AGENDA ITEM SUMMARY

DATE: 04/02/2012 **DEPARTMENT:** Tree Committee/Admin **DEPT. HEAD SIGNATURE:** HD

SUBJECT:

Motion to authorize use of Waiver of Liability Form for participants in Arborfest competitive events.

AUTHORITY: ☐ ID Code _____ ☐ IAR _____ ☐ City Ordinance/Code _____
(IFAPPLICABLE)

BACKGROUND/SUMMARY OF ALTERNATIVES CONSIDERED:

Arborfest has a planned component "mud run," a competitive event with inherent risks. The city attorney has reviewed the attached form to be used a competitors' release of liability of the City and its volunteers who help structure and monitor the event.

FISCAL IMPACT / PROJECT FINANCIAL ANALYSIS:
Comments:

ACKNOWLEDGEMENT BY OTHER AFFECTED CITY DEPARTMENTS: (IFAPPLICABLE)

☐ City Administrator	☐ Library	☐ Benefits Committee
☐ City Attorney	☐ Mayor	☐ Streets
☐ City Clerk	☐ Planning	☐ Treasurer
☐ Building	☐ Police	☐ _____
☐ Engineer	☐ Public Works, Parks	☐ _____
☐ Fire Dept.	☐ P & Z Commission	☐ _____

RECOMMENDATION FROM APPLICABLE DEPARTMENT HEAD:

Motion to authorize use of Waiver of Liability Form for participants in Arborfest competitive events.

ACTION OF THE CITY COUNCIL:
Date _____

City Clerk _____

FOLLOW-UP:
*Ord./Res./Agrmt./Order Originals: Record
Copies (all info.):
Instrument # _____

*Additional/Exceptional Originals to: _____
Copies (AIS only)

RELEASE OF LIABILITY/LIABILITY WAIVER

By signing below, I, _____ , acknowledge that the Arborfest competitive events ("Events") are likely to be hazardous and may result in accident or injury to the participant.

With full knowledge of these dangers, and intending to be legally bound, I hereby agree for myself and on behalf of all of my family and heirs to RELEASE the City of Hailey and any of its representatives, agents, directors, officers, members and elected and appointed officials, and owners of any equipment or property used during the Events ("Released Parties"), from any and all liability, damages, claims, demands or any causes of action, and NOT TO SUE OR OTHERWISE make ANY CLAIMS against the Released Parties whatsoever which may arise during my participation in any of the Events.

I intend this RELEASE OF LIABILITY/LIABILILTY WAIVER to be effective whether or not any loss, damage, injury or death RESULTS FROM THE NEGLIGENCE of the Released Parties. I understand that negligence means a failure to do an act which a reasonably careful person would do, or the doing of an act which a reasonably careful person would not do, under the same or similar circumstances to protect him or herself, or others, from accident, injury or death.

I agree to be solely responsible for my own safety and to take every precaution to provide for my own safety· and well-being while participating in the Events sponsored or conducted by the Released Parties, including inspecting all equipment and make my own assessment as to whether the equipment is safe and free from all defects and whether I can safely participate in the Events. This RELEASE OF LIABILITY/LIABILITY WAIVER is given in the interest of permitting the City of Hailey to serve the community and to enable myself and others to feel free to donate our services and to help each other without fear of liability. I understand that any claim for coverage of medical bills will be submitted to my own insurance company.

This RELEASE OF LIABILITY/LIABIILTY WAIVER has no expiration date.

Signature _____ Date _____

In EMERGENCY, contact _____ addr. _____ phone _____

IF ANY PARTICIPANT IS UNDER 18, A PARENT OR GUARDIAN MUST READ AND SIGN BELOW.

I am the parent or legal guardian of the above minor participant; I have read and understood the above RELEASE OF LIABILITY/LIABILITY WAIVER; on behalf of the name minor participant, I hereby consent to the terms of the above RELEASE OF LIABILITY/LIABILITY WAIVER; and I give my consent to the participation of the above named minor in all Events.

Signature _____ Date _____
Parent or Legal Guardian

AGENDA ITEM SUMMARY

DATE: 4/2/12 **DEPARTMENT:** PW - Wastewater **DEPT. HEAD SIGNATURE:** _____

SUBJECT: Agreement with HDR Engineering to provide a review of the wastewater treatment plant operations to ensure new NPDES permit limits are obtained.

AUTHORITY: ☐ ID Code _____ ☐ IAR _____ ☐ City Ordinance/Code _____
(IFAPPLICABLE)

BACKGROUND/SUMMARY OF ALTERNATIVES CONSIDERED:

With the issuance of the draft NPDES permit for comment HDR offered assistance from one of their operations specialists to optimize treatment plant operation. While our treatment plant has had very few permit violations over the last ten years there are operational problems that arise that could potentially be a problem with new permit limits. HDR's assistance with our operations is expected to offer solutions to these problems and reduce future operation problems.

FISCAL IMPACT / PROJECT FINANCIAL ANALYSIS: Caselle #_____
Budget Line Item #_____ YTD Line Item Balance $_____
Estimated Hours Spent to Date: _____ Estimated Completion Date: _____
Staff Contact: _____ Phone # _____
Comments:

ACKNOWLEDGEMENT BY OTHER AFFECTED CITY DEPARTMENTS: (IFAPPLICABLE)

☐	City Administrator	☐	Library	☐	Benefits Committee
☐	City Attorney	☐	Mayor	☐	Streets
☐	City Clerk	☐	Planning	☐	Treasurer
☐	Building	☐	Police	☐	_____
☐	Engineer	☐	Public Works, Parks	☐	_____
☐	Fire Dept.	☐	P & Z Commission	☐	_____

RECOMMENDATION FROM APPLICABLE DEPARTMENT HEAD:

Motion to authorize the mayor to sign the Task Order with HDR Engineering, Inc. for a Process Operations Review for $4,983.

ADMINISTRATIVE COMMENTS/APPROVAL:

City Administrator _____ Dept. Head Attend Meeting (circle one) Yes No

ACTION OF THE CITY COUNCIL:
Date _____

City Clerk _____

FOLLOW-UP:
*Ord./Res./Agrmt./Order Originals: Record
Copies (all info.):
Instrument # _____

*Additional/Exceptional Originals to: _____.
Copies (AIS only)

CITY OF HAILEY
RESOLUTION NO. 2012-16

RESOLUTION OF THE CITY COUNCIL FOR THE CITY OF HAILEY AUTHORIZING THE EXECUTION OF CONTRACT FOR A REVIEW OF THE WASTEWATER TREATMENT PLANT OPERATIONS WITH HDR ENGINEERING, TO ENSURE NEW NPDES LIMITS ARE OBTAINED IN 2012

WHEREAS, the City of Hailey desires to enter into an agreement with HDR ENGINEERING under which HDR ENGINEERING will perform and be responsible for a review of the wastewater treatment plant operations to ensure new npdes limits are obtained in 2012 for the City of Hailey.

WHEREAS, the City of Hailey and HDR ENGINEERING have agreed to the terms and conditions of the Process Operations Review for the City of Hailey, a copy of which is attached hereto.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HAILEY, IDAHO, that the City of Hailey approves the Process Operations Review between the City of Hailey and HDR ENGINEERING and that the Mayor is authorized to execute the attached Agreement,

Passed this 2nd day of April, 2012.

City of Hailey

_____

Fritz X. Haemmerle, Mayor

ATTEST:

_____

Mary Cone, City Clerk

EXHIBIT A

PROCESS OPERATIONS REVIEW FOR THE CITY OF HAILEY

This Task Order pertains to an Agreement by and between City of Hailey, Idaho, ("OWNER"), and HDR Engineering, Inc. ("ENGINEER"), dated August 10, 2009, ("the Agreement"). Engineer shall perform services on the project described below as provided herein and in the Agreement. This Task Order shall not be binding until it has been properly signed by both parties. Upon execution, this Task Order shall supplement the Agreement as it pertains to the project described below.

BACKGROUND

Recently, the City of Hailey has experienced process operations challenges including reduced settleability and loss of nitrification in their sequencing batch reactor system. Additionally, the City is interested in further understanding the limitations of chemical phosphorus removal. The purpose of this effort is to provide the City with technical support for their process operation challenges. This technical support involves a site visit, process modeling, and on-call services.

SCOPE OF SERVICES

TASK 100 - PROCESS OPERATIONS REVIEW

Objective

Provide the City of Hailey with process operations review which considers future treatment objectives. HDR Subtasks

- HDR operations specialist conduct a tour of the Woodside Boulevard Wastewater Treatment Plant with City of Hailey treatment operators to review settling, alum addition for chemical phosphorus removal, disinfection, ammonia removal and overall solids management strategy.
- Provide an estimated process calculation for anticipated reactor volume which could be necessary to meet current and future ammonia-nitrogen limits.
- Prepare site visitation report which summarizes process challenges and optimization strategies.
- Provide overall project management for scope, schedule and budget control.
- Allowance for up to $1,000 of on-call services.

City of Hailey Involvement

- Interface with Consultant on project issues.
- Plant staff will be available during site visit to provide background information, data, and previous and current operation practices.
- Provide influent, effluent, and other available process data to HDR for inclusion in process modeling. Data will include flow, ammonia, TKN, nitrate, TP, BOD, TSS, and temperature.

Assumptions

- A 4 hour site visit for the Process Operations Specialist of the Woodside Boulevard Wastewater Treatment Plant.
- Travel expenses are included.

- Site visit report, no more than 2 pages and which may include hand-sketched layouts and photos.
- The allowance for additional services will be used at the City's request for process support, additional monitoring, or additional technical support.

Deliverables

- Site visit report (electronic copy)
- Progress reports and invoices (1 hard copy, assume 2 invoices).

PROJECT SCHEDULE

PROCESS OPERATIONS REVIEW FOR THE CITY OF HAILEY

The project schedule for performing the task order is as follows:

Task	Schedule (Assuming NTP of March 23, 2012)
Task 1: Process Operations Review	30 days from NTP

*This schedule is based upon an assumed notice to proceed. If the notice to proceed is delayed, the project schedule will shift the corresponding number of calendar days.

COMPENSATION

PROCESS OPERATIONS REVIEW FOR THE CITY OF HAILEY

The estimated cost to complete this Scope of Services is presented in the table below.

Task	Budget Time and Materials Not to Exceed
Task 1: Process Operations Review	$4,983
TOTAL	**$4,983**

HDR will invoice the City of Hailey for professional services described in this on a time and materials basis. For the activities described in the Scope of Services, HDR estimates a professional services fee of not to exceed the total described in the table above without written authorization from the City.

This Task Order is executed this _____ day of _____, 20___.

City of Hailey, Idaho		HDR ENGINEERING, INC.	
"OWNER"		"ENGINEER"	
BY:		BY:	Karen M Doherty
NAME:		NAME:	Karen M. Doherty, P.E.
TITLE:		TITLE:	Vice President
ADDRESS:	115 Main Street S. Hailey, ID 83333	ADDRESS:	412 E. Parkcenter Blvd. Suite 100 Boise, ID 83706
TELEPHONE:		TELEPHONE:	(208) 387-7000

AGENDA ITEM SUMMARY

DATE: 4/2/12 **DEPARTMENT:** PW - Wastewater **DEPT. HEAD SIGNATURE:** _____

SUBJECT: Comment letter to EPA regarding the City of Hailey NPDES draft permit

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AUTHORITY: ☐ ID Code _____ ☐ IAR _____ ☐ City Ordinance/Code _____
(IFAPPLICABLE)

BACKGROUND/SUMMARY OF ALTERNATIVES CONSIDERED:

The City of Hailey received notice from the EPA on March 12 that our draft NPDES (National Pollution Discharge Elimination System) permit was being issued for the required 30 day comment period. Final comments are due on April 12, 2012. HDR Engineering, Inc. has been our consultant for our wastewater permit issues including work on TMDL issues and has prepared the attached comment letter to EPA.

The attached letter has been reviewed by city staff and the city attorney. While all the comments are important comment #4 in Attachment 1 addresses our phosphorus limit which is our primary concern in meeting the new permit limits. Asking for a seasonal limit will allow for a less expensive option of reclaimed water use instead of expansion of the treatment plant. The permit is a 5 year permit but allows for 4 years 11 months to meet the phosphorus limit.

Once the comment period has ended HDR will remain in contact with the EPA permit writer to address our comments and discuss how the permit could be modified to meet our concerns.

