UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

JUN 22 2012

OFFICE OF
WATER AND
WATERSHEDS

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

Mr. Steve Hansen, Utilities Manager
City of Ketchum
P.O. Box 2315
Ketchum, ID 83340

Re: City of Ketchum/Sun Valley Water and Sewer District Wastewater Treatment Plant
NPDES Permit No.: ID0020281

Dear Mr. Hansen:

We are reissuing a National Pollutant Discharge Elimination System (NPDES) permit for the facility referenced above. The enclosed document authorizes the facility to discharge to the Big Wood River. Also enclosed is the U.S. Environmental Protection Agency's response to the comments received on the draft permit during the public notice period.

This letter serves as service of notice under 40 CFR §124.19(a). The service of notice date for this permit, in accordance with 40 CFR §124.19(a) and 40 CFR 124.20, is June 29, 2012. The permit will become effective on the date indicated in the permit unless a timely appeal meeting the requirements of 40 CFR §124.19 is received by the Environmental Appeals Board. Information about the administrative appeal process may be obtained on-line at http://www.epa.gov/eab or by contacting the Clerk of the Environmental Appeals Board at (202) 233-0122.

Sincerely,

Michael A. Bussell, Director
Office of Water and Watersheds

Enclosures

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cc: Bill Allred, Regional Administrator, IDEQ Twin Falls Regional Office
David Anderson, IDEQ Twin Falls Regional Office
Balthasar Buhidar, IDEQ Twin Falls Regional Office
Justin Hayes, Idaho Conservation League

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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",

**The City of Ketchum**
**110 A River Ranch Road**
**Ketchum, ID 83340**

is authorized to discharge from the Ketchum/Sun Valley Wastewater Treatment Plant located in Ketchum, Idaho, at the following location(s):

| Outfall | Receiving Water | Latitude | Longitude |
|---|---|---|---|
| 001 | Big Wood River | 43° 40' 8" | 114° 21' 7" |

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

This permit shall become effective August 1, 2012.

This permit and the authorization to discharge shall expire at midnight, July 31, 2017.

The permittee shall reapply for a permit reissuance on or before February 1, 2017 if the permittee intends to continue operations and discharges at the facility beyond the term of this permit.

Signed this 22nd day of June 2017.

Michael A. Bussell, Director
Office of Water and Watersheds

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## Schedule of Submissions

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

| Item | Due Date |
|---|---|
| 1. Discharge Monitoring Reports (DMR) | DMRs are due monthly and must be postmarked on or before the 10th day of the month following the monitoring month. |
| 2. Quality Assurance Plan (QAP) | The permittee must provide EPA and IDEQ with written notification that the Plan has been developed and implemented by January 31, 2013 (see Part II.B). The Plan must be kept on site and made available to EPA and IDEQ upon request. |
| 3. Operation and Maintenance (O&M) Plan | The permittee must provide EPA and IDEQ with written notification that the Plan has been developed and implemented by January 31, 2013 (see Part II.A). The Plan must be kept on site and made available to EPA and IDEQ upon request. |
| 4. NPDES Application Renewal | The application must be submitted by February 1, 2017 (see Part V.B). |
| 5. Surface Water Monitoring Report | For parameters for which quarterly sampling is required, surface water monitoring results must be submitted to EPA and IDEQ with the DMRs for the last month of the quarter in which the sampling occurred. For temperature, surface water monitoring results for April and May must be submitted to EPA and IDEQ with the July DMR (due August 10th), and results for June – October must be submitted to EPA and IDEQ with the December DMR (due the following January 10th) (see Part I.D.10). |
| 7. Twenty-Four Hour Notice of Noncompliance Reporting | The permittee must report certain occurrences of noncompliance by telephone within 24 hours from the time the permittee becomes aware of the circumstances. (See Parts III.G and I.B.2.) |
| 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 EPA and IDEQ that the plan has been developed and implemented by January 31, 2013 (see Part II.D). |

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# I. Limitations and Monitoring Requirements

## A. Discharge Authorization

During the effective period of this permit, the permittee is authorized to discharge pollutants from the outfalls specified herein to the Big Wood 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 Monitoring

1. The permittee must limit and monitor discharges from outfall 001 as specified in Table 1, below. All figures represent maximum effluent limits unless otherwise indicated. The permittee must comply with the effluent limits in the tables at all times unless otherwise indicated, regardless of the frequency of monitoring or reporting required by other provisions of this permit.

**Table 1: Effluent Limitations and Monitoring Requirements**

| Parameter | Effluent Limitations | | | | Monitoring Requirements | | |
|---|---|---|---|---|---|---|---|
| | Units | Average Monthly Limit | Average Weekly Limit | Maximum Daily Limit | Sample Location | Sample Frequency | Sample Type |
| Flow | mgd | Report | — | Report | Effluent | continuous | recording |
| Temperature (April – October) | °C | Report | — | Report | Effluent | continuous | recording |
| Temperature (November – March) | °C | Report | — | Report | Effluent | 5/week | grab |
| Biochemical Oxygen Demand ($BOD_5$) | mg/L | 30 | 45 | — | Influent & Effluent | 1/week | 24-hr. comp. |
| | lb/day | 505 | 760 | — | | | calculation |
| | % removal | 85% (min) | — | — | % removal | 1/month | calculation[3] |
| Total Suspended Solids (TSS) | mg/L | 30 | 45 | — | Influent & Effluent | 2/week | 24-hr. comp. |
| | lb/day | 275 | 542 | — | | | calculation |
| | lb/day | Annual Average Limit: 145 lb/day[4] | | | | | calculation[4] |
| | % removal | 85% (min) | — | — | % removal | 1/month | calculation[3] |
| E. coli Bacteria[1,2] | #/100 ml | 126 (geometric mean) | — | 406 (instantaneous maximum) | Effluent | 5/month | grab |
| | CFU/day | $19.1 \times 10^9$ (geometric mean) | — | — | | | calculation |
| pH | s.u. | 6.2 – 9.0 at all times | | | Effluent | daily | grab |
| Total Phosphorus as P | mg/L | 1.0 | 1.5 | — | Effluent | 2/week | 24-hr. comp. |
| | lb/day | 9.9 | 14.9 | — | | | calculation |
| Copper, Total Recoverable[2] | µg/L | 19.2 | — | 35.1 | Effluent | 1/week | 24-hr. comp. |
| | lb/day | 0.64 | — | 1.17 | | | calculation |
| Alkalinity, Total | mg/L as $CaCO_3$ | Report | — | Report | Effluent | 1/quarter | 24-hr. comp. |
| Cadmium, Total Recoverable | µg/L | Report | — | Report | Effluent | 1/quarter | 24-hr. comp. |
| Dissolved Oxygen | mg/L | Report | — | Report | Effluent | 1/month | grab |
| Hardness | mg/L as $CaCO_3$ | Report | — | Report | Effluent | 1/quarter | 24-hr. comp. |

