

April 11, 2001

Response to Comments

Draft NPDES Permit for:  
City of Idaho Falls, Idaho  
Municipal Sewage Treatment Plant  
NPDES No.: ID-002126-1

On October 26, 2000, the Environmental Protection Agency (EPA) reissued a draft National Pollutant Discharge Elimination System (NPDES) permit to the City of Idaho Falls for the discharge from the Idaho Falls Municipal Sewage Treatment Plant. The plant provides secondary treatment to domestic and commercial wastewater prior to discharge to the Snake River. The public comment period for the draft permit extended from October 26 to November 27, 2000. Per a request from the City, the comment period was extended an additional 30 days to December 27, 2000.

The EPA received comments from: 1) The City of Idaho Falls in a letter to Robert Robichaud of the EPA, from Chad Stanger, Public Works Director, dated December 22, 2000, 2) Harrison S. Hilbert in a letter to Michael Lidgard of the EPA dated December 26, 2000, and 3) Bill Davidson through electronic mail to Michael Lidgard dated December 27, 2000. This document represents EPA's response to the comments received during the comment period. The comments are ordered by subject and summarized below followed by EPA's response.

**Ammonia Limitations**

The City's comments regarding the ammonia limitations are summarized as follows: EPA recently adopted revised ammonia criteria that are not reflected in the draft permit; the limitations are calculated with assumptions that are overly conservative; the reasonable potential calculations need to be modified in several ways; an investigation to find the causes of the variations between upstream and downstream ammonia concentrations need to be completed. Specific comments addressing each concern along with EPA's response are provided below.

*Comment.* (Ammonia criteria) The City comments that the EPA has issued a national update of ambient water quality criteria for ammonia. The city points out that adoption of these criteria in Idaho would likely lead to less stringent ammonia limitations for Idaho Falls. The City acknowledges that they are aware EPA does not have the discretion or authority to use the recommended national criteria in lieu of state-promulgated water quality standards at this time but wants to raise the point that more restrictive limits may not be appropriate given the prospect for less restrictive criteria in the future.

*Response.* The EPA basis for water quality based effluent limitations are the currently adopted and approved Idaho Water Quality Standards. Should the State revise the ammonia criteria, and those criteria are subsequently approved by EPA, the City could then petition EPA at that time to modify the permit based on new criteria.

*Comment.* (Receiving water temperature, pH, and criteria) The City questions the use of downstream temperature and pH in calculating ammonia criteria for the receiving water. The City suggests using upstream data from 1993 to 2000 instead of the more limited downstream data set used in the draft permit.

*Response.* EPA agrees with the City’s suggestion to use upstream data from 1993-2000. Review of the data base provided by the City results in the temperature and pH statistics shown in the following table. Updated receiving water ammonia criteria were calculated with the 95<sup>th</sup> percentile values and are also shown in the table:

Upstream 95 <sup>th</sup> Percentile pH and Temperature Based on 1993-2000 Data and the Resulting Receiving Water Ammonia Criteria		
	Summer Season	Winter Season
95 <sup>th</sup> Percentile Temperature, °C	19.7	11.3
95 <sup>th</sup> Percentile pH	8.4	8.4
Chronic Ammonia Criteria (mg/L)	0.40	0.55
Acute Ammonia Criteria (mg/L)	2.37	2.39

*Comment.* (Background calculation) The City states that use of both the 95<sup>th</sup> percentile temperature and 95<sup>th</sup> percentile pH is overly conservative and has almost no probability of occurring.

*Response.* The EPA “Technical Support Document for Water Quality-based Toxics Control” (TSD) recommends that permitting authorities use worst-case receiving water conditions to ensure protection of designated beneficial uses. As stated in the TSD, permitting authorities should develop water quality-based limits which will assure compliance with water quality standards, even during critical conditions in the receiving waters. Region 10 has historically used the 95<sup>th</sup> percentile when setting background concentration for permit calculations for EPA-issued permits. The 95<sup>th</sup> percentile is that value at which 95 percent of the data collected would be expected to be at or below it. Only five percent of the data would be greater than this value. The Region believes the 95<sup>th</sup> percentile of background concentration is a conservative estimate of upstream values which results in permit limitations which are protective of the environment even during critical or worse case conditions. This policy was stated in a memorandum signed by Greg Kellogg, Chief of the Region 10 Wastewater Management and Enforcement Branch, dated July 24, 1995. Region 10 had also used the 95<sup>th</sup> percentile for background assumption prior to the 1995 policy memorandum.

