United States Environmental Protection Agency Region 10 1200 Sixth Avenue Suite 900 Seattle, Washington 98101-3140

# Authorization to Discharge Under the National Pollutant Discharge Elimination System

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 *et seq.*, as amended by the Water Quality Act of 1987, P.L. 100-4, the "Act",

# West Boise Wastewater Treatment Facility, City of Boise

is authorized to discharge from the wastewater treatment facility located in Boise, Idaho at the following outfall location:

Outfall	<b>Receiving Water</b>	Latitude	Longitude
001	Boise River	43° 30' 30"	116° 19' 53"

in accordance with discharge point(s), effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective May 1, 2012

This permit and the authorization to discharge shall expire at midnight, April 30, 2017

The permittee shall reapply for a permit reissuance on or before November 1, 2016, 180 days before the expiration of this permit if the permittee intends to continue operations and discharges at the facility beyond the term of this permit.

Signed this 15<sup>th</sup> day of March, 2012

//Signed//

Michael A. Bussell, Director Office of Water and Watersheds

# Schedule of Submissions

The following is a summary of some of the items the permittee must complete and/or submit to the EPA during the term of this permit:

Item 1. Discharge Monitoring Reports (DMRs)	<b>Due Date</b> DMRs are due monthly and must be submitted on or before the $20^{\text{th}}$ day of the following month.
<ol> <li>Quality Assurance Plan (QAP)</li> </ol>	The permittee must provide the EPA and the IDEQ with written notification that the QAP has been developed and implemented within 90 days after the effective date of this permit (see Part II.E.).
3. NPDES Application Renewal	The application must be submitted at least 180 days before the expiration date of the permit (see Part V.B.).
4. Electronic Submission of Effluent and Surface Water Monitoring Data	All effluent and surface water sampling results and dates of sample collection must be submitted to the EPA electronically on an excel spreadsheet with the NPDES Application.
5. Methylmercury Fish Tissue Annual Report	Due March 31 <sup>st</sup> of the year following the sampling event (see Part I.G)
6. Local Limits Evaluations	Within 60 days of the effective date of this permit, the permittee must submit to the EPA a draft local limits study plan. Within one year of the effective date of the permit the permitee must submit the results of the local limits study. Thereafter, the results of the local limit study must be submitted to the EPA within five years of submitting the previous local limits study results.
7. Annual Pretreatment Report	The Report must be submitted to the pretreatment coordinator no later than November 1 <sup>st</sup> of each calendar year. (See Part II.A.9.)
8. Emergency Response and Public Notification Plan	The permittee must develop and implement an overflow emergency response and public notification plan. The permittee must submit written notice to the EPA and the IDEQ that the plan has been developed and implemented within 180 days of the effective date of this permit.
9. Compliance Evaluation Reports	See Part I.C.

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**APPENDIX A** – Minimum Levels and Interim Minimum Levels for Expanded Effluent Testing

# I. Limitations and Monitoring Requirements

### A. Discharge Authorization

During the effective period of this permit, the permittee is authorized to discharge pollutants from the outfall specified herein to the Boise River within the limits and subject to the conditions set forth herein. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process.

### **B.** Effluent Limitations and Conditions

The permittee must limit and monitor discharges from outfall 001 as specified below. The permittee must comply with the effluent limits at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.

- 1. There must be no floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions that may impair designated uses in the receiving water.
- 2. The pH of the effluent must be between 6.5 9.0 standard units.
- 3. Table 1 presents the effluent limitations for temperature. See Part I.C. for the compliance schedule for this parameter.

Date	MWMT	Average Daily Limit	Instantaneous Maximum Limit	
November 1 – March 31	13.5°C	NA	NA	
April	13.3 °C	NA	NA	
May	13.5 °C	NA	NA	
June 1 –July 15	NA	22.6 °C	26.1 °C	
July 16 - September 30	NA	19.0 °C	22.0 °C	
October	NA	20.3 °C	24.2 °C	
Note: The MWMT is the mean of daily maximum temperatures measured over a consecutive 7 day				

**TABLE 1 – Effluent Limitations for Temperature** 

Note: The MWMT is the mean of daily maximum temperatures measured over a consecutive 7 day period ending on the day of calculation.

4. Table 2 presents the effluent limits for BOD<sub>5</sub>, TSS, minimum percent removal rates for BOD<sub>5</sub> and TSS, Total Ammonia, Mercury, Total Phosphorus, and *Escherichia coli* (*E. coli*). See Part I.C. for the compliance schedule for Total Phosphorus.

	Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit	Monthly Geometric Mean Limit	Instantaneous Maximum Limit
BOD <sub>5</sub>	20 mg/L 2000 lbs/day	30 mg/L 3000 lbs/day			
TSS	30 mg/L 3000 lbs/day	45 mg/L 4500 lbs/day			
Removal Rates for BOD <sub>5</sub> and TSS (see Note 1)	85% minimum				
Total Ammonia as N	788 μg/L 157.7 lbs/day		2435 μg/L 487 lbs/day		
May 1 – Sept 30					
Total Ammonia as N	398 μg/L 80 lbs/day		1493 μg/L 299 lbs/day		
Oct 1 - Apr 30					
Mercury, Total Recoverable	0.009 μg/L 0.002 lbs/day		0.019 μg/L 0.004 lbs/day		
Total Phosphorus May 1 – Sept 30	70 μg/L 14 lbs/day	84 μg/L 16.8 lbs/day			
E. coli bacteria				126 colonies per 100 ml	406 colonies per 100 ml
Note 1. The monthl influent concentration month.					

# TABLE 2 - Effluent Limitations

5. The permittee must report within 24 hours any violation of the maximum daily limits for the following pollutants: Total Ammonia and Mercury, and for any violation of the instantaneous maximum limit for *E. coli*. Violations of all other effluent limits are to be reported at the time the DMRs are submitted (See III.B. and III.G.).

# C. Schedules of Compliance and Interim Effluent Limitations

- 1. **Total Phosphorus:** The permittee must comply with the following Compliance Schedule requirements for Total Phosphorus.
  - a) The following interim and final limitations must be achieved by the dates cited.

Date	Effluent Limit		
May 1, 2012 through September 30, 2013	Not to exceed 5.8 mg/L measured as a seasonal		
	average.		
May 1, 2012 through September 30, 2014	Not to exceed 5.8 mg/L measured as a seasonal		
	average.		
May 1, 2012 through September 30, 2015	Not to exceed 5.8 mg/L measured as a seasonal		
	average.		
May 1, 2016 through September 30, 2016	6 Not to exceed 600 $\mu$ g/L measured as a season		
	average.		
May 1, 2017 through September 30, 2017	Not to exceed 500 $\mu$ g/L measured as a monthly		
and May 1 through September 30 every	average limit.		
year thereafter until the final limit is			
achieved			
10 years from the effective date of the	See Part I.B.3, Table 2 for final effluent limit		
permit			
	2.0		

**TABLE 3 – Effluent Limits and Compliance Dates** 

Note: Season is from May 1 through September 30

- b) The permitee must complete the tasks and reports described below.
- No later than April 26, 2013, the permittee must complete construction of the Struvite Production Facility and submit written notice to the EPA and the Idaho Department of Environmental Quality (IDEQ) stating that the construction is complete.
- (ii) No later than April 26, 2013, the permittee must complete improvements to the UV Disinfection, install and commence operation of an influent flow meter and submit written notice to the EPA and the IDEQ stating that the applicable improvements and installation are complete and operational.
- (iii) No later than April 30, 2016, the permittee must complete construction and commence operation of the Enhanced Biological Nutrient Removal Modifications. The modifications must include the following:
  - Modifications to chemical addition facility
  - South plant primary clarifier mechanism replacements and modifications
  - South plant secondary clarifier mechanisms and weirs
  - New primary sludge fermentation tank
  - New phosphate release tank
  - Four new rotary drum thickeners
  - Piping interconnects for return activated sludge, mixed liquor, primary influent, and primary effluent

• Modifications of the aeration basins in both the North and South plants to Enhanced Biological Phosphorus Removal process

The permittee must submit by April 30, 2016 written notice to the EPA and the IDEQ stating that the applicable modifications are constructed and operational.

(iv) Evaluate options available to achieve the final effluent limitation, including, but not limited to, treatment plant upgrades, seasonal re-use of effluent, effluent trading projects, and the decommissioning the Lander Street wastewater treatment facility and consolidating all operations at the West Boise wastewater treatment facility.

Starting in 2013 and continuing through 2017 the permittee must submit a Report of Progress to the EPA and the IDEQ detailing the evaluation of each available option. Reports must be submitted by December 31 of each year.

(v) No later than December 31, 2018 the permittee must decide on the final option that will be used to achieve the final effluent limits and submit written notice to the EPA and the IDEQ that includes a preliminary schedule of design upgrades and a preliminary construction schedule that will be used to achieve compliance with the final limits.