**Table 1: Effluent Limitations and Monitoring Requirements**

| Parameter | Effluent Limitations | | | | Monitoring Requirements | | |
|---|---|---|---|---|---|---|---|
| | Units | Average Monthly Limit | Average Weekly Limit | Maximum Daily Limit | Sample Location | Sample Frequency | Sample Type |
| Mercury, Total | µg/L | Report | — | Report | Effluent | 1/quarter | 24-hr. comp. |
| Nitrate plus Nitrite | mg/L | Report | — | Report | Effluent | 1/quarter | 24-hr. comp. |
| Oil and Grease | mg/L | Report | — | Report | Effluent | 1/quarter | grab |
| Orthophosphate as P | mg/L | Report | — | Report | Effluent | 1/quarter | 24-hr. comp. |
| Total Ammonia as N | mg/L | Report | — | Report | Effluent | 1/month | 24-hr. comp. |
| Total Dissolved Solids | mg/L | Report | — | Report | Effluent | 1/quarter | 24-hr. comp. |
| Total Kjeldahl Nitrogen | mg/L | Report | | Report | Effluent | 1/quarter | 24-hr. comp. |
| Zinc, Total Recoverable | µg/L | Report | — | Report | Effluent | 1/quarter | 24-hr. comp. |
| NPDES Application Form 2A Expanded Effluent Testing | — | See I.B.7. | | | Effluent | 3x/5 years | — |
| Whole Effluent Toxicity (WET) | TUc | — | — | Report | Effluent | See I.C.2. | 24-hr. comp. |

1. The average monthly E. coli bacteria counts must not exceed a geometric mean of 126/100 ml and $19.1 \times 10^9$ (19.1 billion) per day based on a minimum of five samples taken every 3-7 days within a calendar month. The number of colony forming units (CFUs) per day must be calculated by multiplying the effluent E. coli concentration (#/100 ml) by the flow rate (mgd) on the day sampling occurred and a conversion factor of 37,854,000 deciliters per million gallons. See Part VI for a definition of geometric mean.
2. Reporting is required within 24 hours of a maximum daily limit or instantaneous maximum limit violation. See Parts I.B.2. and III.G.
3. The monthly average percent removal must be calculated from the arithmetic mean of the influent concentration values and the arithmetic mean of the effluent concentration values for that month. Influent and effluent samples must be taken over approximately the same time period.
4. See I.B.8.

2. The permittee must report within 24 hours any violation of the maximum daily or instantaneous maximum limits for the following pollutants: Total recoverable copper and E. coli. Violations of all other effluent limits are to be reported at the time that discharge monitoring reports are submitted (See III.B and III.H).

3. The permittee must not discharge floating, suspended, or submerged matter of any kind in amounts causing nuisance or objectionable conditions or that may impair designated beneficial uses of the receiving water.

4. The permittee must collect effluent samples from the effluent stream after the last treatment unit prior to discharge into the receiving waters.

5. Minimum Levels. For all effluent monitoring, the permittee must use methods that can achieve a minimum level (ML) less than the effluent limitation. For parameters that do not have effluent limitations, the permittee must use methods that can achieve MLs less than or equal to those specified in Table 2, below. For purposes of reporting on the DMR for a single sample, if a value is less than the method detection limit (MDL), the permittee must report "less than {numeric value of the MDL}" and if a value is less than the ML, the permittee must report "less than {numeric value of the ML}."

| Table 2: Maximum MLs for Pollutants Not Subject to Effluent Limitations | | |
|---|---|---|
| **Parameter** | **Units** | **Maximum ML** |
| Cadmium | µg/L | 0.1 |
| Mercury | µg/L | 0.01 |
| Nitrate + Nitrite as N | mg/L | 0.1 |
| Orthophosphate | mg/L | 0.01 |
| Total Kjeldahl Nitrogen | mg/L | 0.1 |
| Zinc | µg/L | 5 |

6. For purposes of calculating monthly averages, except for E. coli, zero may be assigned for values less than the MDL, and the {numeric value of the MDL} may be assigned for values between the MDL and the ML. If the average value is less than the MDL, the permittee must report "less than {numeric value of the MDL}" and if the average value is less than the ML, the permittee must report "less than {numeric value of the ML}." If a value is equal to or greater than the ML, the permittee must report and use the actual value. The resulting average value must be compared to the compliance level, the ML, in assessing compliance.
7. The permittee must perform the effluent testing required by Part D of NPDES application Form 2A (EPA Form 3510-2A, revised 1-99). The permittee must submit the results of this testing with its application for renewal of this NPDES permit. To the extent that effluent monitoring required by other conditions of this permit satisfies this requirement, these samples may be used to satisfy the requirements of this paragraph.
8. Annual average effluent limit for TSS:
   a) The annual average TSS load must not exceed 145 lb/day.
   b) The annual average TSS load must be calculated as the sum of all TSS daily discharges measured during a calendar year, divided by the number of TSS daily discharges measured during that year.
   c) The annual average TSS load must be reported on the December DMR, regardless of whether a discharge of pollutants occurs during the month of December.

## C. 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.B, above, with a required sampling frequency of once per quarter or more frequently, using the sample type required in Part I.B. For parameters for which grab samples are required in Part I.B, grab samples must be taken during the same 24-hour period as the 24-hour composite sample used for the toxicity tests. When the timing of sample collection coincides

with that of the sampling required in Part I.B, analysis of the split sample will fulfill the requirements of Part I.B as well.

2. Chronic Test Species and Methods

   a) For outfall 001, chronic tests must be conducted once per quarter during calendar year 2016. Quarters are defined as January through March, April through June, July through September, and October through December.

   b) The permittee must conduct the following two chronic toxicity tests on each sample, using the species and protocols in Table 3:

**Table 3: 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 as follows:

      (i) For survival endpoints, $TU_c = 100/NOEC$.

      (ii) For all other test endpoints, $TUc = 100/IC_{25}$.

