UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 10

Response to Comments on the Draft NPDES Permit for the City of Meridian

NPDES Permit Number ID0020192

Office of Water and Watersheds

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Overview

The United States Environmental Protection Agency (EPA) Region 10 issued a draft National Pollutant Discharge Elimination System (NPDES) permit for the City of Meridian (Meridian) on July 23, 2015. The public comment period was scheduled to close on September 21, 2015, but was extended to October 21, 2015. The EPA received comments from the City of Meridian (Meridian), City of Boise (Boise), the Idaho Conservation League (ICL), Idaho Rivers United (IRU), and T. Erik Oaas.

Comments Received During the Public Comment Period

Water Quality-based Effluent Limits

Comment #1 (ICL)

The seasonal variations in effluent limits for mercury, copper and zinc appear to be based on the seasonal variations in low flow scenarios in Fivemile Creek and the Boise River. However, since reducing the amount of these pollutants in the WWTP discharge is not a function of altered WWTP operations or upgrades – but rather influent reductions – there should be no seasonal variation in facility discharges of this pollutant. And, there should be no seasonal various in metals inflow.

Implementing pollutant minimization plans for these pollutants should result in reductions that are not related to plant operations/upgrades, which outfall the discharge is routed to, or the receiving water's flow volume.

Response #1

As stated by ICL in its comments, seasonal differences in water quality-based effluent limits in the draft permit for mercury, copper and zinc are due, in part, to the fact that the EPA has calculated seasonal values for the critical low flows in the receiving waters.

In addition, water quality criteria for copper and zinc are dependent upon hardness, and seasonal changes in hardness were also considered in the calculation of effluent limits for these parameters. As discussed in Section 4.3.3.1 of the *Idaho Mixing Zone Implementation Guidance* (IDEQ 2016), establishing effluent limits for metals based on year-round critical conditions for both hardness and stream flow, without regard to seasonal variation, could result in effluent limits that are more stringent than necessary, because minimum hardness and minimum stream flow may not occur simultaneously. As stated on Page B-2 of the fact sheet, there is a statistically significant difference in the hardness in Fivemile Creek during the high flow season of May – September relative to the low flow season of October – April. The water is harder during the low flow season, which offsets the effect of the reduced dilution upon the metals effluent limits. Thus, it is reasonable for the EPA to consider seasonal variation in both receiving water flow and hardness when calculating such limits.

The EPA does not have the information necessary to determine if there are seasonal variations in the influent concentrations or loads of copper, mercury, or zinc, however, such variations are possible. For example, influent loading of these parameters could vary because of inflow and infiltration during wet weather, or because of seasonal changes in loading from industrial users of the treatment plant.

The means of achieving compliance with a water quality-based effluent limit (i.e., influent reductions, improved treatment, or some combination of these) is irrelevant to the calculation of such limits. Water

quality-based effluent limits are calculated based on the water quality criteria (which vary seasonally for copper and zinc in response to seasonal changes in hardness) and the dilution afforded by the mixing zones authorized by the State of Idaho (which varies seasonally in response to changes in stream flow). They are not based on the feasibility of treatment or other means of achieving compliance.

Effluent limits for each season were calculated based on seasonal critical conditions for discharge and receiving water flow, and, where applicable, hardness. The effluent limits will therefore ensure compliance with water quality standards for these pollutants at all times.

Comment #2 (ICL and IRU)

ICL has expressed support for the Lower Boise River TMDL: 2015 Total Phosphorus Addendum's conclusion to develop waste load allocations consistent with effluent concentrations of 0.1 mg/l in the May 1 – September 30 period and 0.35 mg/L in the October 1 – April 30 time period.

ICL stated that it is their understanding that the maximum amount of TP that can be discharged at the Meridian WWTP would be the appropriate seasonal concentration target (i.e. either 0.1 mg/l in the May 1 – September 30 period and 0.35 mg/day in the October 1 – April 30 time period) applied to the facility's design flow (i.e. 10.2 mgd). This would result in a *maximum* discharge of 8.5 lb/day TP during May 1 – September 30 and 29.8 lb/day during the October 1 – April 30 period expressed as a monthly average. But this maximum level of loading would only be achieved (and allowed) when the facility is discharging at its design flow of 10.2 mgd.

ICL stated that, since the TMDL utilized concentrations when developing the waste load allocations, during periods of lesser discharge flow from the facility (i.e. less than 10.2 mgd) total mass loading should be constrained by the need to stay within the concentrations utilized by the TMDL to develop the WLAs.

ICL stated that Meridian's TP effluent mass loading limit needs to be based on effluent concentration and discharge volume. It is not appropriate to only articulate this limit in terms of lb/day loading. Rather, Meridian's limit needs to be expressed such that their discharge does not exceed a concentration of either 0.1 mg/l in the May 1 – September 30 period or 0.35 mg/day in the October 1 – April 30 time period and also does not exceed a total load discharge of 8.5 lb/day TP during May 1 – September 30 and 29.8 lb/day during the October 1 – April 30 period (expressed as a monthly average and corresponding weekly average). To be consistent with the TMDL, the concentration limits cannot be exceeded.

ICL stated that mass loading has to be kept in check by requirements to not exceed the concentration of either 0.1 mg/l in the May 1 – September 30 period or 0.35 mg/day in the October 1 – April 30 time period.

ICL stated that, when considering this matter, it is important to note that during periods of reduced effluent discharge, the reduced effluent discharge volume results in the reduced flows in the Boise River below the point of discharge. This has implications for the Boise River being able to meet its concentration targets per the TMDL. The only way to address this situation is to integrate concentration limits into the final TP effluent limits for this facility.