Thereafter, by December 31<sup>st</sup> of each year, the permittee must provide a Report of Progress to the EPA and the IDEQ which details the progress made toward achieving the final effluent limitation, and the series of actions that will be taken in the coming year.

- (vi) No later than 10 years from the effective date of the permit, the permittee must be in compliance with the final effluent limits. The permittee must notify the EPA and the IDEQ in writing when the final effluent limits are achieved.
- 2. <u>**Temperature:**</u> The permittee must comply with the following Compliance Schedule requirements for Temperature.
  - a) The following interim and final limitations must be achieved by the dates cited. The interim limits are expressed as maximum daily limits.
    - The following maximum daily average interim limits<sup>1</sup> will be effective on the effective date of the permit:

January – March:	17.2 ° C
April – June:	22.1 ° C

<sup>&</sup>lt;sup>1</sup> Interim Temperature limits were developed based on the last nine years of operational and climatic conditions and the assumption that conditions during the Schedule of Compliance would be consistent with observed conditions during the last decade. These limits are not applicable if the Boise Airport Temperature for the annual, seasonal, or monthly period observed and reported by NOAA (<u>http://www.wrh.noaa.gov/boi/climo.php</u>) establishes a new high temperature record.

July – September:	24.1 ° C
October –December:	22.4 ° C

- The final effluent limits listed in Part I. B. must be achieved no later than 10 years from the effective date of the permit
- b) The permittee must complete the tasks and reports described below
- No later than December 31, 2017 complete an alternatives evaluation of methods the permittee may use to achieve the final effluent limits. The evaluation should consider facility improvements, re-use of effluent, and possible trading mechanisms such as offsite mitigation, including wetland and habitat restoration. Starting in 2013 and continuing through 2017 the permittee must submit a Report of Progress to the EPA and the IDEQ detailing the evaluation of each available option. The Reports of Progress must be submitted by December 31 of each year.
- (ii) No later than December 31, 2018 provide a preliminary schedule of design upgrades and a preliminary construction schedule that will be used to achieve compliance with the final limits. By December 31<sup>st</sup> of each year thereafter the permittee must provide a Report of Progress to the IDEQ and the EPA which details the progress made toward achieving the final effluent limitations, and the series of actions that will be taken in the coming year.
- (iii) No later than 10 years from the effective date of the permit, the permittee must be in compliance with the final effluent limits for temperature. The permittee must notify the IDEQ and the EPA in writing when the final effluent limits are achieved.
- 3. <u>Biosolids</u>: Starting in 2012 and ending in 2016, the permittee may transfer up to 88,000 gallons per day (gpd) of solids from the Lander Street facility to the West Boise headworks during the period from February 1 through November 30. Solids may only be transferred when the Lander Street anaerobic digesters have reached capacity.

The permittee must notify the EPA and the IDEQ, in writing, when the Lander Street digesters have reached capacity and when they will start transferring solids to the West Boise facility.

No later than December 31<sup>st</sup> each year the permittee must submit a report to the EPA and the IDEQ which provides the amount of solids (in gpd) transferred to the West Boise headworks each day.

All correspondence and reports must be signed in accordance with the signatory requirements in Part V.E. of this permit.

# **D. Effluent Monitoring Requirements**

1. Effluent samples must be collected from the effluent stream after the last treatment unit prior to discharge into the receiving waters.

- 2. Influent and effluent samples must be taken over approximately the same time period.
- 3. The analytical test method for metals must, at a minimum, achieve a minimum level (ML) or interim minimum level (IML) as specified in Table 4.

Parameter	ML and IML, μg/l
Arsenic	1.3
Cadmium	0.1
Chromium	1.0
Copper	1.0
Cyanide	5.0
Lead	0.16
Mercury	0.001
Molybdenum	1.0
Nickel	2.5
Silver	0.3
Zinc	5.0

 Table 4: Minimum Levels and Interim Minimum Levels

4. The permittee must conduct the sampling in Table 5. Effluent monitoring results must be reported on the appropriate Discharge Monitoring Report (DMR). Additionally, the permittee must submit, to the EPA, all monitoring results and sample collection dates electronically on an excel spreadsheet. The excel spreadsheet must be submitted with the NPDES Application which is due 180 days before the expiration date of the permit.

Parameter	Sample Location	Sample Frequency	Sample Type
Flow, see note 4	Influent and Effluent	Continuous	Recording
E. coli bacteria	Effluent	5 days/week	Grab
pH, standard units	Effluent	5 days/week	Grab
Temperature, °C	Effluent	Continuous	Recording
Total ammonia as N, mg/L	Effluent	2 days/week	24-hour composite
BOD <sub>5</sub>	Influent and Effluent	1/week	24-hour composite
TSS	Influent and Effluent	1/week	24-hour composite
Total Phosphorus, mg/L	Effluent	1/week	24-hour composite
Iron, µg/L, see note 1	Effluent	1/week	24-hour composite
Mercury, $\mu g/L$ , see note 1	Effluent	1/week	24-hour composite
Zinc, $\mu g/L$ , see note 1	Effluent	1/week	24-hour composite
Dissolved Oxygen, mg/L	Effluent	1/week	Grab
Cyanide, µg/L	Effluent	1/month	Grab
Nitrate-Nitrite, mg/L	Effluent	1/month	24-hour composite
Arsenic, µg/L, see note 1	Effluent	1/month	24-hour composite
Cadmium, µg/L, see note 1	Effluent	1/month	24-hour composite
Copper, µg/L, see note 1	Effluent	1/month	24-hour composite
Lead, $\mu g/L$ , see note 1	Effluent	1/month	24-hour composite
Hardness as CaCO <sub>3</sub> , mg/L	Effluent	1/month	24-hour composite
Total Organic Carbon, mg/L	Effluent	1/month	24-hour composite
Alkalinity as CaCO <sub>3</sub> , mg/L	Effluent	1/month	24-hour composite
Aluminum, $\mu$ g/L, see note 1 and 2	Effluent	1/quarter	24-hour composite
Chromium, $\mu$ g/L, see note 1 and 2	Effluent	1/quarter	24-hour composite
Nickel, $\mu g/L$ , see note 1 and 2	Effluent	1/quarter	24-hour composite
Selenium, $\mu g/L$ , see note 1 and 2	Effluent	1/quarter	24-hour composite
Silver, µg/L, see note 1	Effluent	1/quarter	24-hour composite
Total Kjeldahl Nitrogen, mg/L,	Effluent	1/quarter	24-hour composite
see note 2			
Oil and Grease, mg/L, see note 2	Effluent	1/quarter	Grab
Turbidity, NTU, see note 2	Effluent	1/quarter	24-hour composite
Whole Effluent Toxicity, TU <sub>c</sub>	Effluent	see Part I.E.	24-hour composite
Expanded Effluent Testing see note3	Effluent	See note 3	24-hour composite
1 1 1 1 1 1 1 1		1	1

**TABLE 5: Influent and Effluent Monitoring** 

1. These parameters shall be analyzed as total recoverable.

2. Samples must be collected once during each of the following periods: January – March (results must be submitted on the March DMR; April – June (results must be submitted on the June DMR); July – September (results must be submitted on the September DMR); and October – December (results must be submitted on the December DMR).

3. See NPDES Permit Application Form 2A, Part D for the list of pollutants to include in this testing. Testing must occur once in the  $2^{nd}$ ,  $3^{rd}$ , and  $4^{th}$  year of the permit. Additionally, the expanded effluent testing must occur on the same day as a whole effluent toxicity test and must be submitted with the WET test results with the next DMR as well as with the next permit application. The analytical test methods must, at a minimum, meet the interim minimum level or minimum level specified in Appendix A.

4. Influent flow may be estimated until April 26, 2013. The influent flow meter must be installed and operational by April 26, 2013.

5. When calculating monthly averages for reporting on DMRs, zero may be assigned for sample results less than the analytical method detection level (MDL), and the numeric MDL value may be assigned to those sample results

that are between the MDL and the minimum level (ML). If an ML has not been promulgated by the EPA, the interim minimum level will be calculated as 3.18 X MDL. If the calculated average value is less than the MDL, the permittee must report "less than {numeric value of the MDL}" on the DMR and if the average value is less than the ML, the permittee must report "less than {numeric value of the MDL}" of the ML}." If a sample result is equal to or greater than the ML, the permittee must report and use the actual sample result value.

# E. Whole Effluent Toxicity Testing Requirements

The permittee must conduct chronic toxicity tests on effluent samples from outfall 001. Testing must be conducted in accordance with subsections 1 through 7, below.

- 1. Toxicity testing must be conducted on 24-hour composite samples of effluent. In addition, a split of each sample collected must be analyzed for the chemical and physical parameters required in Part I.D., Table 5. When the timing of sample collection coincides with that of the sampling required in Part I.D, analysis of the split sample will fulfill the requirements of Part I.D.
- 2. Chronic Test Frequency, Species and Methods
  - a) Each year, chronic tests must be conducted once during each of the following 4 time periods:

January - April

May–June

July – September

October - December

b) The permittee must conduct the chronic toxicity tests using the species and protocols in Table 6 below, for the first three suites of tests. After this screening period, monitoring must be conducted using the most sensitive species.