FISCAL IMPACT / PROJECT FINANCIAL ANALYSIS: Caselle #_____
Budget Line Item #_____ YTD Line Item Balance $_____
Estimated Hours Spent to Date: _____ Estimated Completion Date: _____
Staff Contact: _____ Phone # _____
Comments:

ACKNOWLEDGEMENT BY OTHER AFFECTED CITY DEPARTMENTS: (IFAPPLICABLE)

☐	City Administrator	☐	Library	☐	Benefits Committee
☐	City Attorney	☐	Mayor	☐	Streets
☐	City Clerk	☐	Planning	☐	Treasurer
☐	Building	☐	Police	☐	_____
☐	Engineer	☐	Public Works, Parks	☐	_____
☐	Fire Dept.	☐	P & Z Commission	☐	_____

RECOMMENDATION FROM APPLICABLE DEPARTMENT HEAD:

Motion to approve the comment letter to EPA and authorize the signature of the Public Works Director.

ADMINISTRATIVE COMMENTS/APPROVAL:

City Administrator _____ Dept. Head Attend Meeting (circle one) Yes No

---

ACTION OF THE CITY COUNCIL:
Date _____

City Clerk _____

FOLLOW-UP:
*Ord./Res./Agrmt./Order Originals: Record
Copies (all info.):
Instrument # _____

*Additional/Exceptional Originals to: _____
Copies (AIS only)

March 28, 2012

Brian Nickel
US EPA Office of Water and Watersheds
1200 Sixth Avenue, OWW-130
Seattle, WA 98101

Subject: Review Comments for DRAFT PERMIT
NPDES Permit No. ID-0020303
City of Hailey Woodside Boulevard Wastewater Treatment Plant

Dear Brian:

Thank you for the opportunity to review the Draft NPDES Permit for the City of Hailey Woodside Boulevard Wastewater Treatment Plant. This letter summarizes several key comments on the draft permit and more detailed comments are attached to this letter.

KEY COMMENTS

The following key comments on the City of Hailey's draft NPDES permit are summarized below.

E. Coli Load

We believe the inclusion of an E. coli load limit in addition to the E. coli concentration limit is unnecessary. The load in the Big Wood River TMDL is based on the concentration from the Water Quality Standards and the design flow for the Woodside Boulevard Wastewater Treatment Plant. Inclusion of an E. coli load limit is unnecessarily restrictive for the City in the future as wastewater flows increase since the equivalent E. coli concentration would be lower than the water quality standards when wastewater flows exceed the design flow. Water quality in the Big Wood River is adequately protected when the Water Quality Standards are applied to the effluent discharge for current and future flows.

Phosphorus Limit

The requirement of the City of Hailey to meet lower effluent total phosphorus limits could eliminate our ability to develop a recycled water program in the future. The City requests that the weekly load limit be removed from the permit and that the phosphorus permit limit be written as a twelve-month average that is equivalent to 5.2 lb/day when the final limit is effective. A twelve-month average limit will be protective of water quality and will allow the City the flexibility to implement a recycled water program as a part of their overall integrated water management program.

Surface Water Monitoring

The additional surface water monitoring required of the City of Hailey is extensive, will be a costly endeavor in the future, and is not justified. Several of the required monitoring parameters called for in the draft permit are not included in the State of Idaho's draft 401 certification and should not be

required in the City's NPDES permit. Additionally, a comparison with other draft NPDES permits for the City of Ketchum and Meadows reveals that less surface water monitoring is required of other dischargers. The City of Hailey requests a reduction in effluent monitoring constituents to match what is listed in the State of Idaho's draft 401 certification.

TRE Workplan

The draft permit calls for an effort to develop a toxicity reduction evaluation (TRE) workplan prior undertaking the WET testing to determine whether there is a toxicity issue to address. Until the City has the opportunity to perform the WET tests and understand whether a TRE is even needed, we believe that requiring a TRE workplan be submitted is premature. The City requests that the TRE workplan be required within 180 days after required toxicity testing if such testing shows the effluent does not meet the toxicity requirements.

Sincerely,

Tom Hellen
Public Works Director

Enclosures.

cc: Hailey Mayor and City Council
Heather Dawson, City of Hailey
HDR Engineering, Inc., Boise, Idaho
IDEQ Twin Falls Regional Office

Attachment 1

City of Hailey Review Comments
National Pollutant Discharge Elimination System
Permit No. ID0020303
March 16, 2012

Draft Permit

Comment 1. NPDES Permit (General). The City of Hailey has commented on the *Big Wood River Watershed Management Plan, Errata to the Big Wood River Watershed Management Plan (TMDL),* and draft post-TMDL assessment, and has a technical memorandum with an assessment of these documents. The comments submitted to EPA and DEQ include concerns about the conclusions regarding the water quality status of the Big Wood River. The City of Hailey's goal is to work with the public, DEQ, and EPA to set appropriate and protective standards based on Idaho's water quality criteria for the Big Wood River, while providing affordable wastewater services to our community.

Requested Revision. The wasteload allocations cited in the NPDES permit should be properly qualified and footnoted as the result of incomplete analyses and provisions made to allow the allocations to be revised in the future (increased or decreased) as a result of additional information that provides the foundation for a more complete water quality analysis. Such provisions should be made to alleviate concerns about anti-backsliding constraints or other requirements that might unnecessarily restrict the City's discharge based on incomplete information in this first NPDES permit to include wasteload allocations.

Comment 2. Section I. Table 1 (p 5). Under the column "Parameter" for the item "E. coli Bacteria", the line for CFU/day unnecessarily duplicates the provision of the #/100 ml requirement. As stated in the Errata, "The wasteload allocations for *E. coli* (in colony forming units, or cfu, per day) in Tables H, XX, HHH, and PPP are based on achieving the *E. coli* criteria of 126 cfu/100 milliliters (based on a 30-day geometric mean) at the point of discharge (i.e., "end of pipe")" (DEQ, 2011). It is not necessary to have both concentration and load requirements in a NPDES permit particularly for constituents not expressed in pounds per day for loads. The monthly geometric mean of 126 cfu/100 mL is equal to the wasteload allocation, which is the Idaho water quality standard, and is protective of surface water quality.

Requested Revision. Delete the unnecessary duplicate requirement for E. coli of CFU/day.

Comment 3. Section I. Table 1 (p 6). Inclusion of an average weekly limit for total phosphorus in addition to an average monthly limit is unnecessary. The presumed ratio of average weekly load to average monthly load (1.5:1) may not accurately represent realistic performance of the City's wastewater treatment facility and is not linked to the TMDL. The average monthly limit is sufficiently protective of water quality and consistent with the Big Wood River TMDL.

Requested Revision. Delete the average weekly limits for total phosphorus.

Comment 4. Section I. Table 1 (p 6). Inclusion of a phosphorus limit that is averaged over a twelve month period instead of a monthly period will provide the City with the operational flexibility to manage a recycled water program. A water quality study of the Big Wood River

following the TMDL showed that the combination of the highest TP and TSS concentrations occur during the start of the snowmelt runoff (HDR, 2010). This pattern suggests that the period when total phosphorus concentrations are greater than the water quality target selected by DEQ is a result of the sediments and phosphorus from natural and nonpoint sources. Additionally, EPA has been supportive of the development and use of recycled water through its integrated planning framework. The City of Hailey has completed a conceptual evaluation of recycled water production and use and determined that there is significant potential to implement a recycled water program. However, the city will not have an incentive to implement a recycled water program if monthly and weekly average phosphorus limits are included in its NPDES permit since the greatest demand for recycled water will occur in the summer months, least demand in the spring and fall, and no demand in the winter. By averaging the effluent phosphorus limits over twelve months, the City will be equally protective of water quality and will have an incentive to use recycled water. This is similar to the permit structure in the preliminary draft NPDES permit for the City of Coeur d'Alene. The City of Coeur d'Alene received a phosphorus limit as pounds per day over nine months.

Requested Revision. Revise the effluent phosphorus limits to the following:

- Twelve-month average phosphorus limit equivalent to 5.2 lb/day
- Maintain the existing monthly average permit limit of 15 lb/day as a maximum

Comment 5. Section I. Table 1 (p 6). Under the column "Parameter" for the item "NPDES Application Form 2A Expanded Effluent Testing" the callout "See Part I.B.9" does not exist.

Requested Revision. Correct the callout to reference the appropriate section.

Comment 6. Section I.C Table 3 (p 8). In Table 3, the freshwater acute toxicity testing is 96 hours, but the referenced method is a 7 day chronic reproduction and growth weight testing. These are two separate methods and should be clarified.

Requested Revision. Revise Table 3 to have the matching freshwater acute toxicity texts with the appropriate methods.

Comment 7. Section I.C.5 (p 9). The toxicity reduction evaluation (TRE) workplan is required prior to the toxicity testing. This TRE workplan is unnecessary and will not be used if the testing results show that the effluent quality meets the toxicity requirements, which is the City's expectation.

Requested Revision. Revise the requirement to have the TRE workplan required within 180 days after toxicity testing if the effluent not meeting the toxicity requirements.

Comment 8. Section I.D.6 (p 11). The requirement, "For temperature, surface water monitoring results must be submitted to EPA and IDEQ with the monthly DMRs" poses technical and safety challenges for the City. During previous efforts to monitor river temperature, the probes were destroyed and lost during high flow events in the river. If the download of the temperature probe recordings were done quarterly, this would reduce risk and time requirements for City personnel. Also, the location of temperature sampling is a life safety issue for City personnel. The City requests the flexibility to locate upstream and downstream temperature monitoring at locations that will provide safe access for personnel.

Requested Revision. Revise the reporting frequency for water temperature to quarterly to coincide with the other parameters in Table 4.

Comment 9. Section I.D Table 4 (p 12). The list of parameters in Table 4 is cited in the Fact Sheet (p 14) as having been specified in IDEQ's 401 certification. The list of parameters in Table 4 includes parameters that are not listed in the 401 certification (p 1).

Requested Revision. Remove the parameters not listed in the 401 certification from the surface water monitoring requirements (Table 4); alkalinity, cadmium, cyanide, lead, nickel, and silver.

Draft Fact Sheet

Comment 10. Section I.A (p 7). The information for "Contact:" should be updated remove the reference to Ray Hyde, Public Works Manger and replace it with Tom Hellen, Public Works Manager.

Requested Revision. Correct the contact information.

Comment 11. Section II.B (p 7). For the sentence "A map has been included in Appendix A...", there is not a map in Appendix A.

Requested Revision. Correct the reference.

Comment 12. Appendix C (p C-6). For the sentence "...and the maximum monthly geometric mean in-stream target of 126 CFU/100 ml total phosphorus", the reference should be to E. coli, not total phosphorus.

Requested Revision. Correct the reference.

Comment 13. Appendix C (p C-6). For the sentence "...of 126 CFU/100 mL total phosphorus (see the TMDL at Page 63)", the reference should be to the Errata.

Requested Revision. Correct the reference to (see the Errata at Page 2).

Comment 14. Appendix E (p E-1). For the sentence "The USFWS county species list for Fremont County lists..." please replace Fremont with Blaine.

Requested Revision. Correct the reference and check that the list species are for Blaine County.

Region 10, NPDES Permits Unit
1200 6th Ave
Suite 900 M/S OWW-130
Seattle, WA 98101

Fact Sheet

Public Comment Start Date:
Public Comment Expiration Date:

Technical Contact: Brian Nickel
206-553-6251
800-424-4372, ext. 6251 (within Alaska, Idaho, Oregon and Washington)
Nickel.Brian@epa.gov

Proposed Reissuance of a National Pollutant Discharge Elimination System (NPDES) Permit to Discharge Pollutants Pursuant to the Provisions of the Clean Water Act (CWA)

City of Hailey
Wastewater Treatment Plant

EPA Proposes To Reissue NPDES Permit
EPA proposes to reissue the NPDES permit for the facility referenced above. The draft permit places conditions on the discharge of pollutants from the pollution control plant to waters of the United States. In order to ensure protection of water quality and human health, the permit places limits on the types and amounts of pollutants that can be discharged from the facility.

This Fact Sheet includes:
- information on public comment, public hearing, and appeal procedures
- a listing of proposed effluent limitations and other conditions for the facility
- a map and description of the discharge location
- technical material supporting the conditions in the permit

State Clean Water Act Section 401 Certification
EPA is requesting that the Idaho Department of Environmental Quality (IDEQ) certify the NPDES permit for this facility, under Section 401 of the Clean Water Act. Comments regarding the certification should be directed to:

Idaho Department of Environmental Quality
1363 Fillmore St.
Twin Falls, ID 83301
(208) 736-2190

Public Comment
Persons wishing to comment on, or request a Public Hearing for the draft permit for this facility may do so in writing by the expiration date of the Public Comment period. A request for a Public Hearing must state the nature of the issues to be raised as well as the requester's name, address and telephone number. All comments and requests for Public Hearings must be in writing and should be submitted to EPA as described in the Public Comments Section of the attached Public Notice.