      (iii) $IC_{25}$ means "25% inhibition concentration." The $IC_{25}$ 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. Quality Assurance

   a) 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, two dilutions above the RWC, and two dilutions below the RWC. The RWC is 31.4% effluent.

b) 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.

c) 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 in-house, 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 of 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 of 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 EPA and IDEQ. In no case shall water that has not met test acceptability criteria be used for either dilution or control.

4. Reporting

a) The permittee must submit the results of the toxicity tests with the discharge monitoring reports (DMRs). Toxicity tests taken from January 1 through March 31 must be reported on the May DMR. Toxicity tests taken from April 1 through June 30 must be reported on the August DMR. Toxicity tests taken from July 1 through September 30 must be reported on the November DMR. Toxicity tests taken from October 1 through December 31 must be reported on the DMR for the following February.

b) The report of toxicity test results must include all relevant information outlined in Section 10, Report Preparation, of *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, Fourth Edition, EPA/821-R-02-013, October 2002. In addition to toxicity test results, the permittee must report: dates of sample collection and initiation of each test; flow rate at the time of sample collection; and the results of the monitoring required in Part I.B of this permit, for parameters with a required monitoring frequency of once per quarter or more frequently.

5. Preparation of initial investigation toxicity reduction evaluation (TRE) workplan: Prior to initiation of the toxicity testing required by this permit, the permittee must submit to EPA a copy of the permittee's initial investigation TRE workplan. This

plan shall describe the steps the permittee intends to follow in the event that chronic toxicity is detected above 3.18 TUc, and must include at a minimum:

a) A description of the investigation and evaluation techniques that would be used to identify potential causes/sources of toxicity, effluent variability, treatment system efficiency;

b) A description of the facility's method of maximizing in-house treatment efficiency, good housekeeping practices, and a list of all chemicals used in operation of the facility; and

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

d) The initial investigation TRE workplan must be sent to the following address:

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

6. Accelerated testing: If chronic toxicity is detected above 3.18 TUc, the permittee must comply with the following:

a) The permittee must implement the initial investigation TRE workplan within 48-hours of the permittee's receipt of the toxicity results demonstrating the exceedance.

b) The permittee must conduct six more bi-weekly (every two weeks) chronic toxicity tests, over a 12-week period. This accelerated testing shall be initiated within 10 calendar days of receipt of the test results indicating the initial exceedance.

c) The permittee must notify EPA of the exceedance in writing at the address in Part I.C.5.d, above, 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.

d) If implementation of the initial investigation workplan clearly identifies the source of toxicity to the satisfaction of EPA (e.g., a temporary plant upset), and none of the six accelerated chronic toxicity tests required under Part I.C.6.b are above 3.18 TUc, the permittee may return to the regular chronic toxicity testing cycle specified in Part I.C.2.a.

7. Toxicity Reduction Evaluation (TRE)

   a) If implementation of the initial investigation workplan does not clearly identify the source of toxicity to the satisfaction of EPA, or any of the six accelerated chronic toxicity tests indicate toxicity above 3.18 TUc, then the permittee must begin implementation of the toxicity reduction evaluation (TRE) requirements below. Implementation of the TRE requirements shall begin within 10 calendar days of receipt of the accelerated chronic toxicity testing results demonstrating the exceedance.

   b) In accordance with the permittee's initial investigation workplan and 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 workplan, which includes:

      (i) Further actions to investigate and identify the cause of toxicity;

      (ii) Actions the permittee will take to mitigate the impact of the discharge and to prevent the recurrence of toxicity; and

      (iii) A schedule for these actions.

   c) 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).

   d) 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.

## D. Surface Water Monitoring

The permittee must conduct surface water monitoring. Surface water monitoring must start by January 31, 2013 and continue for four years. The program must meet the following requirements:

1. Two monitoring station must be established in the Big Wood River at the following locations:

   a) Above the influence of the facility's discharge, and

   b) Below the facility's discharge at a point where the discharge and the receiving water are completely mixed.

2. The permittee must seek approval of the surface water monitoring stations from IDEQ.

3. A failure to obtain IDEQ approval of surface water monitoring stations does not relieve the permittee of the surface water monitoring requirements of this permit.

4. To the extent practicable, surface water sample collection must occur on the same day as effluent sample collection.

5. Cadmium and zinc must be analyzed as dissolved. Mercury must be analyzed as total recoverable.

6. The flow rate must be measured as near as practicable to the time that other ambient parameters are sampled.
7. Samples must be analyzed for the parameters listed in Table 4 and must achieve MDLs that are equivalent to or less than those listed in Table 4. The permittee may request different MDLs. The request must be in writing and must be approved by EPA.
8. Composite samples must consist of 3 grab samples, one from each side of the river, and one from the middle of the river.

**Table 4: Receiving Water Monitoring Requirements**

| Parameter (units) | Sample Frequency | Sample Locations | Sample Type | Maximum MDL |
|---|---|---|---|---|
| Alkalinity (mg/L as $CaCO_3$) | Quarterly[1] | Upstream | Composite | — |
| Cadmium (µg/L) | Quarterly[1] | Upstream and Downstream | Composite | 0.1 mg/L |
| Hardness (mg/L as $CaCO_3$) | Quarterly[1] | Upstream and Downstream | Composite | — |
| Mercury (µg/L) | Quarterly[1] | Upstream and Downstream | Composite | 0.01 µg/L |
| pH (s.u.) | Quarterly[1] | Upstream | Grab | — |
| Temperature, April – October (°C) | Hourly | Upstream and Downstream | Recording | — |
| Total Ammonia as N (mg/L) | Quarterly[1] | Upstream and Downstream | Composite | 0.04 mg/L |
| Zinc, Dissolved (µg/L) | Quarterly[1] | Upstream and Downstream | Composite | 2 µg/L |

1. Quarters are defined as January through March, April through June, July through September and October through December.

9. Quality assurance/quality control plans for all the monitoring must be documented in the Quality Assurance Plan required under Part II.B, "Quality Assurance Plan".
10. For parameters for which quarterly sampling is required, surface water monitoring results must be submitted to EPA and IDEQ with the DMRs for the last month of the quarter in which the sampling occurred. For temperature, surface water monitoring results for April and May must be submitted to EPA and IDEQ with the July DMR (due August 10th), and results for June – October must be submitted to EPA and IDEQ with the December DMR (due the following January 10th). At a minimum, the reports must include the following:
    a) Dates of sample collection and analyses.
    b) Results of sample analysis.
    c) Relevant quality assurance/quality control (QA/QC) information.