ICL stated that the TP TMDL notes that the current discharge of the Meridian WWTP is 5.87 mgd. This is 4.33 mgd less than the design flow of 10.2 mgd. 4.33 mgd can also be represented as 8.05 cfs. When the

Meridian WWTP discharges at 5.87 mgd, the ultimate receiving water (i.e. the Boise River, irrespective of whether the WWTP utilized Outfall 001 or Outfall 002), receives 8.05 cfs. The absence of this 8.05 cfs results a diminished capacity for the Boise River to assimilate and/or dilute phosphorus. In order to keep this reduced dilution capacity from impairing TMDL compliance, the final effluent limits for the WWTP must contain a concentration based limit.

See the NPDES permit for the City of Boise's West WWTP ID0023981 for an example of permit limits that are expressed as both a concentration and a load.

IRU stated that the Snake River and Boise TMDLs were developed based on concentrations of TP (0.01 mg/L and 0.35 mg/L seasonally) not on average monthly and average weekly limits of pounds per day. These plants are not operating at their design capacities and shouldn't be allowed to discharge the load for the design capacity. EPA should amend the permit to express total phosphorus limits in concentrations and load. To be consistent with the TMDL, the concentration limits cannot be exceeded. This is the case even if the total loading is less than the wasteload allocations. Also, EPA requires that effluent be monitored and reported in concentrations. Citizens must be able to check compliance with the permit monthly reports made to EPA.

Response #2

Federal regulations state that NPDES permits shall include effluent limitations that "are consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA pursuant to 40 CFR 130.7." The reference to 40 CFR 130.7 refers to the EPA's approval of TMDLs developed by States.

Federal regulations also state that, in general, "all pollutants limited in permits shall have limitations, standards or prohibitions expressed in terms of mass," although "pollutants limited in terms of mass additionally *may* be limited in terms of other units of measurement…" (40 CFR 122.45(f), emphasis added). Thus, in general, mass limits are mandatory, and limits in terms of other units of measurement are discretionary.

In the case of total phosphorus (TP) for the subject permit, effluent limits in terms of mass are sufficient to ensure consistency with the wasteload allocations (WLAs) for these facilities in the EPA-approved *Lower Boise River TMDL: 2015 Total Phosphorus Addendum* (LBR TMDL TP Addendum) (IDEQ 2015).

The LBR TMDL TP Addendum does not establish concentration-based WLAs. The TP WLAs for the City of Meridian are as follows:

- May 1 – September 30 (Table 27, Page 93): 8.5 lb/day
- October 1 – April 30 (Table 34, Page 109): 29.8 lb/day

The caption for Table 27 (which lists the May – September WLAs) reads, "Point source wasteload allocations for the lower Boise River, May 1–September 30. Wasteload allocations at TP concentrations of 0.1 mg/L are presented per day as monthly averages. DEQ intends that wasteload allocations are to be expressed as average monthly limits." The column heading for the October 1 – April 30 WLAs in Table 34 reads "Oct–Apr Average TP Allocation (lb/day as a monthly average) at TP Conc. = 0.35 mg/L."

Although the caption in Table 27 and the column heading in Table 34 state concentration values, the allocations themselves are listed in the tables exclusively as mass loading rates, in units of pounds per

day. This is clear from the parenthetical in the column headings for the WLAs in Tables 27 and 34, which reads, "lb/day as a monthly average."

The EPA's interpretation of the LBR TMDL TP Addendum is that the concentrations are provided to explain how the mass wasteload allocations were calculated, i.e., the allocations were calculated "at" certain concentrations, and at the design flows of the point sources. Multiplying the concentrations by the design flows and the density of water yields the mass wasteload allocations in units of pounds per day.

These concentrations were also used, in combination with the design flows, to represent the point source discharges in the AQUATOX model (see the LBR TMDL TP Addendum at Section 5.4.3 and Appendix D). Because the design flows were used in the modeling, the entire loading allocated to the point sources by the mass WLAs was simulated in the modeling supporting the TMDL, and the establishment of a mass limit equal to the WLA is therefore consistent with the assumptions and requirements of these WLAs.

ICL stated that:

> *"(T)he current discharge of the Meridian WWTP is 5.87 mgd. This is 4.33 mgd less than the design flow of 10.2 mgd. 4.33 mgd can also be represented as 8.05 cfs. When the Meridian WWTP discharges at 5.87 mgd, the ultimate receiving water (i.e. the Boise River, irrespective of whether the WWTP utilized Outfall 001 or Outfall 002), receives 8.05 cfs. The absence of this 8.05 cfs results a diminished capacity for the Boise River to assimilate and/or dilute phosphorus."*

First, the unit conversion calculations in this comment are incorrect. 4.33 mgd is equivalent to 6.70 CFS, not 8.05 CFS. In any event, while the effluent flow rate of the City of Meridian's publicly owned treatment works (POTW) influences the flow (and therefore the loading capacity) in Fivemile Creek and the Boise River, the TMDL used appropriate conservative assumptions to determine the assimilative capacity, including using the 90th percentile low flow in the Boise River. Using a low flow rate for the river takes into account the variation in all of the factors that influence river flows, including variations in effluent flows from the City of Meridian's POTW. Thus, the Boise River's loading capacity for total phosphorus, as calculated and allocated in the TMDL, is not dependent upon a certain level of discharge flow from the City of Meridian's POTW.

The permit for the City of Boise's NPDES West Boise Wastewater Treatment Facility (#ID0023981) referenced by ICL was issued prior to the State of Idaho's development and the EPA's approval of the LBR TMDL TP Addendum. Thus, the TP effluent limits in that permit were not based on the LBR TMDL TP Addendum. Rather, the TP effluent limits in the City of Boise permit were based directly upon the State of Idaho's narrative criterion for nutrients (IDAPA 58.01.02.200.06), consistent with 40 CFR 122.44(d)(1)(vi) (see the Fact Sheet for the West Boise Wastewater Treatment Facility at Pages C-21 – C-26). As such, it is not appropriate to compare the TP effluent limits in the West Boise Wastewater Treatment Facility permit to the TP limits in the Meridian permit.