After the Public Notice expires, and all comments have been considered, EPA's regional Director for the Office of Water and Watersheds will make a final decision regarding permit issuance. If no substantive comments are received, the tentative conditions in the draft permit will become final, and the permit will become effective upon issuance. If substantive comments are received, EPA will address the comments and issue the permit. The permit will become effective no less than 30 days after the issuance date, unless an appeal is submitted to the Environmental Appeals Board within 30 days.

Documents are Available for Review
The draft NPDES permit and related documents can be reviewed or obtained by visiting or contacting EPA's Regional Office in Seattle between 8:30 a.m. and 4:00 p.m., Monday through Friday at the address below. The draft permits, fact sheet, and other information can also be found by visiting the Region 10 NPDES website at "http://epa.gov/r10earth/waterpermits.htm."

United States Environmental Protection Agency
Region 10
1200 Sixth Avenue, OWW-130
Seattle, Washington 98101
(206) 553-0523 or
Toll Free 1-800-424-4372 (within Alaska, Idaho, Oregon and Washington)

The fact sheet and draft permits are also available at:

US EPA Region 10
1435 N. Orchard
Boise, ID 83706
(208) 378-5746

Idaho Department of Environmental Quality
1363 Fillmore St.
Twin Falls, ID 83301
(208) 736-2190

Acronyms

1Q10	1 day, 10 year low flow
7Q10	7 day, 10 year low flow
30B3	Biologically-based design flow intended to ensure an excursion frequency of less than once every three years, for a 30-day average flow.
AML	Average Monthly Limit
AWL	Average Weekly Limit
BE	Biological Evaluation
BOD_5	Biochemical oxygen demand, five-day
BMP	Best Management Practices
°C	Degrees Celsius
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CV	Coefficient of Variation
CWA	Clean Water Act
DMR	Discharge Monitoring Report
DO	Dissolved oxygen
EFH	Essential Fish Habitat
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
IC	Inhibition Concentration
IDEQ	Idaho Department of Environmental Quality
I/I	Infiltration and Inflow
lbs/day	Pounds per day
LTA	Long Term Average
mg/L	Milligrams per liter
ML	Minimum Level
µg/L	Micrograms per liter
mgd	Million gallons per day
MDL	Maximum Daily Limit or Method Detection Limit
N	Nitrogen
NOAA	National Oceanic and Atmospheric Administration

NOEC	No Observable Effect Concentration
NPDES	National Pollutant Discharge Elimination System
OWW	Office of Water and Watersheds
O&M	Operations and maintenance
POTW	Publicly owned treatment works
QAP	Quality assurance plan
RP	Reasonable Potential
RPM	Reasonable Potential Multiplier
RWC	Receiving Water Concentration
SS	Suspended Solids
s.u.	Standard Units
TKN	Total Kjeldahl Nitrogen
TMDL	Total Maximum Daily Load
TRC	Total Residual Chlorine
TRE	Toxicity Reduction Evaluation
TSD	Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001)
TSS	Total suspended solids
TU_c	Toxic Units, Chronic
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
WET	Whole Effluent Toxicity
WQBEL	Water quality-based effluent limit
WQS	Water Quality Standards
WWTP	Wastewater treatment plant

I. Applicant

A. General Information

This fact sheet provides information on the draft NPDES permit for the following entity:

City of Hailey
Woodside Wastewater Treatment Plant
NPDES Permit # ID0020303

Physical Address:
4297 Glenbrook Drive
Hailey, ID 83333

Mailing Address:
115 S. Main St. Suite H
Hailey, ID 83333

Contact: Ray Hyde, Public Works Manager

II. Facility Information

A. Treatment Plant Description

The City of Hailey owns, operates, and has maintenance responsibility for the Hailey wastewater treatment plant, which treats domestic sewage from local residents and commercial establishments. The Hailey wastewater treatment plant is designed to provide secondary treatment to 1.6 mgd of wastewater.

B. Background Information

The most recent NPDES permit for the City of Haley was issued on May 9, 2001, became effective on June 11, 2001 and expired on June 12, 2006. The first NPDES permit was issued to this facility in December 1973. EPA received a timely and complete application for renewal of this NPDES permit. According to 40 CFR 122.6, when EPA receives a timely and complete application for renewal of an NPDES permit, the conditions of the expired permit continue in force until the effective date of a new permit.

A map has been included in Appendix A which shows the location of the treatment plant and the discharge location.

III. Receiving Water

This facility discharges to the Big Wood River.

A. Low Flow Conditions

The *Technical Support Document for Water Quality-Based Toxics Control* (hereafter referred to as the TSD) (EPA, 1991) and Section 210 of the Idaho Water Quality Standards (WQS)

recommend the flow conditions for use in calculating water quality-based effluent limits (WQBELs) using steady-state modeling. The TSD and the WQS state that WQBELs intended to protect aquatic life uses should be based on the lowest seven-day average flow rate expected to occur once every ten years (7Q10) for chronic criteria and the lowest one-day average flow rate expected to occur once every ten years (1Q10) for acute criteria. Because the chronic criterion for ammonia is a 30-day average concentration not to be exceeded more than once every three years, EPA has used the 30B3 for the chronic ammonia criterion instead of the 7Q10. The 30B3 is a biologically-based flow rate designed to ensure an excursion frequency of no more than once every three years for a 30-day average flow rate. For human health criteria, the Idaho water quality standards recommend the 30Q5 flow rate for non-carcinogens, and the harmonic mean flow rate for carcinogens.

The 1Q10, 7Q10, 30B3, 30Q5, and harmonic mean flows are 69.9, 88.0, 96.5, 111 and 211 CFS, respectively. These flows were calculated using flow records from USGS station number 13139510 (Big Wood River at Hailey, Idaho total flow).

B. Water Quality Standards

Overview

Section 301(b)(1)(C) of the CWA requires the development of limitations in permits necessary to meet water quality standards. Federal regulations at 40 CFR 122.4(d) require that the conditions in NPDES permits ensure compliance with the water quality standards of all affected States. A State's water quality standards are composed of use classifications, numeric and/or narrative water quality criteria, and an anti-degradation policy. The use classification system designates the beneficial uses (such as domestic water supply, contact recreation, and aquatic life) that each water body is expected to achieve. The numeric and/or narrative water quality criteria are the criteria deemed necessary by the State to support the beneficial use classification of each water body. The anti-degradation policy represents a three-tiered approach to maintain and protect various levels of water quality and uses.

This facility discharges to the Big Wood River (HUC 17040219). In this reach, the receiving water is designated for the uses of cold water aquatic life, salmonid spawning, primary contact recreation, and domestic water supply, and is also designated a special resource water (IDAPA 58.01.02.056, 58.01.02.150.21). Water quality criteria designed to protect these beneficial uses appear in Sections 210, 250, and 251 of the Idaho Water Quality Standards. Restrictions on point source discharges to special resource waters appear in Section 400.01.b of the Standards.

In addition, the Idaho Water Quality Standards state that all waters of the State of Idaho are protected for industrial and agricultural water supply (Section 100.03.b and c), wildlife habitats (100.04) and aesthetics (100.05). The WQS state, in Sections 252.02, 252.03, and 253 that these uses are to be protected by narrative criteria which appear in Section 200. These narrative criteria state that all surface waters of the State shall be free from hazardous materials; toxic substances; deleterious materials; radioactive materials; floating, suspended or submerged matter; excess nutrients; oxygen-demanding materials; and sediment in concentrations which would impair beneficial uses. The WQS also state, in Section 252.02 that the criteria from *Water Quality Criteria 1972* (EPA-R3-73-033), also referred to as the "Blue Book," can be used to determine numeric criteria for the protection of the agricultural water supply use.

Idaho's Antidegradation Policy

The EPA is required under Section 301(b)(1)(C) of the Clean Water Act (CWA) and implementing regulations (40 CFR 122.4(d) and 122.44(d)) to establish conditions in NPDES permits that ensure compliance with State water quality standards, including antidegradation requirements. The antidegradation analysis is conducted as part of the State's CWA Section 401 certification process (see Appendix F).

IV. Effluent Limitations

A. Basis for Effluent Limitations

In general, the CWA requires that the effluent limits for a particular pollutant be the more stringent of either technology-based limits or water quality-based limits. Technology-based limits are set according to the level of treatment that is achievable using available technology. A water quality-based effluent limit is designed to ensure that the water quality standards applicable to a waterbody are being met and may be more stringent than technology-based effluent limits. The basis for the effluent limits proposed in the draft permit is provided in Appendices C, D, E, and F.

B. Proposed Effluent Limitations

Below are the proposed effluent limits that are in the draft permit.

1. 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.
2. Removal Requirements for BOD_5 and TSS: The monthly average effluent concentration must not exceed 15 percent of the monthly average influent concentration. Percent removal of BOD_5 and TSS must be reported on the Discharge Monitoring Reports (DMRs). For each parameter, the monthly average percent removal must be calculated from the arithmetic mean of the influent values and the arithmetic mean of the effluent values for that month. Influent and effluent samples must be taken over approximately the same time period.
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.

Table 1 (below) presents the proposed numeric effluent limits.

Table 1: Proposed Effluent Limits				
Parameter	Units	Effluent Limits		
		Average Monthly Limit	Average Weekly Limit	Maximum Daily Limit
Five-Day Biochemical Oxygen Demand (BOD_5)	mg/L	30	45	—
	lb/day	94	141	—
	% removal	85% (min)	—	—
Total Suspended Solids (TSS)	mg/L	30	45	—
	lb/day	45	68	—
	% removal	85% (min)	—	—
E. Coli	#/100 ml	126 (geo. mean)	—	406[2]
	CFU/day	7.63×10^9 (geo. mean)	—	—
pH	s.u.	6.5 – 9.0		
Total Ammonia as N	mg/L	1.9	2.9	3.3
	lb/day	9.0	14	15.6
Total Kjeldahl Nitrogen	lb/day	55	78	—
Total Phosphorus as P (Final)	lb/day	5.2	7.8	—
Total Phosphorus as P (Interim)	lb/day	15	23	—

Notes:
1. Geometric mean.
2. Instantaneous/single sample maximum.

Compliance Schedule for Total Phosphorus

Effluent data indicate that the permittee cannot comply with the proposed water quality-based effluent limits for total phosphorus immediately. The proposed average monthly limit for total phosphorus is 5.2 lb/day. The 95th percentile monthly average phosphorus load from January 2005 through May 2010 was 9.7 lb/day, and the average monthly limit in the prior permit was 15 lb/day.

Federal regulations (40 CFR 122.47) and the Idaho Water Quality Standards (IDAPA 58.01.02.400.03) allow for compliance schedules in permits. Idaho's compliance schedule rule allows compliance schedules only for water quality-based effluent limits "when new limitations are in the permit for the first time." The federal compliance schedule rule allows compliance schedules "when appropriate," requires compliance with effluent limits "as soon as possible," and requires "interim requirements and the dates for their achievement."

In its draft Clean Water Act Section 401 certification, the State of Idaho has proposed to allow a compliance schedule for total phosphorus. The compliance schedule requires compliance with the final effluent limits for total phosphorus no later than four years and 11 months after the effective date of the final permit. The permit includes interim requirements and the dates for their achievement, in compliance with 40 CFR 122.47. In accordance with 40 CFR 122.44(l)(1), the draft permit also proposes interim effluent limits for total phosphorus that apply during the term of the compliance schedule and which are identical to the final effluent limits in the prior permit.

Basis for Deleting Fecal Coliform Effluent Limits

The draft permit proposes to delete the previous permit's effluent limits for fecal coliform. Effluent limitations for all other pollutants are as stringent as or more stringent than those in the current permit.

Statutory Prohibitions on Backsliding

Section 402(o) of the Clean Water Act (CWA) generally prohibits the establishment of effluent limits in a reissued NPDES permit that are less stringent than the corresponding limits in the previous permit, but provides limited exceptions. Section 402(o)(1) of the CWA states that a permit may not be reissued with less-stringent limits established based on Sections 301(b)(1)(C), 303(d) or 303(e) (i.e. water quality-based limits or limits established in accordance with State treatment standards) except in compliance with Section 303(d)(4). Section 402(o)(1) also prohibits backsliding on technology-based effluent limits established using best professional judgment (i.e. based on Section 402(a)(1)(B)), but in this case, the effluent limits being revised are water quality-based effluent limits (WQBELs).