Table 6: Toxicity Test Species and Protocols				
Freshwater Acute Toxicity Tests	Species	Method		
Fathead minnow 96-hour larval survival and growth test (method 1000.0)	Pimephales promelas	EPA-821-R-02-013		
Daphnid 96-hour survival and reproduction test (method 1002.0)	Ceriodaphnia dubia	EPA-821-R-02-013		

c) The presence of chronic toxicity must be determined as specified in *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.

- d) Results must be reported in  $TU_c$  (chronic toxic units), which is defined below. Additionally, if acute toxicity is noted during the chronic test, the permittee must report the LC50
- (i) For survival endpoints,  $TU_c = 100/NOEC$ .
- (ii) For all other test endpoints,  $TUc = 100/IC_{25}$
- (iii) IC<sub>25</sub> means "25% inhibition concentration." The IC<sub>25</sub> 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).
- (iv) NOEC means "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).
- 3. Toxicity Triggers
  - a) Chronic Toxicity Trigger. If the results of the chronic toxicity test exceed 2.0 TU<sub>c</sub> from May through September, or  $1.5 \text{ TU}_c$  from October through April, the permittee must conduct accelerated toxicity testing. See Part I.E.4, below.
- 4. Accelerated testing
  - a) If chronic toxicity is detected above 2.0 TUc from May through September, or 1.5 TUc from October through April, the permittee must implement its *Initial Toxicity Reduction Evaluation Workplan* (City of Boise, January 3, 2011) within 48-hours of the permittee's receipt of the toxicity results demonstrating the exceedance.
  - b) If implementation of the *Initial Toxicity Reduction Evaluation Work Plan* indicates the source of toxicity (for example, a temporary plant upset), then one additional toxicity test is required. If chronic toxicity does not exceed the chronic toxicity trigger in this sample then the permittee can resume its regular WET testing schedule. If chronic toxicity exceeds the chronic toxicity trigger in this sample then the permittee must conduct the monitoring in I.E.4.c. below.
  - c) If chronic toxicity is detected above the toxicity triggers described above then the permittee must conduct six more bi-weekly (every two weeks) acute/chronic toxicity tests, over a twelve-week period. This accelerated

testing shall be initiated within 10-calendar days of receipt of the test results indicating the initial exceedance.

The EPA has the discretion to approve additional time for initiating the four accelerated acute/chronic toxicity tests required in this Part. Requests for additional time to initiate the accelerated testing shall include justification for why additional time is required (e.g., shipping/delivery problems from remote locations, problems contracting with a lab etc.). The EPA has sole discretion to approve or deny additional time to initiate the accelerated testing required in this Part, and may require supporting documentation to support the permittee's request.

- d) The permittee must notify the EPA of the exceedance in writing within 5 calendar days of receipt of the test results indicating the exceedance. The notification must include the following information:
- (i) A status report on any actions required by the permit, with a schedule for actions not yet completed.
- (ii) A description of any additional actions the permittee has taken or will take to investigate and correct the cause(s) of the toxicity.
- (iii) Where no actions have been taken, a discussion of the reasons for not taking action.
- (iv) If implementation of the initial investigation workplan clearly identifies the source of toxicity to the satisfaction of the EPA (e.g., a temporary plant upset), and none of the six accelerated chronic toxicity tests required under Part I.E.4.a. are above 2.0 TU<sub>c</sub> from May through September, or 1.5 TU<sub>c</sub> from October – April the permittee can return to the regular acute/chronic toxicity testing cycle specified in Part I.E.2.
  - e) If implementation of the *Initial Toxicity Reduction Evaluation Workplan* does not clearly identify the source of toxicity to the satisfaction of the EPA, or any of the six accelerated chronic toxicity tests indicate toxicity above 2.0 TU<sub>c</sub> from May through September, or 2.5 TU<sub>c</sub> from October through April, then the permittee shall begin implementation of the Toxicity Reduction Evaluation (TRE) requirements contain in Part I.E.5. Implementation of the TRE requirements shall begin within 10 days of receipt of the accelerated acute/chronic toxicity testing results demonstrating the exceedance.

The EPA has the discretion to approve additional time for initiating the TRE requirements contained in Part I.E.5. Requests for additional time to initiate the TRE/TIE requirements shall include justification for why additional time is required (e.g., shipping/delivery problems from remote locations, problems contracting with a lab etc.). The EPA has sole discretion to approve or deny additional time to initiate the accelerated

testing required in this Part, and may require supporting documentation to support the permittees request.

- 5. Toxicity Reduction Evaluation (TRE)
  - a) In accordance with the permittee's *Initial Toxicity Reduction Evaluation Work Plan* and the EPA manual EPA 833-B-99-002 (*Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants*), the permittee must develop as expeditiously as possible a more detailed TRE work plan, which includes:
  - (i) Further actions to investigate and identify the cause of toxicity;
  - (ii) Actions the permitee will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and
  - (iii) A schedule for these actions
    - b) The permittee may initiate a TIE as part of the overall TRE process described in the EPA acute and chronic TIE manuals EPA/600/6-91/005F (Phase I). EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III).
    - c) If a TIE is initiated prior to completion of the accelerated testing, the accelerated testing schedule may be terminated, or used as necessary in performing the TIE.
- 6. Quality Assurance

The toxicity testing on each organism must include a series of five test dilutions and a control. The dilution series must include the receiving water concentration (RWC), which is the dilution associated with the chronic toxicity trigger (i.e. 48% from May through September and 67% from October through April); two dilutions above the RWC, and two dilutions below the RWC.

- a) All quality assurance criteria and statistical analyses used for chronic 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*, Fourth Edition, EPA/821-R-02-013, October 2002, and individual test protocols.
- b) In addition to those quality assurance measures specified in the methodology, the following quality assurance procedures must be followed:
- (i) If organisms are not cultured in-house, concurrent testing with reference toxicants must be conducted. If organisms are cultured inhouse, monthly reference toxicant testing is sufficient. Reference toxicant tests must be conducted using the same test conditions as the effluent toxicity tests.

- (ii) If either the reference toxicant tests or the 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 days after receipt of the test results.
- (iii) Control and dilution water must be receiving water or lab water, as appropriate, as described in the manual. If the dilution water used is different from the culture water, a second control, using culture water must also be used. Receiving water may be used as control and dilution water upon notification of the EPA and the IDEQ. In no case may water that has not met test acceptability criteria be used for either dilution or control.
- 7. Reporting
  - a) Results of toxicity tests, including any accelerated testing conducted during the month must be reported on the next Discharge Monitoring Report (DMR) after receiving the results of the test and with the next permit application.
  - b) The permittee must attach to the DMR a report that includes: (1) the toxicity test results; (2) the dates of sample collection and initiation of each toxicity test; (3) the flow rate at the time of sample collection; and (4) the results of the effluent analysis for chemical parameters including expanded effluent testing required for the outfall as defined in Part I.D.
  - c) The permittee must report test results for chronic tests in accordance with the guidance in the chapter on "Report Preparation and Test Review" found in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Surface Water Monitoring*.

# F. Surface Water Monitoring Requirements

The permittee must conduct surface water monitoring. Surface water monitoring must start 60 days after the effective date of the permit except for dissolved oxygen and temperature. Sampling for dissolved oxygen and temperature must start no later than 180 days from the issuance date of the permit. The surface water monitoring program must meet the following requirements:

- 1. Monitoring Locations
  - a) Monitoring stations must be established in the Boise River at locations approved by the IDEQ. The monitoring locations must be:
  - (i) Above the influence of the facility's discharge, and
  - (ii) Below the facility's discharge, at a point where the effluent and Boise River are completely mixed, but above the influence of any other point source discharge.

- b) Monitoring locations must be identified in the QAP (see Part II. E.). The permittee must seek approval from the IDEQ for any changes to the surface water monitoring locations. A failure to obtain the IDEQ approval of surface water monitoring stations does not relieve the permittee of the surface water monitoring requirements of this permit.
- 2. Sample Collection
  - a) To the extent practicable, surface water sample collection must occur on the same day as effluent sample collection.
  - b) Ambient samples for mercury, bacteria, pH, and oil and grease must be a single grab sample. Temperature and dissolved oxygen must be continuous recording. All other ambient samples must be composite grab samples. 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.
  - c) Quality assurance/quality control procedures for all the monitoring must be documented in the Quality Assurance Plan required under Part II.E., "Quality Assurance Plan".
  - d) Surface water monitoring results must be reported on the appropriate DMR. Additionally, the permittee must submit, to the EPA, all monitoring results and sample collection dates electronically on an excel spreadsheet. The excel spreadsheet must be submitted with the NPDES Application which is due 180 days before the expiration date of the permit.
  - e) The analytical test methods for metals must, at a minimum, achieve a minimum level (ML) or interim ML (IML) as specified in **Table 9 on page 27 of this permit**.
  - f) Samples must be analyzed for the parameters listed in Table 7.