The fact that the TP effluent limits are expressed in terms of mass does not prevent citizens from checking compliance with the permit monthly per reports made to EPA. The mass TP limits are enforceable, and the actual mass of TP discharged must be reported each month. Effluent data

reported to the EPA is publicly available through the Discharge Monitoring Report (DMR) Pollutant Loading Tool[1], Envirofacts[2], and Enforcement and Compliance History Online (ECHO)[3].

Comment #3 (Meridian)

DEQ removed the weekly limit language from the lower Boise River phosphorus TMDL. DEQ does not allocate weekly TP limits in the TMDL. DEQ removed language from tables in the TMDL referring to weekly limits. Following the TMDL, remove the average weekly limit for phosphorus, for both May through September and October through April in Table 1.

Response #3

Federal regulations require that, for POTWs that discharge continuously, "all permit effluent limitations, standards, and prohibitions, including those necessary to achieve water quality standards, shall unless impracticable be stated as…average weekly and average monthly discharge limitations" (40 CFR 122.45(d)).

Thus, in order to remove the average weekly effluent limits for total phosphorus from the permit, the EPA would need to make a finding that it is "impracticable" to state the effluent limits as average weekly and average monthly discharge limitations.

The LBR TMDL TP Addendum establishes TP WLAs that are monthly averages. The draft permit also proposes average weekly limits that are derived from the average monthly WLAs. As explained in Appendix F to the fact sheet, because attainment of the proposed average monthly effluent limits for TP will require upgrades to the POTW, the historic effluent variability for TP may not be representative of future effluent variability. Instead of using the historic effluent variability for TP to calculate average weekly limits, the EPA made assumptions regarding the future, post-upgrade effluent TP variability (as quantified by the coefficient of variation or CV).

However, the EPA has determined that it is impracticable to state the TP effluent limits as average weekly limitations at this time, since, if the actual effluent variability is significantly different than the EPA's assumptions, then the average weekly limits will not be appropriate.

Because the future, post-upgrade effluent variability is unknown, it is impracticable for the EPA to properly calculate average weekly effluent limits for TP at this time. Thus, the EPA has deleted the proposed average weekly TP limits from the subject permit. Since the WLAs are expressed as monthly averages, average monthly limits are adequate to ensure that the effluent limits are consistent with the assumptions and requirements of the TMDL's WLAs.

Comment #4 (Meridian)

The current effluent mercury data set is inadequate to conduct the reasonable potential analysis presented in the Fact Sheet for a number of reasons. These reasons include the limited number of data points and the lack of a Quality Assurance Project Plan (QAPP) with appropriate protocols for gathering effluent metals samples at low concentration levels.

[1] http://cfpub.epa.gov/dmr/
[2] http://www.epa.gov/enviro/pcs-icis-overview
[3] https://echo.epa.gov/

The historical effluent mercury data set includes only 12 samples with reportable numerical results gathered between September 2008 and July 2010. The reported data varied widely in concentration ranging from 0.0014 to 0.0098 µg/L. A mercury monitoring QAPP was not in place because mercury monitoring was not required at that time by the discharge permit. Clean metals sampling protocols were not followed, sampling equipment and containers were plastic and not acid washed glass, etc. Consequently, it cannot be determined whether the reported data and variability of the reported values are an accurate representation of effluent mercury concentrations, or whether the reported data reflect sample collection contamination, residual presence of mercury in sampling equipment and sample containers, sample transport contamination, etc.

Response #4

The EPA agrees that the existing mercury data may be biased toward higher concentrations due to potential sample contamination from the lack of clean sampling protocols and the use of plastic sampling equipment and containers.

To address this bias, the EPA repeated the reasonable potential analysis for mercury using the 95th percentile probability basis and the 95% confidence level, instead of the 99th percentile probability basis and the 99% confidence level, as used in the draft permit. In Section 3.3.2, the *Technical Support Document for Water Quality-based Toxics Control* (TSD) (EPA 1991) states that, "although (the 99th percentile) does represent a measure of the upper bound of an effluent distribution, other percentiles could be selected by a regulatory agency." The EPA believes it is appropriate to use a lower (i.e., less conservative) effluent percentile value in the reasonable potential analysis for mercury, because there is conservatism inherent in using the available effluent data, which may be biased toward higher concentrations, in the reasonable potential analysis. The TSD provides a table of reasonable potential multipliers for both the 95th and 99th percentiles (Tables 3-1 and 3-2). The EPA believes, in this case, it is appropriate to use the 95th percentile effluent concentration as the maximum projected effluent concentration for mercury, instead of the 99th percentile.

Using this less conservative assumption in the reasonable potential analysis results in a finding that the City of Meridian's discharge does not have the reasonable potential to cause or contribute to excursions above water column mercury criteria, except during the non-irrigation season (October – April) in Fivemile Creek (Outfall 001).

Therefore, the final permit includes numeric water quality-based effluent limits for mercury only for Outfall 001, and only from October – April.

Comment #5 (Meridian)

It should be recognized and acknowledged in the permit and fact sheet that the final effluent limits for ammonia for both Fivemile Creek (October – April) and the Boise River (Nov -Jun) discharges are at, or below, the limits of treatment technology and the ability to comply with those limits will be challenging for the City. It is well understood that during the fall, winter, and spring periods that wastewater temperatures will be lower and treatment process kinetics slower for the nitrification reactions necessary to meet effluent ammonia limits.

The final effluent limits specified for ammonia for Fivemile Creek (0.307 mg/L) and the Boise River (0.255 mg/L) are very low concentrations and may not be attainable on a consistent basis. Since a number of factors influence the calculation of the proposed effluent Ammonia limits, including the

selection of the acute and chronic criteria for ammonia, which are temperature and pH dependent, receiving water dilution, effluent flow, etc. reconsideration of these assumptions is warranted prior to the final effluent limits taking effect. Further, revisions in the 2013 Revised Federal Ammonia Criteria may be considered for adoption in Idaho and further influence the determination of effluent Ammonia limits, including the potential for site specific criteria.