Section 303(d)(4) of the CWA states that, for water bodies where the water quality meets or exceeds the level necessary to support the water body's designated uses, WQBELs may be revised as long as the revision is consistent with the State's antidegradation policy. For water bodies where the applicable water quality standard has not yet been attained, any effluent limitation based on a total maximum daily load or other waste load allocation may be revised only if the cumulative effect of all such revised effluent limitations will assure the attainment of such water quality standard, or the designated use which is not being attained is removed in accordance with 40 CFR 131(g). Additionally, Section 402(o)(2) contains exceptions to the general prohibition on backsliding in 402(o)(1). According to the *U.S. EPA NPDES Permit Writers' Manual* (EPA-833-B-96-003) the 402(o)(2) exceptions are applicable to WQBELs (except for 402(o)(2)(B)(ii) and 402(o)(2)(D)) and are independent of the requirements of 303(d)(4). Therefore, WQBELs may be relaxed as long as either the 402(o)(2) exceptions or the requirements of 303(d)(4) are satisfied.

Even if the requirements of Sections 303(d)(4) or 402(o)(2) are satisfied, Section 402(o)(3) prohibits backsliding which would result in violations of water quality standards or effluent limit guidelines.

Fecal Coliform

The draft permit proposes to delete the fecal coliform limits in the previous permit. In 2002, IDEQ completed and EPA approved a total maximum daily load or TMDL called the *Big Wood River Watershed Management Plan.* In 2011, IDEQ amended the *Big Wood River Watershed Management Plan* in order to correct calculation errors made in the original document. The E. coli effluent limits in the draft permit are based upon the *Errata to the Big Wood River Watershed Management Plan (aka TMDL) of 2002*, which was adopted by IDEQ in November 2011 and approved by EPA in February 2012.

For waters where standards have not yet been attained, Section 303(d)(4)(A) of the Act states that "any effluent limitation based on a total maximum daily load or other waste load allocation established under this section may be revised only if (i) the cumulative effect of all such revised

effluent limitations based on such total maximum daily load or waste load allocation will assure the attainment of such water quality standard, or (ii) the designated use which is not being attained is removed in accordance with regulations established under this section."

The EPA-approved TMDL, as modified by the errata, has load and wasteload allocations for all known sources of bacteria to the Big Wood River. The permit includes an effluent limit of 7.63 billion (7.63×10^9) colony-forming units per day, which is consistent with the wasteload allocation for the discharge in the *Big Wood River Watershed Management Plan*, as modified by the errata. The cumulative effect of all of the load and wasteload allocations in the modified TMDL will assure the attainment of water quality standards for bacteria in the receiving water. Therefore, the effluent limits for bacteria may be revised to remove the effluent limits for fecal coliform and retain effluent limits for E. Coli.

In addition, the draft permit, like the previous permit, includes "criteria end-of-pipe" concentration effluent limits for bacteria, in order to protect contact recreation beneficial uses in the receiving water. The new water quality criteria and effluent limits simply use the indicator organism currently specified in the Idaho water quality standards (E. coli) to provide the same level of protection for the beneficial use of primary contact recreation as was provided by the fecal coliform effluent limits. As explained above, the deletion of the fecal coliform limits and retention of limits for E. Coli do not violate the Act's antibacksliding provisions. Also this limit complies with the antidegradation provisions of the Idaho Water Quality Standards (see Appendix F).

Clean Water Act Section 402(o)(3) Requirements

Because the E. coli limits apply current water quality criteria at the end-of-pipe, the effluent limits are derived from and comply with water quality standards for E. coli. The secondary treatment technology-based effluent limits do not include effluent limits for bacteria. Because the effluent limits will continue to ensure that water quality standards are met and do not violate the secondary treatment effluent limits, the limits comply with Section 402(o)(3) of the CWA.

EPA is requesting that IDEQ certify that the elimination of the fecal coliform limits is protective of Idaho's water quality standards under Section 401 of the CWA.

V. Monitoring Requirements

A. Basis for Effluent and Surface Water Monitoring

Section 308 of the CWA and federal regulation 40 CFR 122.44(i) require monitoring in permits to determine compliance with effluent limitations. Monitoring may also be required to gather effluent and surface water data to determine if additional effluent limitations are required and/or to monitor effluent impacts on receiving water quality. The permit also requires the permittee to perform effluent monitoring required by parts B.6 and D of the NPDES Form 2A application, so that these data will be available when the permittee applies for a renewal of its NPDES permit.

The permittee is responsible for conducting the monitoring and for reporting results on Discharge Monitoring Reports (DMRs) or on the application for renewal, as appropriate, to the U.S. Environmental Protection Agency (EPA).

B. Effluent Monitoring

Monitoring frequencies are based on the nature and effect of the pollutant, as well as a determination of the minimum sampling necessary to adequately monitor the facility's performance. Permittees have the option of taking more frequent samples than are required under the permit. These samples can be used for averaging if they are conducted using EPA-approved test methods (generally found in 40 CFR 136) and if the Method Detection Limits are less than the effluent limits.

Table 2, below, presents the proposed effluent monitoring requirements for the City of Hailey WWTP. In general, the monitoring requirements are similar to those in the prior permit, with certain exceptions explained below. The sampling location must be after the last treatment unit and prior to discharge to the receiving water. If no discharge occurs during the reporting period, "no discharge" shall be reported on the DMR.

Table 2: Effluent Monitoring Requirements

Parameter	Units	Sample Location	Sample Frequency	Sample Type
Flow	mgd	Effluent	continuous	recording
BOD_5	mg/L	Influent & Effluent	1/week	24-hour composite
	lb/day	Effluent		calculation[1]
	% Removal	% Removal	1/month	calculation[2]
TSS	mg/L	Influent & Effluent	2/week	24-hour composite
	lb/day	Effluent		calculation[1]
	% Removal	% Removal	1/month	calculation[2]
pH	standard units	Effluent	daily	grab
E. Coli	#/100 ml	Effluent	5/month	grab
Total Ammonia as N	mg/L	Effluent	2/month	24-hour composite
	lb/day	Effluent		calculation[1]
Total Phosphorus (Interim)	mg/L	Influent & Effluent	2/month	24-hour composite
	lb/day	Effluent		calculation
Total Phosphorus (Final)	mg/L	Influent & Effluent	1/week	24-hour composite
	lb/day	Effluent		calculation
Alkalinity	mg/L as $CaCO_3$	Effluent	1/quarter	24-hour composite
Copper	µg/L	Effluent	1/quarter	24-hour composite
Dissolved Oxygen	mg/L	Effluent	1/month	grab
Hardness	mg/L as $CaCO_3$	Effluent	1/quarter	24-hour composite
Mercury	µg/L	Effluent	1/quarter	24-hour composite
Nitrate + Nitrite	mg/L	Effluent	1/quarter	24-hour composite
Oil and Grease	mg/L	Effluent	1/quarter	grab
Orthophosphate	mg/L	Effluent	1/quarter	24-hour composite
Temperature (April – October)	°C	Effluent	continuous	recording
Temperature (November – March)	°C	Effluent	5/week	grab
Total Dissolved Solids	mg/L	Effluent	1/quarter	24-hour composite
Total Kjeldahl Nitrogen	mg/L	Effluent	1/month	24-hour composite
Zinc	µg/L	Effluent	1/quarter	24-hour composite
NPDES Application Form 2A Expanded Effluent Testing	—	Effluent	3x/5 years	—
Whole Effluent Toxicity (WET)	TU_C	Effluent	1/quarter for one year	24-hour composite

Table 2: Effluent Monitoring Requirements				
Parameter	**Units**	**Sample Location**	**Sample Frequency**	**Sample Type**
Notes: 1. Loading is calculated by multiplying the concentration in mg/L by the flow in mgd and a conversion factor of 8.34. If the concentration is measured in µg/L, the conversion factor is 0.00834. 2. Percent removal is calculated using the following equation: (average monthly influent – average monthly effluent) ÷ average monthly influent. 3. The permittee must report the minimum effluent dilution ratio observed during the month. 4. Each sampling event must include three 24-hour composite samples taken over the course of a calendar week.				

Monitoring Changes from the Previous Permit

The monitoring frequency for TSS has been increased from once per week to twice per week, and, once the final effluent limits for total phosphorus take effect, the monitoring frequency for total phosphorus has been increased from twice per month to once per week. These changes were made in order to better determine compliance with the more-stringent water quality-based TSS and phosphorus limits that are proposed in the draft permit. The draft permit also proposes monthly monitoring of orthophosphate, in order to better characterize the facility's phosphorus discharges, although only total phosphorus is subject to effluent limits.

The draft permit proposes to require monitoring at a frequency of quarterly for all parameters listed in Part B.6 of the application form for POTWs (EPA Form 3510-2A, revised 1-99) that are not subject to effluent limitations, except for total residual chlorine, which may be omitted because the facility does not use chlorine for disinfection.[1] EPA also proposes quarterly monitoring of the effluent for copper, mercury, and zinc. Copper and mercury have been previously analyzed for and detected in the effluent, and zinc has been measured in the Big Wood River upstream from the City of Ketchum's discharge, sometimes at concentrations close to Idaho's water quality criteria for zinc.

The permit also requires at least three samples over the term of the permit for all parameters listed in Part D of the application form for POTWs so that these data will be available when the City applies for a reissued permit.[2] In accordance with Part E of the form 2A application, the permit requires quarterly whole effluent toxicity testing for one year.[3]

EPA proposes to reduce the effluent monitoring frequency for total Kjeldahl nitrogen (TKN) from twice per month to once per month, because the discharges of TKN are generally much less than the effluent limits. Specifically, long-term the average TKN load is 8.2 lb/day, or 15% of the average monthly limit. Therefore, an effluent limit violation is not likely to be "missed" because of less-frequent sampling (see *Interim Guidance for Performance - Based Reductions of NPDES Permit Monitoring Frequencies*, EPA 1996, at Appendix A).

C. Surface Water Monitoring

In its draft Clean Water Act Section 401 certification of this Permit, IDEQ specified receiving water monitoring requirements. Federal regulations require that NPDES permits incorporate the conditions of the State's Clean Water Act Section 401 certification (40 CFR 124.55(a)(2)).

[1] See also 40 CFR 122.21(j)(4)(iii)
[2] See also 40 CFR 122.21(j)(4)(iv)
[3] See also 40 CFR 122.21(j)(5)

Table 3 presents the proposed surface water monitoring requirements. The City of Hailey should continue receiving water monitoring at the established location. Surface water monitoring results must be submitted with the DMRs for the last month of each quarter.

Table 3: Surface Water Monitoring Requirements

Parameter and Units	Location(s)	Sampling Frequency	Maximum Method Detection Limit (MDL)
Alkalinity, mg/L as $CaCO_3$	Upstream	1/quarter	—
Cadmium, dissolved, µg/L	Upstream	1/quarter	0.1 µg/L
Copper, dissolved, µg/L	Upstream	1/quarter	0.5 µg/L
Cyanide, weak acid dissociable, µg/L	Upstream	1/quarter	0.02 µg/L
Hardness, mg/L as $CaCO_3$	Upstream	1/quarter	—
Lead, dissolved, µg/L	Upstream	1/quarter	0.5 µg/L
Mercury, total, µg/L	Upstream	1/quarter	0.01 µg/L
Nickel, dissolved, µg/L	Upstream	1/quarter	1 µg/L
pH, standard units	Upstream	1/quarter	—
Silver, dissolved, µg/L	Upstream	1/quarter	0.1 µg/L
Temperature, °C (April – October)	Upstream and downstream	Hourly	—
Total Ammonia as N, mg/L	Upstream	1/quarter	0.04 mg/L
Zinc, dissolved, µg/L	Upstream	1/quarter	2 µg/L

VI. Sludge (Biosolids) Requirements

EPA Region 10 separates wastewater and sludge permitting. EPA has authority under the CWA to issue separate sludge-only permits for the purposes of regulating biosolids. EPA may issue a sludge-only permit to each facility at a later date, as appropriate.

Until future issuance of a sludge-only permit, sludge management and disposal activities at each facility continue to be subject to the national sewage sludge standards at 40 CFR Part 503 and any requirements of the State's biosolids program. The Part 503 regulations are self-implementing, which means that facilities must comply with them whether or not a permit has been issued.

