| | |
|---|---|
| Issuance Date: | 06/01/22 |
| Effective Date: | 07/01/22 |
| Minor Modification Date | 08/23/22 |
| Expiration Date: | 06/30/27 |
| Application for Permit Renewal Due | 12/30/26 |

# Idaho Pollutant Discharge Elimination System Discharge Permit No. ID0020443

**Idaho Department of Environmental Quality**

Water Quality Division
IPDES Program
1410 N. Hilton Street
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*.

City of Boise
**Lander Street Water Renewal Facility (Lander Street)**

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

| | | |
|---|---|---|
| Facility Location: 790 Lander Street, Boise ID 83703 | Receiving Water: Boise River & Dixie Slough | |
| Outfall Name: Lander Street Outfall 001 | Latitude: 43.63894 | Longitude: -116.24467 |
| Outfall Name: West Boise Outfall 001 | Latitude: 43.67270 | Longitude: -116.33225 |
| Outfall Name: PRF Outfall 001 | Latitude: 43.729549 | Longitude: -116.885952 |
| Treatment Type: Secondary Treatment | | |

Mary Anne Nelson, PhD
Administrator, Surface and Wastewater Division

# 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.

| Permit Section | Submittal Item | Frequency | Initial Submittal Date |
|---|---|---|---|
| 2.2.7 | 24-Hour Notice of Noncompliance | As required | -- |
| 2.2.8 | 5-Day Written Submission for Noncompliance | As required | -- |
| 2.2.5 | Notice of New Introduction of Toxic Pollutants | As required | -- |
| 3.3.6 | Toxicity Reduction Evaluation | As required | -- |
| 3.6.1 | Methylmercury Fish Tissue New Monitoring Partner Notification | As required | -- |
| 3.6 | Methylmercury Fish Tissue Monitoring Plan Notification | As required | 08/01/2022 |
| 2.2.3 | Discharge Monitoring Report (DMR) | Monthly | 08/20/2022 |
| 3.3.3 | Chronic Whole Effluent Toxicity (WET) Testing Report | As required | 10/20/2022 |
| 3.3.4 | Initial Toxicity Reduction Evaluation Strategy | Once | 09/30/2022 |
| 3.5 | Mercury Minimization Plan Notification | Once | 09/30/2022 |
| 3.4.1 | Master List of Nondomestic Users | Annual | 11/01/2022 |
| 3.4.8 | Pretreatment Annual Report | Annual | 11/01/2022 |
| 2.1.3 | Sludge/Biosolids Management Plan | As required | 12/31/2022 |
| 4.1.1 | Quality Assurance Project Plan (QAPP) Notification | As required | 12/31/2022 |
| 4.1.3 | Emergency Response Plan Notification | Once | 12/31/2022 |
| 4.1.2 | Operation and Maintenance (O&M) Manual Notification | Once | 12/31/2022 |
| 2.1.3 | Sludge/Biosolids Annual Report | Annual | 02/19/2023 |
| 3.5 | Mercury Minimization Annual Report | Annual | 03/31/23 |
| 3.6.1 | Methylmercury Fish Tissue Monitoring Annual Report | Annual | 06/01/2023 |
| 3.6.1 | Methylmercury Fish Tissue Monitoring Annual Report Submittal Notification | Annual | 06/01/2023 |
| 3.1 | Compliance Schedule | As required | 06/30/2023 |
| 3.4.6 | Local Limits Evaluation | As required | 06/30/2023 |
| 2.1.4 | Receiving Water Monitoring Report | Once | 12/30/2026 |
| 2.1.5 | Permit Renewal Effluent Individual Sample Results Spreadsheet | Once | 12/30/2026 |
| 2.3 | Permit Renewal Application | Once | 12/30/2026 |

# Table of Contents

Submission Schedule ..... 3
1 Effluent Limits ..... 6
1.1 Discharge Authorization ..... 6
1.2 Effluent Limits and Associated Monitoring Requirements ..... 6
1.3 Regulatory Mixing Zone ..... 13
2 Monitoring and Reporting Requirements ..... 15
2.1 Monitoring Schedules and Requirements ..... 15
2.2 Recording and Reporting Requirements ..... 32
2.3 Permit Renewal ..... 37
3 Special Conditions ..... 37
3.1 Compliance Schedule ..... 37
3.2 Facility Capacity ..... 40
3.3 Whole Effluent Toxicity Testing ..... 40
3.4 Pretreatment Requirements ..... 45
3.5 Mercury Minimization Plan ..... 53
3.6 Methylmercury Fish Tissue Monitoring Plan ..... 54
4 Standard Conditions ..... 56
4.1 Documents Applicable to all Permits ..... 56
4.2 Conditions Applicable to All Permits ..... 58
5 Definitions ..... 65
Appendix A. Significant Figures and Place Values ..... 70

# List of Tables

Table 1. Outfalls and monitoring site locations. ..... 7
Table 2. Pollutants with effluent limits and monitoring requirements for Lander Street Outfall 001. ..... 8
Table 3. Phosphorus, Total as P (TP) interim combined load effluent limits and monitoring requirements for Lander Street Outfall 001, West Boise Outfall 001, and PRF Outflow 001. ..... 12
Table 4. Authorized mixing zones to support aquatic life for Lander Street Outfall 001. ..... 14
Table 5. Influent monitoring for Lander Street Influent 001. ..... 16
Table 6. Additional effluent monitoring for Lander Street Outfall 001. ..... 18
Table 7. Receiving water monitoring site start date requirements. ..... 22
Table 8. Upstream receiving water monitoring requirements for Boise River 001. ..... 23
Table 9. Downstream receiving water monitoring requirements for Boise River 002. ..... 26
Table 10. Effluent testing required for all permit renewals. ..... 30
Table 11. Effluent testing required for permit renewals of facilities with flow greater than or equal to 0.1 MGD. ..... 30
Table 12. Expanded effluent testing required for permit renewal of facilities with flow greater than or equal to 1 MGD or an approved pretreatment program. ..... 30
Table 13. Required test methods for applicable parameters. ..... 31
Table 14. Tasks required under the compliance schedule for Phosphorus, total as P (TP). ..... 38
Table 15. Facility capacity values. ..... 40
Table 16. Whole effluent toxicity (WET) testing. ..... 40
Table 17. Toxicity test species and methods. ..... 41
Table 18. Pretreatment monitoring for influent and effluent. ..... 50
Table 19. Pretreatment monitoring for sludge. ..... 51

# 1 Effluent Limits

## 1.1 Discharge Authorization

During the effective period of this permit, the permittee is authorized to discharge pollutants to the Boise River and Dixie Slough at the permitted location(s) in Table 1 subject to compliance with the limits shown in Table 2 and Table 3 and all other conditions of this permit. This permit authorizes discharge of only those pollutants from the specified outfalls resulting from facility processes, waste streams, and operations clearly identified in the permit application process.

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 Lander Street Water Renewal Facility (Lander Street) Outfall 001, West Boise Water Renewal Facility (West Boise) Outfall 001, and the Phosphorus Removal Facility (PRF) Outflow 001 as described in Table 2 and Table 3 and meet all other permit conditions. The permittee must also monitor discharges at effluent monitoring locations described in Table 1 to verify compliance with the permit limits. The permittee must comply with the effluent limits in Table 2 and 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. Outfalls and monitoring site locations.**

| Site Name | Site Location | Site Description |
|---|---|---|
| Lander Street Outfall 001 | External Outfall | After the final treatment process at Lander Street and prior to discharge to the Boise River |
| West Boise Outfall 001 | External Outfall | After the final treatment process at West Boise and prior to discharge to the Boise River South Channel |
| PRF Outflow 001 | External Outfall | After the PRF final treatment process and prior to discharge to the Dixie Slough |
| Lander Street Influent 001 | Influent Structure | From a well-mixed, representative location before the first treatment process |
| Boise River 001 | Receiving Water | Boise River at Veterans Memorial Parkway Bridge near river mile 50.1, 0.24 miles upstream from the Lander Street diffuser |
| Boise River 002 | Receiving Water | Boise River at Glenwood Bridge adjacent to USGS gage #13206000. Approximately 2.5 miles downstream from the Lander Street outfall and 2.7 miles upstream from the West Boise outfall |

The permittee must report all effluent data results 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 14.c. 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 Table 2 and Table 3.

This permit authorizes a compliance schedule for Phosphorus, total as P (TP). Until compliance with the final effluent limits, at a minimum, the permittee must meet interim effluent limits and monitoring requirements in Table 3, report monitoring results on the appropriate DMR, and accomplish the tasks required in section 3.1.

**Table 2. Pollutants with effluent limits and monitoring requirements for Lander Street Outfall 001.**

| Parameter | Discharge Period | Units | Effluent Limits [a] | | | | | | Monitoring Requirements | | DMR Monitoring Period (DMR Reporting Months) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Monthly Average | Weekly Average | Monthly Geometric Mean | Instantaneous Minimum | Instantaneous Maximum | Daily Maximum | Sample Type | Sample Frequency | |
| Flow | 01/01 to 12/31 | mgd | 15 | — | — | — | — | — | Recorded | Continuous [b, c, d] | Monthly (All Months) |
| Biochemical Oxygen Demand ($BOD_5$) | 01/01 to 12/31 | mg/L | 30 | 45 | — | — | — | — | 24-hour composite [e] | 1/week | Monthly (All Months) |
| | | lb/day | 3753 | 5630 | — | — | — | — | Calculation [f] | | |
| $BOD_5$ Percent Removal | 01/01 to 12/31 | % | 85 (min.) | — | — | — | — | — | Calculation [g] | 1/month | Monthly (All Months) |
| Total Suspended Solids (TSS) | 4/01 to 9/30 | mg/L | 30 | 45 | — | — | — | — | 24-hour composite [e] | 1/week | Monthly (April, May, June, July, August, September) |
| | | lb/day | 3400 | 5000 | — | — | — | — | Calculation [f] | | |
| | 10/01 to 3/31 | mg/L | 30 | 45 | — | — | — | — | 24-hour composite [e] | 1/week | Monthly (October, November, December, January, February, March) |
| | | lb/day | 2500 | 3750 | — | — | — | — | Calculation [f] | | |
| TSS Percent Removal | 01/01 to 12/31 | % | 85 (min.) | — | — | — | — | — | Calculation [g] | 1/month | Monthly (All Months) |

| Parameter | Discharge Period | Units | Effluent Limits [a] | | | | | | Monitoring Requirements | | DMR Monitoring Period (DMR Reporting Months) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Monthly Average | Weekly Average | Monthly Geometric Mean | Instantaneous Minimum | Instantaneous Maximum | Daily Maximum | Sample Type | Sample Frequency | |
| *E. coli* [h] | 01/01 to 12/31 | #/100 mL | — | — | 126 [i] | — | 406 [h, j] | — | Grab [k, n] | 2/week | Monthly (All Months) |
| pH | 01/01 to 12/31 | std. units | — | — | — | 6.5 | 9.0 | — | Recorded | Continuous [b, c, d] | Monthly (All Months) |
| Dissolved oxygen [h] | 10/01 to 10/31 | mg/L | — | — | — | 3.0 | — | — | Recorded | Continuous [b, c, d] | Monthly (October, November, December, January, February, March, April) |
| | 11/01 to 04/30 | mg/L | — | — | — | 3.6 | — | — | | | |
| Phosphorus, Total as P (TP) [l, m] | 05/01 to 09/30 | lb/day | 32.5 [n] | — | — | — | — | — | Calculation [f, n, o, p] | 2/week | Monthly (May, June, July, August, September) |
| | 10/01-04/30 | lb/day | 113.9 [n] | — | — | — | — | — | Calculation [f, n, o, p] | 2/week | Monthly (October, November, December January, February, March, April) |
| Whole Effluent Toxicity (WET) [h, q] | 05/01 to 09/30) | $TU_c$ | 4.0 [q, r] | — | — | — | — | 11.6 [h, q, s] | 24-hour composite [e] | 1/quarter [t] | Quarterly (June, September) |

| Parameter | Discharge Period | Units | Effluent Limits [a] | | | | | | Monitoring Requirements | | DMR Monitoring Period (DMR Reporting Months) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Monthly Average | Weekly Average | Monthly Geometric Mean | Instantaneous Minimum | Instantaneous Maximum | Daily Maximum | Sample Type | Sample Frequency | |
| | 10/01 to 04/30) | $TU_c$ | 2.6 [q, r] | — | — | — | — | 5.3 [h, q, s] | 24-hour composite [e] | 1/quarter [t] | Quarterly (April, December) |

a. See permit section 5 for definitions of effluent limit types.
b. Continuous means measurements recorded at least once every 60 minutes except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance.
c. DEQ acknowledges that uninterrupted data collection is not guaranteed due to vandalism, theft, damage, disturbance, power interruption, etc. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must monitor four representative grab measurements daily spaced between 8 a.m. and 5 p.m. or describe frequency when continuous monitoring is not possible until continuous monitoring equipment is redeployed.
d. For continuously monitored parameters the permittee must submit all monitoring results and sample collection dates electronically on an Excel spreadsheet. The Excel spreadsheet must be submitted with the IPDES permit renewal application.
e. 24-hour composites in this permit must be comprised of at least 8 discrete ≥ 100 ml aliquots and be flow proportional samples.
f. Load (lb/day) = ([Pollutant] mg/L) * (corresponding flow in mgd)) * (conversion factor of 8.34)
g. % Removal = ([Average Monthly Influent] mg/L – [Average Monthly Effluent] mg/L) / ([Average Monthly Influent]mg/L) * 100%. Brackets "[ ]" indicate concentration of the attribute contained inside.
h. Exceedance of a maximum daily limit, instantaneous maximum limit, or instantaneous minimum limit, for this parameter requires 24-hour reporting in accordance with section 2.2.7 of the permit. For *E. coli*, the maximum daily threshold that triggers 24-hour reporting is 406 organisms/100mL.
i. Geometric mean of five or more samples collected 3-11 days apart over a calendar month.
j. Idaho's water quality standard for contact recreation for permitting (IDAPA 58.01.02.251.02.c) include a Statistical Threshold Value (STV), which is represented as an instantaneous maximum limit. The STV requires that no more than 10% of valid samples collected over a 30-day period contain E. coli bacteria in concentrations exceeding an STV of 410 *E. coli* counts per 100 mL. The 2008 Lower Boise River Sediment and Bacteria TMDLs Addendum WLA reduces this to 406 *E. coli* counts per 100 mL.
k. Grab means an individual sample collected over a period of time not exceeding 15 minutes.
l. The permit authorizes a compliance schedule to meet final limits for this pollutant.
m. Effluent limits are the combined TP load of Lander Street Outfall 001 and West Boise Outfall 001, minus (Removal PRF / 1.5).
n. The monthly average load for each facility is expressed as a combined load between Lander Street, West Boise, and PRF and is calculated as: Monthly Average TP Load = (Monthly Average Load Lander Street + Monthly Average Load West Boise) – (Monthly Average Removal PRF / 1.5)
o. TP Removal PRF = (PRF Inflow TP Load) – (PRF Outflow TP Load). Monitoring periods with no removal are included as a 0 data point for the seasonal and annual average load calculation.