Parameter	Units	Upstream Sampling Frequency	Downstream Sampling Frequency
E. coli bacteria	colonies/100 ml	1/month	
рН	standard units	1/week	
Temperature, see note 1	°C	Continuous	Continuous
Total Phosphorus	mg/L	1/week	1/week
Dissolved Oxygen	mg/L	Continuous	Continuous
Total ammonia as N, see note 2	mg/L	1/month	
BOD <sub>5</sub>	mg/L	1/month	
TSS	mg/L	1/month	
Mercury, see note 3	µg/L	1/month	1/month
Cyanide	mg/L	1/month	
Arsenic, see note 3	µg/L	1/month	
Cadmium, see note 4	µg/L	1/month	1/month
Copper, see note 4	µg/L	1/month	1/month
Iron, see note 3	µg/L	1/month	1/month
Lead, see note 4	µg/L	1/month	1/month
Silver, see note 4	µg/L	1/month	1/month
Zinc, see note 4	µg/L	1/month	1/month
Hardness as CaCO <sub>3</sub>	mg/L	1/month	1/month
Total Organic Carbon	mg/L	1/month	1/month
Alkalinity as CaCO <sub>3</sub>	mg/L	1/month	
Aluminum, see note 4 and 5	μg/L	1/quarter	
Chromium, see note 5 and 6	μg/L	1/quarter	
Nickel, see note 5 and 6	µg/L	1/quarter	
Selenium, see note 3 and 5	µg/L	1/quarter	
Total Kjeldahl Nitrogen, see note 5	mg/L	1/quarter	
Nitrate-Nitrite, see note 5	mg/L	1/quarter	
Oil and Grease, see note 5	mg/L	1/quarter	
Turbidity, see note 5	NTU	1/quarter	

#### Table 7: Surface Water Monitoring

1. Temperature must be collected continuously at no less than hourly intervals.

2. The analytical test method for total ammonia must achieve a minimum level of  $10 \mu g/L$ .

3. Mercury arsenic, iron and selenium must be measured as total recoverable.

4. Upstream monitoring for Cadmium, Copper, Lead, Silver, Zinc, and Aluminum must be dissolved and downstream monitoring shall be dissolved *and* total recoverable. These values are needed to determine a translator.

Samples must be collected once during each of the following periods: January – March (results must be submitted on the March DMR; April – June (results must be submitted on the June DMR); July – September (results must be submitted on the September DMR); and October – December (results must be submitted on the December DMR).

6. Chromium and nickel must be measured as dissolved.

### G. Methylmercury Requirements

### 1. Fish Tissue Sampling

**Objective:** The objective of the Methylmercury Fish Tissue Monitoring program is to collect reliable methylmercury fish tissue data, within a specific geographic area, to determine if fish tissue concentrations of methylmercury are compliant with Idaho's methylmercury fish tissue criterion of 0.3 mg/kg. The monitoring program may also be used to advise the public on safe levels of fish consumption.

**Applicability:** The permittee may satisfy the requirements of the Methylmercury Fish Tissue Monitoring Program by arranging to participate in a cooperative effort with other entities which have NPDES permitted discharges to the Lower Boise River or tributaries to the Lower Boise River.

**Requirements:** The permittee must develop and submit a Methylmercury Fish Tissue Monitoring Plan to the Director of the Office of Water and Watersheds and the IDEQ for review and approval within one year of the effective date of the permit. At a minimum the plan must 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 to the EPA and the IDEQ each time a new entity becomes part of the cooperative monitoring program. Written notice must be provided to the EPA and the IDEQ 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 of the City of Boise outfalls and near the middle of the Lower Boise River
  - Near the mouth of the Boise River
  - Snake River upstream of the confluence of the Boise and Snake Rivers
  - Snake River downstream of the confluence of the Boise and Snake Rivers
  - Within the Brownlee Reservoir
- Name, address of organization collecting and analyzing fish tissue samples. The organization must have experience in the collection and analysis of methylmercury fish tissue samples.
- Develop a sampling plan that specifies 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. The plan should 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**: Initial sampling must occur within two years of the effective date of the permit. Following the initial sampling event monitoring must occur at least once every two years from five of six sample locations, and yearly at the sixth location. After three sampling cycles, five of the six sample locations should be sampled once every five years. Sample sites will be determined in consultation with IDEQ.

Additional Sampling: At each sample location where fish are collected a surface water sample must be collected and analyzed for total Mercury using an analytical method which achieves a Minimum Level of  $0.0005 \ \mu g/L$ .

**Reporting Requirements**: The permittee must submit a report which lists the participants financing the monitoring program; the name, address and phone number of the entity collecting and analyzing samples; sample locations; target species used; sample size; time samples were collected; analytical methods used; results, and any other information relevant to the monitoring program. The permittee must submit the report to the EPA, the IDEQ and the Idaho Fish Consumption Advisory Board by March 31<sup>st</sup> of the year following sampling.

**Revision to the Methylmercury Monitoring Plan:** Any revisions to the Methylmercury Monitoring Plan must be approved by the IDEQ and the Director of the Office of Water and Watersheds.

# 2. Mercury Minimization Plan

The permittee must develop and implement a mercury minimization plan that identifies potential sources of mercury and the measures to reduce or eliminate mercury loading. Written notice must be submitted to the EPA and the IDEQ that the plan has been developed and implemented within 90 days of the effective date of this permit. Any existing emergency response and public notification plan may be modified for compliance with this section. The mercury minimization plan should include the following: a) A Program Plan which includes the permitee's commitments for:

(1) Identification of potential sources of mercury that contribute to discharge concentrations;

(2) Reasonable, cost-effective activities to reduce or eliminate mercury loadings from identified sources;

(3) Tracking mercury source reduction implementation and mercury source monitoring;

(4) Quarterly monitoring of POTW influent and effluent;

(5) Resources and staffing

b) Implementation of cost-effective control measures for direct and indirect contributors, and

c) An annual status report submitted to the US EPA, which includes:

(1) A list of potential mercury sources;

(2) A summary of actions taken to reduce or eliminate mercury discharges to progress toward meeting water quality standards;

(3) Mercury source reduction implementation, source monitoring results, influent and effluent, and results for the previous year;

(4) Proposed adjustments to the Program Plan based on findings from the previous year.

### **H.** Pretreatment Requirements

1. Implementation

The permittee must implement its pretreatment program in accordance with the legal authorities, policies, procedures, staffing levels and financial provisions described in its original approved pretreatment program submission, any program amendments submitted thereafter and approved by the EPA, and the general pretreatment regulations (40 CFR 403) and any amendments thereof. At a minimum, the permittee must carry out the following activities:

- a) Enforce prohibitive discharge standards as set forth in 40 CFR 403.5(a) and (b), categorical pretreatment standards promulgated pursuant to Section 307(b) and (c) of the Act (where applicable), and local limitations and BMPs developed by the permittee in accordance with 40 CFR 403.5(c), whichever are more stringent and are applicable to non-domestic users discharging wastewater into the permittee's collection system. Locally derived limitations must be defined as pretreatment standards under Section 307(d) of the Act.
- b) Implement and enforce the requirements of the most recent and the EPA-approved portions of local law and regulations (e.g. municipal code, sewer use ordinance) addressing the regulation of non-domestic users.

- c) Update the inventory of non-domestic users at a frequency and diligence adequate to ensure proper identification of non-domestic users subject to pretreatment standards, but no less than once per year. The permittee must notify these users of applicable pretreatment standards in accordance with 40 CFR 403.8(f)(2)(iii).
- d) Issue, reissue, and modify, in a timely manner, industrial wastewater discharge permits to, at a minimum, all Significant Industrial Users (SIUs) and categorical industrial users. These documents must contain, at a minimum, conditions identified in 40 CFR 403.8(f)(1)(iii), including Best Management Practices, if applicable. The permittee must follow the methods described in its implementation procedures for issuance of individual permits.
- e) Develop and maintain a data management system designed to track the status of the permittee's non-domestic user inventory, non-domestic user discharge 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 three years, as required by 40 CFR 403.12(o), and must make such records available to the EPA upon request. The permittee must also provide public access to information considered effluent data under 40 CFR 2.
- f) Establish, where necessary, legally binding agreements with contributing jurisdictions to ensure compliance with applicable pretreatment requirements in 40 CFR Part 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.
- g) Carry out inspections, surveillance, and monitoring of non-domestic 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.
- h) Require SIUs to conduct wastewater sampling as specified in 40 CFR 403.12(e) or (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 Best Management Practice or pollution prevention alternative, the permittee must require the User to submit documentation to determine compliance with the Standard. If the permittee elects to conduct all non-domestic user monitoring for any SIU instead of requiring self-monitoring, the permittee must conduct sampling in

accordance with the requirements of this paragraph, and the requirements of 40 CFR 403.12(g)(2).