VII. Other Permit Conditions

A. Quality Assurance Plan

The federal regulation at 40 CFR 122.41(e) requires the permittee to develop procedures to ensure that the monitoring data submitted is accurate and to explain data anomalies if they occur. The City of Hailey is required to update the Quality Assurance Plan for the water pollution control plant within 180 days of the effective date of the final permit. The Quality Assurance Plan shall consist of standard operating procedures the permittee must follow for collecting, handling, storing and shipping samples, laboratory analysis, and data reporting.

B. Operation and Maintenance Plan

The permit requires the City of Hailey to properly operate and maintain all facilities and systems of treatment and control. Proper operation and maintenance is essential to meeting discharge limits, monitoring requirements, and all other permit requirements at all times. The permittee is required to develop and implement an operation and maintenance plan for their facility within 180 days of the effective date of the final permit. The plan shall be retained on site and made available to EPA and IDEQ upon request.

C. Standard Permit Provisions

Sections III, IV, and V of the draft permit contain standard regulatory language that must be included in all NPDES permits. Because these requirements are based directly on NPDES regulations, they cannot be challenged in the context of an NPDES permit action. The standard regulatory language covers requirements such as monitoring, recording, and reporting requirements, compliance responsibilities, and other general requirements.

VIII. Other Legal Requirements

A. Endangered Species Act

The Endangered Species Act requires federal agencies to consult with National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) and the U.S. Fish and Wildlife Service (USFWS) if their actions could beneficially or adversely affect any threatened or endangered species. EPA has determined that the issuance of this NPDES permit will have no effect on threatened or endangered species. Therefore, consultation is not required for this action. However, EPA will notify USFWS and NOAA Fisheries of the issuance of this draft permit and will consider any comments made by the Services prior to issuance of a final permit. See Appendix E of this fact sheet for more information.

B. Essential Fish Habitat

Essential fish habitat (EFH) is the waters and substrate (sediments, etc.) necessary for fish to spawn, breed, feed, or grow to maturity. The Magnuson-Stevens Fishery Conservation and Management Act (January 21, 1999) requires EPA to consult with NOAA Fisheries when a proposed discharge has the potential to adversely affect (reduce quality and/or quantity of) EFH. EPA has determined that the discharge from the City of Hailey WWTP will not affect any EFH species in the vicinity of the discharge, therefore consultation is not required for this action.

C. State Certification

Section 401 of the CWA requires EPA to seek State certification before issuing a final permit. As a result of the certification, the State may require more stringent permit conditions or additional monitoring requirements to ensure that the permit complies with water quality standards, or treatment standards established pursuant to any State law or regulation.

D. Sanitary Sewer Overflows and Proper Operation and Maintenance of the Collection System

Untreated or partially treated discharges from separate sanitary sewer systems are referred to as sanitary sewer overflows (SSOs). SSOs may present serious risks of human exposure when released to certain areas, such as streets, private property, basements, and receiving waters used for drinking water, fishing and shellfishing, or contact recreation. Untreated sewage contains pathogens and other pollutants, which are toxic. SSOs are not authorized under this permit. Pursuant to the NPDES regulations, discharges from separate sanitary sewer systems authorized by NPDES permits must meet effluent limitations that are based upon secondary treatment. Further, discharges must meet any more stringent effluent limitations that are established to meet EPA-approved state water quality standards.

The permit contains language to address SSO reporting and public notice and operation and maintenance of the collection system. The permit requires that the permittee identify SSO occurrences and their causes. In addition, the permit establishes reporting, record keeping and third party notification of SSOs. Finally, the permit requires proper operation and maintenance of the collection system. The following specific permit conditions apply:

Immediate Reporting – The permittee is required to notify the EPA of an SSO within 24 hours of the time the permittee becomes aware of the overflow. (See 40 CFR 122.41(l)(6))

Written Reports – The permittee is required to provide the EPA a written report within five days of the time it became aware of any overflow that is subject to the immediate reporting provision. (See 40 CFR 122.41(l)(6)(i)).

Third Party Notice – The permit requires that the permittee establish a process to notify specified third parties of SSOs that may endanger health due to a likelihood of human exposure; or unanticipated bypass and upset that exceeds any effluent limitation in the permit or that may endanger health due to a likelihood of human exposure. The permittee is required to develop, in consultation with appropriate authorities at the local, county, and/or state level, a plan that describes how, under various overflow (and unanticipated bypass and upset) scenarios, the public, as well as other entities, would be notified of overflows that may endanger health. The plan should identify all overflows that would be reported and to whom, and the specific information that would be reported. The plan should include a description of lines of communication and the identities of responsible officials. (See 40 CFR 122.41(l)(6)).

Record Keeping – The permittee is required to keep records of SSOs. The permittee must retain the reports submitted to the EPA and other appropriate reports that could include work orders associated with investigation of system problems related to a SSO, that describes the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the SSO. (See 40 CFR 122.41(j)).

Proper Operation and Maintenance – The permit requires proper operation and maintenance of the collection system. (See 40 CFR 122.41(d) and (e)). SSOs may be indicative of improper operation and maintenance of the collection system. The permittee may consider the development and implementation of a capacity, management, operation and maintenance (CMOM) program.

The permittee may refer to Guide for Evaluating Capacity, Management, Operation, and Maintenance (CMOM) Programs at Sanitary Sewer Collection Systems (EPA 305-B-05-002). This guide identifies some of the criteria used by EPA inspectors to evaluate a collection

system's management, operation and maintenance program activities. Owners/operators can review their own systems against the checklist (Chapter 3) to reduce the occurrence of sewer overflows and improve or maintain compliance.

E. Permit Expiration

The permit will expire five years from the effective date.

IX. References

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

EPA. 1996. *Interim Guidance for Performance-based Reduction of NPDES Permit Monitoring Frequencies.*

Appendix A: Facility Information

General Information

NPDES ID Number:	ID0020303
Physical Address:	4297 Glenbrook Drive, Hailey, ID 83333
Mailing Address:	115 S. Main Street, Suite H, Hailey, ID 83333
Facility Background:	The most recent NPDES permit for the City of Haley was issued on May 9, 2001, became effective on June 11, 2001 and expired on June 12, 2006. The first NPDES permit was issued to this facility in December 1973. EPA received a timely and complete application for renewal of this NPDES permit. According to 40 CFR 122.6, when EPA receives a timely and complete application for renewal of an NPDES permit, the conditions of the expired permit continue in force until the effective date of a new permit.

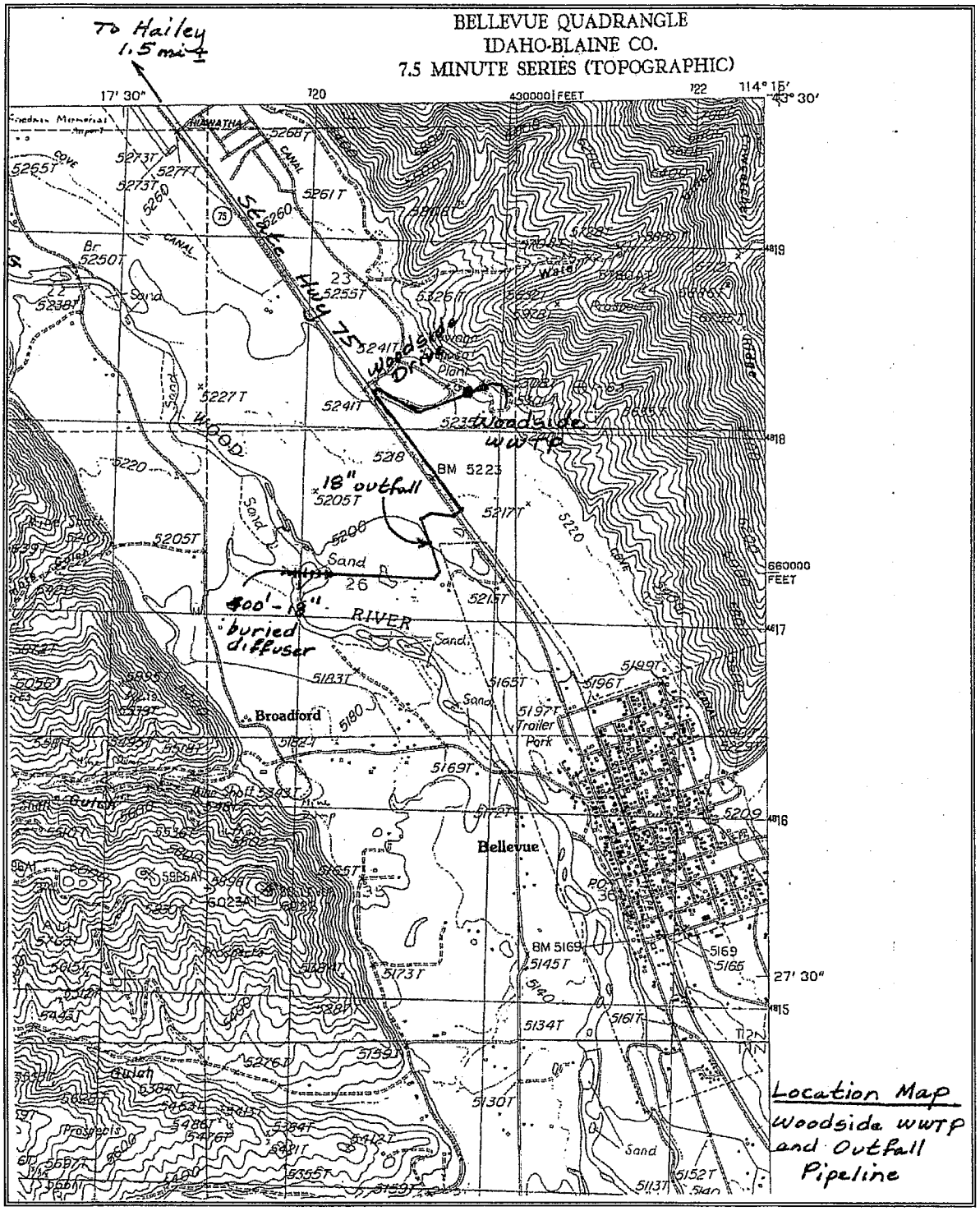
Facility Information

Type of Facility:	Publicly Owned Treatment Works (POTW)
Treatment Train:	Influent pumps, bar screen, grit removal, sequencing batch reactors, equalization basin, cloth filters, ultraviolet disinfection.
Flow:	Design flow is 1.6 mgd. The maximum daily flow from January 2005 – May 2010 was 1.26 mgd.
Outfall Location:	latitude 43E 28' 42" N; longitude 114E 16' 48" W

Receiving Water Information

Receiving Water:	Big Wood River
Watershed:	Big Wood River (HUC 17040219)
Beneficial Uses:	Cold water aquatic life, salmonid spawning, domestic water supply, primary contact recreation, industrial and agricultural water supply, wildlife habitats, and aesthetics.

Appendix B: Facility Map



Appendix C: Basis for Effluent Limits

The following discussion explains in more detail the statutory and regulatory basis for the technology and water quality-based effluent limits in the draft permit. Part A discusses technology-based effluent limits, Part B discusses water quality-based effluent limits in general, and Part C discusses facility specific water quality-based effluent limits.

A. Technology-Based Effluent Limits

Federal Secondary Treatment Effluent Limits

The CWA requires POTWs to meet requirements based on available wastewater treatment technology. Section 301 of the CWA established a required performance level, referred to as "secondary treatment," which all POTWs were required to meet by July 1, 1977. EPA has developed and promulgated "secondary treatment" effluent limitations, which are found in 40 CFR 133.102. These technology-based effluent limits apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by application of secondary treatment in terms of BOD_5, TSS, and pH. The federally promulgated secondary treatment effluent limits are listed in Table C-1.

Table C-1: Secondary Treatment Effluent Limits
(40 CFR 133.102)

Parameter	Average Monthly Limit	Average Weekly Limit	Range
BOD_5	30 mg/L	45 mg/L	—
TSS	30 mg/L	45 mg/L	—
Removal Rates for BOD_5 and TSS	85% (minimum)	—	—
pH	—	—	6.0 – 9.0 s.u.

Chlorine

The City of Hailey does not use chlorine for disinfection. Therefore, no technology-based chlorine effluent limits are applicable to this discharge.

