day of a continuing violation.

Pursuant to Idaho Code §39-175E, §39-108 and §39-117, any person who knowingly makes any false statement, representation or certification in any IPDES form, in any notice or report required by an IPDES permit, or who knowingly renders inaccurate any monitoring device or method required to be maintained shall be guilty of a misdemeanor and upon conviction thereof shall be punished by a fine of not more than $5,000 per violation or for each day of a continuing violation.

Pursuant to Idaho Code §18-113, a misdemeanor violation of the IPDES program requirements as set forth in §39-117, is punishable by imprisonment in a county jail not exceeding 6 months.

In addition to civil penalties as described above, pursuant to Idaho Code §39-175E and §39-108, any person who has been determined to have violated the provision of the rules, permits, or orders relating to the IPDES program shall be liable for any expense incurred by DEQ in enforcing the program requirements, or in enforcing or terminating any nuisance, source of environmental degradation, cause of sickness or health hazard.

4.2.15 Planned Changes

The permittee must give written notice to DEQ through the IPDES E-Permitting System as soon as possible of any planned physical alterations or additions to the permitted facility whenever any of the following occurs:

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in IDAPA 58.01.25.101 and 58.01.25.120.

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limits in this permit.
3. The alteration or addition results in a significant change in the permittee’s sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application site or sludge management plan.

4.2.16 Anticipated Noncompliance

The permittee must give written advance notice to DEQ through the IPDES E-Permitting System of any planned changes in the permitted facility or activity that may result in noncompliance with this permit.

4.2.17 Toxic Pollutants

The permittee must comply with effluent standards or prohibitions established under Clean Water Act Section 307(a) for toxic pollutants and with standards for sewage sludge use or disposal established under Clean Water Act Section 405(d), IDAPA 58.01.25.380, and IDAPA 58.01.16.650 within the time provided in the regulations that establish those standards or prohibitions, or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

4.2.18 Permit Modification

This permit may be modified either at the request of any interested person, including the permittee, or by DEQ’s initiative for reasons specified in IDAPA 58.01.25.201.02. Only those conditions being modified shall be reopened when a draft permit is prepared (IDAPA 58.01.25.201.01). The request for permit modification or a notification of planned changes to the permit does not stay any permit condition (IDAPA 58.01.25.300.06).

4.2.19 Omitted/Erroneous Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or that it submitted incorrect information in a permit application or any report to DEQ, it must promptly submit the omitted facts or corrected information in writing.

4.2.20 Availability of Reports

In accordance with IDAPA 58.01.21, “Rules Governing the Protection and Disclosure of Records in the Possession of the Department of Environmental Quality,” information submitted to DEQ pursuant to this permit may be claimed as confidential by the permittee. In accordance with IDAPA 58.01.25.002, permit applications, permits, and effluent data are not considered confidential. Any confidentiality claim must be asserted at the time of submission by stamping the words “trade secret,” “proprietary,” or “confidential” on each page containing such information. If no claim is made at the time of submission, DEQ may make the information available to the public without further notice to the permittee. If a claim is asserted, the information will be treated in accordance with the procedures in IDAPA 58.01.21.
4.2.21 Transfers

This permit is not transferable to any person except as specified in IDAPA 58.01.25.202. DEQ may require modification, or revocation and reissuance of this permit to change the name of the permittee, and may incorporate such other requirements as may be necessary under IDAPA 58.01.25.202.