The commenter states that use of 95<sup>th</sup> percentile for both pH and temperature is overly conservative and has almost no probability of occurring. The occurrence of both the 95<sup>th</sup> percentile of temperature and pH is rare, as expected, but it has been observed near the facility.

The ambient grab sampling, which has been conducted at a low frequency of once a month, has sampled days with pH and temperature similar to the conditions used in the table above. In July 2000, the temperature was measured as 19°C while the corresponding pH was 8.3. This compares to the summer 95<sup>th</sup> percentile of 19.7°C and pH of 8.4. In October 2000 (winter season), the temperature was 13°C and the pH was 8.5, which is actually greater than the 95<sup>th</sup> percentile conditions of 11.3°C and pH of 8.4. One factor which increases the likelihood that high temperature and pH can occur simultaneously in this receiving water is the fact that pH has relatively little variability. The average value is 8.1 with the 95<sup>th</sup> percentile at 8.4 standard units and there is very little variability in pH with season. Given this historical data, it is apparent that use of the 95<sup>th</sup> percentile is more than just a hypothetical worst case scenario, it is in fact representative of conditions that actually occur in the receiving waters, albeit on an infrequent basis.

*Comment.* (Ammonia effluent and ambient data base) The City suggests use of 1993-2000 data for ammonia effluent and ammonia in-stream evaluations since there have been no major changes to the plant over his period. The City also commented that four values from the effluent and in-stream data sets are outliers and should be removed from the data sets prior to developing summary statistics. The City detected the outliers by use of the Grubb's Test (Engineering Statistics Handbook). The Grubb Test protocol and results of the analysis of the Idaho Falls data were submitted to EPA for review.

*Response.* EPA agrees to use the entire data set from 1993-2000 as suggested by the City for the reasonable potential evaluation. EPA also agrees with the City that for this permit, the Grubb Test with a significance level of 0.05 is appropriate for identifying outliers. The four data points listed in the comment letter will be removed from the analysis (plant effluent 8.56 mg/L, plant upstream 1.17, 0.68, and 0.64 mg/L).

*Comment.* (Assumptions for the reasonable potential calculation) The City commented that when calculating the reasonable potential of the effluent to cause or contribute to exceedance of ammonia criteria, EPA used the more conservative multiplying factors to apply to the effluent data rather than factors that were adopted by EPA in the Great Lakes Water Quality Initiative (GLI). The City states that the permit writer used the more conservative multipliers set at 99 percent confidence level and 99 percent probability basis (i.e., Table 3-1 of the TSD) without any justification of the need to do so. The City also states that since the State of Idaho has not requested the more stringent approach, there is no basis for Region 10 to deviate from a default position of using the multipliers set at the 95<sup>th</sup> percentile (i.e., Table 3-2 of the TSD).

The City also points out that the use of 95<sup>th</sup> percentile for the ammonia background concentration is conservative and inconsistent with EPA policy as stated in the GLI.

*Response.* EPA does not agree with the City's rationale for use of reasonable multiplying factors based on 95<sup>th</sup> percentile rather than those used in the fact sheet which are based on 99<sup>th</sup> percentile (Table 3-1, TSD). Region 10 uses worst-case conditions when determining reasonable potential to exceed criteria, and when developing permit limits and conditions, in order to ensure protection of State water quality standards. The GLI, which is the basis for the City's position to use the 95<sup>th</sup>

percentile, was adopted for those states bordering on the Great Lakes. States outside those boundaries are not required to adopt the GLI. In addition, the GLI set the 95<sup>th</sup> percentile as the minimum upper bound, not as a default value. Where EPA Region 10 is the permitting authority, the Region uses a 99<sup>th</sup> percentile probability basis to determine the reasonable potential multiplier. Idaho DEQ has not questioned Region 10's use of the 99<sup>th</sup> percentile in other EPA-issued permits.

In response to the comment regarding ammonia background concentration, Region 10 uses the 95<sup>th</sup> percentile of background concentrations as a conservative estimate of background/upstream values. The TSD guidance recommends that permitting authorities use worst-case receiving water conditions to ensure protection of designated beneficial uses. As discussed in response to a comment on background pH and temperature above, Region 10 believes that using the 95<sup>th</sup> percentile for background concentration is protective of the environment since the 95<sup>th</sup> percentile represents worst-case receiving water conditions. Region 10 has historically used the 95<sup>th</sup> percentile when setting background concentration for permit calculations in EPA-issued permits.