p. TP Monthly Average Load is the sum of each calculated load divided by the number of calculated loads in the month.
q. See permit section 3.3.5 for additional accelerated testing and section 3.3.3 for reporting requirements.
r. The monthly average $TU_c$ must be reported as the average TUc of all test results for the reporting period.
s. The daily maximum $TU_c$ must be reported as the maximum test TUc result for the reporting period.
t. Quarters are defined as: January – April; May – June; July – September; and October – December. Samples must be collected once during each quarter with results submitted on the last DMR of the applicable quarterly monitoring period.

**Table 3. Phosphorus, Total as P (TP) interim combined load effluent limits and monitoring requirements for Lander Street Outfall 001, West Boise Outfall 001, and PRF Outflow 001.**

| Discharge Period | Units | Effluent Limits [a] | | Monitoring Requirements | | | DMR Monitoring Period (DMR Reporting Months)) |
|---|---|---|---|---|---|---|---|
| | | Seasonal Average Minimum Removal | Annual Average Limit [b] | Monitoring Locations | Sample Type | Sample Frequency | |
| Year 1-10 (May 1 – September 30) | lb/day | 25 [c] | | PRF Outflow 001 | Calculation [d, e, f] | 1/week | Annual (September) |
| Year 1-7 | lb/day | — | 405 [h] | Lander Street Outfall 001<br>West Boise Outfall 001<br>PRF Outflow 001 | Calculation [d, e, g] | 1/week | Annual (December) |
| Year 8-10 | lb/day | — | 275 [h] | Lander Street Outfall 001<br>West Boise Outfall 001<br>PRF Outflow 001 | Calculation [d, e, g] | 1/week | Annual (December) |

a. See permit section 5 for definitions of effluent limit types.
b. Effluent limits are the combined TP load of Lander Street Outfall 001 and West Boise Outfall 001, minus (Removal PRF / 1.5).
c. Until the final TP limits become effective the PRF facility is required to remove at least 25 lb/day as a seasonal average from May through September.
d. TP Removal PRF = (PRF Inflow TP Load) – (PRF Outflow TP Load). Monitoring periods with no removal are included as a 0 data point for the seasonal and annual average load calculation.
e. Load (lb/day) = (([TP] mg/L) * (corresponding flow in mgd)) * (conversion factor of 8.34)
f. Seasonal Average Load – Derived from sum of each calculated load divided by the number of calculated loads during the May–September season.
g. TP Annual Average Load for each facility is the sum of each calculated load divided by the number of calculated loads in a calendar year.
h. The combined annual average load is expressed as a combined load between Lander Street, West Boise and PRF and is calculated as: Annual Average TP Load = (Annual Average Load Lander Street + Annual Average Load West Boise – (Annual Average Removal PRF / 1.5)

### 1.2.1 Narrative Limits

The discharge must not result in any floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions that may impair designated uses in the receiving water. The discharge must comply with all narrative criteria at IDAPA 58.01.02.200. The permittee must observe the effluent prior to discharge and the mixing area at the outfall once per week. The permittee must maintain a log of each observation that includes date, time, and whether there is any floating, suspended, or submerged matter in the effluent or resulting from the discharge. The log must be retained onsite and made available to DEQ upon request.

## 1.3 Regulatory Mixing Zone

Pursuant to IDAPA 58.01.02.060, DEQ authorizes the mixing zones in Table 4 for the Boise River.

**Table 4. Authorized mixing zones to support aquatic life for Lander Street Outfall 001.**

| Pollutant | Discharge Period | | Criteria Type (Design Discharge Condition) | | | | |
|---|---|---|---|---|---|---|---|
| | | Acute (1Q10) | Chronic (7Q10) | Instantaneous Minimum (7Q10) | MWMT (7Q10) | Daily Average (7Q10) | Instantaneous Maximum (7Q10) |
| Copper | May - September | -- | 3% of 290 cfs | -- | -- | -- | -- |
| | October – April | -- | 3% of 119 cfs | -- | -- | -- | -- |
| Dissolved Oxygen | May | -- | -- | 6% of 290 cfs | -- | -- | -- |
| | June - September | -- | -- | 4% of 290 cfs | -- | -- | -- |
| | October | -- | -- | 2% of 119 cfs | -- | -- | -- |
| | November - April | -- | -- | 12% of 119 cfs | -- | -- | -- |
| Temperature | November - April | -- | -- | -- | 41% of 119 cfs | -- | -- |
| | May | -- | -- | -- | 41% of 290 cfs | -- | -- |
| | June | -- | -- | -- | -- | 6% of 290 cfs | 1% of 290 cfs |
| | July - September | -- | -- | -- | -- | 32% of 290 cfs | 8% of 290 cfs |
| | October | -- | -- | -- | -- | 33% of 119 cfs | 7% of 119 cfs |
| WET | May - September | -- | 43% of 290 cfs | -- | -- | -- | -- |
| | October - April | -- | 43% of 119 cfs | -- | -- | -- | -- |
| Zinc | May - September | 1% of 269 cfs | 1% of 290 cfs | -- | -- | -- | -- |
| | October - April | 2% of 101 cfs | 2% of 119 cfs | -- | -- | -- | -- |

This permit requires monitoring for copper, dissolved oxygen, temperature, WET, and zinc to ensure appropriateness of authorized mixing zones. Specific monitoring requirements are in sections 1.2 and/or 2.1.2 and 2.1.4.

# 2 Monitoring and Reporting Requirements

For all influent, 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 test method for any parameter is prescribed in permit section 2.1.6 the method used must be able to achieve an ML less than or equal to the effluent limit.
- The permittee may request different test methods or 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 of this permit in accordance with section 2.1.6. 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 Influent Monitoring

The permittee must monitor influent at Lander Street Influent 001 and report results on the appropriate DMRs as listed in Table 5.

**Table 5. Influent monitoring for Lander Street Influent 001.**

| Parameter | Monitoring Period | Units | Monthly Average [a] | Weekly Average [a] | Daily Maximum [a] | Semiannual Maximum [a] | Sample Frequency | Sample Type | DMR Monitoring Period (DMR Reporting Months) |
|---|---|---|---|---|---|---|---|---|---|
| Flow [b] | 01/01 to 12/31 | mgd | Report | – | Report | – | Continuous [c, d, e] | Recording | Monthly (All Months) |
| $BOD_5$ | 01/01 to 12/31 | mg/L | Report | Report | – | – | 1/week | 24-hour composite [f] | Monthly (All Months) |
| | | lb/day | – | – | Report | – | | Calculation | |
| TSS | 01/01 to 12/31 | mg/L | Report | Report | – | – | 1/week | 24-hour composite [f] | Monthly (All Months) |
| | | lb/day | – | – | Report | – | | Calculation | |
| Mercury, total | 01/01 to 12/31 | µg/L | – | – | – | Report | 2/year | 24-hour composite [f] | Semiannual (June, December) |

a. See permit section 5 for definitions of reporting frequency types.
b. Permittee may use current influent flow measurement equipment and method at Lander Street until headworks construction is complete.
c. Continuous means measurements recorded at least once every 60 minutes except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance.
d. DEQ acknowledges that uninterrupted data collection is not guaranteed due to vandalism, theft, damage, disturbance, power interruption, etc. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must monitor four representative grab measurements daily spaced between 8 a.m. and 5 p.m. or describe frequency when continuous monitoring is not possible until continuous monitoring equipment is redeployed.
e. For continuously monitored parameters the permittee must submit, to DEQ, all monitoring results and sample collection dates electronically on an Excel spreadsheet. The Excel spreadsheet must be submitted with the IPDES permit renewal application.
f. 24-hour composites in this permit must be comprised of at least 8 discrete ≥ 100/ml aliquots and be flow-proportional samples.

### 2.1.2 Additional Effluent Monitoring

Pollutants that must be monitored for averaging periods not associated with effluent limits are presented in Table 6. The permittee must monitor effluent at the locations specified in Table 1 and report results on appropriate DMRs as identified in Table 6.

**Table 6. Additional effluent monitoring for Lander Street Outfall 001.**

| Parameter | Monitoring Period | Units | Monthly Average [a] | Daily Maximum [a] | Sample Frequency | Sample Type | DMR Monitoring Period (DMR Reporting Months) |
|---|---|---|---|---|---|---|---|
| Flow [b] | 01/01 to 12/31 | mgd | – | Report | Continuous [c, d, e] | Recording | Monthly (All Months) |
| Ammonia, total as N | 01/01 to 12/31 | µg/L | Report | Report | 2/week | 24-hour composite [f] | Monthly (All Months) |
| TP | 01/01 to 12/31 | µg/L | Report | Report | 2/week | 24-hour composite [f] | Monthly (All Months) |
| | | lb/day | Report | _ | 2/week | Calculation [g, h] | Monthly (All Months) |
| Cyanide, Weak Acid Dissociable (WAD) | 01/01 to 12/31 | µg/L | Report | Report | 1/month | Grab [i] | Monthly (All Months) |
| Arsenic, total | 01/01 to 12/31 | µg/L | Report | Report | 1/month | 24-hour composite [f] | Monthly (All Months) |
| Cadmium, total | 01/01 to 12/31 | µg/L | Report | Report | 1/month | 24-hour composite [f] | Monthly (All Months) |
| Copper, total | 01/01 to 12/31 | µg/L | Report | Report | 1/month | 24-hour composite [f] | Monthly (All Months) |
| Lead, total | 01/01 to 12/31 | µg/L | Report | Report | 1/month | 24-hour composite [f] | Monthly (All Months) |
| Mercury, total | 01/01 to 12/31 | µg/L | Report | Report | 1/month | 24-hour composite [f] | Monthly (All Months) |
| Zinc, total | 01/01 to 12/31 | µg/L | Report | Report | 1/month | 24-hour composite [f] | Monthly (All Months) |
| Hardness | 01/01 to 12/31 | mg/L | Report | Report | 1/month | 24-hour composite [f] | Monthly (All Months) |
| Chromium, total | 01/01 to 12/31 | µg/L | Report | Report | 1/quarter [j] | 24-hour composite [f] | Quarterly (April, June, Sept, Dec) |
| Nickel, total | 01/01 to 12/31 | µg/L | Report | Report | 1/quarter [j] | 24-hour composite [f] | Quarterly (April, June, Sept, Dec) |
| Selenium, total | 01/01 to 12/31 | µg/L | Report | Report | 1/quarter [j] | 24-hour composite [f] | Quarterly (April, June, Sept, Dec) |
| Silver, total | 01/01 to 12/31 | µg/L | Report | Report | 1/quarter [j] | 24-hour composite [f] | Quarterly (April, June, Sept, Dec) |

a. See permit section 5 for definitions of reporting frequency types.
b. This parameter has a monthly average effluent limit for Lander Street and daily maximum monitoring and reporting.
c. Continuous means measurements recorded at least once every 60 minutes except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance.
d. DEQ acknowledges that uninterrupted data collection is not guaranteed due to vandalism, theft, damage, disturbance, power interruption, etc. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must monitor four representative grab measurements daily spaced between 8 a.m. and 5 p.m. or describe frequency when continuous monitoring is not possible until continuous monitoring equipment is redeployed.
e. For continuously monitored parameters the permittee must submit all monitoring results and sample collection dates electronically on an Excel spreadsheet. The Excel spreadsheet must be submitted with the IPDES permit renewal application.
f. 24-hour composites in this permit must be comprised of at least 8 discrete ≥ 100 ml aliquots and be flow-proportional samples.
g. Load (lb/day) = ([Pollutant] mg/L) * (corresponding flow in mgd)) * (conversion factor of 8.34)
h. TP Monthly Average Load is the sum of each calculated load divided by the number of calculated loads in a month.
i. Grab means an individual sample collected over a period of time not exceeding 15 minutes.
j. Quarters are defined as: January – April; May – June; July – September; and October – December. Samples must be collected once during each quarter with results submitted on the last DMR of the applicable quarterly monitoring period.