4.2.22 State Laws

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 established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the Clean Water Act. This includes, but is not limited to, IDAPA 58.01.16 and 58.01.17.
## 5 Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-hour composite sample</td>
<td>A combination of discrete sample aliquots of at least 100 milliliters, collected over periodic intervals from the same location, during the operating hours of a facility over an 8 hour period. The permit may specify the number of aliquots and/or the time between aliquots that the facility must composite. Samples may be acquired using an auto-sampler or directly collected from the sampling location by an operator. Composite of samples can be based on flow or time.</td>
</tr>
<tr>
<td>24-hour composite sample</td>
<td>A combination of discreet sample aliquots of at least 100 milliliters, collected over periodic intervals from the same location over a 24-hour period. The composite may be flow or time proportional. The sample aliquots must be collected and stored in accordance with 40 CFR 136.</td>
</tr>
<tr>
<td>acute toxic unit (TUₐ)</td>
<td>A measure of acute toxicity. TUₐ is the reciprocal of the effluent concentration that causes 50% of the organisms to die by the end on the acute exposure period (i.e., 100/LC₅₀).</td>
</tr>
<tr>
<td>aliquot</td>
<td>A sample taken as a portion of a larger whole sample for chemical analysis.</td>
</tr>
<tr>
<td>annual average</td>
<td>The annual average is the sum of all individual data points collected over a calendar year, divided by the number of data points.</td>
</tr>
<tr>
<td>best management practices (BMPs)</td>
<td>Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. 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 areas.</td>
</tr>
<tr>
<td>biosolids</td>
<td>Organic materials resulting from the treatment of domestic sewage in a treatment facility.</td>
</tr>
<tr>
<td>bypass</td>
<td>The intentional diversion of wastewater from any portion of a treatment facility.</td>
</tr>
<tr>
<td>chronic toxic unit (TUₐ)</td>
<td>A measure of chronic toxicity. TUₐ is the reciprocal of the effluent concentration that causes no observable effect on the test organisms by the end of the chronic exposure period (i.e., 100/&quot;NOEC&quot;).</td>
</tr>
<tr>
<td>composite sample</td>
<td>A sample derived from two or more discrete aliquots (samples) collected at equal time intervals or collected proportional to the flow rate over the compositing period. See also “24-hour composite sample” and “8-hour composite sample”.</td>
</tr>
<tr>
<td>daily discharge</td>
<td>The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limits expressed in units of mass, the “daily discharge” is calculated as the total mass of the pollutant discharged over the day. For pollutants with limits expressed in other units of measurement, the “daily discharge” is calculated as the average measurement of the pollutant over the day.</td>
</tr>
<tr>
<td>daily maximum</td>
<td>The largest daily value recorded or calculated over the monitoring period, alternatively, the limit established above which an excursion occurs.</td>
</tr>
<tr>
<td>Idaho Department of Environmental Quality (DEQ)</td>
<td>The entity responsible for implementing the Idaho Pollutant Discharge Elimination System program.</td>
</tr>
<tr>
<td>director</td>
<td>The director of the Idaho Department of Environmental Quality or the...</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>authorized agent.</td>
<td></td>
</tr>
<tr>
<td>discharge monitoring report (DMR)</td>
<td>The facility or activity report containing monitoring and discharge quality and quantity information and data required to be submitted periodically, as defined in the discharge permit.</td>
</tr>
<tr>
<td>DMR Month</td>
<td>The final month of a completed monitoring period.</td>
</tr>
<tr>
<td>United States Environmental Protection Agency (EPA)</td>
<td>The Agency responsible for implementation of the Clean Water Act (CWA) and oversight of state NPDES programs.</td>
</tr>
<tr>
<td>geometric mean</td>
<td>The n&lt;sup&gt;th&lt;/sup&gt; root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.</td>
</tr>
<tr>
<td>grab sample</td>
<td>An individual sample collected over a period of time not exceeding 15 minutes.</td>
</tr>
<tr>
<td>Idaho Pollutant Discharge Elimination System (IPDES)</td>
<td>The Idaho program responsible for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and enforcing pretreatment requirements, under IDAPA 58.01.25 and the Clean Water Act Sections 307, 402, 318, and 405.</td>
</tr>
<tr>
<td>inhibition concentration (IC)</td>
<td>A point estimate of the toxicant concentration that causes a given percent reduction (p) in a nonquantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., interpolation method).</td>
</tr>
<tr>
<td>indirect discharge</td>
<td>The introduction of pollutants into a POTW from any nondomestic source regulated under Section 307(b), (c) or (d) of the Clean Water Act.</td>
</tr>
<tr>
<td>indirect discharger</td>
<td>A nondomestic discharger introducing pollutants to a publicly or privately owned treatment works.</td>
</tr>
<tr>
<td>industrial user (IU)</td>
<td>A source of “indirect discharge” to a publicly or privately owned treatment works.</td>
</tr>
<tr>
<td>instantaneous maximum</td>
<td>The maximum allowable concentration or other measure of a pollutant determined from the analysis of any discrete or composite sample collected, independent of the flow rate and the duration of the sampling event.</td>
</tr>
<tr>
<td>instantaneous minimum</td>