# II. Special Conditions

## A. Operation and Maintenance Plan

In addition to the requirements specified in Section IV.E of this permit (Proper Operation and Maintenance), by January 31, 2013, the permittee must provide written

notice to EPA and IDEQ that an operations and maintenance plan for the current wastewater treatment facility has been developed and implemented. The plan shall be retained on site and made available on request to EPA and IDEQ. Any changes occurring in the operation of the plant shall be reflected within the Operation and Maintenance plan.

**B. 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 EPA and IDEQ that the Plan has been developed and implemented by January 31, 2013. 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 *EPA 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 EPA and/or IDEQ upon request.

**C. Control of Undesirable Pollutants and Industrial Users**

1. The permittee must require any industrial user discharging to its treatment works to comply with any applicable requirements of 40 CFR 403 through 471.
2. The permittee must not allow introduction of the following pollutants into the POTW:
   a) Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140

degrees Fahrenheit or 60 degrees Centigrade 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 pH lower than 5.0, unless the works is specifically designed to accommodate such Discharges.

c) Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW 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 will 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 Director of the Office of Water and Watersheds, 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.

h) Any trucked or hauled pollutants, except at discharge points designated by the POTW.

i) Any pollutant which causes Pass Through or Interference.

**D. 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 EPA and IDEQ that the plan has been developed and implemented by January 31, 2013. Any existing emergency response and public notification plan may be modified for compliance with this section.

# III. 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

The permittee must either submit monitoring data and other reports in paper form, or must report electronically using NetDMR, a web-based tool that allows permittees to electronically submit DMRs and other required reports via a secure internet connection. Specific requirements regarding submittal of data and reports in paper form and submittal using NetDMR are described below.

1. Paper Copy Submissions

Monitoring data must be submitted using the DMR form (EPA No. 3320-1) or equivalent and must be postmarked by the 10th day of the month following the completed reporting period. 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"). The permittee must submit the legible originals of these documents to the Director, Office of Compliance and Enforcement, with copies to IDEQ at the following addresses:

US EPA Region 10
Attn: ICIS Data Entry Team
1200 Sixth Avenue, Suite 900

OCE-133
Seattle, Washington 98101-3410

Idaho Department of Environmental Quality
1363 Fillmore Street
Twin Falls, ID 83301

2. Electronic submissions

Monitoring data must be submitted electronically to EPA no later than the 10th of the month following the completed reporting period. All reports required under this permit must be submitted to EPA as a legible 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 paper copies of DMRs or other reports to EPA and IDEQ.

The permittee may use NetDMR after requesting and receiving permission from US EPA Region 10. NetDMR is accessed from http://www.epa.gov/netdmr.

## C. Monitoring Procedures

Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless another method is required under 40 CFR subchapters N or O, or other test procedures have been specified in this permit or approved by 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 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 EPA or 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 applicable pollutants identified by Part I.B.2.
   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 the addresses in Part III.B ("Reporting of Monitoring Results").

## 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.D.

## J. Notice of New Introduction of Toxic Pollutants

The permittee must notify the Director of the Office of Water and Watersheds and 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 6th Avenue
   Suite 900 OWW-130
   Seattle, WA 98101-3140

# IV. 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

1. 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 6 months per violation, or by both.

**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

1. 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 IDEQ as soon as possible of any planned physical alterations or additions to the permitted facility whenever:

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

## V. 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 by February 1, 2017.

**C. Duty to Provide Information**

The permittee must furnish to EPA and IDEQ, within the time specified in the request, any information that EPA or 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 EPA or 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 EPA or IDEQ, it must promptly submit the omitted facts or corrected information in writing.

**E. Signatory Requirements**

All applications, reports or information submitted to EPA and 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 EPA or 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 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 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 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, 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; 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.

## VI. Definitions

1. "Act" means the Clean Water Act.
2. "Administrator" means the Administrator of the EPA, or an authorized representative.
3. "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.
4. "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.
5. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
6. "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").
7. "Composite" - see "24-hour composite".
8. "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.
9. "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.

10. "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.
11. "DMR" means discharge monitoring report.
12. "EPA" means the United States Environmental Protection Agency.
13. "Geometric Mean" means the $n^{th}$ root of a product of n factors, or the antilogarithm of the arithmetic mean of the logarithms of the individual sample values.
14. "Grab" sample is an individual sample collected over a period of time not exceeding 15 minutes.
15. "IDEQ" means the Idaho Department of Environmental Quality.
16. "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).
17. "Interference" is defined in 40 CFR 403.3.
18. "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.
19. "Maximum daily discharge limitation" means the highest allowable "daily discharge."
20. "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.
21. "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.
22. "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).
23. "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.
24. "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).

25. "QA/QC" means quality assurance/quality control.
26. "Regional Administrator" means the Regional Administrator of Region 10 of the EPA, or the authorized representative of the Regional Administrator.
27. "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.
28. "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.
29. "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.

# Response to Comments on the Draft NPDES Permit for the City of Ketchum: Permit #ID0020281

**US Environmental Protection Agency**
**Region 10**
**NPDES Permits Unit**
**June 2012**

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## Background

On March 14, 2012, the United States Environmental Protection Agency (EPA) Region 10 issued a draft National Pollutant Discharge Elimination System (NPDES) permit for public review and comment for the City of Ketchum, Idaho (NPDES Permit #ID0020281). The public comment period closed on April 13, 2012. EPA received comments on the draft permit from the City of Ketchum (City) and the Idaho Conservation League (ICL).

## Response to Comments Received on the Draft Permit

### Comments Regarding Effluent Limits for Total Suspended Solids

#### Comment #1

ICL stated that the average monthly total suspended solids (TSS) effluent limits in the draft permit are not consistent with the Big Wood River Watershed Management Plan's (Big Wood River TMDL) wasteload allocation (WLA) for this facility. ICL stated that the Big Wood River TMDL established a TSS WLA of 26.5 tons/year for the City of Ketchum WWTP. ICL notes that, on a daily basis, the WLA is equivalent to 145 lbs/day; however, the draft permit proposes an average monthly TSS limit of 275 lb/day. ICL asserts that EPA's conclusion that the proposed TSS effluent limits are "consistent with the assumptions and requirements" of the TMDL is unsupported for the following reasons:

- ICL stated that the fact sheet relies on certain methodologies for accounting for variability in effluent discharge and relies on an EPA document entitled *Technical Support Document for Water Quality-based Toxics Control* or TSD. ICL stated that EPA has used the TSD's methodologies to develop limits for TSS, not toxic pollutants. ICL stated that this is an inappropriate and unsupported use of the methodologies described in the TSD.
- ICL stated that the average monthly effluent limit was calculated using what appears to be a totally arbitrary multiplier. ICL stated that EPA cites the average monthly limit as being calculated by multiplying the facility's TMDL WLA, converted to a daily load (145 lbs/day) by 1.89. EPA states that this multiplier of 1.89 is the result of a "relationship" shown in Table 5-2 in the TSD. ICL stated that Table 5-2 has 200 different ratios and that the discussion in the fact sheet therefore fails to provide the information required for reviewers to review or replicate EPAs' conclusion. ICL stated that, although Table 5-2 contains 200 possible ratios, none of these ratios is "1.89" – the ratio that EPA has chosen to utilize.
- ICL states that the proposed effluent limits authorize discharges that exceed the WLA for this facility. If the facility were to discharge TSS at 275 lbs/day for every day of the year, it would be in compliance with the draft permit. Doing so would result in an annual TSS discharge of 50.2 tons/yr. ICL stated that an effluent limit that provides for a lawful discharge of 50.2 tons/year of TSS is not consistent with the WLA in the EPA approved TMDL of 26.5 tons/year.

Response #1

EPA believes that the proposed average monthly effluent limit of 275 lb/day is, in fact, consistent with the assumptions and requirements of the WLA in the TMDL, for the reasons explained below.

*The TSD Was Properly Used to Calculate the Average Monthly Limits in the Draft Permit*

EPA's guidance for writing NPDES permits (*U.S. EPA NPDES Permit Writers' Manual*, 2010) specifically addresses the development of water quality based effluent limits using the procedures from the TSD. (See chapter 6)

> "The terminology used and procedures described in this manual when discussing both assessing the need for and calculating WQBELs are based on the procedures in EPA's Technical Support Document for Water Quality-Based Toxics Control <www.epa.gov/npdes/pubs/owm0264.pdf> (hereafter TSD). *Those procedures were developed specifically to address toxic pollutants but have been appropriately used to address a number of conventional and nonconventional pollutants as well.*" (emphasis added, see Page 6-11)

Therefore, consistent with this guidance, EPA appropriately relied on the statistical methods in the TSD.

As stated in the fact sheet, the specific part of the TSD that was used in the calculation of TSS effluent limits for the City of Ketchum was the equation used to calculate an average monthly limit based upon a pre-determined long-term average (LTA) WLA (see TSD at table 5-2). Typically, for effluent limits for toxic pollutants based upon two-value (i.e. acute and chronic) water quality criteria, the LTA WLA would have been calculated based on the acute and chronic WLAs, as shown in Box 5-2 and Table 5-1 of the TSD. In this case, the WLA in the Big Wood River TMDL is expressed as an annual total load of 26.5 tons per year, which can be converted to an annual average load in units of lb/day (145 lb/day in this case[1]). Once the WLA is converted to an annual average value, it is approximately equivalent to the LTA WLA, for the purposes of effluent limit calculations. Thus, it is appropriate to calculate average monthly limits from the annual average WLA, using the equation in Table 5-2 of the TSD.

*The Multiplier Used to Calculate the Average Monthly Limit was Not Arbitrary*

As stated in the fact sheet (Page C-6 and C-7), "The average monthly and average weekly loading limits for TSS are calculated based on the annual total wasteload allocation as well as the variability of the effluent TSS load, using the relationship shown in Table 5-2 of the TSD." ICL notes in its comments that Table 5-2 has 200 possible ratios, and none of the ratios listed is equal to 1.89, which is the multiplier used in this case. This is because EPA did not use the *values* printed in the table to calculate the multiplier; rather, EPA used the *equation* which is printed in the table and which produces the values in the table. The direct use of the equation rather than the values in the table allows for a more precise calculation of the multiplier than is possible using the table (even if interpolation is used), because the table only includes certain values for the

[1] 26.5 tons/year x 2000 lb/ton ÷ 365 days/year = 145 lb/day

coefficient of variation (CV) and sampling frequency, whereas, if the equation is used, then the exact CV and sampling frequency can be used. The equation is:

$AML = LTA \times \exp(z_a\sigma_n - 0.5\sigma_n^2)$

Where:

$\sigma_n^2 = \ln(CV^2/n + 1)$
$\sigma_n = \sqrt{\sigma_n^2}$
$z_a = 1.645$ for 95th percentile probability basis
n = number of sampling events

In this case, the multiplier was calculated based on the variability of the City of Ketchum's average monthly discharges, as reported on the City's discharge monitoring reports (DMRs) from September 2006 through August 2011. The average of the monthly average TSS loads was 25.47 lb/day, and the standard deviation of the monthly average TSS load was 12.04 lb/day, thus, the coefficient of variation (CV) is 12.04 ÷ 25.47 = 0.4727.

When setting an average monthly limit based on a LTA WLA, the goal is to assess the variability of the monthly averages (i.e., the expected ratio between the long-term average and the maximum monthly average). The TSD equations are based on the assumption that the CV has been calculated based on individual data points. In this case, EPA evaluated the CV of the monthly average TSS loads, as reported on the DMRs. Because the City of Ketchum was required to sample its effluent for TSS at least once per week (see the 2001 permit at Table 1, on Page 5), each reported monthly average TSS load represents the average of at least four samples. The monthly averages will be less variable (i.e., have a lower CV) than the individual daily loads. The equation in Table 5-2 can be adapted to assess the variability of the monthly average data by setting the "number of samples" equal to one. This is appropriate because, in this case, any single "sample" from the data set used to calculate the effluent variability is, in fact, an *average* of at least four individual samples. Thus:

$\sigma_1^2 = \ln(CV^2/1 + 1) = \ln(0.4727^2 \div 1 + 1) = 0.2017$
$\sigma_1 = \sqrt{\sigma_1^2} = 0.4491$

$\exp(z_a\sigma_n - 0.5\sigma_n^2) = \exp(1.645 \times 0.4727 + 0.5 \times 0.2017) = \mathbf{1.89}$

Note that the CV in this case (0.4727) is close to 0.5. The LTA multiplier shown in Table 5-2 of the TSD for a CV of 0.5 and n = 1 is 1.95, which is close to the multiplier calculated from the actual CV.

Thus, the multiplier used to calculate the average monthly TSS limit from the annual WLA was not arbitrary and was based on EPA permitting guidance (i.e., the TSD).