#### *Updates to the Ammonia Reasonable Potential Analysis*

As outlined above, EPA agrees with the City on a number of comments, some of which have an influence on the reasonable potential determination of the fact sheet. The factors that have been revised which influence the determination includes: Revised pH and temperature data bases and resultant water-quality criteria, the use of the expanded 1993-2000 upstream and effluent ammonia data base, and exclusion of the four ammonia data points listed as outliers. EPA has updated the reasonable potential to exceed analysis for ammonia. The results are summarized in the following table:

Ammonia Reasonable Potential Statistics With 1993-2000 Data, Excluding Outliers		
Statistic	Summer	Winter
Most Stringent Criteria (mg/L)	0.40	0.55
Maximum Effluent Value (mg/L)	1.67	5.85
CV, Number of Samples	0.77, 32	0.83, 59
Reasonable Potential Multiplier	2.30	1.90
Effluent x Multiplier (mg/L)	3.84	11.12
95 <sup>th</sup> Percentile Upstream Ammonia Value (mg/L)	0.34	0.34
Maximum Instream Concentration (mg/L)	0.59	1.12
Reasonable Potential to Exceed Criteria?	Yes	Yes

The maximum in-stream concentration of the table above was calculated using the formula from page C-9 of the fact sheet. With the use of the expanded data set, the exclusion of the four data points as outliers, and criteria based on the updated pH and temperature data, a reasonable potential to exceed criteria still exists since the maximum instream concentration exceeds the criteria. This finding is the same as that of the fact sheet. Effluent limitations for ammonia, therefore, are required in the final permit.

#### *Revised Ammonia Limitations*

The ammonia limitations of the final permit need to be recalculated due to the changes to the data sets as discussed above. Specifically, three variables have changed which influence the limitation calculations: ammonia water-quality criteria (due to revised pH and temperature data bases), the background ammonia values, and effluent CV values (due to expanded data sets and exclusion of outliers). All updated variables are listed in the table above. The equations from pages C-17 through C-20 of the fact sheet were re-evaluated with the revised variables in order to determine the following revised ammonia limitations which have been included in the final permit:

Revised Ammonia Effluent Limitations		
	Average Monthly Limit	Maximum Daily Limit

Total Ammonia October 1 - May 31	1.8 mg/L (260 lbs/day)	5.7 mg/L (810 lbs/day)
Total Ammonia June 1 - September 30	1.1 mg/L (160 lbs/day)	3.3 mg/L (470 lbs/day)

*Comment.* (Sampling locations) The City commented that analysis of past in-stream ammonia sampling revealed a pattern of events where upstream ammonia concentrations are greater than the corresponding downstream concentrations during roughly one-half of sampling events. The City proposed a number of possible explanations for this occurrence. The City recently initiated a study to gather additional in-stream ammonia data. The City commented that more time is needed to characterize in-stream ammonia.

The City recommends continued effluent ammonia monitoring of once per month and expansion of the ambient monitoring program to include different sampling locations. The City recommends continued monitoring of ammonia without limitations “until such time that the sources and/or validity of the high background concentrations are determined” and the 1999 EPA Criteria Update are adopted by the State of Idaho.

*Response.* During development of the previous permit (1993), EPA proposed ammonia limitations. Ammonia limitations, however, were not included in the final permit. EPA withdrew ammonia limitations at that time in response to comments from the City and in recognition that the ambient data was insufficient to develop limits. The ambient and effluent monitoring program that has been conducted since 1993 was developed specifically to gather data sufficient to evaluate the need for ammonia limitations. Data (flow, pH, temperature, ammonia) has been gathered monthly upstream, downstream, and in the effluent for the past eight years. The existing data base is sufficient (92 sampling dates) to evaluate effluent ammonia and its contribution to the receiving water. The reasonable potential analysis, outlined in the previous comment, follows the procedures of the EPA Technical Support Document for Water Quality-based Toxics Control, and demonstrates that a reasonable potential to exceed Idaho water quality standards exists and that ammonia limitations are required. With respect to monitoring, daily monitoring of the effluent will be required in the final permit in order to show compliance with the daily and monthly limitations. Daily monitoring is reasonable for a facility of this size (17 mgd design value). Ambient monitoring will be required as recommended by the City in order to continue to gather information regarding in-stream ammonia values in the receiving water. Ambient monitoring frequency is discussed further in the comments below.