<td>The minimum allowable concentration or other measure of a pollutant determined from the analysis of any discrete or composite sample collected, independent of the flow rate and the duration of the sampling event.</td>
</tr>
<tr>
<td>LC&lt;sub&gt;50&lt;/sub&gt;</td>
<td>The concentration of toxicant (e.g., effluent) which is lethal to 50 percent of the test organisms exposed in the time period prescribed by the test.</td>
</tr>
<tr>
<td>maximum daily average</td>
<td>The maximum of the daily average for the reporting period.</td>
</tr>
<tr>
<td>maximum weekly maximum temperature (MWMT)</td>
<td>The reported MWMT is the single highest weekly maximum temperature (WMT) that occurs during a given year or reporting period of interest. The WMT is the mean of daily maximum temperatures measured over a consecutive seven (7) day period ending on the day of calculation.</td>
</tr>
<tr>
<td>method detection limit (MDL)</td>
<td>The minimum concentration of a substance (analyte) that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.</td>
</tr>
<tr>
<td>minimum level (ML)</td>
<td>Either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL).</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>whichever is higher. Minimum levels may be obtained in several ways:</td>
<td>They may be published by method; they may be the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a factor of 3.</td>
</tr>
<tr>
<td>monthly average (average monthly) effluent limit (AML)</td>
<td>Monthly average effluent limit is the highest allowable average of “daily discharges” over a calendar month, calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month.</td>
</tr>
<tr>
<td>monthly total</td>
<td>The total of all waste accepted in a calendar month.</td>
</tr>
<tr>
<td>National Pollutant Discharge Elimination System (NPDES)</td>
<td>The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Clean Water Act.</td>
</tr>
<tr>
<td>new discharger</td>
<td>Any building, structure, facility, or installation:</td>
</tr>
<tr>
<td>new source</td>
<td>Any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:</td>
</tr>
<tr>
<td>no observed effect concentration (NOEC)</td>
<td>The NOEC is the highest concentration of toxicant (e.g., effluent) to which organisms are exposed in a chronic toxicity test [full life-cycle or partial life-cycle (short term) test], that causes no observable adverse effects on the test organisms (i.e., the highest concentration of effluent in which the values for the observed responses are not statistically significantly different from the controls).</td>
</tr>
<tr>
<td>pass through</td>
<td>A discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW’s NPDES permit (including an increase in the magnitude or duration of a violation).</td>
</tr>
<tr>
<td>quality assurance project plan (QAPP)</td>
<td>The QAPP documents the results of a project’s technical planning process, providing in one place a clear, concise, and complete plan for the environmental data operation and its quality objectives and identifying key project personnel.</td>
</tr>
<tr>
<td>receiving water concentration (RWC)</td>
<td>The concentration of a toxicant or effluent in the receiving water after mixing. The RWC is the inverse of the dilution factor. It is sometimes referred to as the instream waste concentration (IWC).</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>recorded</td>
<td>A recorded parameter can be collected using an automated recording device (data logger, SCADA, pressure transducer, etc.) or can be manually recorded in a log reading from another measurement device (stage gage, float valve visual, or any other permanently installed equipment that does not record automatically).</td>
</tr>
<tr>
<td>reporting period</td>
<td>Monitoring results for parameters are required to be reported (see DMR Month definition).</td>
</tr>
<tr>
<td>seasonal average</td>
<td>The seasonal average is the highest allowable average of “daily discharges” over a defined season, calculated as the sum of all “daily discharges” measured during a defined season divided by the number of “daily discharges” measured during that season.</td>
</tr>
<tr>
<td>sewage sludge</td>
<td>Any solid, semisolid, or liquid residue removed during the treatment of wastewater. Sewage sludge includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment, scum, septage, portable toilet pumpings, type III marine sanitation device pumpings (33 CFR Part 159), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge.</td>
</tr>
</tbody>
</table>
| sufficiently sensitive        | • The method minimum level is at or below the level of the applicable water quality criterion or permit limit for the measured pollutant or pollutant parameter; or  
  • In the case of permit applications, the method minimum level is above the applicable water quality criterion, but the amount of the pollutant or pollutant parameter in a facility’s discharge is high enough that the method detects and quantifies the level of the pollutant or pollutant parameter in the discharge; or  
  The method has the lowest minimum level of the EPA-approved analytical methods for the parameter.                                                                                                                   |
| upset                         | An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limits because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. |
| weekly average (average weekly) effluent limit (AWL) | Weekly average effluent limit is the highest allowable average of “daily discharges” over a calendar week, calculated as the sum of all “daily discharges” measured during a calendar week divided by the number of “daily discharges” measured during that week. |
Appendix A. Significant Figures and Place Values