Response #5

As explained in the fact sheet (Pages B-3 – B-4) the ammonia criteria for Fivemile Creek and the south channel of the Boise River were evaluated using pH and temperature data collected by the City of Meridian between April 2000 and March 2002.

The EPA searched the United States Geological Survey (USGS) National Water Information System (NWIS) and the EPA STOrage and RETreival (STORET) Data Warehouse for more recent pH and temperature data for the receiving waters near the outfalls. The EPA was able to locate two additional data points for pH and temperature for the south channel of the Boise River at Linder Road from the USGS NWIS (station #13206305) taken on August 21st and October 30th of 2012, which were not used in the calculation of the 95th percentile pH and temperature for the draft permit. Including these two additional data points in the calculation of the 95th percentile pH and temperature of the south channel of the Boise River did not change the 95th percentile pH or temperature of the south channel of the Boise River. The EPA could not locate any pH or temperature data for Fivemile Creek in the vicinity of outfall 001 in addition to those used to develop the draft permit.

Permits may be modified for cause during their term, according to 40 CFR 122.62. This is also stated in the permit, in Part V.A. If additional water quality data become available during the term of this permit, which demonstrate that the pH or temperature of the receiving waters is significantly different than shown by the available data, this would be considered new information, which would be cause for modification of the permit (40 CFR 122.62(a)(2)). Since the ability to modify permits for cause during their terms is provided in the regulations as well as a standard permit condition, it is not necessary to include additional language in the permit to allow for such modification.

Comment #6 (Meridian and IRU)

The City of Meridian and IRU commented on the seasonal average total phosphorus (TP) concentration limit described in Part I.B.10 of the draft permit.

The City of Meridian stated that the procedure for calculating the seasonal average is unclear and requested that the EPA make the following modifications:

- Modify Part I.B.10.b to read: The seasonal average total phosphorus concentration must be calculated as the sum of the measurements as required in Table 2 from May 1st through September 30th, divided by the number of total measurements during that season.
- Modify Part I.B.10.f to read: On the DMRs for May- August, inclusive, the permittee must calculate and report the partial seasonal average total phosphorus concentration for May 1st through the last day of the monitoring month, inclusive. The partial seasonal average total phosphorus concentration must be reported for May through August, inclusive, regardless of whether a discharge of pollutants occurs during a given month. Per III.B the results must be reported by the 20th day of the following month. The partial seasonal average total phosphorus concentrations must be calculated as the sum of the measurements as required in Table 2 for

each month from the 1st through the last day of the month, inclusive, divided by the number of total measurements during the month.

- Regarding Part I.B.10, seasonal average limits for phosphorus should include a reference to the compliance schedule and interim limits. Add to the first sentence of Part I.B.10, 'Phosphorus is subject to a compliance schedule and interim limits, refer to Permit Part l.C., and these requirements do not apply until the final effluent limitations are effective.'

IRU stated that the Fact Sheet does not explain the seven points listed in the draft permit under Part I.B.10. Seasonal average limits for total phosphorus for Outfall 001. An explanation is needed. Where did 120 µg/L come from? The EPA should require daily monitoring if they are expecting a sum of all daily discharges. Twice a week doesn't cut it for daily.

Response #6

The EPA did not intend to include Part I.B.10 in the draft permit. Preliminary drafts of the permit, which were written before the draft *Lower Boise River TMDL: 2015 Total Phosphorus Addendum* (IDEQ 2015b) was issued for public review and comment, had included this section. The seasonal average TP limit would have been based on the State of Idaho's narrative water quality criterion for excess nutrients (IDAPA 58.01.02.200.06), consistent with 40 CFR 122.44(d)(1)(vi).

However, the EPA intended to delete this language from the public comment draft permit because the seasonal average TP limit stated in the draft permit is not consistent with the assumptions and requirements of the WLAs in the final, EPA-approved *Lower Boise River TMDL: 2015 Total Phosphorus Addendum* (IDEQ 2015b).

The language in Part I.B.10 of the draft permit has been deleted from the final permit. Part I.B.11 of the draft permit has been re-numbered as Part I.B.10 in the final permit.

Comment #7 (IRU)

The Fact Sheet does not explain the rationale for the combined loading allowance for TSS, TP and BOD. Could you provide an explanation?

Response #7

The basis for all of the limits in the draft permit, including the combined loading limits for TSS, TP and BOD is summarized in Table D-2 of the fact sheet. The basis for the TP limits (which are expressed as combined loading limits) is explained in more detail in Appendix F of the fact sheet. The combined loading limit for BOD_5 is a technology-based effluent limit, and is explained on Page D-1 of the fact sheet. The combined loading limit for TSS is based on the EPA-approved *Lower Boise River TMDL: 2015 Sediment and Bacteria Allocation Addendum* (IDEQ 2015a). See the fact sheet at Pages 13 and D-3.

Comment #8 (ICL)

Although the DEQ provided (and EPA approved) that Meridian could increase its WLA for TSS by allocating to Meridian some of the TSS that had been reserved for growth in the prior Lower Boise Sediment TMDL, it is not appropriate for the EPA to incorporate this change into the City of Meridian's TSS effluent limit. In this instance, because the receiving water(s), continues to violate water quality standards for sedimentation and siltation, this increase in allowable TSS discharges represents backsliding, irrespective of the changed conditions at the WWTP. Increasing the TSS effluent limit will cause and/or contribute to a violation of water quality standards.