***An Average Monthly Limit Must Be Set Higher Than an Annual Average WLA to Account for Effluent Variability***

On Pages C-6 and C-7, the fact sheet states that:

*"The goal of a water quality-based effluent limit is to ensure a low probability that water quality standards will be exceeded in the receiving water as a result of a discharge, while considering the variability of the pollutant in the effluent (see TSD at Section 5.3.1). The average monthly and average weekly loading limits for TSS are calculated based on the annual total wasteload allocation as well as the variability of the effluent TSS load, using the relationship shown in Table 5-2 of the TSD.*

*The average monthly limit is 275 lb/day, which is calculated as 2.51 times the wasteload allocation translated to a daily load. The monthly average effluent limits will nonetheless ensure that the facility will have a low probability of exceeding its 26.5 ton-per-year wasteload allocation because facilities must generally operate below their average monthly limits most of the time in order to ensure consistent compliance (see TSD at figure 5-3). Therefore, the TSS effluent limits are consistent with the assumptions and requirements of the wasteload allocation."*

As explained in Section 5.2.2 of the TSD, "all permit limits, whether technology-based or water quality-based, are set at the upper bounds of acceptable performance. The purpose of a permit limit is to specify an upper bound of acceptable effluent quality." In Section 5.3.1, the TSD states that "the limits must 'force' treatment plant performance, which, after considering acceptable effluent variability, will only have a low statistical probability of exceeding the WLA and will achieve the desired loadings."

In general, federal regulations require effluent limits for continuously discharging POTWs to be expressed as average monthly and average weekly discharge limitations, meaning the highest allowable averages of discharges measured over a calendar month or a calendar week (40 CFR 122.2, 122.45(d)(2)). Because effluent discharges are not constant, an effluent limit that specifies the maximum allowable average discharge over a short period of time (e.g., a month or week) must be set higher than the long-term average discharge that the limit is intended to achieve. If such a short-term effluent limit were set equal to an annual average WLA, it would be more stringent than intended.[2]

*EPA Has Assured that the Permits Will Meet the Annual WLA*

There is a low probability that the permittee would exceed the annual WLA. The average monthly TSS limits in the draft permit represent the expected maximum monthly average effluent load that the City would discharge, if its long-term average TSS load were equal to the WLA (26.5 tons per year, or, equivalently, 145 lb/day), assuming that the effluent variability remains the same as it has been in the past. Thus, as stated on Page C-7 of the fact sheet, "The monthly average effluent limits will nonetheless ensure that the facility will have a low probability of exceeding its 26.5 ton-per-year wasteload allocation because facilities must generally operate below their

[2] In Section 5.3.1, the TSD specifically recommends against setting a relatively short-term maximum permit limit equal to a relatively long-term WLA, because the limit would be overly stringent. The TSD's specific example of this is setting the maximum daily limit equal to the chronic WLA.

average monthly limits most of the time in order to ensure consistent compliance (see TSD at figure 5-3)."

However, ICL is correct that it is possible that the permittee could comply with the average monthly limits and yet discharge more TSS than allocated in the TMDL. Therefore, as explained in the response to comment #2, below, EPA has included an annual average effluent limit for TSS, which directly ensures that the annual loading of TSS will not exceed 145 lb/day, on average (or, equivalently, 26.5 tons per year total).

**Comment #2**

ICL stated that EPA has not proposed a TSS effluent limit consistent with the tons/yr (or annual loading) format of the TSS WLA in the Big Wood River TMDL. ICL stated that the absence of an annual limit is a deficiency that EPA needs to correct prior to issuance of this permit.

**Response #2**

EPA agrees that an annual limit for TSS is appropriate in this case. As explained in the response to comment #1, above, because federal regulations require that effluent limits for POTWs that discharge continuously must generally be expressed as average monthly and average weekly limits (40 CFR 122.45(d)(2)), for the draft permit, EPA attempted to reconcile the difference between the averaging period of the WLA (annual) and the averaging periods of the limits (monthly and weekly) in a way that accounts for the variability of the effluent TSS loading.

As explained in the response to comment #1, above, EPA disagrees with ICL's statements that the average monthly TSS limits proposed in the draft permit were arbitrary and an improper use of the TSD. However, ICL is correct that it is possible (albeit unlikely) that the permittee could comply with the average monthly limits and yet discharge more TSS than allocated in the TMDL. Therefore, EPA has established an annual average effluent limit for TSS of 145 lb/day. This limit is equal to the 26.5 ton-per-year WLA converted to a daily load.[3] EPA chose to express the TSS effluent limits as an annual average (in lb/day) instead of an annual total, because this is consistent with the way the monthly and weekly limits are expressed. This will simplify the calculation of loads for compliance purposes, because the annual average load is calculated in a manner similar to an average monthly or weekly load.

EPA has determined that the City can comply with an annual average limit of 145 lb/day immediately upon the effective date of the final permit. This annual average load has not been exceeded in the past five years (2007, 2008, 2009, 2010, and 2011). The highest annual average load measured in the last five years was 30.8 lb/day, in 2011. Therefore, a compliance schedule is not necessary for this new water quality-based effluent limit.

EPA has also included average monthly and average weekly limits in addition to the annual average limit of 145 lb/day. The average monthly limit in the final permit is identical to that in the draft permit (275 lb/day). The average weekly limit has been changed to 542 lb/day, as

[3] 26.5 tons/year × 2000 lb/ton ÷ 365 days/year = 145 lb/day

explained in the response to comment #3, below. The average monthly and average weekly limits ensure that the permit complies with federal regulations governing the expression of effluent limits in NPDES permits for POTWs that discharge continuously (40 CFR 122.45(d)(2)). In addition, the average monthly and average weekly limits will ensure that the maximum discharge in any given month is not so much greater than the annual average limit that the City is likely to violate the annual average WLA due to one or two months of relatively high discharge loading.

Comment #3

ICL stated that the calculation of the average weekly effluent limit incorrectly used technology-based effluent limit methodology rather than water quality-based limits. ICL stated that the fact sheet states that the average weekly TSS limit was set at 413 lbs/day, which is 1.5 times the average monthly limit and that this is "consistent with the technology-based concentration limits." ICL stated that the Big Wood River is listed as 303(d) for TSS and there is a TMDL that has established a TSS WLA for this facility. As such, it is not appropriate for this facility's effluent limits to be technology-based. Rather, this facility's limits need to be water quality-based.