### 2.1.3 Sewage Sludge Monitoring

The permittee must update and submit a biosolids management plan through the IPDES E-Permitting System for DEQ review by December 31, 2022. The plan must document how the facility monitors accumulation, removes, treats, and then disposes the material. DEQ will review the plan and determine whether the plan meets the requirements of IDAPA 58.01.16 and 40 CFR 503. If the plan meets the specified requirements, then DEQ will provide written approval. The permittee must either comply with an existing approved plan or delay disposal of sewage sludge until the proposed plan is approved.

Additionally, the permittee must submit a sludge annual report indicating the annual mass generated, stored, reused, and disposed. This report must be submitted through the IPDES E-Permitting System by February 19, 2023, and annually thereafter. This must comply with the facility's approved biosolids management plan.

Solids removed from Lander Street are process through their primary digesters and held in a holding tank prior to being pumped. The digested sludge (biosolids) are primarily pumped through a pipeline to West Boise, dewatered and hauled to the City-owned Twenty Mile South Biosolids Application Site and handled in accordance with IDAPA 58.01.16 and 40 CFR 503. Major maintenance activities on the pipeline may require biosolids to be dewatered at Lander Street or hauled to West Boise to be processed.

### 2.1.4 Receiving Water Monitoring

The permittee must conduct receiving water monitoring at the locations in Table 7 for parameters identified for each site in Table 8 and Table 9. Monitoring must begin by the monitoring start dates listed in Table 7. Monitoring must meet the following requirements:

1. Results must be reported on the appropriate DMR as specified in Table 8 and Table 9
2. To the extent practicable, receiving water sample collection must occur on the same day as effluent sample collection.
3. When flow monitoring is required in Table 8, the flow rate must be measured as near as practicable to the time that other ambient parameters are sampled.
4. Samples must be analyzed for the parameters listed in Table 8 and Table 9.
5. Quality assurance project plans (QAPPs) must address all receiving water monitoring.
6. Samples for metals, pH, ammonia, temperature, dissolved organic carbon, conductivity, and hardness, if applicable, must be collected on the same day (Table 8 and Table 9).
7. In addition, the permittee must submit all receiving water monitoring results for the current permit cycle for all parameters in the receiving water monitoring report spreadsheet that is uploaded to the IPDES E-Permitting System concurrently with the permit renewal application submittal by 12/30/2026. 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.

**Table 7. Receiving water monitoring site start date requirements.**

| Receiving Water | Location | Location Approval Type | Site Name | Lat/Long | Site Description | Monitoring Start Date | Monitoring Duration |
|---|---|---|---|---|---|---|---|
| Boise River | Upstream | Designated location | Boise River 001 | 43.63656 -116.24294 | Boise River at Veterans Memorial Parkway Bridge near river mile 50.1, 0.24 miles upstream from the Lander Street diffuser | 07/01/2022 | For as long as the permit remains in effect. |
| Boise River | Downstream | Designated location | Boise River 002 | 43.66077 -116.27941 | Boise River at Glenwood Bridge adjacent to USGS gage #13206000. Approximately 2.5 miles downstream from the Lander Street outfall and 2.74 miles upstream from West Boise outfall | 07/01/2022 | For as long as the permit remains in effect. |

**Table 8. Upstream receiving water monitoring requirements for Boise River 001.**

| Parameter | Monitoring Period | Units | Monthly Average [a] | Maximum Daily Average [a] | Daily Maximum [a] | Quarterly Maximum [a] | Annual Maximum [a] | Instan-taneous Minimum [a] | Sample Frequency | Sample Type | DMR Monitoring Period (DMR Reporting Months) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Dissolved Oxygen | 01/01 to 12/31 | mg/L | — | — | — | | | Report | Continuous [b, c, d] | Recorded | Monthly (All Months) |
| Temperature | 01/01 to 12/31 | °C | — | Report | Report | | | — | Continuous [b, c, d, e, f, g] | Recorded | Monthly [b] (All Months) |
| pH | 01/01 to 12/31 | s.u. | — | — | Report | | | Report | 1/week [g] | Grab [g] | Monthly (All Months) |
| TP | 01/01 to 12/31 | mg/L | — | — | Report | | | — | 1/week | Composite Grab [h] | Monthly (All Months) |
| Ammonia, Total as N | 01/01 to 12/31 | µg/L | — | — | Report | | | — | 1/month [f] | Composite Grab [h] | Monthly (All Months) |
| $BOD_5$ | 01/01 to 12/31 | mg/L | — | — | Report | | | — | 1/month | Composite Grab [h] | Monthly (All Months) |
| Cyanide, WAD | 01/01 to 12/31 | µg/L | — | — | Report | | | — | 1/month | Grab [g] | Monthly (All Months) |
| *E. coli* | 01/01 to 12/31 | #/100 mL | — | — | Report | | | — | 1/month | Grab [g] | Monthly (All Months) |
| Hardness | 01/01 to 12/31 | mg/L | — | — | Report | | | — | 1/month | Grab [g] | Monthly (All Months) |
| TSS | 01/01 to 12/31 | mg/L | — | — | Report | | | — | 1/month | Composite Grab [h] | Monthly (All Months) |
| Arsenic, total | 01/01 to 12/31 | µg/L | — | — | Report | | | — | 1/month | Composite Grab [h] | Monthly (All Months) |
| Cadmium, dissolved | 01/01 to 12/31 | µg/L | — | — | Report | | | — | 1/month | Composite Grab [h] | Monthly (All Months) |
| Copper, dissolved | 01/01 to 12/31 | µg/L | — | — | Report | | | — | 1/month | Composite Grab [h] | Monthly (All Months) |
| Lead, dissolved | 01/01 to 12/31 | µg/L | — | — | Report | | | — | 1/month | Composite Grab [h] | Monthly (All Months) |

| Parameter | Monitoring Period | Units | Monthly Average [a] | Maximum Daily Average [a] | Daily Maximum [a] | Quarterly Maximum [a] | Annual Maximum [a] | Instan-taneous Minimum [a] | Sample Frequency | Sample Type | DMR Monitoring Period (DMR Reporting Months) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Mercury total | 01/01 to 12/31 | µg/L | — | — | Report | | | — | 1/month | Grab [g] | Monthly (All Months) |
| Silver, total | 01/01 to 12/31 | µg/L | — | — | Report | | | — | 1/month | Composite Grab [h] | Monthly (All Months) |
| Zinc, dissolved | 01/01 to 12/31 | µg/L | — | — | Report | | | — | 1/month | Composite Grab [h] | Monthly (All Months) |
| Chromium, dissolved | 01/01 to 12/31 | µg/L | — | — | — | Report | | — | 1/quarter [i] | Composite Grab [h] | Quarterly [l] (April, June, Sept, Dec) |
| Nickel, dissolved | 01/01 to 12/31 | µg/L | — | — | — | Report | | — | 1/quarter [i] | Composite Grab [h] | Quarterly [l] (April, June, Sept, Dec) |
| Selenium, total | 01/01 to 12/31 | µg/L | — | — | — | Report | | — | 1/quarter [i] | Composite Grab [h] | Quarterly [l] (April, June, Sept, Dec) |
| Total Kjeldahl Nitrogen | 01/01 to 12/31 | mg/L | — | — | — | — | Report | — | 1/year [j] | Composite Grab [h] | Quarterly [j] (April, June, Sept, Dec) |
| Nitrate-Nitrite Nitrogen | 01/01 to 12/31 | mg/L | — | — | — | — | Report | — | 1/year [j] | Composite Grab [h] | Quarterly [j] (April, June, Sept, Dec) |
| Oil and Grease | 01/01 to 12/31 | mg/L | — | — | — | — | Report | — | 1/year [j] | Grab [g] | Quarterly [j] (April, June, Sept, Dec) |
| Turbidity | 01/01 to 12/31 | NTU | — | — | — | — | Report | — | 1/year [j] | Composite Grab [h] | Quarterly [j] (April, June, Sept, Dec) |

a. See permit section 5 for definitions of reporting frequency types.
b. Continuous means measurements recorded at least once every 60 minutes except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance.
c. DEQ acknowledges that uninterrupted data collection is not guaranteed due to vandalism, theft, damage, disturbance, power interruption, etc. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must monitor four representative grab measurements daily spaced between 8 a.m. and 5 p.m. or describe frequency when continuous monitoring is not possible until continuous monitoring equipment is redeployed.

d. For continuously monitored parameters the permittee must submit all monitoring results and sample collection dates electronically on an Excel spreadsheet. The Excel spreadsheet must be submitted with the permit renewal application.
e. 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*.
f. To the extent practicable, surface water collection must occur on the same day as effluent sample collection.
g. Grab means an individual sample collected over a period of time not exceeding 15 minutes.
h. Composite grab samples are allowed because traffic conditions are not safe to complete a typical composite sample. Composite grab samples must consist of at least 3 grab samples, one from each side of the river and one from the middle of the river.
i. Quarters are defined as: January – April; May – June; July – September; and October – December. Samples must be collected once during each quarter with results submitted on the last DMR of the applicable quarterly monitoring period.
j. This parameter has annual monitoring in rotating quarters that are defined in footnote i. Monitor during fourth quarter 2022, second quarter 2023, third quarter 2024, and every fifth quarter thereafter. Results must be submitted on the last DMR of the applicable quarterly monitoring period. For quarters that monitoring is not required, use NODI code 9 (Conditional Monitoring – Not Required This Period).

**Table 9. Downstream receiving water monitoring requirements for Boise River 002.**

| Parameter | Monitoring Period | Units | Monthly Average [a] | Maximum Daily Average [a] | Daily Maximum [a] | Instan-taneous Maximum [a] | Instan-taneous Minimum [a] | Sample Frequency | Sample Type | DMR Monitoring Period (DMR Reporting Months) |
|---|---|---|---|---|---|---|---|---|---|---|
| Dissolved Oxygen | 01/01 to 12/31 | mg/L | — | — | — | — | Report | Continuous [b, c, d] | Recorded | Monthly (All Months) |
| Flow | 01/01 to 12/31 | cfs | — | — | — | Report | Report | Continuous [b, c, d, f] | Recorded | — [e] |
| Temperature | 01/01 to 12/31 | °C | — | Report | — | Report | — | Continuous [b, c, d, g,] | Recorded | Monthly (All Months) |
| pH | 01/01 to 12/31 | s.u. | — | — | — | Report | Report | 1/week | Grab [h] | Monthly (All Months) |
| TP | 01/01 to 12/31 | mg/L | Report | — | Report | — | — | 1/week | Composite Grab [i] | Monthly (All Months) |
| Hardness | 01/01 to 12/31 | mg/L | — | — | Report | — | — | 1/month | Grab [h] | Monthly (All Months) |
| Copper, dissolved | 01/01 to 12/31 | µg/L | Report [j] | — | Report | — | — | 1/month [j] | Composite Grab [i, k] | Monthly (All Months) |
| Copper, total | 01/01 to 12/31 | µg/L | — | — | Report | — | — | 1/month | Composite Grab [i] | Monthly (All Months) |
| Zinc, dissolved | 01/01 to 12/31 | µg/L | — | — | Report | — | — | 1/month | Composite Grab [i] | Monthly (All Months) |
| Zinc, total | 01/01 to 12/31 | µg/L | — | — | Report | — | — | 1/month | Composite Grab [i] | Monthly (All Months) |
| Alkalinity | 01/01/2023 to 12/31/2025 | mg/L | Report [j] | — | — | — | — | 1/month [j] | Composite Grab [i, k] | Monthly (All Months) |
| Dissolved Organic Carbon [k] | 01/01/2023 to 12/31/2025 | µg/L | Report [j] | — | — | — | — | 1/month [j] | Composite Grab [i, k] | Monthly (All Months) |
| Dissolved Calcium ($Ca^{2+}$) [k] | 01/01/2023 to 12/31/2025 | µg/L | Report [j] | — | — | — | — | 1/month [j] | Composite Grab [l k] | Monthly (All Months) |
| Dissolved | 01/01/2023 | µg/L | Report [j,k] | — | — | — | — | 1/month [j] | Composite | Monthly (All |

| Parameter | Monitoring Period | Units | Monthly Average [a] | Maximum Daily Average [a] | Daily Maximum [a] | Instan-taneous Maximum [a] | Instan-taneous Minimum [a] | Sample Frequency | Sample Type | DMR Monitoring Period (DMR Reporting Months) |
|---|---|---|---|---|---|---|---|---|---|---|
| Potassium ($K^+$) [k] | to 12/31/2025 | | | | | | | | Grab [i, k] | Months) |
| Dissolved Magnesium ($Mg^{2+}$) [k] | 01/01/2023 to 12/31/2025 | µg/L | Report [j] | — | — | — | — | 1/month [j] | Composite Grab [i, k] | Monthly (All Months) |
| Sulfate ($SO_4^-$) [k] | 01/01/2023 to 12/31/2025 | mg/L | Report [j] | — | — | — | — | 1/month [j] | Composite Grab [i, k] | Monthly (All Months) |
| Dissolved Sodium ($Na^+$) [k] | 01/01/2023 to 12/31/2025 | µg/L | Report [j] | — | — | — | — | 1/month [j] | Composite Grab [i, k] | Monthly (All Months) |
| Chloride ($Cl^-$) [k] | 01/01/2023 to 12/31/2025 | mg/L | Report [j] | — | — | — | — | 1/month [j] | Composite Grab [i, k] | Monthly (All Months) |

a. See permit section 5 for definitions of reporting frequency types.
b. Continuous means measurements recorded at least once every 60 minutes except for brief lengths of time for calibration, power failure, or unanticipated equipment repair or maintenance.
c. DEQ acknowledges that uninterrupted data collection is not guaranteed due to vandalism, theft, damage, disturbance, power interruption, etc. In the event of equipment failure or loss, the permittee must notify DEQ and deploy new equipment to minimize interruption of data collection. If new equipment cannot be immediately deployed, the permittee must monitor four representative grab measurements daily spaced between 8 a.m. and 5 p.m. or describe frequency when continuous monitoring is not possible until continuous monitoring equipment is redeployed
d. For continuously monitored parameters the permittee must submit all monitoring results and sample collection dates electronically on an Excel spreadsheet. The Excel spreadsheet must be submitted with the IPDES permit renewal application.
e. Continuous flow monitoring data must be reported only in the Receiving Water Monitoring spreadsheet submitted with the permit renewal application. Include any average, minimum, maximum and individual daily data values available at the time of annual report development, with provisional data indicated.
f. If USGS 13206000 receiving water flow monitoring is discontinued, the flow monitoring will be the responsibility of the permittee.
g. 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*.
h. Grab means an individual sample collected over a period not exceeding15 minutes.
i. Composite grab samples are allowed because traffic conditions are not safe to complete a typical composite sample. Composite grab samples must consist of at least 3 grab samples, one from each side of the river and one from the middle of the river.
j. All Copper BLM input parameters must by collected concurrently. Temperature and pH must be measured in situ at the time of sample collection or taken from a continuous logger data within 15 minutes from the same site. If multiple samples are taken, submit an Excel spreadsheet with results of concurrent sample with the permit application.

k. Follow Copper BLM parameter collection and analytical methods outlined in Implementation Guidance for the Idaho Copper Criteria for Aquatic Life Using the Biotic Ligand Model (DEQ 2017) and 40 CFR 136 as required to constitute a complete sample, plus recommended analytical methods, preservative, holding times, and minimum laboratory reporting limits.