Response #8

The TSS effluent limits in the permit are consistent with the City's wasteload allocations in the 1999 *Lower Boise River TMDL* and in the *Lower Boise River TMDL 2015 Sediment and Bacteria Addendum* (IDEQ 2015a). The 2015 Sediment and Bacteria Addendum addressed the impairment for sedimentation and siltation in Fivemile Creek and has been approved by the EPA. Therefore, the effluent limits for TSS are as stringent as necessary to protect water quality in both Fivemile Creek and the Boise River.

Comment #9 (Oaas)

Mr. T. Erik Oaas stated that, with the close proximity of the City's Sewage Treatment Plant and its forward looking leaders in the Meridian City government which established Idaho's first viable reclaimed water program, the Lakeview Golf Club is a natural and logical user for such reclaimed water, for the following reasons:

1. Using reclaimed water will eliminate (or substantially reduce) our usage of potable water from the canal so that it can be utilized for drinking water use and commercial agricultural uses.
2. Since the vegetation on the golf course can benefit from the additional nutrients in the water currently produced by the plant for reclaimed use, it has the potential of saving the City and the taxpayers millions of dollars in technology upgrades to the plant that could otherwise be substantially less.
3. The aquifer under the golf course would continue to be recharged only with reclaimed water that otherwise would be discharged into the Boise River.
4. As potable water from both surface sources and groundwater sources becomes scarcer, it only makes good sense to conserve potable water and better utilize reclaimed water.

Mr. Oaas stated that, if the draft permit is approved as proposed, there will be no logical reason for the City to increase its reclaimed water program and send this significantly underutilized resource to the golf course because the multimillion improvements to the sewage plant will be mandatory in order to comply with the new restrictions year round. I strongly encourage you to reconsider two portions of the DRAFT permit:

1. Raise the winter concentration limits for phosphorus to a more reasonable level for compliance by the City and yet still provide a well maintained, healthy and sustainable Boise River system.
2. Modify the current permit structure which has monthly and weekly limitations making it very difficult if not impossible to use reclaimed water for outdoor irrigation.

Response #9

This comment requests that the EPA take two actions regarding the draft permit. First, to "raise the winter concentration limits for phosphorus to a more reasonable level," and second, to "modify the current permit structure which has monthly and weekly limitations."

As explained in the response to comment #3, the EPA has determined that the average weekly limits for TP should be removed from the City of Meridian's permit. The final permit includes only average monthly limits.

Regarding the request to "raise the winter concentration limits for phosphorus," first, it should be noted that the final permit does not include any final limits on the concentration of phosphorus. The permit does, however, include final water quality-based effluent limits for phosphorus expressed in terms of

mass, and interim effluent limits expressed in terms of concentration. Final, water quality-based mass limits for TP are established for all times of the year, however, the limits for October – April are less stringent than the limits for May – September.

The final average monthly TP effluent limits in the permit are identical to the WLAs established for this facility in the *Lower Boise River TMDL: 2015 Total Phosphorus Addendum* (IDEQ 2015b). NPDES permits must include effluent limits that are consistent with the assumptions and requirements of an EPA-approved TMDL (40 CFR 122.44(d)(1)(vii)(B)). The EPA cannot establish less stringent effluent limits for phosphorus than proposed in the draft permit, because any such less stringent limits would not be consistent with the assumptions and requirements of the EPA-approved *Lower Boise River TMDL: 2015 Total Phosphorus Addendum* (IDEQ 2015b).

Comment #10 (Meridian)

Bis (2-ethylhexyl) phthalate has a sampling frequency of 1/month along with an average weekly limit. Sampling does not support the limit. Remove the average weekly limit for bis (2-ethylhexyl) phthalate.

Response #10

The EPA has removed all of the effluent limits for bis (2-ethylhexyl) phthalate from the permit along with the associated compliance schedule. The EPA has determined that there is insufficient information to demonstrate that the facility has the reasonable potential to cause or contribute to excursions above water quality standards for this pollutant. The EPA has determined that it is possible that the bis (2-ethylhexyl) phthalate measurements upon which the reasonable potential finding was based could have been biased due to contamination during sample collection and analysis (Kissire 2016).

Comment #11 (Meridian)

Effluent limitations should not be set lower than the quantifiable limits for EPA-approved analytical methods. An impossible situation of demonstrating compliance is created when limits are lower than the laboratory levels achievable with approved analytical methods. The solution of just reporting MLs is a tenuous proposition that does not properly address the statistical accuracy of approved laboratory techniques. For all effluent limitations lower than the quantifiable limits for EPA approved analytical methods, the effluent limitation should be set at that level or greater.

Response #11

The only effluent limits in the City of Meridian's permit which are not quantifiable using EPA approved analytical methods are those for weak acid dissociable cyanide.

The inclusion of the calculated effluent limit (even though it is not quantifiable using EPA approved analytical methods) and the use of the minimum level as the compliance evaluation level are consistent with the recommendations in Section 5.7.3 of the *Technical Support Document for Water Quality-based Toxics Control* (EPA 1991). Federal regulations state that, when developing water quality-based effluent limits, the permitting authority shall ensure 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 (40 CFR 122.44(d)(1)(vii)(A)). The fact that no approved analytical method can quantify the limited pollutant at the level of a limit derived from and complying with all applicable water quality standards does not modify this regulatory requirement.

This does not create a "tenuous" situation for the permittee's compliance. The permit states that "the permittee will be compliant with the weak acid dissociable cyanide limitations if the average monthly and maximum daily weak acid dissociable cyanide concentrations are less than 10 µg/L and the average monthly and maximum daily mass discharges of weak acid dissociable cyanide are less than 0.85 lb/day." Thus, the permit language is clear and explicit as to how compliance with the weak acid dissociable cyanide effluent limits will be evaluated.