Response #3

As stated in the fact sheet at Pages C-1 and C-2, "The concentration and removal rate limits for $BOD_5$ and TSS are the technology-based effluent limits of 40 CFR 133.102. *However, the mass limits for $BOD_5$ and TSS are more stringent than the technology-based effluent limits. The mass limits for TSS are water quality-based effluent limits* that are consistent with the assumptions and requirements of the wasteload allocation for the discharge in the Big Wood River Watershed Management Plan" (emphasis added). This statement is true for all of the TSS mass limits in the final permit, regardless of their averaging period (annual, monthly or weekly). See also Table C-5, on Page C-7 of the fact sheet.

The technology-based TSS loading limits for the City of Ketchum, which do not appear in the permit, would be calculated using the equation shown on Page C-8 of the fact sheet. The technology-based TSS loading limits are:

**Average monthly limit:**

$$30 \text{ mg/L} \times 4.0 \text{ mgd} \times 8.34 = 1001 \text{ lb/day}$$

**Average weekly limit**

$$45 \text{ mg/L} \times 4.0 \text{ mgd} \times 8.34 = 1501 \text{ lb/day}$$

The proposed water quality-based average monthly and average weekly TSS loading limits in the draft permit are 275 lb/day and 413 lb/day, respectively. These limits represent a 72.5% reduction relative to the technology-based effluent limits. The fact that EPA used the same ratio between the average monthly and average weekly limits (1.5:1) as used in the technology-based limits does not mean that the average weekly TSS limits are technology-based rather than water quality-based.

The water quality-based effluent limits for TSS are expressed exclusively as loads (i.e., the concentration limits are technology-based) because the WLA for TSS in the Big Wood River TMDL is expressed exclusively as load (i.e., tons per year). If the effluent flow rate were sufficiently low, the City could comply with the water quality-based mass limits for TSS, without discharging a lower concentration of TSS than required by the technology-based limits.

Because the WLA is expressed as an annual total load (i.e, tons per year), the effluent loading of TSS in any given week is only of concern if it ultimately results in noncompliance with the average monthly or annual average limit. Therefore, EPA has reviewed the City's effluent TSS data to determine if the assumed 1.5:1 ratio of the maximum average weekly load to the average monthly load accurately reflects the WWTP's performance. The TSS effluent limits in the City's 2001 permit were expressed as average monthly and average weekly limits, thus, the city was required to report the monthly average and the maximum weekly average TSS load each month. EPA calculated the ratios of the reported maximum weekly average TSS load to the reported average monthly TSS load for each month from October 2006 through April 2012. All of the monthly average TSS loads were less than the average monthly effluent limit in the reissued permit, and the ratio of the maximum average weekly load to the average monthly load was greater than 1.5:1 38% of the time. The 95$^{th}$ percentile ratio was 1.97:1.

Therefore, EPA believes that the proposed 1.5:1 ratio of the average weekly limit to the average monthly limit does not reflect the historic performance of the City's WWTP. EPA has therefore used the 95$^{th}$ percentile ratio of the maximum average weekly load to the average monthly load. This results in an average weekly limit of 542 lb/day in the final permit, instead of the proposed average weekly limit of 413 lb/day. This water quality-based limit is more stringent than both the average weekly TSS effluent loading limit in the prior permit (760 lb/day) and the technology-based limit (1501 lb/day). Therefore, this limit complies with the anti-backsliding provisions of the Clean Water Act and with secondary treatment requirements for POTWs (40 CFR 133.102(b)). The average monthly limit of 275 lb/day is unchanged from that proposed in the draft permit.

The purposes of the average weekly limit are to ensure compliance with federal regulations governing the expression of effluent limits in permits (40 CFR 122.45(d)(2)) and to ensure that the average discharge of TSS in any given calendar week is not so much greater than the average monthly effluent limit that the permittee is likely to violate the average monthly limit due to a single week of high discharge loading. The revised average weekly limit will serve these purposes.

Comment #4

ICL stated that the Big Wood River TMDL established TSS WLAs for The Meadows, the City of Hailey WWTP and the City of Ketchum WWTP. The WLA and the proposed permit effluent limits for TSS at these facilities are displayed in the table below.

| Facility | From TMDL | | From Draft NPDES | | Permit limit greater than WLA by: (tons/yr) |
|---|---|---|---|---|---|
| | TSS WLA (tons/yr) | Converted Daily WLA (lb/day) | Proposed TSS AML (lb/day) | Converted Annual (tons/yr) | |
| Meadows | 0.6 | 3.3 | 8.3 | 1.5 | 0.9 |
| Hailey | 3.3 | 18 | 45 | 8.2 | 4.9 |
| Ketchum | 26.5 | 145 | 275 | 50.2 | 23.7 |
| Total | 30.4 | 166.3 | 328.3 | 59.9 | — |
| **Total amount of TSS discharge authorized in excess of WLA** | | | | | **29.5 tons/yr** |

ICL stated that each draft NPDES permit fails to limit TSS discharge at the respective facility to the WLA identified in the TMDL. As a result, each of these facilities is being authorized to discharge at levels that are not consistent with the WLAs in the TMDL.

ICL stated that, if each facility operated at the maximum levels allowed in their draft permits, the resulting discharge would exceed the WLAs developed in the Big Wood TMDL by 29.5 tons/year, or, equivalently, 162 lb/day. This represents a nearly 100% increase in TSS discharge beyond what the Big Wood River TMDL authorizes.

ICL stated that the TMDL was developed to reduce TSS discharge to the Big Wood River and restore water quality to the point that the river could be removed from the 303(d) list. ICL stated that permit limits that allow for a 100% increase in TSS discharge are not consistent with the TMDL. ICL stated that the limits issued in the final versions of these NPDES permits need to be the same as the WLAs that have been developed for these facilities.

Response #4

EPA agrees that the Big Wood River TMDL was developed to reduce TSS discharge to the Big Wood River and thereby restore water quality. However, EPA disagrees that the draft permits for the City of Hailey, City of Ketchum, and The Meadows allow an increase in TSS discharge. In fact, neither the draft nor the final permits allow an increase in TSS discharges relative to previously-authorized levels. Table 2, below, provides a comparison of the average monthly effluent limits in the draft and final permits relative to the prior permits.

**Table 2: Comparison of Permits' Average Monthly Limits**

| Facility | Prior Permit AML (lb/day) | 2012 Permit TSS AML (lb/day) |
|---|---|---|
| Meadows | 25 | 8.3 |
| Hailey | 94 | 45 |
| Ketchum | 505 | 275 |
| Total | 624 | 328.3 |

As shown in Table 2, based solely on average monthly TSS limits, the draft reissued permits for The Meadows, the City of Hailey, and the City of Ketchum require a 47% reduction in TSS load relative to the prior permits.