*Comment.* (Compliance costs) The City commented that preliminary study found that an expansion of the facility in order to comply with the proposed ammonia limits will cost approximately \$15-\$20 million.

*Response.* The final ammonia limits are significantly less stringent than those of the proposed draft permit, on which the City’s projected costs estimates are based. Review of effluent data from the last eight years shows that the samples collected complied with the proposed maximum

daily limitations on all but two out of 92 sampling events. Multiple samples have not been collected in any one month so current compliance with the new average monthly limit is difficult to determine. Samples collected once per month over the past eight years have been summarized by month and compared to the monthly limitation in order to gain some insight into compliance with the average monthly limits. Results are presented in the following table:

Average Effluent Ammonia Concentration by Month Compared to the Average Monthly Limitation (AML)												
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
samples	7	6	7	8	8	8	8	8	8	8	8	8
avg, mg/L	2.2	2.5	1.9	1.7	1.0	0.7	0.5	0.5	0.6	1.1	1.6	1.4
AML, mg/L	1.8	1.8	1.8	1.8	1.8	1.1	1.1	1.1	1.1	1.8	1.8	1.8

This limited data set gives an indication of how the existing discharge compares to the monthly limitation and suggest that additional reductions may be required in order to meet the permit limits. EPA believes the costs of meeting the permit limits should be significantly less than would have been the case under the draft permit. Furthermore, EPA has discussed inclusion of a compliance schedule in the final permit with Idaho DEQ who has authority to authorize additional time to comply with new limitations. In a letter from Gregory Eager, DEQ, to Robert Robichaud, EPA Region 10, dated April 6, 2001, the State certified the permit pursuant to the provisions of Section 401 of the Clean Water Act. Included in the certification is a schedule of compliance for the City to meet the new ammonia limitations in five years. A five year compliance schedule, along with an annual report of progress requirement, has been included in the final permit. A compliance date of April 1, 2006, was selected so that compliance with the monthly and daily limitations can be demonstrated prior to the expiration date of the permit.

### **Lead and Copper Limits**

The following summarizes the City’s comments regarding the lead and copper limits: “The proposed lead and copper limitations are based on results from a laboratory the City no longer uses (and only used twice) due to invalid results. Reasonable potential calculations need to be modified in several ways, including revised databases and resulting CV’s without outliers, and background river hardness data. Available river hardness data from the City indicates that a higher hardness should be assumed for the calculation of metals limits.” More specific comments and responses are provided below.

*Comment.* (Lead and copper testing) The City provided background information regarding the labs that have been used over the past years to test metals in the effluent. In June of 1997, the City used Alpine labs for the first time and the results were higher than historic values. In December

1997, the City tested its effluent at Alpine labs and two other labs in order to evaluate Alpine lab results. Values from Alpine were again high relative to historic values while the other labs detected no copper or lead in the samples. The City discontinued testing at Alpine labs. Since 1998 the City has used Energy Labs and results are generally comparable to historic values. The City comments that the Alpine Lab data should not have been included in the data base used by EPA to determine whether effluent limits are necessary.

*Response.* EPA was not aware of the split sample analysis conducted in 1997 while drafting the permit. EPA does agree with the City that the Alpine Lab results are not consistent with the results from the other two labs analyzing the effluent in 1997 nor with effluent results conducted prior to or after 1997. EPA has reviewed quality assurance reports from the three labs conducting the tests in 1997, however, and found all the labs met acceptable criteria. Due to the uncertainties surrounding the 1997 data, and the fact that considerable analysis has been conducted since the Alpine results, EPA believes it is reasonable to conduct the copper and lead reasonable potential analysis with data collected from 1998 to present. Twenty-five samples have been analyzed during that time which provides a relatively large data set for analysis, sufficient to characterize the effluent. The data is more recent than that used in the fact sheet and therefore more representative of current conditions. Also, since December 1999, the City’s contracting lab has been using methods that reach lower detection limits. Sixteen of the twenty-five samples were analyzed with the method that reaches the lower detection limit. The following summarizes the data and the results of an updated reasonable potential analysis. Except for the updated data set, all other assumptions are consistent with those used in the fact sheet.