Comment #12 (Meridian)

In Table B-1, on Page B-3 of the fact sheet, the results October -April and May- September are incorrect. Correct the values in Table B-1 from 1.23 mg/L to 1.25 mg/L. In Table B-2, on Page B-4 of the fact sheet, the results Nov -June and July- October are incorrect. Correct the values in Table B-2 from 0.759 mg/L to 0.77 mg/L.

Response #12

This comment is referring to the calculation of the acute water quality criterion for ammonia.

The EPA used a spreadsheet developed by the Idaho Department of Environmental Quality to calculate the values of the ammonia criteria based on the pH and temperature of the receiving water. This spreadsheet was then incorporated into a Microsoft Excel workbook, which included other spreadsheets for determining reasonable potential and calculating effluent limits. The EPA checked the formula for the acute water quality criterion in this spreadsheet against the Idaho Water Quality Standards at IDAPA 58.01.02.250.02.d.i.

The EPA found two small discrepancies in the spreadsheet's formula for the acute water quality criterion. Specifically, the numerator of the first term of the criterion was 0.274 in the spreadsheet instead of 0.275, and the numerator of the second term of the criterion was 38.9 in the spreadsheet instead of 39.0.

The EPA corrected the formula for the acute water quality criterion in the spreadsheet used to determine reasonable potential and calculate effluent limits for the City of Meridian. The corrections resulted in an acute criterion of 1.23 mg/L for Fivemile Creek (pH = 8.8) and an acute criterion of 0.761 mg/L for the Boise River (pH = 9.1). This resulted in small changes to the effluent limits for ammonia, as shown in Tables 1 and 2, below.

Table 1: Corrected Ammonia Effluent Limits for Outfall 001 (Fivemile Creek)

Parameter	Units	Effluent Limits	
		Average Monthly Limit	Maximum Daily Limit
Draft Permit			
Total Ammonia as N (October – April)	mg/L	0.307	1.25
	lb/day	26.1	106
Total Ammonia as N (May – September)	mg/L	0.405	1.65
	lb/day	34.4	140
Final Permit			
Total Ammonia as N (October – April)	mg/L	0.308	1.25
	lb/day	26.2	106

Table 1: Corrected Ammonia Effluent Limits for Outfall 001 (Fivemile Creek)			
Parameter	**Units**	**Effluent Limits**	
		Average Monthly Limit	**Maximum Daily Limit**
Total Ammonia as N (May – September)	mg/L	0.406	1.65
	lb/day	34.5	140

Table 2: Corrected Ammonia Effluent Limits for Outfall 002 (Boise River)			
Parameter	**Units**	**Effluent Limits**	
		Average Monthly Limit	**Maximum Daily Limit**
Draft Permit			
Total Ammonia as N (November – June)	mg/L	0.255	1.04
	lb/day	21.7	88.5
Total Ammonia as N (July – October)	mg/L	0.242	1.06
	lb/day	20.6	90.2
Final Permit			
Total Ammonia as N (November – June)	mg/L	0.256	1.04
	lb/day	21.8	88.5
Total Ammonia as N (July – October)	mg/L	0.242	1.06
	lb/day	20.6	90.2

Comment #13 (Boise)

Boise stated that the aquatic life criterion for mercury is satisfied and provides no basis for reasonable potential, mercury numeric limits, or monitoring requirements.

The Nampa, Meridian, and Caldwell Fact Sheets and draft permits evaluate and propose the need for mercury limitations and monitoring requirements using two Idaho water quality standards for mercury, the 12 ng/l aquatic organism criterion[4] and the 0.3 mg/kg methylmercury fish tissue based human health criterion[5] approved by EPA in 2008.

The 12 ng/l aquatic life mercury criterion was incorrectly applied to determine the reasonable potential to exceed, numeric mercury limits, and monitoring requirements.

The Nampa and Meridian mercury limitations and the Caldwell monitoring requirements are based on the 12 ng/l aquatic life criterion. If the 12 ng/l criterion is exceeded in the receiving stream more than

[4] IDAPA 58.01.02- Water Quality Standards and Wastewater Treatment Requirements, 2004; Section 58.01.02.210.01.a.8, Mercury aquatic life criterion, CCC, B2, footnote g "g. If the CCC for total mercury is exceeded more than once in a three (3) year period in ambient water, the edible portion of aquatic species of concern must be analyzed to determine whether the concentration of methyl mercury exceeds the FDA action level (one (1.0) mg/kg). If the FDA action level is exceeded, the Director must notify the EPA regional administrator, initiate a review and as appropriate, revision of its mercury criterion in these water quality standards, and take other appropriate action such as the issuance of fish consumption advisory for the affected area."

[5] Idaho's Water Quality Standards, IDAPA 58.01.02, IAC 2011, http://adminrules.idaho.gov/rules/current/58/0102.pdf

once every three years, the criterion requires fish tissue testing of the edible portion of consumed species to determine whether the concentration exceeds the 1.0 mg/kg FDA action level. If the 1 mg/kg action level is exceeded, actions to control mercury discharges and notify the public are required.[6]

The reasonable potential analysis appears to use only the water column concentration portion of the 12 ng/I criterion without evaluating the edible fish tissue portion of the criterion using local fish tissue data to determine compliance or non-compliance with the standard, if there is reasonable potential to exceed the state water quality standard, in the determination of numeric limit or other controls, and in determination of associated monitoring requirements.

Historical and recent fish tissue data have been collected and reported by USGS, the Idaho Fish Consumption Advisory Program[7], and the City of Boise Methylmercury Fish Tissue Sampling Program for the Lower Boise River, Snake River and Brownlee Reservoir. The data show fish tissue mercury values range from 0.06 to 0.33 mg/kg methylmercury for samples collected in the Boise and Snake Rivers and Brownlee Reservoir[8]. These levels are well below the 1.0 mg/kg FDA action level and demonstrate compliance with the aquatic life mercury criterion.