- i) Enforce and obtain remedies for any industrial user noncompliance with applicable pretreatment standards and requirements. This must include timely and appropriate reviews of industrial reports to identify all violations of the user's permit, the local ordinance, and federal pretreatment standards and requirements. Once violations have been uncovered, the permittee must take timely and appropriate action to address the noncompliance. The permittee's enforcement actions must follow its EPA-approved enforcement response procedures.
- j) 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 non-domestic users which, at any time in the previous 12 months, were in significant noncompliance as defined in 40 CFR 403.8 (f)(2)(viii).
- k) Maintain adequate staff, funds and equipment to implement its pretreatment program.
- 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. Any local limits found to be inadequate by this analysis must be revised. The permittee may be required to revise existing local limits or develop new limits if deemed necessary by the EPA.
- 2. 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 non-domestic users.

- a) 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)].
- b) 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.
- c) 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. Enforcement Requirement

Whenever the EPA 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, the EPA may notify the owner or operator of the POTW of such violation. If, within 30 days after such notification has been sent by the EPA to the POTW, the POTW fails to commence appropriate enforcement action to correct the violation, the

EPA may take appropriate enforcement action under the authority provided in section 309(f) of the Act.

4. 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 the EPA.

5. Local Limits Evaluations

Within one year of the effective date of this permit, the permittee must submit to the EPA for review and approval, the results of a local limits study. Thereafter, the permittee must submit the results of a local limit study to the EPA within 5 years of submitting the previous study.

The permittee must coordinate with the EPA to develop a mutually agreeable study plan prior to the initiation of the study. Within 60 days of the effective date of this permit, the permittee must submit a draft local limits study plan to the EPA (Attention: Pretreatment Coordinator), for review and approval. The permittee must use the 2004 EPA *Local Limits Development Guidance* to plan and conduct the local limits study.

The study shall take into account water quality in the receiving stream, inhibition levels for biological processes in the treatment plants, sludge quality goals, and health and safety of workers and the public. The study must address at least the following pollutants: arsenic, cadmium, chromium, copper, cyanide, lead, mercury, nickel, silver, zinc, molybdenum, selenium, 5-day BOD, TSS and ammonia. The study must also assess (including sampling) major industrial and commercial sources of these pollutants and characterize their discharges.

The study must calculate the maximum allowable headworks loadings (MAHLs) for the pollutants set forth above, as well as for any other pollutant that may interfere with or pass through the POTW. Whenever the POTW influent loadings meet any of the following conditions, the local limits are needed:

- a) Toxics
- (i) Average influent loading of a toxic pollutant exceeds 60 % percent of the MAHL.
- (ii) Maximum daily influent loading of a toxic pollutant exceed 80% percent of the MAHL, any time in the 12-month period preceding the analysis.
  - b) BOD<sub>5</sub>, TSS, and Ammonia
- (i) Monthly average influent loading reaches 80% percent of average design capacity for BOD, TSS, and ammonia during any one month in the 12-month period preceding the analysis.

The study must also determine what local limits are required to ensure that the maximum allowable headworks loadings established by the City are not exceeded. Results of the study shall include proposed local limits if necessary or appropriate, maximum allowable headworks loadings, all supporting calculations, and all assumptions. If no local limits are proposed, the permittee must include with the study and documentation a discussion and justification (calculations, assumptions, the EPA approved scientific methodologies and practices) for not implementing local limits. If the permittee concludes that local limits are necessary, the City must promulgate local limits within 120 days after the EPA's approval of the local limits.

6. Control of Undesirable Pollutants

The permittee must not allow introduction of the following pollutants into the publicly owned treatment works (POTW):

- a) Pollutants which will create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 °F or 60 °C using the test methods specified in 40 CFR 261.21;
- b) Pollutants which will cause corrosive structural damage to the POTW, but in no case, discharges with a pH lower than 5.0, unless the POTW is designed to accommodate such discharges;
- c) Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW (including the collection system) resulting in interference;
- d) Any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW;
- e) Heat in amounts which 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 °C (104 °F) unless the Regional Administrator, upon request of the POTW, approves alternate temperature limits;
- f) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
- g) Pollutants which 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
- h) Any trucked or hauled pollutants, except at discharge points designated by the POTW.
- 7. Requirements for Industrial users

The permittee must require any industrial user of its treatment works to comply with any applicable requirements in 40 CFR 403 through 471.

- 8. Sampling Requirements
  - a) Parameters: The permittee must sample influent and effluent from the POTW for arsenic, cadmium, chromium, copper, cyanide, lead, mercury, molybdenum, nickel, selenium, silver, and zinc. Metals must be analyzed and reported as total metals. If the POTW accepts ammonia from industrial sources, the permittee must also sample the POTW influent and effluent for ammonia. The permittee must sample sludge for arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, zinc, and percent solids.
  - b) Sampling Events: Sampling events must be conducted twice per year: once in April and once in October.
  - c) Sampling Locations, Sample Type, and Sample Frequency: The permittee must sample as described in Table 8. Influent samples must be taken prior to mixing with any internal wastestreams (including gravity belt thickener recirculation stream). To the extent that the timing of effluent sampling coincides with sampling required for whole effluent toxicity testing under paragraph I.E., these monitoring results will satisfy the requirements of that paragraph.

Waste stream	Sample Type	Frequency	
Influent	24-hour Composite <sup>1</sup>	3 days within a week (Mon - Fri)	
Effluent	24-hour Composite <sup>1</sup>	3 days within a week (Mon - Fri)	
Sludge	Grab	Once, during the same time period that influent and effluent samples are being taken	
1. Influent and effluent samples for cyanide must be collected and analyzed as required in			

#### Table 8: Pretreatment Monitoring

paragraph 8.h of this part.

d) Analytical Methods: For influent and effluent pretreatment sampling, the permittee must use the EPA-approved analytical methods that, at a minimum, achieve the minimum level (ML) or interim ML (IML) listed in Table 9.

Parameter	ML and IML, μg/l
Arsenic	1.3
Cadmium	0.1
Chromium	1.0
Copper	1.0
Cyanide	5.0
Lead	0.16
Mercury	0.001
This ML applies until September 30, 2012	
Mercury	0.0005
This ML applies starting October 1, 2012	
Molybdenum	1.0
Nickel	2.5
Silver	0.3
Zinc	5.0

 Table 9: Minimum Levels and Interim Minimum Levels

e) Sludge Sampling: Sludge samples must be taken as the sludge leaves the dewatering device or digesters.

- f) Sludge Reporting: Metals concentrations in sludge must be reported in mg/kg, dry weight.
- g) Reporting Results: Analytical results for each day's samples must be reported separately. Sample results must be submitted with the pretreatment annual report required in Part II.A.9., below.
- h) Cyanide sampling: Influent and effluent sampling for cyanide must be conducted as follows. Eight discrete grab samples must be collected over a 24-hour day. Each grab 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 (refer to Standard Methods, 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, to 12.0 standard units. Each sample can then be composited into a larger container which has been chilled to 4 degrees Celsius, to allow for one analysis for the day.
- 9. Pretreatment Report
  - a) The permittee must submit an annual report pursuant to 40 CFR 403.12(i) 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 to the following address no later than November 1<sup>st</sup> of each year:

Pretreatment Coordinator U.S. Environmental Protection Agency Region 10, OWW-130 1200 Sixth Avenue, Suite 900 Seattle, WA 98101-3140

- b) The pretreatment report must be compiled following the EPA Region 10 Annual Report Guidance. At a minimum, the report must include:
- (i) An updated non-domestic user inventory, including those facilities that are no longer discharging (with explanation), and new dischargers, appropriately categorized and characterized. Categorical users should have the applicable category noted as well as cases where more stringent local limits apply instead of the categorical standard.
- (ii) Results of wastewater and sludge sampling at the POTW as specified in Part II.A.8 (above).
- (iii) Calculations of removal rates for each pollutant for each day of sampling.
- (iv) An analysis and discussion of whether the existing local limitations 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.
- (v) Status of program implementation, including:
  - (a) Any planned modifications to the pretreatment program that have been approved by the EPA, including staffing and funding updates.
  - (b) A description of any interference, upset, or NPDES permit violations experienced at the POTW which were directly or indirectly attributable to non-domestic users, including:
    - (i) Date & time of the incident
    - (ii) Description of the effect on the POTW's operation
    - (iii) Effects on the POTW's effluent and biosolids quality
    - (iv) Identification of suspected or known sources of the discharge causing the upset
    - (v) Steps taken to remedy the situation and to prevent recurrence
  - (c) Listing of non-domestic users inspected and/or monitored during the report year with dates and an indication compliance status.
  - (d) Listing of non-domestic users planned for inspection and/or monitoring for the coming year along with associated frequencies.