#### *2.1.4.1 Receiving Water Continuous Monitoring*

The permittee must collect continuously recorded data for pollutants that have a sample frequency of "continuous" in the receiving water monitoring tables above. Data collection must meet the following minimum requirements:

1. Monitoring in the receiving water must be adequately addressed in the Quality Assurance Project Plan (QAPP).
2. Begin monitoring on or before the specified start listed in Table 7 for each receiving water monitoring site.
3. Recording devices must be set to record at the specified interval in the receiving water monitoring requirement table above
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 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*

### 2.1.5 Permit Renewal Effluent Monitoring

The renewal application for this permit requires data collection to characterize the effect of the effluent on the Boise River (section 2.1.4). The permittee must collect samples of the final wastewater effluent for the parameters listed in Table 10, Table 11, and Table 12 so DEQ can assess the surface water impacts. For parameters requiring a 24-hour composite sample, only one analysis of the composite of aliquots (samples) is required for each sample. All 24-hour composite samples collected for permit renewal monitoring must be flow-proportional and composed of at least 8 aliquots (samples). Monitoring results collected to achieve other permit conditions may be used to meet permit renewal effluent monitoring requirements. The permittee must include any representative data collected to achieve other permit conditions and enter summary data in their permit renewal application.

The permittee must also upload a permit renewal effluent individual sample results spreadsheet to the IPDES E-Permitting System by 12/30/2026.

The permittee must conduct sampling of the final effluent according to the following schedule:

- 2022: Fourth quarter (October - December)
- 2023: Second quarter (April - June)
- 2024: Third quarter (July - September)

In addition, the permittee must continue permit renewal effluent monitoring at a frequency of once every fifth quarter after the last sampling event listed in the schedule above until a new permit is issued.

**Table 10. Effluent testing required for all permit renewals.**

| Parameter | Units | Sample Type | Report |
|---|---|---|---|
| pH | s.u. | Grab | Minimum and maximum value |
| Flow | MGD | Continuous | Maximum daily value, average daily value, number of samples |
| Temperature | °C | Continuous | |
| $BOD_5$ | mg/L | 24-hour composite | Maximum daily value, average daily value, analytical method and ML or MDL |
| TSS | mg/L | 24-hour composite | |
| *E. coli* | #/100 mL | Grab | |

The facility has a design flow greater than or equal to 0.1 MGD and must also sample effluent following the schedule above for the parameters in Table 11.

**Table 11. Effluent testing required for permit renewals of facilities with flow greater than or equal to 0.1 MGD.**

| Parameter | Units | Sample Type | Report |
|---|---|---|---|
| Ammonia, Total as N | mg/L | 24-hour composite | Maximum daily value, average daily value, analytical method and ML or MDL |
| Total residual chlorine | mg/L | Grab | |
| Dissolved oxygen | mg/L | Grab | |
| Total Kjeldahl nitrogen | mg/L as N | 24-hour composite | |
| Nitrate plus nitrite | mg/L as N | 24-hour composite | |
| Oil and grease | mg/L | Grab | |
| TP | mg/L | 24-hour composite | |
| Total dissolved solids | mg/L | 24-hour composite | |

The facility has a design flow greater than or equal to 1 MGD or an approved pretreatment program and must also sample effluent following the schedule above for the parameters in Table 12. The complete listing for metals, volatile organic compounds, acid extractable compounds, and base neutral compounds is in 40 CFR 122, Appendix J, Table 2.

**Table 12. Expanded effluent testing required for permit renewal of facilities with flow greater than or equal to 1 MGD or an approved pretreatment program.**

| Parameter | Units | Sample Type | Report |
|---|---|---|---|
| Metals (total recoverable) | µg/L | 24-hour composite | Units, maximum daily value, average daily value, analytical method and ML or MDL |
| Cyanide, WAD | µg/L | Grab | |
| Mercury (total recoverable) | µg/L | 24-hour composite | |
| Total phenols | µg/L | Grab | |
| Hardness (as $CaCO_3$) | mg/L | 24-hour composite | |
| Volatile organic compounds | µg/L | Grab | |
| Acid-extractable compounds | µg/L | 24-hour composite | |
| Base-neutral compounds | µg/L | 24-hour composite | |

### 2.1.6 Analytical and Sampling Procedures

Required monitoring must be completed using sufficiently sensitive methods and 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 a 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 Table 13 lists the EPA approved test methods. The permittee may request to use a different test method. The request must be in writing and must be approved by DEQ.

**Table 13. Required test methods for applicable parameters.**

| Parameter | Units | Test Method [a, b] |
|---|---|---|
| Arsenic | µg/L | EPA 200.8, EPA 200.7 |
| Cadmium | µg/L | EPA 200.8, EPA 200.7 |
| Chromium | µg/L | EPA 200.8, EPA 200.7 |
| Copper | µg/L | EPA 200.8, EPA 200.7 |
| Cyanide, total | µg/L | EPA 821-B-01-009 (Kelada-01), 10-204-00-1-X, EPA 335.4, SM 4500-CN |
| Cyanide, WAD | µg/L | EPA 821-B-01-009 (Kelada-01), 10-204-00-1-WX, SM 4500-CN |
| Lead | µg/L | EPA 200.8, EPA 200.7 |
| Mercury | µg/L | EPA 245.1, EPA 245.2, EPA 245.7, EPA 1631, SM 3112 B |
| Molybdenum | µg/L | EPA 200.8, EPA 200.7 |
| Nickel | µg/L | EPA 200.8, EPA 200.7 |
| Selenium | µg/L | EPA 200.8, EPA 200.7 |
| Silver | µg/L | EPA 200.8, EPA 200.7 |
| Zinc | µg/L | EPA 200.8, EPA 200.7 |

a. The permittee may use any of the listed methods for each parameter that is sufficiently sensitive.
b. The permittee may use less sensitive CFR-approved methods for influent mercury monitoring provided that the method is sufficiently sensitive to detect and quantify the level of mercury in the influent sample. If mercury is not detected in the sample, the permittee must reanalyze the influent using a sufficiently sensitive method.

#### *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 sample is necessary to meet monitoring frequency required in the permit. If the original sample cannot be reanalyzed, the permittee must resample and analyze at the earliest possible opportunity. All sample/measurement 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 names of the individuals who performed the sampling or measurements
3. The dates analyses were performed
4. The names of the individuals who performed the analyses
5. The analytical techniques or methods used
6. The results of all analyses (including all QA/QC analyses required of the analytical method used)
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 for all days of a reporting period, the permittee must enter the no data indicator (NODI) code "C" that indicates no discharge for the outfall DMR during a given monitoring period. Receiving water monitoring and reporting may be required during months with no effluent discharge.
2. If the permittee did not discharge wastewater for only some of the 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 must enter the NODI Code "F" (that indicates insufficient flow for sampling and include collected sample values in a comment on the reporting period DMR.
3. For parameters continuously monitored in the effluent, influent and receiving water the permittee must submit all monitoring results and sample collection dates electronically in an Excel spreadsheet through the IPDES E-Permitting System concurrently with the permit renewal application. The file must be in the format of one analytical result per row and include the following information, when applicable:
    - 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
- Any applicable notes

4. The permittee must report, at least, the same level of precision (and significant figures, unless fewer significant figures are reported by the lab) 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. Appendix A Table A-1includes the number of significant figures in each effluent limit and place value requirements for reporting.
5. 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.
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. To calculate the geometric mean pollutant concentration when an individual result is:
   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}'.
   c. If there are individual results '< {numeric value}' and '> {numeric value}', on the DMR the permittee must report the geometric mean as '> {calculated geometric mean}'.
8. The permittee must calculate mass loads on each day the parameter is monitored using the following equation:

$$Flow\ (mgd) * Concentration\left(\frac{mg}{L}\right) * 8.34\left(\frac{lb * L}{mg * MG}\right) = lb\ per\ day$$

   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. For reporting the load on the DMR for a single sample when concentration data are less than the MDL: Use '0' to calculate the mass load, then report the mass load as '0'.

c. For reporting the load on the DMR for multiple samples when at least one sample is >MDL, but concentration data are less than the MDL for one or more individual results: Use 0 as the concentration to calculate the mass load for any individual result < MDL. Add all individual loads and divide by the number of calculated loads, then report the calculated mass load. For example, for these measured flows and concentrations:

- 2.0 mgd and <0.010 mg/ L
- 2.1 mgd and 0.03 mg/L
- 2.2 mgd and 0.01 mg/L

Calculate average mass: $((2.0\ mgd \times 0\ mg\ L) + (2.1\ mgd \times 0.030\ mg\ L) + (2.2\ mgd \times 0.010\ mg\ L))/\ 3) \times 8.34 = 0.2363\ (lb\ day)$. Round the result and report 0.24 lb/day.

d. To report a "daily maximum" load, use the day's parameter concentration and the corresponding day's average flow in equation from item #6 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.

9. To calculate monthly averages, add all individual lab results or calculated mass loadings, adjusted as necessary per section 2.2.2, item #4, 5, 6, 7, or 8 for the entire calendar month being reported and divide by the number of analytical results.
10. To calculate weekly averages, add all individual results for each week (Sunday-Saturday per 2.2.2 item #4, 5, 6, 7, or 8) and divide by the number of samples in the calendar week. Partial weeks at the end of a calendar month (one to six days) must be included in the following month's weekly average calculation. Assess the resulting averages and report the maximum value for the reporting period.
11. The reported minimum daily value on the DMR is the smallest individual result for the reporting period.
12. The reported maximum daily value on the DMR is the largest individual result for the reporting period.
13. The weekly maximum temperature (WMT) is the mean of the daily maximum temperatures measured over a period of seven consecutive days (e.g., Sunday-Saturday). The maximum weekly maximum temperature (MWMT) reported value on the DMR is the maximum of these calculated WMT values for the reporting period.
14. For calculating TP seasonal and annual loads:
    a. TP Removal PRF = (PRF Inflow TP Load) – (PRF Outflow TP Load)

b. Load (lb/day) = ([TP] mg/L) * (corresponding flow in mgd)) * (conversion factor of 8.34)
c. TP Monthly Average Load is the sum of each calculated load for a facility divided by the number of calculated loads for that month.
d. TP Monthly Average Load for each facility is expressed as a combined load between Lander Street, West Boise, and PRF and is calculated as: Monthly Average TP Load = (Monthly Average Load Lander Street + Monthly Average Load West Boise) – (Monthly Average Removal PRF / 1.5)
e. TP Seasonal Average Load for the PRF is the sum of each calculated load divided by the number of calculated loads, including values of 0, during the May–September season.
f. TP Annual Average Load for each facility is the sum of each calculated load divided by the number of calculated loads in the year.
g. The annual average load for each facility is expressed as a combined load between Lander Street, West Boise, and PRF and is calculated as: Annual Average TP Load = (Annual Average Load Lander Street + Annual Average Load West Boise) – (Annual Average Removal PRF / 1.5)

### 2.2.3 Discharge Monitoring Report

NetDMR Submittal—The permittee must submit influent, effluent, and receiving water monitoring data electronically using NetDMR, an EPA web-based tool that allows permittees to electronically submit DMRs.

Monitoring data must be submitted electronically using NetDMR no later than the 20th of the month following the completed monitoring period. All other reports required under this permit must be submitted as a legible electronic document using the 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 Notice of New Introduction of Toxic Pollutants

The permittee must provide adequate notice per IDAPA 58.01.25.301.02 to DEQ through the IPDES E-Permitting System as soon as the permittee becomes aware of the following:

1. Any new introduction of pollutants into the POTW from an industrial user or other indirect discharger that would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants.
2. Any substantial change in the volume or character of pollutants being introduced into the POTW by an authorized source at the time of issuance of this IPDES permit.