Reasonable Potential Calculations for Copper and Lead with 1998-2000 Data Sets		
	Copper	Lead
Number of Samples	25	25
CV	0.6	—
Maximum Effluent, µg/L	20	below detection
Reasonable Potential Multiplier	2.3	—
Effluent x Multiplier	46	0
Maximum Instream Concentration (µg/L)	3.3 (see pg C-9 of Fact Sheet for equation)	0
Most Stringent Criteria, µg/L	9.4	1.97
Reasonable Potential to Exceed?	No	No

Conducting the analysis with 1998 through 2000 data indicates that there is no reasonable potential to exceed Idaho Water Quality Criteria, therefore, the copper and lead limitations of the draft permit have not been included in the final permit.

*Comment.* (Hardness) The City request EPA’s data set that produced a 5<sup>th</sup> percentile river



hardness value of 80 mg/L. The City conducted river sampling and reviewed data bases that suggest the 5<sup>th</sup> percentile river hardness between 125 and 130 mg/L.

*Response.* EPA appreciates the City conducting hardness analysis of river samples and if a limitation was required in the permit, EPA would use the most recent hardness data collected by the City to determine metal criteria. The higher values suggested by the City would result in higher, or less stringent criteria and therefore would not change the updated reasonable potential evaluations shown above. EPA's hardness value of 80 mg/L was from a STORET data base in the Snake River from the 1970's. The ambient monitoring program required by the final permit will require hardness analysis of river samples in order to better characterize this important parameter in the vicinity of the wastewater facility.

*Comment.* (Lead and copper summary) In summary, the City recommends removal of the lead and copper limitations since no reasonable potential to exceed is demonstrated. The City proposes to continue metals sampling at twice per year with no sampling of metals or hardness in the ambient sampling program.

*Response.* EPA agrees with the recommendation however, ambient sampling of hardness would improve the evaluation of the impact the facility may have in the receiving water and will be included in the ambient monitoring program.

### **Fecal Coliform Limits**

*Comment.* The City recommends that the fecal coliform limitation be removed since the E. Coli limitation effectively replaces it and there is no longer a basis in the Idaho water quality standards for fecal coliform.

*Response.* The E. Coli standards have replaced the average monthly and maximum daily fecal limits of the previous permit. However, the weekly fecal coliform bacteria limitation is a technology-based limit for wastewater treatment facilities. The requirement is directly from the *Idaho Water Quality Standards and Wastewater Treatment Requirements* (IDAPA16.01.02.420.05.a) and requires that weekly average fecal coliform concentrations in treated effluent not exceed 200 colonies/100ml. The weekly fecal limit, therefore, is retained in the final permit.

### **Ambient Receiving Water Monitoring**

*Comment.* (Clarification for sampling during winter season) "The City has concern for personnel safety while sampling at mid-river locations during the 5 to 6 months that ice covers the river. In addition, winter conditions promote ice covers on the side of the river. Guidance and clarification is requested in reference to winter ambient sampling." The City recommends: "The monitoring location upstream and downstream of the Idaho Falls outfall will be reviewed and new locations may be selected with consideration for ice-covered conditions."

*Response.* The permit does not specify upstream or downstream monitoring locations but requires that the City select locations with the consultation of the Idaho DEQ office in Idaho Falls. Therefore, the permit already allows for the city to review and select monitoring locations with consideration for ice-covered conditions.

EPA shares the City's concern for personnel safety while sampling mid-river when ice covers the river. EPA will make three changes to the final permit to provide flexibility to deal with ice conditions. First, the draft permit will be modified to require sampling within the calendar quarter, instead of in specific months, in order to allow the City more flexibility in dealing with sampling times during winter periods and thus potentially avoid ice cover conditions or to gather samples when conditions are most favorable. Secondly, EPA will insert the following language into the permit: "Upstream and downstream composite sampling shall consist of three grab samples, one from each side of the river, and one from the middle. When weather conditions prevent collecting samples from the middle of the river, then the permittee may composite samples from only each bank." The composite sampling requirement was included in the existing permit while the provision for weather conditions is a new provision. Finally, a clause has been added to the final permit, which was also in the existing permit but not in the draft, which requires the permittee to notify EPA whenever extreme weather conditions prevent monitoring of the receiving water. The City should not endanger personnel when extreme weather prevents collection of a sample but instead report the conditions to EPA under the terms of the permit.

*Comment.* (Metals monitoring) The City commented under the copper and lead comments that ambient metals monitoring is not needed since effluent limitations are not necessary.