The table below lists the significant figures for effluent limits in this permit and the minimum place value for DMR reporting and IPDES E-Permitting system submissions. Significant figure reporting conventions can be found in the IPDES User’s Guide to Permitting and Compliance Volume 1 – General information (DEQ 2017).

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Limit Set</th>
<th>Significant Figures</th>
<th>Minimum place value (X)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Oxygen Demand (COD)</td>
<td>Monthly Average Concentration</td>
<td>2</td>
<td>X.0</td>
<td>mg/L</td>
</tr>
<tr>
<td></td>
<td>Daily Maximum</td>
<td>2</td>
<td>X.0</td>
<td>mg/L</td>
</tr>
<tr>
<td></td>
<td>Monthly Average Load</td>
<td>2</td>
<td>X.0</td>
<td>lb/day</td>
</tr>
<tr>
<td></td>
<td>Daily Maximum Load</td>
<td>2</td>
<td>X.0</td>
<td>lb/day</td>
</tr>
<tr>
<td>Total Phosphorus (TP)</td>
<td>Monthly Average Concentration</td>
<td>2</td>
<td>X.0</td>
<td>mg/L</td>
</tr>
<tr>
<td></td>
<td>Daily Maximum Concentration</td>
<td>2</td>
<td>X.0</td>
<td>mg/L</td>
</tr>
<tr>
<td></td>
<td>Monthly Average Load</td>
<td>2</td>
<td>X.0</td>
<td>lb/day</td>
</tr>
<tr>
<td></td>
<td>Daily Maximum Load</td>
<td>2</td>
<td>X.0</td>
<td>lb/day</td>
</tr>
<tr>
<td></td>
<td>Net TP concentration</td>
<td>2</td>
<td></td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Net TP load</td>
<td>2</td>
<td>X.0</td>
<td>lb/day</td>
</tr>
<tr>
<td>Total Suspended Solids (TSS)</td>
<td>Monthly Average Concentration</td>
<td>2</td>
<td>X.0</td>
<td>mg/L</td>
</tr>
<tr>
<td></td>
<td>Daily Maximum Concentration</td>
<td>2</td>
<td>X.0</td>
<td>mg/L</td>
</tr>
<tr>
<td></td>
<td>Monthly Average Load</td>
<td>2</td>
<td>X.0</td>
<td>lb/day</td>
</tr>
<tr>
<td></td>
<td>Daily Maximum Average Load</td>
<td>2</td>
<td>X.0</td>
<td>lb/day</td>
</tr>
<tr>
<td>E. coli</td>
<td>Quarterly Maximum</td>
<td>3</td>
<td>X.0</td>
<td>#/100mL</td>
</tr>
<tr>
<td>pH</td>
<td>Instantaneous Maximum</td>
<td>2</td>
<td>0.X</td>
<td>s.u.</td>
</tr>
<tr>
<td></td>
<td>Instantaneous Minimum</td>
<td>2</td>
<td>0.X</td>
<td>s.u.</td>
</tr>
</tbody>
</table>