For the purposes of this section, adequate notice must include the following:

1. The quality and quantity of effluent to be introduced into the POTW;
2. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW; and
3. Any anticipated impact of the change on the quantity or quality of sewage sludge accumulated at the POTW.

### 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 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 that 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;
4. Any violation of an instantaneous maximum, instantaneous minimum, or daily maximum effluent limit for pollutants identified in Table 2; or
5. Any overflow prior to the treatment works over which the permittee has ownership or operational control; or an overflow from a contributing collection system that affected or was affected by the permittee's operation or infrastructure. An overflow is any spill, release, or diversion of municipal sewage including:
    a. An overflow that results in a discharge to waters of the United States; or
    b. An overflow of wastewater, including a wastewater backup into a building (other than a backup caused solely by a blockage or other malfunction in a building service line), or discharged to the soil's surface that does not reach waters of the United States.

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 sanitary sewer overflow (SSO) 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 an 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; and
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.

When the occurrence is a noncompliance event that may endanger human health or the environment, an unanticipated bypass, an upset, or an overflow, the permittee must complete and submit the 5-day written report form through the IPDES E-Permitting System within 5 days of the time the permittee becomes aware of the event.

### 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

Submit permit renewal application including required monitoring data in section 2.1.5 through the IPDES E-Permitting System as required in section 4.2.2, by 12/30/2026.

If 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 in any report to DEQ, it must submit the correct facts or information promptly as required in IDAPA 58.01.25.300.12.h.

# 3 Special Conditions

## 3.1 Compliance Schedule

The permittee must comply with all effluent limits and monitoring requirements identified in this permit beginning on the effective date of this permit except those for which a compliance schedule is hereby authorized. The permittee cannot immediately achieve effluent limits for the pollutant(s) identified in this section upon issuance of this permit. DEQ is authorizing a compliance schedule for these permit conditions consistent with IDAPA 58.01.25.305. Until compliance with the final effluent limits is achieved, at a minimum, the permittee must meet interim effluent limits in Table 3 and complete the tasks and reports listed in Table 14. There is no penalty for completing tasks or submitting deliverables in advance of the due dates.

The permittee must achieve compliance with the final effluent limits for TP as set forth in Table 2 of this permit no later than 06/30/2032. The final effluent limits are a combined load that must be met between Lander Street, West Boise, and PRF.

**Table 14. Tasks required under the compliance schedule for Phosphorus, total as P (TP).**

| Task Number | Date Due | Task Activity |
|---|---|---|
| 1 | 6/30/2023 | Status/Progress Report<br>Provide a summary of Enhanced Biological Nutrient Removal (EBNR) process improvements completed during the task year and a narrative description of work anticipated for the upcoming year.<br><br>Deliverable:<br>Submit a report through the IPDES E-permitting System detailing EBNR and any other TP removal process improvements made during the task year and the series of actions that will be taken in the coming year. |
| 2 | 6/30/2024 | Engineering Plan<br>Submit a plan for secondary treatment design.<br><br>Deliverable:<br>Permittee must submit a preliminary engineering report (PER) to DEQ for review and approval. Submit notification through the IPDES E-Permitting System that a PER was submitted to the DEQ Boise Regional Office detailing secondary treatment improvements. |
| 3 | 6/30/2025 | Other: Final Design Complete<br>Submit written notice that final design is complete for secondary treatment improvements.<br><br>Deliverable:<br>Submit written notice through the IPDES E-Permitting System that Plans and Specifications for secondary treatment upgrades were submitted to DEQ Boise Regional Office engineering staff for review and approval. |
| 4 | 2/28/2026 | Award Contracts for Required Work or On-Site Construction<br>Submit written notice that construction-related contracts have been awarded.<br><br>Deliverable:<br>Submit written notice through the IPDES E-Permitting System that construction contracts are awarded. |
| 5 | 6/30/2026 | Status/Progress Report<br>Submit any updates on the construction schedule and a report outlining progress during the task year on secondary treatment improvements.<br><br>Deliverable:<br>Submit a report through the IPDES E-Permitting System of any updates to the construction schedule, detailing progress from the task year on secondary treatment improvement and a narrative description of work anticipated for the upcoming year. |
| 6 | 6/30/2027 | Status/Progress Report<br>Submit any updates to the construction schedule and a report outlining progress during the task year on secondary treatment improvements.<br><br>Deliverable:<br>Submit a report through the IPDES E-Permitting System of any updates to the construction schedule, detailing progress from the task year, and a narrative description of work anticipated for the upcoming year. |

| Task Number | Date Due | Task Activity |
|---|---|---|
| 7 | 6/30/2028 | Status/Progress Report<br>Submit any updates to the construction schedule and a report outlining progress during the task year on secondary treatment improvement and tertiary treatment evaluation, including any updates on the tertiary treatment design schedule.<br><br>Deliverable:<br>Submit a report through the IPDES E-Permitting System detailing any updates to the construction schedule, progress from the task year on secondary treatment improvement and tertiary treatment evaluation project design, and a narrative description of work anticipated for the upcoming year. |
| 8 | 6/30/2029 | Status/Progress Report<br>Submit any updates to the construction schedule and a report outlining progress during the task year on secondary treatment improvement and tertiary treatment evaluation, including any updates on the tertiary treatment selection and design schedule.<br><br>Deliverable:<br>Submit a report through the IPDES E-Permitting System detailing any updates to the construction schedule, progress from the task year on secondary treatment improvement and tertiary treatment evaluation project design, and a narrative description of work anticipated for the upcoming year. |
| 9 | 12/31/2029 | Complete Required Work or On-Site Construction<br>Submit written notice that secondary treatment improvement construction is substantially complete.<br><br>Deliverable:<br>Submit written notice through the IPDES E-Permitting System that secondary treatment improvement project construction has been substantially completed. |
| 10 | 6/30/2030 | Initiate Operation/Startup<br>Submit a report summarizing the startup process optimization activities and tertiary treatment evaluation progress.<br><br>Deliverable:<br>Submit a written report through the IPDES E-Permitting System summarizing startup, process optimization activities, progress on tertiary treatment, and progress during the task year toward meeting the final combined load TP effluent limit. |
| 11 | 6/30/2031 | Status/Progress Report<br>Submit a report summarizing process optimization activities, tertiary treatment evaluation, and progress in the current task year toward achieving the final TP combined load effluent limits.<br><br>Deliverable:<br>Submit a written report through the IPDES E-Permitting System summarizing process optimization activities, treatment performance improvements, and progress during the task year with the tertiary treatment process and meeting the final combined load TP effluent limit. |
| 12 | 6/30/2032 | Achieve Final Effluent Limitations<br>Complete process optimization and submit notification that final combined load effluent limits are achieved.<br><br>Deliverable:<br>Submit written notice through the IPDES E-Permitting System that compliance with final TP combined load effluent limit has been met. |

Written notice of compliance or noncompliance with each scheduled task must be submitted through the IPDES E-Permitting System within 14 days following each task due date in the table in section 3.1.

Status/ progress reports required for specified tasks in Table 14 must include the following:

1. An assessment of the previous year of TP data and comparison to the effluent limits.
2. A report on progress made towards meeting the TP effluent limits, including the applicable deliverable required under each associated task relevant to the reporting year.
3. Further actions and milestones targeted for the upcoming year.

## 3.2 Facility Capacity

The influent and effluent monitoring section of the permit includes monitoring for flow, $BOD_5$, and TSS. The permittee should consider updating or preparing a facility capacity plan when the actual flow or load reaches the 85% capacity trigger value of any of the design criteria in Table 15. If reported values exceed any maximum facility capacity value in Table 15 for any 2 months during a rolling 12-month period, the permittee should assess whether an update to the facility plan is necessary.

**Table 15. Facility capacity values.**

| Facility Design Criteria | 85% Design Capacity | Maximum Design Capacity | Units |
|---|---|---|---|
| Maximum Monthly Effluent Flow [a] | 12.75 | 15 | mgd |
| $BOD_5$ maximum monthly influent load [b] | 28176 | 33150 | lb/day |
| TSS maximum monthly influent load [b] | 25381 | 29860 | lb/day |

a. Maximum monthly flow means the largest volume of flow recorded during reporting month.
b. Maximum monthly loading means the largest daily load calculated during a reporting month.

When a facility plan update is deemed necessary, engineering documents must meet the requirements of IDAPA 58.01.16.410 for facility plans. The plan must be approved by DEQ.

## 3.3 Whole Effluent Toxicity Testing

### 3.3.1 Sample Frequency, Test Species, and Methods

The permittee must conduct effluent monitoring at Lander Street Outfall 001for chronic toxicity using the frequency and sample type identified in Table 16.

**Table 16. Whole effluent toxicity (WET) testing.**

| Parameter | Sample Frequency[a] | Sample Type[b] | Report |
|---|---|---|---|
| Chronic toxicity [a, c] | Quarterly | 24-hr composite | Complete all fields in the DMR and IPDES E-Permitting System. This follows the report preparation instructions in Section 10 of EPA-821-R-02-013, or most recent guidance. |

a. If a test exceeds the monthly average limit the permittee must begin accelerated testing and if necessary, evaluate the cause of toxicity as described in sections 3.3.5. and 3.3.6.

b. A split of each WET sample must be analyzed for the chemical and physical parameters required in permit section 1.2 and section 2.1.2 and can be used to satisfy the required sampling in those sections.
c. Chronic toxicity tests are required for this permit. The daily maximum limit shall be interpreted as signifying the maximum test result for the month.

For quarterly WET testing, quarters are defined as: January – April; May – June; July – September; and October – December. Samples must be collected once during each quarter with results submitted on the last DMR of the applicable quarterly monitoring period.

A split of each WET sample collected must be analyzed for the chemical and physical parameters required in section 1.2 and section 2.1.2, using the approved analytical methods of 40 CFR 136 or other approved methods. These samples can be used to satisfy the required sampling in those permit sections. For parameters for which grab samples are required, grab samples must be taken during the same period as the chronic toxicity sample used for the toxicity tests.

Toxicity must be determined using the species and test methods identified in Table 17. The permittee must follow all test procedure recommendations unless otherwise specified in this permit. The toxicity testing on each organism must include a series of five test dilutions and a control. The dilution series for May – September must include 8, 25, 50, 75, and 100 % effluent. The dilution series for October – April must include 18, 38, 50, 75, and 100 % effluent.

**Table 17. Toxicity test species and methods.**

| Test Type | WET Test Method No.[a] | Freshwater Toxicity Test Method | Species | Test Method Source |
|---|---|---|---|---|
| Chronic | 1000.0 | Survival and Growth | *Fathead Minnow Pimephales promelas* | EPA-821-R-02-013 |
| Chronic | 1002.0 | Survival and Reproduction | *Daphnid, Ceriodaphnia dubia* | EPA-821-R-02-013 |
| Chronic | 1003.0 | Growth | *Green Alga, Selenastrum capriconutum* | EPA-821-R-02-013 |

a. Use of most recent promulgated test method is required.

After four complete rounds of toxicity tests using all test species in Table 17, the permittee may request to test using the most sensitive species from previous toxicity tests. The criteria for determining the most sensitive species are:

1. The most sensitive species is the species which, during the screening period, produces the greatest maximum toxicity result in chronic toxic units (TUc), which is defined in section 3.3.3.
2. If all three species produce the identical maximum toxicity result (including no toxicity in 100% effluent) the permittee must use *Ceriodaphnia dubia* for subsequent tests.
3. If two species produce the identical maximum toxicity result, which is greater than 1.0 TUc and also greater than the maximum toxicity result of the third species, the permittee may use either of the two species producing the greater maximum toxicity result for subsequent tests.

If the permittee wishes to reduce the number of WET test species they must submit a written request through the IPDES E-Permitting System for reduction of WET test species, including test

results and rationale for species removal. With approval from DEQ, the permittee can then reduce testing to the species requested.

### 3.3.2 Quality Assurance

All quality assurance criteria and statistical analyses used for WET tests and reference toxicant tests must be in accordance with *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA-821-R-02-013, or most recent version) and individual test protocols.

In addition to those quality assurance measures specified in the methodology, the following quality assurance procedures must be followed:

- Unless the samples are used in an on-site toxicity test the day of collection (or hand delivered to the testing laboratory for use on the day of collection), the samples must be held at 0 °C < T ≤ 6 °C until used to inhibit microbial degradation, chemical transformations, and loss of highly volatile toxic substances.
- The holding time from sample collection to first use of each sample must not exceed 36 hours.
- If organisms are not cultured in-house, concurrent testing with reference toxicants must be conducted. If organisms are cultured in-house, monthly reference toxicant testing is sufficient. Reference toxicant tests must be conducted using the same test conditions as the effluent toxicity tests.
- If either the reference toxicant tests or effluent tests do not meet all test acceptability criteria as specified in the test methods manual, the permittee must re-sample and re-test within 14 calendar days of receipt of the test results.
- Water used in the control and dilution series must be lab water with equivalent hardness to receiving water, as described in the test methods manual. If the dilution water used is different water used for culture, the permittee must include a second control (using culture water). In no case shall water that has not met test acceptability criteria be used for either dilution or control.