*Response.* EPA agrees that since the updated analysis found no reasonable potential to exceed water quality criteria for lead and copper, ambient metals monitoring is not necessary and is not included in the final permit. Ambient samples will be analyzed for hardness.

*Comment.* Mr. Bill Davidson and Mr. Harrison Hilbert each sent comment letters regarding the monitoring program. Both letters are similar. The letters provide background information, general identification of inadequacies of the monitoring program, and specific recommendations for changes. Below is a brief summary of the main comments followed by specific listing of each recommendation and EPA's response.

Both letters reiterate that fact that the section of the Snake River which receives the discharge is not listed as water quality limited and that no TMDL management plans are under development for this particular segment. The letters, however, do raise the fact that the Snake River is water-quality limited for dissolved oxygen (DO), nutrients, sediment, and flow alteration, beginning at the Bonneville County border which the commenter states is 10 miles downstream of the facility. The commenters state that the impact of the permittee's discharge on the Snake River is relevant to TMDL management plans downstream of the facility.

The commenters state that the proposed reduction in nutrient monitoring from monthly to quarterly is not adequate to characterize impacts of the permittees discharge on the Snake River, and that due to nutrient concerns in the Snake River, more frequent monitoring is necessary. The

commenters express their concern that effluent temperature should be monitored to evaluate possible impairment for cold water biota, water temperature criteria, and un-ionized ammonia. The commenters express concern that grab samples for ambient monitoring of temperature, DO, and pH is not suitable to characterize the receiving water since these variables can vary over the course of a 24-hour day and 24-hour monitoring can provide essential information on the general biological productivity of the ecosystem. The following discussion identifies specific recommendations from the letters and EPA's response:

*Comment.* (Effluent monitoring frequency) Change the frequency of monitoring effluent for nitrate, nitrite, total Kjeldahl nitrogen, total phosphorus and dissolved oxygen from 4/year to 1/month (Section 1.A).

*Response.* EPA agrees with the comment to continue effluent monitoring for nutrients on a monthly basis. Due to the downstream nutrient concerns, and the general concern for nutrients throughout the Snake River basin, it is reasonable to continue to monitor the effluent for nutrients. Other factors considered by EPA in deciding to require monthly effluent monitoring of nutrients include: Monthly nutrient monitoring frequency is required for other similar municipal facilities in the state, the existing permit currently requires monthly monitoring, the size of this facility (17 mgd design value) makes it one of the largest municipal facilities in the state and likely the largest point source in this segment of the Snake River.

*Comment.* (Effluent temperature monitoring) Add temperature to the list of effluent characteristics to be monitored one day/week with the daily minimum, maximum, and average reported based on hourly (or more frequent) recording.

*Response.* It is reasonable to require a municipal facility that discharges to receiving waters protected for cold water biota to monitor the temperature of the discharge. After review of other municipal facility NPDES permits in Idaho and consideration of the volume of the discharge, temperature monitoring will be required daily with grab sampling.

*Comment.* (Ambient monitoring frequency) Change the frequency of monitoring ambient water for nutrients from 4/year to 1/month.

*Response.* As discussed in an earlier comment, EPA agrees that effluent monitoring on a monthly basis is reasonable and necessary to determine nutrient loadings from the facility, however, EPA believes ambient monitoring frequency can be reduced at this time to quarterly. Quarterly monitoring will be sufficient to track the facility's impact on the receiving water together with the results of monthly ambient sampling over the past eight years which were discussed in the fact sheet.

*Comment.* (Ambient frequency) Change the frequency of monitoring ambient water temperature, pH and DO from 4/year to hourly instantaneous measurements over five days for each month.

*Response.* Data gathered monthly for the past eight years does not suggest that the facility is contributing to temperature, pH, or DO problems in this part of the river and EPA therefore will

reduce ambient monitoring to quarterly and not increase the frequency as suggested by the comment. Quarterly monitoring will allow continued investigation of the facilities impact on the Snake River but at a reduced frequency.

*Comment.* (Composite definition) Include a definition of “composite” sample type, such as “a spatially-integrated sample that accounts for any spatial variation at a station.”

*Response.* EPA agrees with this comment and has added the following requirement to the final permit: “Upstream and downstream composite sampling shall consist of three grab samples, one from each side of the river, and one from the middle. When weather conditions prevent collecting samples from the middle of the river, then the permittee may composite samples from only each bank.” The composite sample requirement was in the existing permit and mistakenly left out of the draft permit. The provision for adverse weather conditions was added in response to a comment raised by the City and discussed above.