- (e) Listing of non-domestic users whose permits have been issued, reissued, or modified during the report year along with current permit expiration dates.
- (f) Listing of non-domestic users notified of promulgated pretreatment standards and/or local standards during the report year as required in 40 CFR 403.8(f)(2)(iii).
- (g) Listing of non-domestic users notified of promulgated pretreatment standards or applicable local standards that are on compliance schedules. The listing must include the final date of compliance for each facility.
- (vi) Status of enforcement activities including:
  - (a) Listing of non-domestic users who failed to comply with applicable pretreatment standards and requirements, including:
    - (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.
  - (b) 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.
  - (c) The EPA may require more frequent reporting on those users who are determined to be in significant noncompliance.

# I. Sludge (Biosolids)

Pollutants contained in sludge from other treatment works, or in sludge generated, processed or handled at this facility or land applied by this facility shall not be discharged to surface waters either directly or indirectly. Sludge from other facilities may not be received at this facility mixed with sewage, and may not be mixed with sewage within the plant. Sludge from this facility may not be mixed with sewage or other wastewater prior to treatment and discharge, or mixed with effluent prior to discharge directly to surface waters. See Part I.C.3 for compliance schedule requirements and interim limitations.

#### J. Removed Substances

Collected screenings, grit, solids, biosolids, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters must be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

### K. Water Effects Ratio Study

No later than 4 years after the effective date of the permit the permittee must submit to the EPA and the IDEQ a report which evaluates whether the key characteristics of the effluent and receiving water remain in the range of conditions tested to establish the site specific water effect ratios (WER) for the acute and chronic aquatic life criteria for copper and lead found at IDAPA 58.01.02.278.04. The report must evaluate, at a minimum the relative proportions of effluent flows to receiving water flows, total hardness, major ion chemistry (e.g., calcium, magnesium, calcium/magnesium ratios, sodium, and potassium), and organic carbon. Based upon review of the report, the IDEQ may, at its discretion, also require confirmatory toxicity testing.

# L. Quality Assurance Plan (QAP)

The permittee must develop a quality assurance plan (QAP) for all monitoring required by this permit. The permittee must submit written notice to the EPA and the IDEQ that the QAP has been developed and implemented within 90 days of the effective date of this permit. Any existing QAPs may be modified for compliance with this section.

- 1. The QAP must be designed to assist in planning for the collection and analysis of effluent and receiving water samples in support of the permit and in explaining data anomalies when they occur.
- 2. Throughout all sample collection and analysis activities, the permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in *Requirements for Quality Assurance Project Plans* (EPA/QA/R-5) and *Guidance for Quality Assurance Project Plans* (EPA/QA/G-5). The QAP must be prepared in the format that is specified in these documents.
- 3. At a minimum, the QAP 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, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements.
  - b) Map(s) indicating the location of each sampling point.
  - c) Qualification and training of personnel.
  - d) Name(s), address(es) and telephone number(s) of the laboratories used by or proposed to be used by the permittee.
- 4. The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP.

5. Copies of the QAP must be kept on site and made available to the EPA and/or the IDEQ upon request.

# M. Design Criteria Requirements

Each month, the permittee shall compute an annual average value for flow, and BODs and TSS loading entering the facility based on the previous twelve months data or all data available, whichever is less. If the facility performs plant upgrades that affects the design criteria listed in Table 8, only data collected after the upgrade should be used in determining the annual average value. When the average annual values exceed 85% of the design criteria values listed in Table 10, the permittee shall develop a facility plan and schedule within one year from the date of first exceedance. The plan must include the permittee's strategy for continuing to maintain compliance with effluent limits, and will be made available to the Director or authorized representative upon request.

Criteria	Value	Units
Average Flow	24	mgd
Influent BOD <sub>5</sub> Loading	41,600	lbs/day
Influent TSS Loading	48,800	lbs/day

Table 10 – Design Criteria

# N. Operations and Maintenance Review

- Within 60 days of the effective date of the permit, the permittee must review its operations and maintenance plan and ensure that it includes appropriate best management practices (BMPs), the plan must be reviewed annually thereafter. BMPs include measures which prevent or minimize the potential for the release of pollutants to the Boise River. The plan must be retained on site and made available to the EPA and the IDEQ upon request.
- 2. The permittee must develop a description of pollution prevention measures and controls appropriate for the facility. The appropriateness and priorities of controls in the plan shall reflect identified potential sources of pollutants at the facility. The description of BMPs shall address, to the extent practicable, the following minimum components: spill prevention and control; optimization of chemical usage; preventive maintenance program; minimization of pollutant inputs from industrial users; research, development and implementation of a public information and education program to control the introduction of household hazardous material to the sewer system; and water conservation.

# **O. Emergency Response and Public Notification Plan**

1. The permittee must develop and implement an overflow emergency response and public notification plan that identifies measures to protect public health from overflows that may endanger health and unanticipated bypasses or upsets that exceed any effluent limitation in the permit. At a minimum the plan must include mechanisms to:

- a) 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 and unanticipated bypass or upset that exceed any effluent limitation in the permit;
- b) Ensure appropriate responses including assurance that reports of an overflow or of an unanticipated bypass or upset that exceed any effluent limitation in the permit are immediately dispatched to appropriate personnel for investigation and response;
- c) Ensure immediate notification to the public, health agencies, and other affected public entities (including public water systems). The overflow response plan must identify the public health and other officials who will receive immediate notification;
- d) Ensure that appropriate personnel are aware of and follow the plan and are appropriately trained; and
- e) Provide emergency operations.
- 2. The permittee must submit written notice to the EPA and the IDEQ that the plan has been developed and implemented within 180 days of the effective date of this permit. Any existing emergency response and public notification plan may be modified for compliance with this section.

# P. Modification for Cause

- 1. This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the permittee) or upon the EPA's initiative. However, permits may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.63 and 122.64. All requests must be in writing and must contain facts or reasons supporting the request. If a permit modification satisfies the criteria in 40 CFR 122.63 for "minor modifications" the permit may be modified without a draft permit or public review. Otherwise, a draft modified permit must be prepared and other procedures in 40 CFR 124 followed.
- 2. New information may be a cause for modification of this permit. The permit may be modified during its term for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance. New information may include but is not limited to the following:
  - a) Information supporting a phosphorous offset at the Dixie Drain, including information that would describe the offset, how it would be implemented, measured and monitored.
  - b) Effluent and/or receiving water quality and/or quantity data.

- c) New water quality modeling analyses, including modeling that demonstrates new phosphorous effluent limits would not adversely affect waters between the City of Boise and the Dixie Drain.
- d) All necessary information related to the application of the State's temperature criteria.
- 3. New water quality standards regulations may be a cause for modification of this permit. The permit may be modified during its term for this cause if the permit condition requested to be modified was based on an EPA approved water quality standard, and the EPA has approved a State action with regard to the water quality standard on which the permit condition was based.
- 4. Any modification of this permit must comply with all applicable requirements of the Act and implementing regulations, including but not limited to:
  - a) The anti-backsliding provisions of the Act (Sections 402(o) and 303(d)(4))
  - b) Technology-based treatment requirements (40 CFR 125.3 and 133, CWA Section 301(b)(1)(B))
  - c) The applicable water quality requirements of all affected States (40 CFR 122.4(d), 122.44(d), CWA Sections 301(b)(1)(C) and 401(a)(2)).
  - d) Any conditions included in the State of Idaho's CWA Section 401 certification of the modified permit which are necessary to assure compliance with the applicable provisions of CWA Sections 208(e), 301, 302, 303, 306, and 307 and with appropriate requirements of State law.
  - 5. If, at least 18 months prior to the expiration date of the permit, the City submits a request for permit modification, or revocation and reissuance, for a phosphorus offset at Dixie Drain consistent with the provisions outlined above, or for the application of the State's temperature criteria consistent with the provisions outlined above, the Director of the Office of Water and Watersheds will grant or deny the request within 90 days of receiving the request. If the EPA grants the request, the EPA will submit a preliminary draft NPDES Permit containing the Dixie Drain offsets to the IDEQ for review and draft section 401 certification within 12 months of receiving the request for permit modification or revocation and reissuance.

# II. Monitoring, Recording and Reporting Requirements

# A. Representative Sampling (Routine and Non-Routine Discharges)

Samples and measurements must be representative of the volume and nature of the monitored discharge.

In order to ensure that the effluent limits set forth in this permit are not violated at times other than when routine samples are taken, the permittee must collect additional samples 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 limited in Part I.B. of this permit that are likely to be affected by the discharge.

The permittee must collect such additional samples as soon as the spill, discharge, or bypassed effluent reaches the outfall. The samples must be analyzed in accordance with paragraph III.C ("Monitoring Procedures"). The permittee must report all additional monitoring in accordance with paragraph III.D ("Additional Monitoring by Permittee").