### 3.3.3 Reporting

The permittee must submit the $TU_c$ results of all toxicity tests that meet quality assurance criteria in section 3.3.2, including accelerated tests required in section 3.3.5, on the DMR specified in Table 2. In addition, the permittee must submit each laboratory report through the IPDES E-Permitting System within 30 days of receipt. The permittee must complete all required fields in the IPDES E-Permitting System Reporting Monitoring Data Entry WET testing section and submit the laboratory report and all associated QA/QC information. The testing methods and requirements are outlined in section 10 *Report Preparation,* of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, Fourth Edition*, EPA/821-R-02-013, October 2002. Use of the most recent promulgated test method is required. The permittee must collect WET effluent samples concurrently with monitoring required in section 1.2 and 2.1.2.

Chronic toxicity test results must be reported in $TU_c$ (chronic toxic units), calculation is explained below.

To calculate chronic toxicity survival endpoints:

$$TUc = \frac{100}{NOEC}$$

NOEC is an acronym for no observed effect concentration. The NOEC is the highest concentration of toxicant, expressed in percent 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).

To calculate all other chronic toxicity test endpoints:

$$TUc = \frac{100}{IC25}$$

IC25 is the 25% inhibition concentration. The IC25 is a point estimate of the toxicant concentration, expressed in percent effluent, that causes a 25% reduction in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., interpolation method).

All valid toxicity tests for each species during the quarter, including those required by section 3.3.5, must be included in DMR and IPDES E-Permitting System reporting. For each test species, all calculated $TU_c$ endpoint values are summed and then divided by the number of chronic toxicity endpoint values. The resulting chronic toxicity, in TUc, is reported on the DMR as the Monthly Average Value for that species. The highest chronic toxicity endpoint value, in TUc, is reported on the DMR as the Daily Maximum Value for that species.

If the laboratory determines a test result is anomalous, the permittee should contact the assigned IPDES compliance officer to determine whether changes are appropriate for the accelerated test schedule. If a permittee/lab presents DEQ with an anomalous result, and DEQ agrees, they could retest. If that retest result is less than the monthly average effluent limit DEQ will respond in writing that the permittee does not have to proceed with accelerated testing. Until DEQ notifies the permittee in writing that changes are appropriate, the permittee must maintain the accelerated test schedule.

### 3.3.4 Preparation of Initial Toxicity Reduction Evaluation Strategy

The permittee shall submit a copy of the permittee's Initial Toxicity Reduction Evaluation (TRE) strategy through the IPDES E-Permitting System by 9/30/2022.

This strategy shall describe the steps the permittee intends to follow in the event toxicity is detected at levels greater than the effluent limit in permit section 1.2 and must include the following, at a minimum:

- A description of the investigation and evaluation techniques that would be used to identify potential causes/sources of toxicity, effluent variability, treatment system efficiency
- A description of the facility's method of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in operation of the facility

- If a toxicity identification evaluation (TIE) is necessary, who will conduct it (i.e., in-house or other)

### 3.3.5 Accelerated Testing

The permittee must implement accelerated testing and the initial TRE strategy if toxicity is detected above the monthly average WET limit in this permit. The Lander Street Outfall 001 WET effluent limits are as follows:

- 4.0 $TU_c$ for May 1 – September 30
- 2.6 $TU_c$ for October 1 – April 30

Accelerated testing requires the permittee to conduct four more tests. Testing must occur biweekly (every 2 weeks), over an 8-week period. Testing shall commence within 10 calendar days of receipt of the sample results of the exceedance.

If the permittee is required to begin accelerated testing more than once in a rolling 12-month period, then they shall implement the TRE plan requirements identified in section 3.3.6 immediately upon collecting the first sample of the accelerated testing protocol.

If all the required accelerated tests are below the permit effluent limit, the permittee may return to the WET testing frequency required in section 3.3.1.

If any accelerated test exceeds the permit monthly average effluent limit, the permittee must submit notification through the IPDES E-Permitting System within 5 calendar days of receipt of the test results indicating the exceedance. The notification must include the following information:

- A status report on any actions required by the permit, with a schedule for actions not yet completed.
- A description of any additional actions the permittee has taken or will take to investigate and correct the causes of the toxicity.
- Where no actions have been taken, a discussion of the reasons for taking no action.

If implementing the Initial TRE Strategy clearly identifies the source of toxicity to the satisfaction of the DEQ (e.g., a temporary plant upset), or none of the four accelerated chronic toxicity tests required under section 3.3.5. are above 4.0 $TU_c$ from May through September, or 2.6 $TU_c$ from October – April the permittee can return to the regular chronic toxicity testing cycle specified in section 3.3.1.

If implementing the Initial TRE Strategy does not clearly identify the source of toxicity to the satisfaction of the DEQ, or any of the four accelerated chronic toxicity tests indicate toxicity above 4.0 $TU_c$ from May through September, or 2.6 $TU_c$ from October – April, then the permittee must begin implementation of the Toxicity Reduction Evaluation (TRE) requirements in section 3.3.6.The TRE requirements must be implemented within 10 days of receipt of the accelerated chronic toxicity testing results that exceed the trigger, or when the source of toxicity is not identified, after completion of accelerated tests required in this section.

### 3.3.6 Toxicity Reduction Evaluation

If toxicity is detected above the monthly average WET effluent limit in section 3.3.5 or in any of the four additional tests required under accelerated testing, then the permittee must develop and implement a TRE. The permittee will develop as expeditiously as possible a TRE plan in accordance with the EPA manual EPA 833- B-99-002 (*Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants*), which includes the following:

- Further actions to investigate and identify the cause of toxicity
- Actions the permittee will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity
- A schedule for these actions

The permittee must continue accelerated testing at the same frequency throughout TRE plan development and implementation.

The permittee may initiate a TIE as part of the overall TRE process described in the EPA acute and chronic TIE manuals: *Toxicity Identification Evaluation; Characterization of Chronically Toxic Effluents, Phase I* (EPA/600/6-91/005F), *Methods for Aquatic Toxicity Identification Evaluations, Phase II: Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080), and *Methods for Aquatic Toxicity Identification Evaluations, Phase III: Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA-600/R-92/081).

If after testing required under section 3.3.5 is complete and two additional consecutive tests do not exceed the permit quarterly average effluent limit, then the permittee may return to the testing frequency required in section 3.3.1 but must complete development of the TRE plan.

### 3.3.7 Inconclusive TRE/TIE

If the detailed TRE described in section 3.3.6 is inconclusive, the permittee must conduct one chronic toxicity test every other week for eight weeks (four tests, total). This accelerated testing must be initiated within 10 calendar days of completing the detailed TRE/TIE.

- If none of the additional four required accelerated chronic toxicity tests exceed the applicable monthly average chronic WET effluent limit in section 3.3.5 of this permit, the permittee may return to the regular chronic toxicity testing cycle specified in section 3.3.1.
- If any of the four accelerated chronic toxicity tests exceed the applicable monthly average chronic WET effluent limit in section 3.3.5 of this permit, the permittee must repeat the TRE/TIE process described in section 3.3.6.

## 3.4 Pretreatment Requirements

The permittee must require any nondomestic user of its treatment works to comply with the applicable requirements in 40 CFR 403 through 471 and the POTW's pretreatment program.

The permittee must implement its pretreatment program in accordance with the legal authorities, policies, procedures, staffing levels, and financial provisions described in its original

pretreatment program submission approved on January 31, 1985, any program amendments submitted thereafter and approved by DEQ, and the general pretreatment regulations (40 CFR 403) and any amendments thereof.

### 3.4.1 Implementation

At a minimum, the permittee must carry out the following activities:

1. Enforce general pretreatment program prohibitions as set forth in 40 CFR 403.5(a) and (b), categorical pretreatment standards promulgated pursuant to Section 307(b) and (c) of the Clean Water Act (where applicable), and local limits and best management practices (BMPs) developed by the permittee in accordance with 40 CFR 403.5(c), whichever are more stringent and are applicable to nondomestic users discharging wastewater into the permittee's collection system. Locally derived limits must be defined as pretreatment standards under Section 307(d) of the Clean Water Act.
2. Implement and enforce the requirements of the most recent local law and regulations (e.g., municipal code, sewer use ordinance) addressing the regulation of nondomestic users.
3. Update its master list of nondomestic users at a frequency and diligence adequate to ensure proper identification of nondomestic users subject to pretreatment standards, but no less than once per year. The master list must be submitted with the pretreatment annual report. The permittee must notify these users of applicable pretreatment standards in accordance with 40 CFR 403.8(f)(2)(iii).
4. Issue, reissue, and modify, in a timely manner, industrial wastewater discharge permits to at least all SIUs and categorical industrial users (CIUs). These documents must contain, at a minimum, conditions identified in 40 CFR 403.8(f)(1)(iii), including BMPs, if applicable. The permittee must follow the methods described in its implementation procedures for issuance of individual permits.
5. Develop and maintain a data management system designed to track the status of the permittee's nondomestic user inventory, wastewater characteristics, and their compliance with applicable pretreatment standards and requirements. The permittee must retain all records relating to its pretreatment program activities for a minimum of 5 years and must make such records available to DEQ upon request.
6. Establish, where necessary, legally binding agreements with contributing jurisdictions to ensure compliance with applicable pretreatment requirements in 40 CFR 403 by industrial users within these jurisdictions. These legally binding agreements must identify the agency responsible for the various pretreatment implementation and enforcement activities in the contributing jurisdiction and outline the specific roles, responsibilities and pretreatment activities of each jurisdiction.
7. Carry out inspections, surveillance, and monitoring of nondomestic users to determine compliance with applicable pretreatment standards and requirements. A complete inspection of all SIUs and sampling of all SIUs' effluent must be conducted at least annually.
8. Require SIUs to conduct wastewater monitoring and reporting as specified in 40 CFR 403.12(e) through (h). Frequency of wastewater sampling by the SIUs must be appropriate for the character and volume of the wastewater but no less than twice per

year. Sample collection and analysis must be performed in accordance with 40 CFR 403.12(b)(5)(ii) through (v) and 40 CFR 136. In cases where the pretreatment standard requires compliance with a BMP or pollution prevention alternatives, the permittee must require the SIU to submit documentation to determine compliance with the standard. If the permittee elects to conduct all nondomestic user monitoring for any SIU instead of requiring self-monitoring, the permittee must conduct sampling in accordance with the requirements of this bullet, and the requirements of 40 CFR 403.12(g).

9. Enforce and obtain remedies for any industrial user noncompliance with applicable pretreatment standards and requirements. This must include timely and appropriate reviews of reports to identify all violations of the user's permit, the local ordinance, and federal pretreatment standards and requirements. Once violations have been identified, the permittee must take timely and appropriate action to address the noncompliance. The permittee's enforcement actions must follow its DEQ-approved enforcement response procedures.
10. Publish, at least annually, in a newspaper (or newspapers) of general circulation that provides meaningful public notice within the jurisdiction(s) served by the POTW, a list of all nondomestic users that, at any time in the previous 12 months, were in significant noncompliance as defined in 40 CFR 403.8 (f)(2)(viii). A copy of these publications must be submitted in the pretreatment annual report.
11. Maintain adequate staff, funds, and equipment to implement its pretreatment program.
12. Conduct an analysis annually to determine whether influent pollutant loadings are approaching the maximum allowable headworks loadings calculated in the permittee's most recent local limits calculations. The results of this analysis must be reviewed as outlined in Section 7.1.1 of the 2004 EPA Local Limits Guidance using threshold values of 60% for annual average pollutant concentrations and 80% for annual maximum pollutant concentrations.

### 3.4.2 General Pretreatment Program Prohibitions

The permittee must not allow introduction of the following pollutants into the POTW:

1. Pollutants that will create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than 60 ºC (140 ºF) using the test methods specified in 40 CFR 261.21;
2. Pollutants that may cause corrosive structural damage to the POTW, but in no case, discharges with a pH lower than 5.0, unless the treatment facilities are designed to accommodate such discharges;
3. Solid or viscous pollutants in amounts that may cause obstruction to the flow in the POTW (including the collection system) resulting in interference;
4. Any pollutant, including oxygen-demanding pollutants (e.g., BOD), released in a discharge at a flow rate and/or pollutant concentration that may cause interference with the POTW;
5. Heat in amounts that may inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40 ºC (104 ºF) unless DEQ, upon request of the POTW, approves alternate temperature limits;

6. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that may cause interference or pass-through;
7. Pollutants that may result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and
8. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

### 3.4.3 Accidental Spill Prevention and Slug Discharges

The permittee must implement an accidental spill prevention program to reduce and prevent spills and slug discharges of pollutants from nondomestic users.

1. Control mechanisms for SIUs must contain requirements to control slug discharges if determined by the POTW to be necessary [40 CFR 403.8(f)(1)(iii)(B)(6)].
2. SIUs must be evaluated for the need for a plan or other action to control slug discharges within 1 year of being designated an SIU [40 CFR 403.8(f)(2)(vi)].
3. SIUs must notify the POTW immediately of any changes at their facilities affecting the potential for a slug discharge [40 CFR 403.8(f)(2)(vi)].

### 3.4.4 Enforcement Requirement

Whenever DEQ finds, on the basis of any available information, that the owner or operator of any source is introducing a pollutant into the POTW in violation of national pretreatment standards, including prohibited discharges, local limits, or categorical standards, or has caused interference or pass-through, DEQ may notify the owner or operator of the POTW of such violation. If, within 30 days after such notification has been sent by DEQ to the POTW, the POTW fails to commence appropriate enforcement action to correct the violation, DEQ may take appropriate enforcement action under the authority provided in Section 309(f) of the Clean Water Act.

### 3.4.5 Modification of the Pretreatment Program

If the permittee elects to modify any components of its pretreatment program, it must comply with the requirements of 40 CFR 403.18. No substantial program modification, as defined in 40 CFR 403.18(b), may be implemented prior to receiving written authorization from DEQ. The permittee must submit program modification requests to the IPDES Pretreatment Coordinator via the IPDES E-Permitting System.