Furthermore, as explained in the response to comment #2, to address the concern that it is possible (albeit unlikely) that the City of Ketchum could comply with the average monthly limits and yet discharge more TSS than allocated in the TMDL, EPA has established annual average effluent limits.

Therefore, as explained in the response to comment #2, for the City of Ketchum, EPA has established an annual average effluent limit for TSS of 145 lb/day, which is equal to the 26.5 ton-per-year WLA converted to a daily load.

These same concerns were also raised for the City of Hailey and The Meadows. Therefore, EPA has also established annual average effluent limits for TSS for the City of Hailey and The Meadows, which are equal to those facilities' annual total WLAs converted to daily loads. Thus, the reissued permits for Hailey, Ketchum, and The Meadows assure that the TSS loading from these sources, both individually and cumulatively, is no greater than that allocated in the Big Wood River TMDL.

## Comments Regarding Monitoring Requirements

### Comment #5

The City stated that, due to high water runoff, there are times when it would be life threatening to retrieve the probes used for temperature monitoring. The City requested that the permit require reporting of receiving water temperature data only two or three times yearly. The City stated that they could work around high river flows and still supply EPA and IDEQ with a full year's data without having employee's lives in danger.

### Response #5

EPA agrees that it is appropriate to allow the City to collect and submit temperature data less frequently than monthly, in order to ensure safe access to the monitoring equipment.

EPA has changed the reporting requirements for temperature as follows. In the final permit, the City is required to report the temperature data twice per year. Temperature data for April - May must be reported with the July DMR (due August 10$^{th}$) and data for June - October must be reported with the December DMR (due the following January 10$^{th}$).

This ensures that, if there is a problem with the April - May monitoring, the City has an opportunity to correct it and still collect valid data for August through October. The City has roughly 70-day windows to retrieve the temperature loggers (i.e., between June 1$^{st}$ and August 10$^{th}$ for the April – May data, and between November 1$^{st}$ and the following January 10$^{th}$ for June – October data), which should allow for safe retrieval.

## Comments Regarding Mixing Zones

### Comment #6

ICL stated that the revised draft permit proposes to allow State-authorized mixing zones encompassing 25% of the flow of the receiving water. ICL stated that the authorized mixing zones are too big. DEQ regulations typically limit the size of a mixing zone to 25% of the receiving flow. ICL stated that DEQ is in the habit of granting nearly every facility a mixing zone for the full 25%, even though smaller mixing zones would frequently suffice. ICL stated that it is inappropriate for the EPA to concur with DEQ's granting of a full 25% and that EPA should instead calculate the minimum size of the mixing zone that is actually needed to ensure compliance with water quality standards.

### Response #6

The mixing zone policy in the Idaho WQS states that "the Department (of Environmental Quality) will determine the applicability of a mixing zone and, if applicable, its size, configuration, and location" (IDAPA 58.01.02.060.01). Thus, the authority to determine the size of a mixing zone in the State of Idaho rests with IDEQ. In its final Clean Water Act Section 401 certification, IDEQ authorized mixing zones utilizing 25% of the flow volume of the Big Wood River for copper, ammonia, zinc, and cadmium. As stated by the commenter, this is allowed by Idaho's mixing zone policy (IDAPA 58.01.02.060.01.e.iv).

Furthermore, the design flow of the treatment plant (4.0 mgd or 6.19 CFS) was used to calculate the dilution factors, even though actual flows have been less than the design flow. The average actual flow measured in the past 5 years (May 2007 – April 2012) was 1.34 mgd, and the maximum monthly average flow was 2.23 mgd. The mixing zone calculations also used critical low flow conditions in the receiving water, as described on Pages 8 and D-2 of the fact sheet. Both of these assumptions are conservative, i.e., they will decrease the calculated dilution factors. Since the City of Ketchum WWTP is a major POTW, and the critical low flows of the river are small, the dilution factors are modest (2.74:1 – 6.13:1), even though the mixing zone utilizes 25% of the receiving stream flow.

## Other Comments

### Comment #7

The City made a comment on the Fact Sheet for the draft permit. The City stated that Mike Herrera is no longer with the City of Ketchum. The current manager is Steve Hansen. He is also the authorized signatory on the city discharge permit.

### Response #7

The fact sheet is a final document, the purpose of which is to explain the conditions in the draft permit. As such, EPA will not edit the fact sheet in response to these comments. EPA will, however respond to the substantive issues raised by these comments.

EPA acknowledges that Mike Herrera is no longer with the City of Ketchum and that the current manager is Steve Hansen.

## References

EPA. 1991. *Technical Support Document for Water Quality-based Toxics Control.* U.S. Environmental Protection Agency. Office of Water. EPA/505/2-90-001. March 1991.

EPA. 2010. *U.S. Environmental Protection Agency NPDES Permit Writers' Manual.* Office of Wastewater Management. Water Permits Division. State and Regional Branch. EPA-833-K-10-001. September 2010.

IDEQ. 2002. *The Big Wood River Watershed Management Plan.* Twin Falls Regional Office. March 11, 2002.

To: Carol Hubbard/R10/USEPA/US@EPA,
Cc:
Bcc:
Subject: Final ID ARRA PER ready for signature
From: Michelle Tucker/R10/USEPA/US - Wednesday 06/06/2012 03:14 PM

Hey Carol, Paula's reviewing the cover letter I prepared for the ID Final ARRA PER (the graphics you got yesterday). Let's get the rest of the document ready for signature, k? Here are all the files. I'm teleworking today so I haven't been able to save them to the G drive (to overwrite the ones that are currently there)

The combo pdf itself, once created, can be saved in the SFY2011 or SFY11 ID folder. There is another folder that says Final ARRA PER. Let me know if you have difficulty finding it. I don't expect Paula will finish reviewing the cover letter before you go home tonight but I'm guessing I'll be able to email it to you for when you arrive tomorrow morning :-)

Here are the files that shouldn't change and that you can combo into a large pdf. We'll just insert the cover letter tomorrow, k? As you can see, they are in numerical order (02 is the cover letter Paula is reviewing) so it should be pretty easy to put them together, just follow the numbers...1, 3, 4, 5, 6, 7 :-)





03 ID Final ARRA PER Cover.pdf04 ID Final ARRA PER.docx05 Final ARRA Review Checklist ID Mar 2012.xlsm



06 ARRA File Review Checklist Coeur d'Alene - Draft Final.xlsx



07 ARRA File Review Checklist Potlatch - Draft Final.xls