# **B.** Reporting of Monitoring Results

Each month the permittee must summarize monitoring results on the Discharge Monitoring Report (DMR). The permittee must submit reports monthly, postmarked by the 20<sup>th</sup> day of the following month. The permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of Part V.E. of this permit ("Signatory Requirements"). Reports must be submitted electronically using NetDMR (a web-based tool that allows permittees to electronically submit discharge monitoring reports (DMRs) and other required reports via a secure internet connection) Specific requirements regarding submittal using NetDMR are described below:

# Submittal of Reports using Net DMR

NetDMR is accessed from: http://www.epa.gov/netdmr. Upon the effective date of this permit the permittee shall begin submitting DMRs and reports required under this permit electronically to EPA using NetDMR. All reports required under the permit shall be submitted to EPA as an electronic attachment to the DMR. The permittee must sign and certify all DMRs, and all other reports, in accordance with the requirements of Part V.E. of this permit ("Signatory Requirements"). Once a permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of DMRs or other reports to EPA.

# **C. Monitoring Procedures**

Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless other test procedures have been specified in this permit or approved by the EPA as an alternate test procedure under 40 CFR 136.5.

# D. Additional Monitoring by Permittee

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

Upon request by the EPA, the permittee must submit results of any other sampling, regardless of the test method used.

### E. Records Contents

Records of monitoring information must include:

- 1. the date, exact place, and time of sampling or measurements;
- 2. the name(s) of the individual(s) who performed the sampling or measurements;
- 3. the date(s) analyses were performed;
- 4. the names of the individual(s) who performed the analyses;
- 5. the analytical techniques or methods used; and
- 6. the results of such analyses.

# F. Retention of Records

The permittee must retain records of all monitoring information, including, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, copies of DMRs, a copy of the NPDES permit, and records of all data used to complete the application for this permit, for a period of at least five years from the date of the sample, measurement, report or application. This period may be extended by request of the EPA or the IDEQ at any time.

# G. Twenty-four Hour Notice of Noncompliance Reporting

- 1. The permittee must report the following occurrences of noncompliance by telephone within 24 hours from the time the permittee becomes aware of the circumstances:
  - a) any noncompliance that may endanger health or the environment;
  - b) any unanticipated bypass that exceeds any effluent limitation in the permit (See Part IV.F., "Bypass of Treatment Facilities");
  - c) any upset that exceeds any effluent limitation in the permit (See Part IV.G., "Upset Conditions"); or
  - d) any violation of a maximum daily discharge limitation for Mercury or Total Ammonia, and any violation of the instantaneous maximum limit for *E. coli*.
  - e) any overflow prior to the treatment works over which the permittee has ownership or has operational control. An overflow is any spill, release or diversion of municipal sewage including:
  - (i) an overflow that results in a discharge to waters of the United States; and
  - (ii) 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 privately owned sewer or building lateral) that does not reach waters of the United States.

- 2. The permittee must also provide a written submission within five days of the time that the permittee becomes aware of any event required to be reported under subpart 1 above. The written submission must contain:
  - a) a description of the noncompliance and its cause;
  - b) the period of noncompliance, including exact dates and times;
  - c) the estimated time noncompliance is expected to continue if it has not been corrected; and
  - d) steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
  - e) if the noncompliance involves an overflow, the written submission must contain:
  - (i) The location of the overflow;
  - (ii) The receiving water (if there is one);
  - (iii) An estimate of the volume of the overflow;
  - (iv) A description of the sewer system component from which the release occurred (e.g., manhole, constructed overflow pipe, crack in pipe);
  - (v) The estimated date and time when the overflow began and stopped or will be stopped;
  - (vi) The cause or suspected cause of the overflow;
  - (vii) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
  - (viii) An estimate of the number of persons who came into contact with wastewater from the overflow; and
  - (ix) Steps taken or planned to mitigate the impact(s) of the overflow and a schedule of major milestones for those steps.
- 3. The Director of the Office of Compliance and Enforcement may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the NPDES Compliance Hotline in Seattle, Washington, by telephone, (206) 553-1846.
- 4. Reports must be submitted to;

US EPA Region 10 Attn: ICIS Data Entry Team 200 Sixth Avenue, Suite 900 OCE-133 Seattle, Washington 98101-3140 Idaho Department of Environmental Quality Boise Regional Office 1445 N. Orchard Street Boise, Idaho 83706

## H. Other Noncompliance Reporting

The permittee must report all instances of noncompliance, not required to be reported within 24 hours, at the time that monitoring reports for Part III.B ("Reporting of Monitoring Results") are submitted. The reports must contain the information listed in Part III.G.2 of this permit ("Twenty-four Hour Notice of Noncompliance Reporting").

### I. Public Notification

The permittee must immediately notify the public, health agencies and other affected entities (e.g., public water systems) of any overflow which the permittee owns or has operational control; or any unanticipated bypass or upset that exceeds any effluent limitation in the permit in accordance with the notification procedures developed in accordance with Part II.G.

## J. Notice of New Introduction of Toxic Pollutants

The permittee must notify the Director of the Office of Water and Watersheds and the IDEQ in writing of:

- 1. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Sections 301 or 306 of the Act if it were directly discharging those pollutants; and
- 2. Any substantial change in the volume or character of pollutants being introduced into the POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- 3. For the purposes of this section, adequate notice must include information on:
  - a) The quality and quantity of effluent to be introduced into the POTW, and
  - b) Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- 4. The permittee must notify the Director of the Office of Water and Watersheds at the following address:

US EPA Region 10 Attn: NPDES Permits Unit Manager 1200 Sixth Avenue, Suite 900 OWW-130 Seattle, WA 98101-3140

#### K. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.

# III. Compliance Responsibilities

### A. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

### **B.** Penalties for Violations of Permit Conditions

- Civil and Administrative Penalties. Pursuant to 40 CFR Part 19 and the Act, any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$37,500 per day for each violation).
- 2. Administrative Penalties. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Pursuant to 40 CFR 19 and the Act, administrative penalties for Class I violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$37,500). Pursuant to 40 CFR 19 and the Act, penalties for Class II violations are not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently \$16,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$177.500).
- 3. Criminal Penalties:
  - a) Negligent Violations. The Act provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a

pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both.

- b) Knowing Violations. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both.
- c) Knowing Endangerment. Any person who knowingly violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the Act, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.
- d) False Statements. The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more than \$10,000 per violation, or by imprisonment for not more tha

#### C. Need To Halt or Reduce Activity not a Defense

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

#### **D.** 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.

### E. 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) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

# F. Bypass of Treatment Facilities

- 1. Bypass not exceeding limitations. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs 2 and 3 of this Part.
- 2. Notice.
  - a) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it must submit prior written notice, if possible at least 10 days before the date of the bypass.
  - b) Unanticipated bypass. The permittee must submit notice of an unanticipated bypass as required under Part III.G ("Twenty-four Hour Notice of Noncompliance Reporting").
- 3. Prohibition of bypass.
  - a) Bypass is prohibited, and the Director of the Office of Compliance and Enforcement may take enforcement action against the permittee for a bypass, unless:
  - (i) The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
  - (ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have

been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

- (iii) The permittee submitted notices as required under paragraph 2 of this Part.
  - b) The Director of the Office of Compliance and Enforcement may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph 3.a. of this Part.

## G. Upset Conditions

- Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the permittee meets the requirements of paragraph 2 of this Part. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- 2. Conditions necessary for a demonstration of upset. To establish the affirmative defense of upset, the permittee must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a) An upset occurred and that the permittee can identify 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 Part III.G, "Twenty-four Hour Notice of Noncompliance Reporting;" and
  - d) The permittee complied with any remedial measures required under Part IV.D, "Duty to Mitigate."
- 3. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

### H. Toxic Pollutants

The permittee must comply with effluent standards or prohibitions established under Section 307(a) of the Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

### I. Planned Changes

The permittee must give written notice to the Director of the Office of Water and Watersheds as specified in part III.J.4. and the IDEQ as soon as possible of any planned physical alterations or additions to the permitted facility whenever:

- 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 40 CFR 122.29(b); or
- 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 limitations 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.

### J. Anticipated Noncompliance

The permittee must give written advance notice to the Director of the Office of Compliance and Enforcement and the IDEQ of any planned changes in the permitted facility or activity that may result in noncompliance with this permit.

## K. Reopener

This permit may be reopened to include any applicable standard for sewage sludge use or disposal promulgated under section 405(d) of the Act. The Director may modify or revoke and reissue the 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.

# **IV.** General Provisions

### A. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 122.62, 122.64, or 124.5. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

# **B.** Duty to Reapply

If the permittee intends to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. In accordance with 40 CFR 122.21(d), and unless permission for the application to be submitted at a later date has been granted by the Regional Administrator, the permittee must submit a new application at least 180 days before the expiration date of this permit.

#### C. Duty to Provide Information

The permittee must furnish to the EPA and the IDEQ, within the time specified in the request, any information that the EPA or the IDEQ 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 the EPA or the IDEQ, upon request, copies of records required to be kept by this permit.

### **D.** Other 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 the EPA or the IDEQ, it must promptly submit the omitted facts or corrected information in writing.