### 3.4.6 Local Limits Evaluation

The permittee must submit a complete local limits evaluation pursuant to 40 CFR 403.5 within 1 year of the effective date of the permit, and every 5 years thereafter, or sooner if any of the following occur:

- A new industrial user begins a discharge that may significantly impact the POTW, including, but not limited to:
  - the flow is ≥5% of the average dry weather hydraulic or organic capacity of the POTW treatment plant, or
  - the flow represents a 25% or greater increase in total industrial flow to the POTW, or

  - the discharge contains elevated levels of pollutants for which there are established local limits or permit limits, or
  - the discharge contains a pollutant of concern new to the POTW
- An existing industrial user modifies their discharge in a manner that may significantly impact the POTW as above,
- Changes or upgrades occur to the POTW's operations or treatment capacities.

For additional guidance regarding when a local limits evaluation is required, contact the IPDES Pretreatment Coordinator. The evaluation must take into account water quality in the receiving stream, inhibition levels for biological processes in the treatment plant, and sludge quality goals. The evaluation must address the following pollutants if present in the discharge: arsenic, $BOD_5$, cadmium, chromium, copper, cyanide, lead, mercury, molybdenum, nickel, selenium, silver, TSS, zinc, and any other pollutant of concern. The permittee must address total ammonia as N if the POTW accepts indirect discharges of ammonia. Submitted results of the evaluation must include proposed local limits, maximum allowable headworks loadings, all supporting calculations, and all assumptions.

Upon submission of the local limits evaluation, the IPDES Pretreatment Coordinator will review the submission in accordance with 40 CFR 403.18. Non-substantial modifications to local limits may be implemented after 45 days unless DEQ notifies the permittee that the modification is disapproved or determines that the modification is substantial. Substantial modifications include, but are not limited to, less stringent local limits or decreases in the maximum allowable headworks or industrial loadings.

Local limits evaluations resulting in substantial modifications to the permittee's pretreatment program may be submitted to the IPDES Pretreatment Coordinator for review prior to official submission of the local limits evaluation or pretreatment program modification request through the IPDES E-Permitting System.

### 3.4.7 Pretreatment Monitoring

The permittee's pretreatment program requires monitoring at Lander Street Influent 001 and Lander Street Outfall 001 at the locations described in Table 1. The permittee must sample the influent and effluent for the pollutants, frequency, and sample type in Table 18 and report the results on an annual basis in the pretreatment report. To the extent that the timing of sampling coincides with sampling required for influent or effluent testing required by Table 2, Table 3, Table 5, or Table 6, these results will satisfy the requirements of effluent parameter testing.

**Table 18. Pretreatment monitoring for influent and effluent.**

| Pollutant [a] | CAS Number. | Sample Frequency | Sample Type | Report |
|---|---|---|---|---|
| Arsenic (total) [b] | 7440382 | Twice per year in April and October on 3 consecutive days between Monday and Friday, inclusive. | 24-hour composite | Daily values |
| Cadmium [b] | 7440439 | | | |
| Chromium (total) [b] | 7440473 | | | |
| Copper [b] | 7440508 | | | |
| Lead [b] | 7439921 | | | |
| Mercury [b] | 7439976 | | | |
| Molybdenum | 7439987 | | | |
| Nickel [b] | 7440020 | | | |
| Selenium | 7782492 | | | |
| Silver [b] | 7440224 | | | |
| Zinc [b] | 7440666 | | | |
| Cyanide (total) [b, c] | 57125 | | | |
| Ammonia | 7664417 | | | |
| TP | 7723140 | | | |

*Notes:* CAS = Chemical Abstracts Service

a. All metals must be analyzed for total concentration unless otherwise specified.
b. For influent and effluent pretreatment sampling of arsenic, cadmium, chromium, copper, cyanide, lead, mercury, nickel, silver, and zinc, the permittee must use EPA-approved analytical methods that are sufficiently sensitive.
c. When sampling for cyanide, eight discrete grab samples must be collected over the operating day with samples collected no less than one hour apart. Each sample must be at least 100 mL. Each sample must be checked for the presence of chlorine and/or sulfides prior to preserving and compositing (Standard Method 4500-CN B). If chlorine and/or sulfides are detected, the sample must be treated to remove any trace of these parameters. After testing and treating for the interference compounds, the pH of each sample must be adjusted using sodium hydroxide, as specified in 40CFR 136. Each sample can then be composited into a larger container that is kept chilled to ≤6 °C, to allow for one analysis for the day.

In addition to the monitoring specified in Table 18, once during each monitoring period, the permittee must perform chemical analyses of its influent for all specific toxic organic pollutants listed in Table II of Appendix D of 40 CFR 122. The analysis must align with the following:

1. Sample type—The samples must be 24-hour composites, except when sampling volatiles.
2. Volatile organic compounds sampling—Eight discrete samples must be collected over a 24-hour day using 40-mL volatile organic analysis (VOA) vials with Teflon septa. During sampling, the flow from the discharge will be controlled to produce smooth laminar flow to prevent agitation and aeration of the sample. The VOA vials will be filled to the top such that there is a meniscus present. There must be no visible air space or air bubbles in the VOA vials when capped. A single analysis for volatile pollutants may be run for each monitoring day by compositing equal volumes of the individual discrete VOA vials (at the analytical laboratory using extreme care not to introduce air/air bubbles) directly into the gas chromatograph (GC) purge and trap apparatus, with no less than 1 mL of each grab included in the composite. The composited sample must be analyzed immediately.
3. If the sum of the concentrations for each toxic organic pollutant listed in Table II of Appendix D of 40 CFR 122, which is found in the influent at a concentration greater than 10 micrograms per liter, is greater than 1000 micrograms per liter, then the effluent and sludge must also be analyzed for each toxic organic pollutant listed in Table II of

Appendix D of 40 CFR 122 during the next pretreatment monitoring period. This requirement also becomes effective if, from one monitoring period to the next, the sum of the toxic organic pollutants in the influent increases by an order of magnitude from the previous sample. This increased monitoring must continue until the triggering condition no longer applies, or upon approval of DEQ.

4. Gas chromatograph/mass spectrometer (GC/MS) analysis—In addition to analyzing for pollutants specified listed in Table II of Appendix D of 40 CFR 122, the permittee must make a reasonable attempt using GC/MS analytical techniques to identify and quantify the 10 most abundant constituents of each extract (excluding toxic organic pollutants in Table II of Appendix D of 40 CFR 122 and unsubstituted aliphatic compounds) shown to be present by peaks on the total ion plots (reconstructed gas chromatograms). Identification must be attempted through the use of EPA and NIST/EPA/NIH Mass Spectral Library, with visual confirmation by an experienced analyst. Quantification may be an order-of-magnitude estimate based upon comparison with an internal standard.
5. Sample handling—All samples must be prepared, preserved, shipped, and analyzed in accordance with the QAPP and section 2.1.6.
6. Phenol and sulfides sampling —Eight discrete samples must be collected over 24 hours. Each aliquot must be at least 100 mL and composited into a larger container.

The permittee must sample sludge according to Table 19 as the sludge leaves the dewatering device or digesters and report the results on an annual basis in the pretreatment report.

**Table 19. Pretreatment monitoring for sludge.**

| Pollutant[a] | CAS Number | Sample Frequency | Sample Type | Report |
|---|---|---|---|---|
| Arsenic (total)[b] | 7440382 | Twice per year in April and October, on 3 consecutive days between Monday and Friday, inclusive. | Grab | Daily values |
| Cadmium [b] | 7440439 | | | |
| Copper [b] | 7440508 | | | |
| Lead [b] | 7439921 | | | |
| Mercury [b] | 7439976 | | | |
| Molybdenum [b] | 7439987 | | | |
| Nickel [b] | 7440020 | | | |
| Selenium [b] | 7782492 | | | |
| Zinc [b] | 7440666 | | | |
| Percent Solids | N/A | | | |

*Notes:* CAS = Chemical Abstracts Service; N/A = not applicable

a. Metals concentrations in sludge must be reported in mg/kg, dry weight.

b. All metals must be analyzed for total concentration unless otherwise specified.

### 3.4.8 Pretreatment Annual Report

The permittee must submit a pretreatment annual report pursuant to 40 CFR 403.12(i) by November 1, each year that describes the permittee's program activities over the period October 1 of the previous year to September 30 of the current year. This report must be submitted through the IPDES E-Permitting System.

The pretreatment annual report must include the following:

1. User Inventory—An updated nondomestic user inventory, including names and addresses, a list of those facilities that are no longer discharging (with explanation), and new indirect dischargers appropriately categorized and characterized. CIUs should have the applicable category noted as well as cases where more stringent local limits apply instead of the categorical standard. The list must also identify users subject to reduced reporting requirements and those that are nonsignificant CIUs, if applicable.
    a. Listing of nondomestic users whose permits have been issued, reissued, or modified during the report year along with current permit expiration dates.
2. Wastewater and Sludge Sampling Results—Collected at the POTW as specified in section 3.4.7.
    b. Calculations of removal rates for each pollutant for each day of sampling.
    c. Analysis and discussion of whether the existing local limits in the permittee's sewer use ordinance continue to be appropriate to prevent treatment plant interference and pass-through of pollutants that could affect water quality or sludge quality. This should include a comparison between influent loadings and the most recent relevant maximum allowable headworks loadings calculated for the treatment plant. If existing local limits are inadequate to prevent treatment plant interference or pass-through, the permittee must complete a local limits evaluation and revise local limits sufficient to prevent treatment plant interference or pass-through.
3. Compliance and Inspection Activities
    d. Listing of nondomestic users inspected and/or monitored during the report year with dates and an indication of compliance status.
    e. Listing of nondomestic users planned for inspection and/or monitoring for the coming year along with associated frequencies.
4. Treatment Plant Upsets—A description of any interference, pass-through, upset, or IPDES permit violations experienced at the POTW that were directly or indirectly attributable to nondomestic users, including the following:
    a. Date and time of incident;
    b. Description of the effect on the POTW's operation;
    c. Effects on the POTW's effluent and biosolids quality;
    d. Identification of suspected or known sources of the discharge causing the upset; and
    e. Steps taken to remedy the situation and to prevent recurrence.
5. Status of Enforcement Activities— including:
    a. Listing of nondomestic users who failed to comply with applicable pretreatment standards and requirements, including the following:
        i. Summary of the violation(s).
        ii. Enforcement action taken or planned by the permittee.
        iii. Present compliance status as of the date of preparation of the pretreatment report.

6. Significant Noncompliance—Listing of those users in significant noncompliance during the report year as defined in 40 CFR 403.8(f)(2)(viii) and a copy of the newspaper publication of those users' names.
    a. DEQ may require more frequent reporting on those dischargers determined to be in significant noncompliance.
7. Status of Program Implementation
    a. Any planned modifications to the pretreatment program that have been approved by DEQ, including staffing and funding updates.
    b. Listing of nondomestic users notified of promulgated pretreatment standards and/or local standards during the report year as required in 40 CFR 403.8(f)(2)(iii).
    c. Listing of nondomestic users notified of promulgated pretreatment standards or applicable local standards who are on compliance schedules. The listing must include the final date of compliance for each facility.

## 3.5 Mercury Minimization Plan

The permittee must update and implement a mercury minimization plan (MMP) that identifies potential sources of mercury and the measures to reduce or eliminate mercury loading.

A mercury minimization plan notification must be submitted through the IPDES E-Permitting System indicating that the plan has been developed and implemented by 09/30/2022.

At a minimum, the MMP must include the following:

1. Identification and evaluation of current and potential mercury sources that contribute to discharge concentrations;
2. Identification and evaluation of conditions (i.e., anaerobic conditions) that might contribute to the methylation of elemental mercury in the collection and treatment systems;
3. Identification of industrial, commercial, and residential sources of mercury;
4. A monitoring plan to confirm current or potential sources of mercury;
5. Identification of potential methods for reducing or eliminating mercury. These may include, but are not limited to, the following:
    a. BMP requirements or limits for industrial and commercial sources of mercury to a collection system;
    b. Material substitution;
    c. Material recovery;
    d. Spill control and collection;
    e. Waste recycling;
    f. Process modifications;
    g. Laboratory housekeeping, use and disposal practices; and
    h. Public education;
6. Monthly monitoring of effluent to enable evaluation of the effectiveness and implementation of the MMP;

7. Monitoring of POTW influent twice per year (June and December);
8. Tracking mercury source reduction implementation and mercury source monitoring;
9. Implementation of cost-effective control measures for direct and indirect contributors; and
10. A mercury minimization annual report submitted to DEQ due 03/31/2023 for the first year (subsequently due annually thereafter), which includes the following:
    a. A list of potential mercury sources;
    b. A summary of actions taken to reduce or eliminate mercury discharges to progress toward meeting water quality standards;
    c. Mercury source reduction implementation, source monitoring results, influent and effluent monitoring results, and a summary of control measure effectiveness from the previous year; and
    d. Proposed adjustments to the program plan based on the plan effectiveness at reducing mercury and other findings from the previous year.

The mercury minimization annual report must be submitted through the IPDES E-Permitting System.

If DEQ determines that the MMP not effectively maintaining reduced mercury loading to its collection system compared to pre-2015 levels, or if a fish tissue advisory is developed, DEQ may reopen this permit to modify the permit conditions. These modifications may include but are not limited to additional fish tissue monitoring for methylmercury or the addition of a numeric effluent limit.