*Comment.* (Instantaneous temperature sampling) “Change the “composite” sample type for temperature to instantaneous (Section 1.B.3)”

*Response.* Composite grab samples upstream and downstream of the facility will provide adequate information (along with the past eight years of monthly ambient data) to determine the impact of the discharge on temperature within the river. More intensive temporal and spatial analysis of temperature within the Snake River can be coordinated by Idaho DEQ, or other interested parties, should it be determined necessary for basin planning purposes.

*Other Revisions.* EPA made two minor additions to the ambient monitoring part of the final permit which were in the existing permit but mistakenly not in the draft permit. A footnote was added to the final permit which clarifies that flow monitoring of the river is required at the upstream station only. Also, a sentence was added which states that, to the extent practicable, ambient sampling should be conducted on the same day as effluent nutrient sampling.

### **Whole Effluent Toxicity (WET) Testing**

*Comment.* The City comments that if the outside lab does not receive toxicity samples in the first week of the month, it is difficult to get the results incorporated into DMR report for the month the samples are obtained. The City request that the results be allowed to be reported in the following months report if the results are not available on time.

*Response.* Results need to be reported with the DMR for the month in which the tests are conducted. If test results show that the discharge fails toxicity criteria, EPA needs to be notified in a timely manner. All Region 10 permits with toxicity testing contain this reporting requirement. Some additional time has been indirectly provided in this final permit over the previous permit. Per a request by the permittee, EPA amended Section II.C. which requires DMR’s be submitted by the 15<sup>th</sup> day of the following month versus the 10<sup>th</sup> day following the month as previously required.

### **Pretreatment**

*Comment.* The City provided the following comment: “The City requested a change from “non-domestic user” to “significant industrial user (SIU)” in the February 18, 1993 comment letter. In the proposed permit, the terms non-domestic user and significant industrial user are both utilized, and seem to be used interchangeably in some sections. This language is potentially burdensome.” The City proceeded to provide examples which are discussed in the response below.

*Response.* EPA has reviewed the use of the terms “significant industrial user” and “non-domestic user” in Part I.G. of the permit. The use of these terms is not interchangeable and has been used intentionally by EPA.

The City’s comment, however, indicates some misunderstanding of the requirements of this part of the permit. For example, the City comments that the “expense of monitoring all non-domestic customers in the same manner as significant industrial users would be cost-prohibitive.” Part I.G.1.g. of the permit requires monitoring of non-domestic users to determine compliance with applicable standards and requirements. The part requires a complete inspection of all SIUs be conducted at least annually. The City has an additional obligation under 40 CFR 403.8(f)(2)(v), to “randomly sample and analyze the effluent from industrial users and conduct surveillance activities in order to identify... noncompliance with pretreatment standards.” However, there is no requirement to conduct the non-SIUs under a specific time frame as there is for the SIUs under the permit. The frequency for non-domestic users, other than SIUs, is left to the City and is not necessarily the same for both types of users.

Similarly, the City comments that “Developing, implementing, and administering an accidental spill prevention program for each and every non-domestic user would also be costly to the City.” The permit under Part I.G.2. requires the city to implement an accidental spill prevention program to reduce and prevent spills from non-domestic users. The City’s program should address the City’s response to spills from all users and its procedures and programs to avoid spills. The City has flexibility in designing the program. For example, one part of the City’s program may be to require an accidental spill prevention plan from some users but not from all non-domestic users. The City’s program, however, must address spills from all non-domestic users, but not necessarily require spill plans from all users.

### **Minor Permit and Fact Sheet Edits**

*Comment.* The City commented that the O&M Plan requirements of the permit included a reference to Glacier Creek and ADEC and need to be replaced with Snake River and IDEQ.

*Response.* The changes have been made to the final permit as suggested.

*Comment.* The City commented that the fact sheet identified the discharge from outfall 001 at river mile 796 when in fact the actual discharge is at river mile 794.

*Response.* EPA recognizes this comment and will correct the Idaho Falls file.

*Permit edit:* The chlorine test procedures previously specified in footnote 3 of Table 1 were

deleted in order to simplify the permit. Section II.B. addresses test procedures for the permit and includes the procedures for total residual chlorine analysis.