Mass-Based Limits

The federal regulation at 40 CFR 122.45(f) requires that effluent limits be expressed in terms of mass, if possible. The regulation at 40 CFR 122.45(b) requires that effluent limitations for POTWs be calculated based on the design flow of the facility. The mass based limits are expressed in pounds per day and are calculated as follows:

$$\text{Mass based limit (lb/day)} = \text{concentration limit (mg/L)} \times \text{design flow (mgd)} \times 8.34^{[1]}$$

Use of Technology-based Effluent Limits in the Draft Permit

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

[1] 8.34 is a conversion factor equal to the density of water in pounds per gallon

limits that are consistent with the assumptions and requirements of the wasteload allocation for the discharge in the *Big Wood River Watershed Management Plan*. The BOD_5 mass limits are identical to the limits in the prior permit. The limits were originally based on a 1996 antidegradation analysis by Idaho DEQ and have been continued forward based on the anti-backsliding provisions of the Clean Water Act (Section 402(o)).

B. Water Quality-based Effluent Limits

Statutory and Regulatory Basis

Section 301(b)(1)(C) of the CWA requires the development of limitations in permits necessary to meet water quality standards by July 1, 1977. Discharges to State or Tribal waters must also comply with limitations imposed by the State or Tribe as part of its certification of NPDES permits under section 401 of the CWA. Federal regulations at 40 CFR 122.4(d) prohibit the issuance of an NPDES permit that does not ensure compliance with the water quality standards of all affected States. The NPDES regulation (40 CFR 122.44(d)(1)) implementing Section 301(b)(1)(C) of the CWA requires that permits include limits for all pollutants or parameters which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State or Tribal water quality standard, including narrative criteria for water quality, and that the level of water quality to be achieved by limits on point sources is derived from and complies with all applicable water quality standards.

The regulations require the permitting authority to make this evaluation using procedures which account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant in the effluent, species sensitivity (for toxicity), and where appropriate, dilution in the receiving water. The limits must be stringent enough to ensure that water quality standards are met, and must be consistent with any available wasteload allocation.

Reasonable Potential Analysis

When evaluating the effluent to determine if water quality-based effluent limits are needed, based on numeric criteria, EPA projects the receiving water concentration (downstream of where the effluent enters the receiving water) for each pollutant of concern. EPA uses the concentration of the pollutant in the effluent and receiving water and, if appropriate, the dilution available from the receiving water, to project the receiving water concentration. If the projected concentration of the pollutant in the receiving water exceeds the numeric criterion for that specific chemical, then the discharge has the reasonable potential to cause or contribute to an exceedance of the applicable water quality standard, and a water quality-based effluent limit is required.

Sometimes it is appropriate to allow a small area of the receiving water to provide dilution of the effluent. These areas are called mixing zones. Mixing zone allowances will increase the mass loadings of the pollutant to the water body and will decrease treatment requirements. Mixing zones can be used only when there is adequate receiving water flow volume and when the receiving water meets the criteria necessary to protect the designated uses of the water body. Mixing zones must be authorized by IDEQ. Based on the previous permit, the mixing zone recommendations of EPA's *Water Quality Standards Handbook: Second Edition*, and the draft certification, the water quality-based effluent limits in this permit have been calculated using a

mixing zone. If IDEQ does not grant a mixing zone, the water quality-based effluent limits will be recalculated such that the criteria are met before the effluent is discharged to the receiving water.

Procedure for Deriving Water Quality-based Effluent Limits

The first step in developing a water quality-based effluent limit is to develop a wasteload allocation (WLA) for the pollutant. A wasteload allocation is the concentration or loading of a pollutant that the permittee may discharge without causing or contributing to an exceedance of water quality standards in the receiving water.

In cases where a mixing zone is not authorized, either because the receiving water already exceeds the criterion, the receiving water flow is too low to provide dilution, or the State does not authorize one, the criterion becomes the WLA. Establishing the criterion as the wasteload allocation ensures that the permittee will not cause or contribute to an exceedance of the criterion. The following discussion details the specific water quality-based effluent limits in the draft permit.

Once a WLA is developed, EPA calculates effluent limits which are protective of the WLA using statistical procedures described in Appendix E.

C. Facility-Specific Water Quality-based Limits

Total Phosphorus

Federal regulations require that "effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge" in a total maximum daily load (TMDL) that has been prepared by the State and approved by EPA. The Big Wood River Watershed Management Plan is a TMDL that was approved by EPA on May 15, 2002. The TMDL's wasteload allocation for total phosphorus for this discharge was 5.2 lb/day.

In the TMDL, the loading capacity was calculated using the annual average river flow and the maximum monthly average in-stream target of 50 µg/L (0.05 mg/L) total phosphorus (see the TMDL at page 62). Federal regulations require that effluent limits for POTWs be expressed as average monthly and average weekly limits, unless impracticable (40 CFR 122.45(d)(1)). Therefore, it is consistent with the assumptions and requirements of the phosphorus wasteload allocation to establish an average monthly effluent limit equal to the wasteload allocation. Consistent with the technology-based effluent limits for BOD_5 and TSS, EPA has established an average weekly limit equal to 1.5 times the maximum daily limit.

Metals

The toxicities of some metals vary with the hardness of the water. Therefore, the water quality criteria for these metals also vary with hardness. Since toxicity decreases (and numeric water quality criteria increase) as hardness increases, EPA has used the 5th percentile as a worst-case assumption for ambient hardness. The 5th percentile ambient hardness is 90.6 mg/L as $CaCO_3$. Effluent hardness data were not available.

The hardness-dependent water quality criteria for the metals of concern are expressed as dissolved metal. The dissolved fraction of the metal is the fraction that will pass through a 0.45-micron filter. However, the federal regulation at 40 CFR 122.45(c) requires that NPDES permit effluent limits must be expressed as total recoverable metal. Total recoverable metal is the concentration of the metal in an unfiltered sample. To develop effluent limits for total recoverable metals which are protective of the dissolved metals criteria, "translators" are used in the equations to determine reasonable potential and derive effluent limits. Translators can either be site specific values or default values. EPA has published guidance related to the use of translators in NPDES permits in *The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit from a Dissolved Criterion* (EPA 823-B-96-007, June 1996). In the absence of site-specific translators, this guidance recommends the use of water quality criteria conversion factors as the default translators. Because site-specific translators were not available, EPA has used the conversion factors in the Idaho Water Quality Standards in the reasonable potential and effluent limit calculations for the City of Hailey discharge. The only hardness-dependent metal that has been measured in the City's discharge is copper. Table C-2, below, details the calculations for water quality criteria for copper (see also IDAPA 58.01.02.210).

Table C-2: Aquatic Life Metals Criteria

Parameter	Equations for Metals Criteria (expressed as total recoverable)[1,2,3]		Equations or Values of Conversion Factors and Translators[4]	
	Acute	Chronic	Acute	Chronic
Copper	$e^{0.9422[\ln(\text{hardness})]-1.464}$	$e^{0.8545[\ln(\text{hardness})]-1.465}$	0.960	0.960

Notes:
1. "e" is the exponential constant, approximately equal to 2.718
2. "ln" is the natural logarithm (log base "e")
3. Hardness is measured in mg/L as $CaCO_3$
4. Multiplying the results of the criteria equations by these conversion factors yields the dissolved criteria.

At a hardness of 90.6 mg/L as $CaCO_3$, the numeric water quality criteria for copper are equal to 15.5 µg/L (acute) and 10.4 µg/L (chronic). EPA has determined that the discharge does not have reasonable potential to cause or contribute to violations of Idaho's water quality criteria for copper. Therefore the draft permit does not include an effluent limit for copper.

pH

The most stringent water quality criterion for pH is for the protection of aquatic life. The pH criteria for aquatic life uses state that the pH must be no less than 6.5 and no greater than 9.0 standard units (IDAPA 58.01.02.250.01.a). Mixing zones are generally not granted for pH, therefore the most stringent water quality criterion must be met before the effluent is discharged to the receiving water. The draft permit requires that the effluent have a pH of no less than 6.5 and no greater than 9.0 standard units. Effluent data indicate that the permittee will have no difficulty in complying with these effluent limits.

Ammonia

The Idaho water quality standards contain criteria for the protection of aquatic life from the toxic effects of ammonia. Because the Snake River is designated for salmonid spawning, EPA has applied ammonia criteria which are protective of salmonids, including early life stages. The criteria are dependent on pH and temperature, because the fraction of ammonia present as the toxic, un-ionized form increases with increasing pH and temperature. Therefore, the criteria become more stringent as pH and temperature increase. The following table details the equations used to determine water quality criteria for ammonia, and the values of these equations at the 95th percentile pH, which is 8.5 standard units, and the 95th percentile temperature observed in the Big Wood River upstream from the discharge, which is 15.7 °C.

EPA has determined that the ammonia effluent limits in the previous permit will ensure compliance with Idaho's water quality criteria for ammonia. Therefore, the previous permit's ammonia effluent limits have been retained under the anti-backsliding provisions of the Clean Water Act (Section 402(o)).

Table C-4: Water Quality Criteria for Ammonia

	Acute Criterion[1]	Chronic Criterion[2]
Equations:	$\frac{0.275}{1+10^{7.204-pH}}+\frac{39}{1+10^{pH-7.204}}$	$\left(\frac{0.0577}{1+10^{7.688-pH}}+\frac{2.487}{1+10^{pH-7.688}}\right)\times MIN\left(2.85,1.45\times10^{0.028\times(25-T)}\right)$
Results:	2.1	1.01

1. No seasonal variation was assumed for pH, therefore, there is no seasonal variation in the acute criterion (which is a function of pH only).

E. Coli

Concentration Limits

The Idaho water quality standards state that waters of the State of Idaho that are designated for recreation are not to contain E. coli bacteria in concentrations exceeding a geometric mean of 126 organisms per 100 ml based on a minimum of five samples taken every three to seven days over a thirty day period. Therefore, the draft permit contains a monthly geometric mean effluent limit for E. coli of 126 organisms per 100 ml, and a minimum sampling frequency of five grab samples per month (IDAPA 58.01.02.251.01.a.).

The Idaho water quality standards also state that a water sample that exceeds certain "single sample maximum" values indicates a likely exceedance of the geometric mean criterion, although it is not, in and of itself, a violation of water quality standards. For waters designated for primary contact recreation, the "single sample maximum" value is 406 organisms per 100 ml (IDAPA 58.01.02.251.01.b.ii.).

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). Because a single sample value exceeding 406 organisms per 100 ml indicates a likely exceedance of the geometric mean criterion, EPA has imposed an instantaneous (single grab sample) maximum effluent limit for E. coli of 406 organisms per 100 ml, in addition to a monthly geometric mean limit of 126 organisms per 100 ml, which directly implements the water quality criterion for E. coli. This will ensure that the discharge will have a low probability of exceeding water quality standards for E. coli.

Regulations at 40 CFR 122.45(d)(2) require that effluent limitations for continuous discharges from POTWs be expressed as average monthly and average weekly limits, unless impracticable. The terms "average monthly limit" and "average weekly limit" are defined in 40 CFR 122.2 as being arithmetic (as opposed to geometric) averages. It is impracticable to properly implement a 30-day geometric mean criterion in a permit using monthly and weekly arithmetic average limits. The geometric mean of a given data set is equal to the arithmetic mean of that data set if and only if all of the values in that data set are equal. Otherwise, the geometric mean is always less than the arithmetic mean. In order to ensure that the effluent limits are "derived from and comply with" the geometric mean water quality criterion, as required by 40 CFR 122.44(d)(1)(vii)(A), it is necessary to express the effluent limits as a monthly geometric mean and an instantaneous maximum limit.

CFU/Day Limits

Federal regulations require that "effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation for the discharge" in a total maximum daily load (TMDL) that has been prepared by the State and approved by EPA. The Big Wood River Watershed Management Plan is a TMDL that was approved by EPA on May 15, 2002. The TMDL was modified by IDEQ in November 2011, and the modification was approved by EPA in February 2012. The modified TMDL's wasteload allocation for E. coli for this discharge is 7.63 billion (7.63×10^9) CFU/day.

In the TMDL, the loading capacity was calculated using the annual average river flow and the maximum monthly geometric mean in-stream target of 126 CFU/100 ml total phosphorus (see the TMDL at Page 63). Therefore, it is appropriate to establish a monthly geometric mean effluent limit equal to the wasteload allocation.

Floating, Suspended and Submerged Matter

The State of Idaho has a narrative water quality criterion which reads "Surface waters of the state shall be free from floating, suspended, or submerged matter of any kind in concentrations causing nuisance or objectionable conditions or that may impair designated beneficial uses (IDAPA 58.01.02.200.05)." This criterion has been included in the permit as a narrative effluent limit.