## 3.6 Methylmercury Fish Tissue Monitoring Plan

The permittee must develop and implement a methylmercury (MeHg) fish tissue monitoring plan. Any existing MeHg fish tissue monitoring plan may be modified for compliance with this section.

A MeHg fish tissue monitoring plan notification must be submitted through the IPDES E-Permitting System that the plan has been developed by 08/01/2022.

The permittee may continue to satisfy the requirements of the MeHg fish tissue monitoring plan by participating in the current Lower Boise watershed cooperative effort with other IPDES-permitted facilities as described in section 3.6.1 or by developing a city-specific individual plan.

### 3.6.1 Cooperative Fish Tissue Monitoring Plan

The objective of the cooperative fish tissue monitoring is to collect reliable and more strategically located MeHg fish tissue data, within a specific geographic area, to determine if fish tissue concentrations of MeHg are compliant with Idaho's MeHg fish tissue criterion of 0.3 milligrams per kilogram (mg/kg). The monitoring program may also be used to advise the public on safe levels of fish consumption. The requirements for participation are as follows:

### *Monitoring Plan*

The MeHg fish tissue monitoring plan must, at a minimum, include the following elements:

- Identify all participants (e.g., City of Boise, other municipalities, or industries) funding the monitoring program. The monitoring plan must be updated each time a municipality or industrial facility joins the cooperative monitoring program, and the City of Boise must provide notice through the IPDES E-Permitting System each time a new entity becomes part of the cooperative monitoring program. Written notice must be provided to DEQ within 30 days of a new participant joining the program.
- Monitoring stations where fish tissue samples will be collected. One monitoring station must be located in each of the following areas:
  - Upstream of River Mile 50 in the Lower Boise River
  - An area downstream of both City of Boise outfalls in the lower Boise River near Middleton, Idaho
  - Near the mouth of the Boise River
- Name, address of organization collecting and analyzing fish tissue samples. The organization must have experience in the collection and analysis of MeHg fish tissue samples.
- Specify sample target species, sample number and size, timing of sample collection, and all essential fish collection, handling, and shipping information for field sampling teams collecting fish.
- Include a project description, detailed standard operating procedures (SOPs) for fish collection, and instructions for completing field forms and labels and for shipping fish samples. Protocols should be consistent with Chapter 4 of *Implementation Guidance for the Idaho Mercury Water Quality Criteria* (Idaho Department of Environmental Quality, 2005).
- Identify all protocols related to sample preparation methods and analytical methods to be used on samples.
- Identify data quality goals for all sample collection and handling activities and describe the Quality Assurance/Quality Control (QA/QC) techniques employed by field teams to support those goals.

### *Sample Frequency*

Sampling must occur annually at the site near Middleton. All three sites must be sampled once every five years, starting in 2022.

### *Surface Water Monitoring*

At each sample location where fish are collected a surface water sample must be collected and analyzed for total mercury using EPA method 1631E.

### *Reporting Requirements*

The permittee must submit a report through the IPDES E-Permitting System annually, with the first report due on 06/01/2023. The permittee must also submit the annual report to the Idaho Department of Health and Welfare (IDHW) by June 1 of the year following sampling. Include

the date the report was sent to IDHW on the cover letter accompanying the annual report in the IPDES E-Permitting System.

The IDHW mailing address is:
Idaho Department of Health and Welfare
Environmental Health Program
ATTN: Toxicologist
450 W State Street
Boise, 83702

The MeHg monitoring annual report must include:

- List of participants financing the monitoring program
- Name, address and phone number of the entity collecting and analyzing samples
- Sample locations
- Target species
- Sample size
- Time of sample collection
- Analytical methods used
- Results
- Any other information relevant to the monitoring program.

# 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 12/31/2022. 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 effluent, influent, and receiving water samples in support of this permit and handling 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, and duplicates), precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.

b. Maps indicating the location of each sampling point.

c. Qualification, training and licensure of personnel.

d. Names, addresses and telephone numbers 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

In addition to the requirements specified in section 4.2.5, the permittee must submit an Operation and Maintenance (O&M) Manual Notification through the IPDES E-Permitting System by 12/31/2022 certifying that an O&M manual for the current water renewal facility has been developed and implemented. The manual must be consistent with IDAPA 58.01.16.425. The manual must be retained on site and made available to DEQ upon request. Any significant changes occurring in the daily operation of the plant must be concurrently reflected within the O&M manual.

### 4.1.3 Emergency Response Plan

The permittee must develop and implement an emergency response plan that identifies measures to protect public health and the environment. At a minimum, the plan must include mechanisms for the following:

1. Ensure that the permittee is aware (to the greatest extent possible) of all overflows from portions of the collection system over which the permittee has ownership or operational control as well as any unanticipated treatment unit bypass or upset that may exceed any effluent limit in the permit.
2. Ensure that reports of an overflow or of an unanticipated bypass or upset that may exceed any effluent limit in this permit are immediately dispatched to appropriate personnel for investigation and response as required in sections 2.2.7 and 2.2.8.
3. Ensure timely notification to DEQ of any noncompliance that require 24-hour reporting because they may endanger public health or the environment, and identify the public health district and other officials who will also receive immediate notification for items that require 24-hour reporting in section 2.2.7.
4. Ensure that appropriate personnel understand, are appropriately trained on, and follow the Emergency Response Plan; and
5. Provide emergency facility operation.

The permittee must submit an Emergency Response Plan Notification through the IPDES E-Permitting System that the plan has been developed and implemented by 12/31/2022. The plan must be available at the facility for DEQ review.

## 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 this permit and the Clean Water 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 comply with standards for sewage sludge use or disposal established in 40 CFR 503 within the time provided in those regulations, even if the permit has not yet been modified to incorporate the requirement.

### 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 58.01.25.105, 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 12/30/2026. 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 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 must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), including the outfall diffuser, that are installed or used by the permittee to achieve compliance with the conditions of this permit. To attain proper operation and maintenance, facility operations must be overseen by an appropriately licensed operator per IDAPA 58.01.16.203. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. The facility must notify DEQ whenever there is a substantive change in chemicals or flocculants for use in treatment processes. 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. The permittee should submit the total population served or Annual Equivalent Dwelling Unit (EDU) Report to DEQ through the IPDES E-Permitting System by May 31 each year. This information is used to calculate the facility's annual fee.

### 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 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 at reasonable times to and copy 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 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 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 report 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

Bypass of primary treatment, nitrification process, secondary clarifiers, or disinfectant treatment units is 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 ten (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; and
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 also 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 any provision of the rules, permits or orders relating to the IPDES program shall be liable for any expense incurred by the state 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 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 (Sewage Sludge), and IDAPA 58.01.16.650 "Wastewater Rules", 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

#### *4.2.18.1 Causes to Modify Permits*

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).

#### *4.2.18.2 Sewage Sludge Standard Changes*

This permit may be reopened to include any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act. DEQ may modify or revoke and reissue this permit if the standard for sewage sludge use or disposal is more stringent than

any requirements for sludge use or disposal in the permit, or controls a pollutant or practice not limited in the permit.

### 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 58.01.02, 58.01.16, and 58.01.17.

# 5 Definitions

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| 24-hour composite sample | 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. |
| aliquot | A sample taken as a portion of a larger whole sample for chemical analysis. |
| annual average | The annual average is the sum of all individual data points collected over a calendar year, divided by the number of data points. |
| best management practices (BMPs) | 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. |
| biosolids | Organic materials resulting from the treatment of domestic sewage in a treatment facility. |
| bypass | The intentional diversion of waste streams from any portion of a treatment facility |
| chronic toxic unit ($TU_c$) | A measure of chronic toxicity. $TU_c$ 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/NOEC). |
| composite sample | 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”. |
| daily average | An average of all continuously monitored data recorded in one calendar day. |
| daily discharge | 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. |
| daily maximum | The largest daily value recorded or calculated over the reporting period; alternatively, the limit established above which an excursion occurs. |
| Idaho Department of Environmental Quality (DEQ) | The entity responsible for implementing the Idaho Pollutant Discharge Elimination System program. |
| director | The director of DEQ, or an authorized representative |
| Discharge Monitoring Report (DMR) | 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. |
| DMR monitoring period | The period of time during which sampling occurs (monthly, quarterly). |
| DMR reporting month | The final month of a completed DMR monitoring period. The month that data is being reported for. For example, the DMR reporting month indicated “December” is due by January 20$^{th}$. |

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| United States Environmental Protection Agency (EPA) | The Agency responsible for implementation of the clean water act (CWA) and oversight of state NPDES programs. |
| geometric mean | The $n^{th}$ root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values |
| grab sample | An individual sample collected over a period of time not exceeding 15 minutes |
| Idaho Pollutant Discharge Elimination System (IPDES) | The Idaho program 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 |
| inhibition concentration (IC) | 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) |
| indirect discharge | The introduction of pollutants into a POTW from any nondomestic source regulated under Section 307(b), (c), or (d) of the Clean Water Act |
| indirect discharger | A nondomestic discharger introducing pollutants to a publicly or privately owned treatment works |
| industrial user (IU) | A source of “indirect discharge” to a publicly or privately owned treatment works |
| instantaneous maximum | 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. |
| instantaneous minimum | 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. |
| interference | A discharge that, alone or in conjunction with a discharge or discharges from other sources, both (1) inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and (2) therefore, is a cause of a violation of any requirement of the POTW’s IPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act. |
| LC50 | The concentration of toxicant (e.g., effluent) that is lethal to 50% of the test organisms exposed in the time period prescribed by the test. |
| maximum daily average | The maximum of the daily averages for the reporting period. |
| maximum weekly average | The maximum of the weekly average of all data collected/recorded during a calendar week. |

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| maximum weekly maximum temperature (MWMT) | 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. |
| method detection limit (MDL) | 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. |
| minimum level (ML) | Either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: 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. |
| monthly average (average monthly) effluent limit (AML) | 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. |
| monthly geometric mean | Geometric mean calculation of 5 or more samples collected 3 to 7 days apart in a calendar month. |
| National Pollutant Discharge Elimination System (NPDES) | 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. |
| new discharger | Any building, structure, facility, or installation:<br>a. From which there is or may be a discharge of pollutants;<br>b. That did not commence the discharge of pollutants at a particular site prior to August 13, 1979;<br>c. Which is not a new source; and<br>Which has never received a finally effective NPDES or IPDES permit for discharges at that site. |
| new source | Any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:<br>a. After promulgation of standards of performance under the Clean Water Act section 306 which are applicable to such source; or<br>After proposal of standards of performance in accordance with the Clean Water Act section 306 which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within one hundred twenty (120) days of their proposal. |
| no observed effect concentration (NOEC) | No observed effect concentration. 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). |

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| pass-through | A discharge that exits the POTW into waters of the United States in quantities or concentrations that, 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 IPDES permit (including an increase in the magnitude or duration of a violation). |
| quality assurance project plan (QAPP) | 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. |
| quarterly average | Arithmetic summation of all individual results for the quarter divided by the number of samples in the quarter. |
| quarterly maximum | Reported as the highest individual result for the quarter monitoring period. |
| receiving water concentration (RWC) | 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). |
| recorded | 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). |
| seasonal average | 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. |
| semiannual maximum | Semiannual maximum is the highest individual result for a calendar six-month period defined as January through June and July through December. |
| sewage sludge | 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 159), and sewage sludge products. Sewage sludge does not include grit or screenings, or ash generated during the incineration of sewage sludge. |
| 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<br>• 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<br>• 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 |

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|---|---|
| | 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 A-1. Effluent limit parameters.**

| Parameter | Limit Set | Significant Figures | Minimum place value (X) | Units |
|---|---|---|---|---|
| Flow | Monthly Average | 2 | 0**X**.00 | mgd |
| Biochemical Oxygen Demand ($BOD_5$) | Monthly Average Concentration | 2 | 0**X**.00 | mg/L |
| | Weekly Average Concentration | 2 | 0**X**.00 | mg/L |
| | Monthly Average Load | 4 | 00**X**.0 | lb/day |
| | Weekly Average Load | 4 | 00**X**.0 | lb/day |
| | Percent Removal | 2 | 0**X**.0 | % |
| Total Suspended Solids (TSS) | Monthly Average Concentration | 2 | 0**X**.00 | mg/L |
| | Weekly Average Concentration | 2 | 0**X**.00 | mg/L |
| | Monthly Average Load | 4 | 00**X**.0 | lb/day |
| | Weekly Average Load | 4 | 00**X**.0 | lb/day |
| | Percent Removal | 2 | 0**X**.0 | % |
| *E. coli* | Monthly Geometric Mean | 3 | 00**X**.0 | #/100mL |
| | Maximum Daily Concentration | 3 | 00**X**.0 | #/100mL |
| pH | Instantaneous Maximum | 2 | 00.**X** | s.u. |
| | Instantaneous Minimum | 2 | 00.**X** | s.u. |
| Dissolved Oxygen | Instantaneous Minimum | 2 | 00.**X** | mg/L |
| TP | Seasonal Average Load | 3 | 00**X**.0 | lb/day |
| Whole Effluent Toxicity | Monthly Average Concentration | 2 | 00.**X** | $TU_c$ |
| | Maximum Daily Concentration | 2 | 00.**X** | $TU_c$ |

**Table A-2. Parameters with interim limits.**

| Parameter | Limit Set | Significant Figures | Minimum place value (X) | Units |
|---|---|---|---|---|
| TP | Seasonal Average Minimum Removal | 2 | 00**X**.0 | lb/day |
| | Annual Average | 3 | 00**X**.0 | lb/day |