### E. Signatory Requirements

All applications, reports or information submitted to the EPA and the IDEQ 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.
  - b) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.
  - c) For a municipality, state, federal, Indian tribe, or other public agency: by either a principal executive officer or ranking elected official.
- 2. All reports required by the permit and other information requested by the EPA or the IDEQ must be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a) The authorization is made in writing by a person described above;
  - b) The authorization specifies either an individual or a 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 the Director of the Office of Compliance and Enforcement and the IDEQ.
- 3. Changes to authorization. If an authorization under Part V.E.2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part V.E.2. must be submitted to the Director of the Office of Compliance and Enforcement and the IDEQ prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under this Part 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."

### F. Availability of Reports

In accordance with 40 CFR 2, information submitted to the EPA pursuant to this permit may be claimed as confidential by the permittee. In accordance with the Act, 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 "confidential business information" on each page containing such information. If no claim is made at the time of submission, the EPA 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 40 CFR 2, Subpart B (Public Information) and 41 Fed. Reg. 36902 through 36924 (September 1, 1976), as amended.

### G. Inspection and Entry

The permittee must allow the Director of the Office of Compliance and Enforcement, EPA Region 10; the IDEQ or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by law, to:

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

#### H. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to persons or property or invasion of other private rights, nor any infringement of federal, tribal, state or local laws or regulations.

### I. Transfers

This permit is not transferable to any person except after written notice to the Director of the Office of Water and Watersheds as specified in Part III.J.4. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act. (See 40 CFR 122.61; in some cases, modification or revocation and reissuance is mandatory).

### J. 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 Act.

# V. Definitions

- 1. "Act" means the Clean Water Act.
- 2. "Acute Toxic Unit" ("TUa") is a measure of acute toxicity. TUa is the reciprocal of the effluent concentration that causes 50 percent of the organisms to die by the end on the acute exposure period (i.e., 100/"LC50").
- 3. "Administrator" means the Administrator of the EPA, or an authorized representative.
- 4. "Average monthly discharge limitation" means 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.
- 5. "Average weekly discharge limitation" means 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.
- 6. "Best Management Practices" (BMPs) means 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.

- 7. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- 8. "Chronic toxic unit" ("TUc") is a measure of chronic toxicity. TUc 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").
- 9. "Composite" see "24-hour composite".
- 10. "Daily discharge" means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
- 11. "Director of the Office of Compliance and Enforcement" means the Director of the Office of Compliance and Enforcement, EPA Region 10, or an authorized representative.
- 12. "Director of the Office of Water and Watersheds" means the Director of the Office of Water and Watersheds, EPA Region 10, or an authorized representative.
- 13. "DMR" means discharge monitoring report.
- 14. "EPA" means the United States Environmental Protection Agency.
- 15. "Geometric Mean" means the n<sup>th</sup> root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.
- 16. "Grab" sample is an individual sample collected over a period of time not exceeding 15 minutes.
- 17. "IDEQ" means the Idaho Department of Environmental Quality.
- 18. "Inhibition concentration", IC, is a point estimate of the toxicant concentration that causes a given percent reduction (p) in a non-quantal biological measurement (e.g., reproduction or growth) calculated from a continuous model (e.g., Interpolation Method).
- 19. "Interference" is defined in 40 CFR 403.3.
- 20. "Interim Minimum Level (IML)" is used when a method-specific "Minimum Level (ML)" has not been published by the EPA. The IML is equal to 3.18 times the method-specified "Method Detection Limit (MDL)".
- 21. "LC50" means the concentration of toxicant (e.g., effluent) which is lethal to 50 percent of the test organisms exposed in the time period prescribed by the test.
- 22. "Maximum daily discharge limitation" means the highest allowable "daily discharge."

- 23. "Maximum Weekly Maximum Temperature" is the mean of daily maximum temperatures measured over a consecutive 7 day period ending on the day of calculation.
- 24. "Method Detection Limit (MDL)" means the minimum concentration of a substance (analyte) that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.
- 25. "Minimum Level (ML)" means the concentration at which the entire analytical system must give a recognizable signal and an acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method-specified sample weights, volumes and processing steps have been followed.
- 26. "NOEC" means 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).
- 27. "NPDES" means National Pollutant Discharge Elimination System, the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits . . . under sections 307, 402, 318, and 405 of the CWA.
- 28. "Pass Through" means a Discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).
- 29. "QA/QC" means quality assurance/quality control.
- 30. "Regional Administrator" means the Regional Administrator of Region 10 of the EPA, or the authorized representative of the Regional Administrator.
- 31. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- 32. "Significant Industrial User" means all industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N; and any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater); contributes a process wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority as defined in 40 CFR 403.12(a) on the basis that

the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)). Upon a finding that an industrial user meeting above the criteria has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority (as defined in 40 CFR 403.12(a)) may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

- 33. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations 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.
- 34. "24-hour composite" sample means a combination of at least 8 discrete sample aliquots of at least 100 milliliters, collected over periodic intervals from the same location, during the operating hours of a facility over a 24 hour period. The composite must be flow proportional. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of Standard Methods for the Examination of Water and Wastewater.

#### <u>APPENDIX A</u> minimum levels and interim minimum levels for expanded effluent testing

PARAMETER	Minimum Level (µg/L)	Interim Minimum Level (µg/L)
Acenaphthene	10	
Acenaphthylene	10	
Acrolein		2.2
Acrylonitrile		1.6
Anthracene	10	
Benzene		0.6
Benzidine		0.35
Benzo(a)anthracene		0.04
3,4-Benzofluoranthene (benzo(b)fluoranthene)		0.03
Benzo(ghi)perylene	20	
Benzo(k)fluoranthene		0.054
Bis(2-chloroethoxy)methane	10	
Bis(2-chloroethyl)ether		1.0
Bis(2-chloroisopropyl)ether	10	
Bis(2-ethylhexyl)phthalate		6
Bromoform		0.6
Bromomethane		3.75
(Methyl bromide)		
4-Bromophenyl phenyl ether	10	
Butyl benzyl phthalate	10	
Carbon Tetrachloride		0.38
Chlorobenzene	10	
Chlorodibromomethane		0.29
Chlorethane	50	
2-Chloroethyl vinyl ether	10	
Chloroform		5.1

PARAMETER	Minimum Level (μg/L)	Interim Minimum Level (μg/L)
Chloromethane	50	
(Methyl chloride)		
4-Chloro-3-methylphenol	10	
(p-chloro-m-cresol)		
2-Chloronapthalene	10	
2-Chlorophenol	10	
4-Chlorophenyl phenyl ether	10	
Chrysene		0.48
Dibenzo(a,h)anthracene		0.10
1,2-Dichlorobenzene	10	
1,3-Dichlorobenzene	10	
1,4-Dichlorobenzene	10	
3,3'-Dichlorobenzidine		0.41
Dichlorobromomethane		0.3
1,1-Dichloroethane	10	
1,2-Dichloroethane		0.10
1,1 Dichloroethylene	10	
1,2-trans-Dichloroethene	10	
2,4-Dichlorophenol	10	
1,2-Dichloropropane		0.13
1,3-Dichloropropene		
cis-1,3-Dichloropropene		1.08
trans-1,3-Dichloropropene		0.6
Diethyl phthalate	10	
2,4-Dimethylphenol	10	
Dimethyl phthalate	10	
Di-n-butyl phthalate	10	
2,4-Dinitrophenol		41
2,4-Dinitrotoluene		0.06
2,6-Dinitrotoluene		0.03

PARAMETER	Minimum Level (µg/L)	Interim Minimum Level (µg/L)
Di-n-octyl phthalate	10	
Ethylbenzene	10	
Fluoranthene	10	
Fluorene	10	
Hexachlorobenzene		0.16
Hexachlorobutadiene		1.08
Hexachlorocyclopentadiene	10	
Hexachloroethane		0.10
Indeno (1,2,3-cd)pyrene		0.137
Isophorone	10	18.1
2-methyl-4,6-dinitrophenol	20	
(4,6 dinitro-o-cresol)		
Methylene Chloride		0.80
Naphthalene	10	
Nitrobenzene	10	
2-Nitrophenol	20	
4-Nitrophenol	50	
N-nitrosodimethylamine		0.48
N-nitrosodi-n-propylamine		1.46
N-nitrosodiphenylamine		2.58
Pentachlorophenol		1.88
Phenanthrene		2.04
Phenol	10	
Pyrene	10	
1,1,2,2-Tetrachloroethane		0.10
Tetrachloroethylene		0.10
Toluene	10	
1,2,4-Trichlorobenzene	10	
1,1,1-Trichloroethane		0.10
1,1,2-Trichloroethane		0.06

PARAMETER	Minimum Level (µg/L)	Interim Minimum Level (µg/L)
Trichloroethylene		0.38
2,4,6-Trichlorophenol		2.04
Vinyl Chloride		0.57