Analysis of the applicable 2004 mercury aquatic life criterion continuous concentration of 12 ng/I and footnote g, when correctly evaluated, shows that the 12 ng/I criterion is satisfied at all locations within the Lower Boise Watershed, the Snake River below the confluence with the Boise, and Brownlee Reservoir. No reasonable potential exists to exceed the mercury aquatic life water quality criterion, therefore, no numeric limitations, additional actions or public notification are necessary to satisfy the mercury aquatic life criterion.

The basis and development of numeric mercury limitations contained in the Meridian and Nampa draft permits, and mercury monitoring requirements in the draft Caldwell permit are incorrect and there is no basis provided for numeric limitations, additional actions or additional monitoring. The Fact Sheets need to be corrected to reflect that the applicable aquatic life criterion for mercury is satisfied.

Response #13

The commenter is correct that the EPA applied both the aquatic life chronic criterion or criterion continuous concentration (CCC) of 12 ng/L (0.012 µg/L) and the 0.3 mg/kg human health criterion for methylmercury in fish tissue. This is because both of these criteria are in effect for Clean Water Act purposes in Idaho.

As explained in the fact sheets, (see, for example, the City of Meridian fact sheet at Page D-7), on December 12, 2008, the EPA disapproved the State of Idaho's removal of its aquatic life water quality

[6] 1DAPA 58.01.02-Water Quality Standards and Wastewater Treatment Requirements, 2004; Section 58.01.02.210.01.a.8, Mercury aquatic life criterion, CCC, 82, footnote g "g. If the CCC for total mercury is exceeded more than once in a three (3) year period in ambient water, the edible portion of aquatic species of concern must be analyzed to determine whether the concentration of methyl mercury exceeds the FDA action level (one (1.0) mg/kg). If the FDA action level is exceeded, the Director must notify the EPA regional administrator, initiate a review and as appropriate, revision of its mercury criterion in these water quality standards, and take other appropriate action such as the issuance of fish consumption advisory for the affected area."

[7] Idaho Fish Consumption Advisories, Idaho Fish Consumption Advisory Program, http://healthandwelfare.idaho.gov/Health/EnvironmentalHealth/FishAdvisories/tabid/180/default.aspx

[8] 2013 Boise River Watershed Based Methylmercury Fish Tissue Sampling Report, Boise City Public Works, 22p. and 2014 Boise River Watershed Based Methylmercury Fish Tissue Sampling Report, Boise City Public Works, 11p.

criteria for mercury in the water column[9]. The aquatic life water column criteria for total recoverable mercury that the EPA approved in 1997 remain in effect for Clean Water Act purposes (40 CFR 131.21). These criteria are an acute criterion or criterion maximum concentration (CMC) of 2.1 µg/L and a chronic criterion or criterion continuous concentration (CCC) of 0.012 µg/L (12 ng/L). Because these criteria remain in effect for Clean Water Act purposes, the EPA must implement these criteria in NPDES permits (40 CFR 131.21(d)). The numeric effluent limits for mercury in the draft permit for Meridian are based on these criteria.

The commenters point out that, in a footnote to the table of water quality criteria, the Idaho Water Quality Standards had stated the following:

> *If the CCC for total mercury is exceeded more than once in a three (3) year period in ambient water, the edible portion of aquatic species of concern must be analyzed to determine whether the concentration of methyl mercury exceeds the FDA action level (one (1.0) mg/kg). If the FDA action level is exceeded, the Director must notify the EPA regional administrator, initiate a review and as appropriate, revision of its mercury criterion in these water quality standards, and take other appropriate action such as the issuance of fish consumption advisory for the affected area.*

This now-repealed provision of the Idaho WQS concerns sampling for fish tissue to be performed in response to exceedances of the water column mercury CCC, and could result in revisions to the water column mercury criteria. It does not modify the numeric criteria (i.e., the CMC of 2.1 µg/L and CCC of 12 ng/L), which were used as the basis for numeric effluent limits for mercury in the Meridian permit.

The commenters assert that the fact that fish tissue concentrations are below the Food and Drug Administration (FDA) action level of 1.0 mg/kg in the receiving waters demonstrates compliance with the 12 ng/L numeric aquatic life CCC. The commenters then conclude, based on fish tissue concentrations below the FDA action level, that there is no reasonable potential to exceed the 12 ng/L CCC. The EPA disagrees with these assertions for the following reasons.

First, the fact that fish tissue concentrations of methylmercury have not exceeded the FDA action level of 1.0 mg/kg does not necessarily mean that the 12 ng/L CCC, with its associated averaging period and allowable excursion frequency, is attained. The 12 ng/L CCC was based on achieving the 1.0 mg/kg FDA action level, using a bioconcentration factor of 81,700 (EPA 1985). However, bioaccumulation of mercury is highly variable and is influenced by a number of factors, including the age or size of the organism; food web structure; water quality parameters such as pH, DOC, sulfate, alkalinity, and dissolved oxygen; mercury loadings history; proximity to wetlands; watershed land use characteristics; and waterbody productivity, morphology, and hydrology (EPA 2010). Furthermore, bioaccumulation of mercury in fish occurs gradually over the lifetime of the fish, whereas the 12 ng/L CCC has an averaging period of only 4 days, with an excursion frequency of once every three years (EPA 1985). Infrequent, short-term excursions above the 12 ng/L CCC would have a small effect on concentrations of methylmercury in fish tissue, as long as the average concentration of mercury was low. However, such excursions would nonetheless violate the 12 ng/L CCC (unless they occurred less frequently than once every three years).