Total Suspended Solids

The TSS mass limits are water quality-based effluent limits which are more stringent than the technology-based effluent limits, and have been included for consistency with the *Big Wood River Watershed Management Plan* (IDEQ 2002), which is a TMDL that was prepared by Idaho DEQ and approved by EPA. NPDES permits must contain water quality-based effluent limits that are consistent with the assumptions and requirements of any available wasteload allocation in an EPA-approved TMDL (40 CFR 122.44(d)(1)(vii)(B)). The wasteload allocation for TSS in the Watershed Management Plan is 3.3tons per year (see the Watershed Management Plan at Table BBB). On a daily basis, the wasteload allocation is equivalent to 18 lb/day.

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 45 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 3.3 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.

The draft permit also proposes an average weekly limit equal to 68 lb/day, which is 1.5 times the average monthly limit (consistent with the technology-based concentration limits). Thus, the monthly and weekly effluent limits for TSS are consistent with the assumptions and requirements of the wasteload allocation in the *Big Wood River Watershed Management Plan*, as required by 40 CFR 122.44(d)(1)(vii)(B).

Temperature

There are insufficient data to determine if the discharge has the reasonable potential to cause or contribute to excursions above water quality standards for temperature. Therefore, no effluent limits are proposed for temperature.

The State of Idaho's draft Clean Water Act Section 401 certification for the City of Hailey requires hourly monitoring of the receiving water temperature, upstream and downstream of the outfall, from April through October each year. EPA is required to incorporate requirements specified in Section 401 certifications into NPDES permits (40 CFR 124.55(a)(2)). Therefore, the draft permit proposes hourly monitoring of the receiving water temperature, upstream and downstream of the outfall, from April through October each year.

The draft permit also proposes continuous monitoring of the effluent temperature, from April through October.

D. Summary of Limits and Bases

The following table summarizes the general statutory and regulatory bases for the limits in the draft permit

Table C-5 Summary of Effluent Limit Bases

Limited Parameter	Basis for Limit
BOD_5 and TSS Concentration and Removal Rate	Clean Water Act (CWA) Section 301(b)(1)(B), 40 CFR 133 (technology-based)
BOD_5 Load	CWA Section 402(o) (anti-backsliding)
TSS Load	CWA Section 301(b)(1)(C), 40 CFR 122.44(d)(1)(vii)(B) (water quality-based, TMDL)
Floating, Suspended or Submerged Matter	CWA Section 301(b)(1)(C), 40 CFR 122.44(d), IDAPA 58.01.02.200.05 (water quality-based)
pH	CWA Sections 301(b)(1)(C) and 402(o), 40 CFR 122.44(d), IDAPA 58.01.02.250.01.a. (water quality-based and anti-backsliding)
E. Coli Concentration	CWA Sections 301(b)(1)(C) and 402(o), 40 CFR 122.44(d), IDAPA 58.01.02.251.01 (water quality-based and anti-backsliding)
E. Coli Load	CWA Sections 301(b)(1)(C) 40 CFR 122.44(d)(1)(vii)(B) (water quality-based, TMDL)

Table C-5 Summary of Effluent Limit Bases	
Limited Parameter	**Basis for Limit**
Ammonia	CWA Section 402(o) (anti-backsliding)
Phosphorus	CWA Section 301(b)(1)(C), 40 CFR 122.44(d)(1)(vii)(B) (water quality-based, TMDL)

Appendix D: Reasonable Potential Calculations

The following describes the process EPA has used to determine if the discharge authorized in the draft permit has the reasonable potential to cause or contribute to a violation of Idaho's federally approved water quality standards. EPA uses the process described in the *Technical Support Document for Water Quality-based Toxics Control* (EPA, 1991) to determine reasonable potential.

To determine if there is reasonable potential for the discharge to cause or contribute to an exceedance of water quality criteria for a given pollutant, EPA compares the maximum projected receiving water concentration to the water quality criteria for that pollutant. If the projected receiving water concentration exceeds the criteria, there is reasonable potential, and a water quality-based effluent limit must be included in the permit. This section discusses how the maximum projected receiving water concentration is determined.

A. Mass Balance

For discharges to flowing water bodies, the maximum projected receiving water concentration is determined using the following mass balance equation:

$$C_dQ_d = C_eQ_e + C_uQ_u \qquad \text{(Equation D-1)}$$

where,

C_d = Receiving water concentration downstream of the effluent discharge (that is, the concentration at the edge of the mixing zone)
C_e = Maximum projected effluent concentration
C_u = 95th percentile measured receiving water upstream concentration
Q_d = Receiving water flow rate downstream of the effluent discharge = $Q_e + Q_u$
Q_e = Effluent flow rate (set equal to the design flow of the WWTP)
Q_u = Receiving water low flow rate upstream of the discharge (1Q10, 7Q10 or 30B3)

When the mass balance equation is solved for C_d, it becomes:

$$C_d = \frac{C_eQ_e + C_uQ_u}{Q_e + Q_u} \qquad \text{(Equation D-2)}$$

The above form of the equation is based on the assumption that the discharge is rapidly and completely mixed with the receiving stream, and 100% of the stream flow is available for mixing, under the State's mixing zone policies. If the mixing zone is based on less than complete mixing with the receiving water, the equation becomes:

$$C_d = \frac{C_eQ_e + C_u(Q_u \times MZ)}{Q_e + (Q_u \times MZ)} \qquad \text{(Equation D-3)}$$

Where MZ is the fraction of the receiving water flow available for dilution. The Idaho water quality standards generally limit mixing zones to 25% of the volume of the stream flow. EPA's Water Quality Standards Handbook Second Edition states that mixing zones "must be limited to an area or volume as small as practicable." In order to ensure that the mixing zones used in the

reasonable potential analysis are as small as practicable, in general, the mixing zones were limited to 10% of the critical stream flow volume. EPA has determined that, if a mixing zone encompassing 20% of the critical stream flow volume is used in the reasonable potential analysis, the City of Hailey does not have the reasonable potential to cause or contribute to excursions above water quality standards for copper. Because 20% of the stream volume is less than the 25% generally allowed by the Idaho water quality standards, EPA has used a mixing zone encompassing 20% of the critical stream flow volume, for the reasonable potential analysis for copper.

If a mixing zone is not allowed, dilution is not considered when projecting the receiving water concentration and,

$$C_d = C_e \qquad \text{(Equation D-4)}$$

Equation D-2 can be simplified by introducing a "dilution factor,"

$$D = \frac{Q_e + 0.1 \times Q_u}{Q_e} \qquad \text{(Equation D-5)}$$

There are multiple values for the dilution factor, which depend on the receiving stream flow used and what fraction of it is available for mixing. Dilution factors for acute aquatic life criteria are based on the 1Q10 flow rate in the receiving stream, one based on the 7Q10 flow rate to determine reasonable potential and wasteload allocations chronic aquatic life criteria (except for ammonia) and conventional pollutants, one based on the 30B3 flow rate to determine reasonable potential and wasteload allocations for the chronic ammonia criterion, one based on the 30Q5 flow rate and used to determine reasonable potential and wasteload allocations for human health criteria for non-carcinogens, and one based on the harmonic mean flow rate and used to determine reasonable potential and wasteload allocations for human health criteria for carcinogens. All dilution factors are calculated with the effluent flow rate set equal to the design flow of 2.48 CFS (1.6 mgd). The dilution factors are listed in Table D-1, below.

Table D-1: Dilution Factors

Mixing Zone	Acute Dilution Factor (1Q10)	Chronic Dilution Factor (7Q10)	Chronic Ammonia Criterion Dilution Factor (30B3)	Human Health Non-Carcinogen Dilution Factor (30Q5)	Human Health Carcinogen Dilution Factor (Harmonic Mean)
10% of Critical Flow (Except Copper)	3.82	4.55	4.90	5.48	9.52
20% of Critical Flow (Copper)	6.65	8.11	N/A	N/A	N/A

After the dilution factor simplification, Equation D-2 becomes:

$$C_d = \frac{C_e - C_u}{D} + C_u \qquad \text{(Equation D-6)}$$

If the criterion is expressed as dissolved metal, the effluent concentrations, which are measured in total recoverable metal, must be converted to dissolved metal as shown in Equation D-7.

$$C_d = \left[\frac{CF \times C_e - C_u}{D}\right] + C_u \quad \text{(Equation D-7)}$$

Where C_e is expressed as total recoverable metal, C_u and C_d are expressed as dissolved metal, and CF is a conversion factor used to convert between dissolved and total recoverable metal.

Equations D-6 and D-7 are the forms of the mass balance equation which were used to determine reasonable potential and calculate wasteload allocations.

B. Maximum Projected Effluent Concentration

For ammonia, EPA has used maximum daily limits in the 2001 permit as the maximum projected effluent concentration. The previous permit's effluent limits are used in this manner because, in general, the anti-backsliding provisions of the Clean Water Act (Section 402(o)) require that effluent limits in reissued permits be at least as stringent as the effluent limits in the previous permit. If a discharge at the maximum limits in the previous permit would not result in excursions above water quality standards, then the previous permit's effluent limits may be retained.

To calculate the maximum projected effluent concentration for copper and mercury, EPA has used the procedure described in section 3.3 of the TSD, "Determining the Need for Permit Limits with Effluent Monitoring Data." In this procedure, the 99th percentile of the effluent data is the maximum projected effluent concentration in the mass balance equation.

Since there are a limited number of data points available, the 99th percentile is calculated by multiplying the maximum reported effluent concentration by a "reasonable potential multiplier" (RPM). The RPM is the ratio of the 99th percentile concentration to the maximum reported effluent concentration. The RPM is calculated from the coefficient of variation (CV) of the data and the number of data points. The CV is defined as the ratio of the standard deviation of the data set to the mean.

Using the equations in section 3.3.2 of the TSD, the reasonable potential multiplier (RPM) is calculated based on the CV and the number of samples in the data set as follows. The following discussion presents the equations used to calculate the RPM, and also works through the calculations for the RPM for copper as an example. Reasonable potential calculations for all pollutants can be found in Table D-2.

First, the percentile represented by the highest reported concentration is calculated.

$$p_n = (1 - \text{confidence level})^{1/n} \quad \text{(Equation D-8)}$$

where,
p_n = the percentile represented by the highest reported concentration
n = the number of samples
confidence level = 99% = 0.99

The data set contains 23 copper samples collected from the effluent, therefore:

$$p_n = (1 - 0.99)^{1/23}$$
$$p_n = 0.819$$

This means that we can say, with 99% confidence, that the maximum reported effluent copper concentration is greater than the 81st percentile.

The reasonable potential multiplier (RPM) is the ratio of the 99th percentile concentration (at the 99% confidence level) to the maximum reported effluent concentration. This is calculated as follows:

$$RPM = C_{99}/C_p \qquad \text{(Equation D-9)}$$

Where,

$$C = \exp(z\sigma - 0.5\sigma^2) \qquad \text{(Equation D-10)}$$

Where,

$$\sigma^2 = \ln(CV^2 + 1) \qquad \text{(Equation D-11)}$$

$$\sigma = \sqrt{\sigma^2}$$

CV = coefficient of variation = (standard deviation) ÷ (mean)
z = the inverse of the normal cumulative distribution function at a given percentile

In the case of copper:

CV = coefficient of variation = 0.588
$\sigma^2 = \ln(CV^2 + 1) = 0.297$
$\sigma = \sqrt{\sigma^2} = 0.545$
z = 2.326 for the 99th percentile = 0.910 for the 81st percentile

$C_{99} = \exp(2.326 \times 0.545 - 0.5 \times 0.297) = 3.06$
$C_{81} = \exp(0.910 \times 0.545 - 0.5 \times 0.297) = 1.42$

$RPM = C_{99}/C_{81} = 3.06/1.42$
RPM = 2.16

The maximum projected effluent concentration is determined by simply multiplying the maximum reported effluent concentration by the RPM:

$$C_e = (RPM)(MRC) \qquad \text{(Equation D-12)}$$

where MRC = Maximum Reported Concentration

In the case of copper,

$C_e = (2.16)(17.2\ \mu g/L) =$ **37.2 µg/L**

C. Maximum Projected Receiving Water Concentration

The discharge has reasonable potential to cause or contribute to an exceedance of water quality criteria if the maximum projected concentration of the pollutant at the edge of the mixing zone exceeds the most stringent criterion for that pollutant. The maximum projected receiving water concentration is calculated from Equation D-6:

$$C_d = \frac{C_e - C_u}{D} + C_u \quad \text{(Equation D-6)}$$

Or, if the criterion is expressed as dissolved metal, the maximum projected receiving water concentration is calculated from Equation D-7:

$$C_d = \left[\frac{CF \times C_e - C_u}{D}\right] + C_u \quad \text{(Equation D-7)}$$

Where C_e is expressed total recoverable metal, C_u and C_d are expressed as dissolved metal, and CF is the conversion factor. EPA was not able to locate any upstream ambient water quality data for copper. For the purposes of this analysis, EPA has assumed that the upstream ambient copper concentration is zero.

For copper the acute receiving water concentration is, in micrograms per liter:

$$C_d = \left[\frac{0.960 \times 37.2 - 6.5}{6.65}\right] + 6.5 = 10.9$$

For copper the chronic receiving water concentration is, in micrograms per liter:

$$C_d = \left[\frac{0.960 \times 37.2 - 6.5}{8.11}\right] + 6.5 = 10.1$$

The acute and chronic water quality criteria are 15.5 and 10.4 µg/L, respectively. Because the projected receiving water concentrations are less than the criteria, water quality-based effluent limits are not necessary for copper.

Table D-2, below, summarizes the reasonable potential calculations for ammonia, copper, and mercury. It was not necessary to perform reasonable potential analyses for total Kjeldahl nitrogen, total phosphorus, total suspended solids, or biochemical oxygen demand, because effluent limits for these parameters are independently required by either technology-based requirements, to ensure consistency with the wasteload allocations in the *Big Wood River Watershed Management Plan*, antidegradation and anti-backsliding requirements, or a combination of the above. Parameters other than those named above have not been sampled for in the effluent.

Table D-2: Reasonable Potential Calculations

Effluent Percentile value	99%																
		State Water Quality Standard		Max concentration at edge of...													
	Ambient Concentration (metals as dissolved)	Acute	Chronic	Acute Mixing Zone	Chronic Mixing Zone	LIMIT REQ'D?		Max effluent conc. measured (metals as total recoverable)	Coeff. Variation		# of samples	Multiplier	Acute Dil'n Factor	Chronic Dil'n Factor		Metal Criteria Translator as decimal	Metal Criteria Translator as decimal
Parameter	*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*		*Pn*	*ug/L*	*CV*	*s*	*n*				COMMENTS	Acute	Chronic
Ammonia (Prev Limit) mg/L	0.1000	2.13	1.009	0.38	0.318	NO	N/A	1.17	N/A		N/A	1.00	3.82	4.90	10% Mixing Zone	1.00	1.00
Mercury	0.0050	2.10	0.012	0.00400	0.00416	NO	0.819	0.00038	0.932	0.791	23	3.06	3.82	4.55	10% Mixing Zone	1.00	1.00
Cu	6.5	15.5	10.4	10.90	10.10	NO	0.819	17.2	0.588	0.545	23	2.16	6.65	8.11	20% Mixing Zone	0.96	0.96

Appendix E: Endangered Species Act

Section 7 of the Endangered Species Act (ESA) requires federal agencies to request a consultation with the National Oceanic and Atmospheric Administration (NOAA) Fisheries and the US Fish and Wildlife Service (USFWS) regarding potential effects that a federal action may have on listed endangered and threatened species.

In an e-mail dated January 21, 2009, NOAA Fisheries stated that there are no threatened or endangered species under NOAA's jurisdiction in the Snake River drainage upstream of the Hells Canyon Dam, which is located at river mile 247.5. The City of Hailey discharge is to the Big Wood River, which is a tributary to the Malad River, which is a tributary to the Snake River. The Malad River flows into the Snake River at river mile 571, about 324 miles upstream from the nearest occurrence of threatened or endangered species under NOAA's jurisdiction. Therefore, the reissuance of this permit will have no effect on any listed threatened or endangered species under NOAA's jurisdiction.

The subject discharge is located in Blaine County, Idaho. The USFWS county species list for Fremont County lists the following threatened and endangered species:

- Bull trout (*Salvelinus confluentus*) Listed Threatened
- Canada lynx (*Lynx canadensis*) Listed Threatened

Discharges of pollutants to surface waters have the potential to directly affect aquatic species such as the bull trout. According to *The Big Wood River Watershed Management Plan* (IDEQ 2002, Page 8), bull trout are not present in the Big Wood River subbasin. Therefore, the discharge will have no effect on bull trout.

EPA has also determined that the reissuance of an NPDES permit to the City of Hailey will have no effect on the Canada lynx. The Canada lynx is a terrestrial species, which is generally not susceptible to the water quality impacts that may result from the reissuance of an NPDES permit. The primary causes of the Canada lynx's decline are habitat destruction, overutilization for commercial, recreational, scientific, or educational purposes, and climate change (USFWS 2005). Reissuance of an NPDES permit to the City of Hailey will have no effect on habitat destruction, overutilization for commercial, recreational, scientific, or educational purposes, or climate change. Therefore, the issuance of this permit will have no effect on the Canada lynx.

References

IDEQ. 2002. *The Big Wood River Watershed Management Plan.*

US Fish and Wildlife Service. 2005. "Recovery Outline for the Contiguous United States Distinct Population Segment of the Canada Lynx."

Appendix F: Clean Water Act Section 401 Certification and Antidegradation Review

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 Hailey
115 S. Main St. Suite H
Hailey, ID 83333

is authorized to discharge from the Woodside Wastewater Treatment Plant located in Hailey, Idaho, at the following location(s):

Outfall	Receiving Water	Latitude	Longitude
001	Big Wood River	43° 28' 42"	114° 16' 48"

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

This permit shall become effective

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

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

Signed this day of

Draft
Michael A. Bussell, Director
Office of Water and Watersheds

Draft permit. This document does not authorize a discharge.

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 (see III.B).
2. Quality Assurance Plan (QAP)	The permittee must provide EPA and Idaho Department of Environmental Quality (IDEQ) with written notification that the Plan has been developed and implemented within 180 days after the effective date of the final permit (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 within 180 days after the effective date of the final permit (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 at least 180 days before the expiration date of the permit (see Part V.B).
5. Surface Water Monitoring	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 must be submitted to EPA and IDEQ with the monthly DMRs (see I.D.6).
6. Compliance Schedule	Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date (see Part III.K).
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 within 180 days of the effective date of this permit (see II.E).

Table of Contents

Draft permit. This document does not authorize a discharge.

Draft permit. This document does not authorize a discharge.

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 – Oct.)	°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	94	141	—			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	45	68	—			calculation
	% 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	7.63×10^9 (geometric mean)	—	—			calculation
pH	s.u.	6.5 – 9.0 at all times			Effluent	daily	grab
Total Ammonia as N[2]	mg/L	1.9	2.9	3.3	Effluent	2/month	24-hr. comp.
	lb/day	9	14	15.6			calculation
Total Phosphorus as P (Interim)	mg/L	Report	Report	—	Effluent	2/month	24-hr. comp.
	lb/day	15	23	—			calculation
Total Phosphorus as P (Final)	mg/L	Report	Report	—	Effluent	1/week	24-hr. comp.
	lb/day	5.2	7.8	—			calculation
Total Kjeldahl Nitrogen	mg/L	Report	Report	—	Effluent	1/month	24-hr. comp.
	lb/day	55	78	—			calculation
Alkalinity, Total	mg/L as $CaCO_3$	Report	—	Report	Effluent	1/quarter	24-hr. comp.
Copper, Total Recoverable	µg/L	Report	—	Report	Effluent	1/quarter	24-hr. comp.
Dissolved Oxygen	mg/L	Report	—	Report	Effluent	1/month	grab

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
Hardness	mg/L as $CaCO_3$	Report	—	Report	Effluent	1/quarter	24-hr. comp.
Mercury	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	mg/L	Report	—	Report	Effluent	1/quarter	24-hr. comp.
Total Dissolved Solids	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 Part I.B.9.			Effluent	3x/5 years	—
Whole Effluent Toxicity (WET)	TUc	—	—	Report	Effluent	See I.C.2.a.	24-hr. comp.

1. The average monthly E. Coli bacteria counts must not exceed a geometric mean of 126/100 ml based on a minimum of five samples taken every 3-7 days within a calendar month. No single sample may exceed 406 organisms per 100 ml. 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 values and the arithmetic mean of the effluent values for that month. Influent and effluent samples must be taken over approximately the same time period.

2. The permittee must report within 24 hours any violation of the maximum daily or instantaneous maximum limits for the following pollutants: Total ammonia as N and E. coli. Violations of all other effluent limits are to be reported at the time that discharge monitoring reports are submitted (See Parts 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. 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**
Copper	µg/L	5
Mercury	µg/L	0.01
Nitrate + Nitrite as N	mg/L	0.1
Orthophosphate	mg/L	0.01
Zinc	µg/L	10

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.

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, $TU_c = 100/IC_{25}$

(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 22% 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 though 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 a copy of the permittee's initial investigation TRE workplan to EPA at the address below. This plan shall describe the steps the permittee intends to follow in the event that chronic toxicity is detected above 4.55 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 4.55 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 4.55 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 4.55 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 180 days after the effective date of the permit and continue for four years. The program must meet the following requirements:

1. Monitoring stations 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 effluent and the Big Wood River are completely mixed.
2. To the extent practicable, surface water sample collection must occur on the same day as effluent sample collection.
3. Cadmium, copper, lead, nickel, silver, and zinc must be analyzed as dissolved. Mercury must be analyzed as total.
4. 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.
5. 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".
6. 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 must be submitted to EPA and IDEQ with the monthly DMRs. At a minimum, the report 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.

Table 4: Receiving Water Monitoring Requirements

Parameter (units)	Sample Frequency	Sample Location(s)	Sample Type	Maximum MDL
Alkalinity (mg/L as $CaCO_3$)	Quarterly[1]	Upstream	Grab	—
Cadmium, Dissolved (µg/L)	Quarterly[1]	Upstream	Grab	0.1 µg/L
Copper, Dissolved (µg/L)	Quarterly[1]	Upstream	Grab	0.5 µg/L
Cyanide (µg/L)	Quarterly[1]	Upstream	Grab	0.02 µg/L
Hardness (mg/L as $CaCO_3$)	Quarterly[1]	Upstream	Grab	—
Lead, Dissolved (µg/L)	Quarterly[1]	Upstream	Grab	0.5 µg/L
Mercury (µg/L)	Quarterly[1]	Upstream	Grab	0.01 µg/L
Nickel, Dissolved (µg/L)	Quarterly[1]	Upstream	Grab	1 µg/L
pH (s.u.)	Quarterly[1]	Upstream	Grab	—
Silver, Dissolved	Quarterly[1]	Upstream	Grab	0.1 µg/L
Temperature, April – October (°C)	Hourly	Upstream & Downstream	Recording	—
Total Ammonia as N (mg/L)	Quarterly[1]	Upstream	Grab	0.04 mg/L
Zinc, Dissolved (µg/L)	Quarterly[1]	Upstream	Grab	2 µg/L

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

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 180 days after the effective date of this permit, 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 upon 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 within 180 days of the effective date of this permit. Any existing QAPs may be modified for compliance with this section.

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

2. Throughout all sample collection and analysis activities, the permittee must use the EPA-approved QA/QC and chain-of-custody procedures described in *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. Total Phosphorus Schedule of Compliance

1. The permittee must comply with all effluent limitations and monitoring requirements in Part I.B of this permit immediately upon the effective date of this permit except the final effluent limitations for total phosphorus.
2. The permittee must achieve compliance with the final effluent limits for total phosphorus no later than four years and eleven months after the effective date of this permit.
3. While the schedule of compliance is in effect, the permittee must comply with the following interim requirements:
   a) The permittee must comply with the interim total phosphorus effluent limitations and monitoring requirements in Part I.B of this permit.
   b) The permittee must submit an Annual Report of Progress which outlines the progress made towards reaching the compliance date for the total phosphorus effluent limitations. The first report is due one year after effective date of the final permit and annually thereafter, until compliance with the total phosphorus effluent limits is achieved. See also Part III.J, "Compliance Schedules". At a minimum, the annual report must include:
      (i) An assessment of the previous year of total phosphorus data and comparison to the final effluent limitations.

(ii) A report on progress made towards meeting the effluent limitations, including the applicable deliverable required under paragraph 2 (Table 4).

(iii) Further actions and milestones targeted for the upcoming year.

D. 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.

E. 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 within 180 days of the effective date of this permit. Any existing emergency response and public notification plan may be modified for compliance with this section.

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 Part III.C ("Monitoring Procedures"). The permittee must report all additional monitoring in accordance with Part 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.

   a) 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 98101-3140

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

2. Electronic Copy Submissions

   a) 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.

   b) 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 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 III.G.

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 Sixth Avenue
   Suite 900 OWW-130
   Seattle, WA 98101-3140

K. Compliance Schedules

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

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 at least 180 days before the expiration date of this permit.

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.