[9] http://www.deq.idaho.gov/media/451688-epa_letter_mercury_criterion_disapproval.pdf

Second, even if an exceedance of the 12 ng/L CCC has not occurred in the receiving waters, this would not necessarily mean that a particular discharge would not need to have effluent limits based on the 12 ng/L CCC. Limits must be established not only if a discharge *causes* excursions above water quality standards, but also if a discharge has the *reasonable potential* to cause or *contributes* to excursions above water quality standards (40 CFR 122.44(d)(1)(i, iii)). In determining whether the subject discharges had the reasonable potential to cause or contribute to excursions above the 12 ng/L CCC, the EPA used the procedures in Section 3.3 of the TSD. Consistent with 40 CFR 122.44(d)(1)(ii), these procedures account for existing controls on point and nonpoint sources of pollution and the variability of the pollutant in the effluent. In this case, since a mixing zone was authorized by the State of Idaho for mercury, the EPA also considered the dilution of the effluent in the receiving water.

Using these procedures, the EPA determined that the discharges from the City of Meridian wastewater treatment plant have the reasonable potential cause or contribute to excursions above the 12 ng/L mercury CCC. Therefore, the EPA must establish effluent limits that are derived from and ensure compliance with the 12 ng/L mercury CCC (40 CFR 122.44(d)(1)(vii)(A)).

As explained in the response to comment #4, the EPA has determined that the discharge has the reasonable potential to cause or contribute to excursions above the numeric water quality criterion for mercury at outfall 001, from October – April.

Comment #14 (Boise)

The Idaho Methylmercury Human Health water quality criterion for fish tissue (0.3 mg/kg) is 3.3 times more stringent than the aquatic life 12 ng/I criterion when correctly evaluated[10]. The Human Health criterion therefore is more stringent and the appropriate criterion for evaluation of reasonable potential, limits or other actions, and monitoring requirements. Idaho and EPA have developed guidance for implementation of the human health criterion. The Fact Sheet needs to use the Human Health mercury criterion for the evaluation of reasonable potential, associated controls, and monitoring requirements for mercury.

The Idaho Mercury Human Health criterion was adopted with implementation guidance[11] that addresses how it would be applied to municipal wastewater treatment facilities, including additional actions and recommended monitoring frequencies based on the level of fish tissue mercury within the watershed. EPA[12] developed methylmercury human health implementation guidance that is essentially identical to the Idaho guidance.

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[10] IDAPA 58.01.02 -Water Quality Standards and Wastewater Treatment Requirements, 2004; Section 58.01.02.210.01.a.8, Mercury aquatic life criterion, CCC, B2, footnote g "g. lf the CCC for total mercury is exceeded more than once in a three (3) year period in ambient water, the edible portion of aquatic species of concern must be analyzed to determine whether the concentration of methyl mercury exceeds the FDA action level (one (1.0) mg/kg). If the FDA action level is exceeded, the Director must notify the EPA regional administrator, initiate a review and as appropriate, revision of its mercury criterion in these water quality standards, and take other appropriate action such as the issuance of fish consumption advisory for the affected area."

[11] Implementation Guidance for the Idaho Mercury Water Quality Criteria, April 2005, IDEQ, 212 pages, https://www.deq.idaho.gov/media/639808-idaho_mercury_wq_guidance.pdf

[12] Guidance for Implementing the January 2001 Methylmercury Water Quality Criterion, EPA 2010, 221 p, http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P1007BKQ.TXT

The Fact Sheet needs to be significantly modified and use the lower and appropriate 0.3 mg/kg EPA approved Idaho Methylmercury Human Health criterion and associated Idaho Methylmercury Criteria Implementation Guidance[13] for the evaluation of the reasonable potential to exceed standards, the appropriate limitations or controls, and the associated monitoring requirements.

Using the Idaho Methylmercury criterion, Idaho and EPA Methylmercury Implementation Guidance, effluent data, and recent fish tissue data (2000-present) from all sources, reasonable potential does appear to be triggered (e.g. quantifiable mercury in the effluent and >24 mg/kg fish tissue below facilities), additional actions do appear to be required (e.g. Mercury Minimization Plans), and watershed based fish tissue and effluent monitoring does appear to be justified.

The Fact Sheet for the draft Nampa and Meridian NPDES permits needs to be corrected to provide the basis for additional mercury controls and monitoring limits.

Response #14

The commenters' statement that the Idaho methylmercury human health water quality criterion for fish tissue (0.3 mg/kg) is 3.3 times more stringent than the aquatic life 12 ng/I CCC appears to be based on the fact that the 12 ng/L CCC was based on the FDA action level of 1.0 mg/kg, which is 3.3 times the human health criterion. However, since the 12 ng/L CCC is a water column criterion as opposed to a fish tissue criterion, this statement would be true in terms of water column concentrations of mercury only if the site-specific bioaccumulation factor was equal to the bioconcentration factor of 81,700 that was used to develop the 12 ng/L aquatic life criterion from the 1.0 mg/kg FDA action level. Bioaccumulation of mercury is highly variable and is influenced by a number of factors, including the age or size of the organism; food web structure; water quality parameters such as pH, DOC, sulfate, alkalinity, and dissolved oxygen; mercury loadings history; proximity to wetlands; watershed land use characteristics; and waterbody productivity, morphology, and hydrology (EPA 2010). Furthermore, bioaccumulation of mercury in fish occurs gradually over the lifetime of the fish, whereas the 12 ng/L CCC has an averaging period of only 4 days, with an allowed excursion frequency of once every three years (EPA 1985). Infrequent, short-term excursions above the 12 ng/L CCC would have a small effect on concentrations of methylmercury in fish tissue, as long as the average concentration of mercury was low. However, such excursions would nonetheless violate the 12 ng/L CCC (unless they occurred less frequently than once every three years).

As discussed in the fact sheet, the EPA has, in fact, implemented the Idaho methylmercury human health criterion in the subject permit in a manner consistent with the IDEQ and EPA guidance referenced by the commenters. See the fact sheet at Pages 25-26.

As explained in the response to comment #13, the EPA must also establish water quality-based effluent limits for mercury if the discharges have the reasonable potential to cause or contribute to excursions above the 12 ng/L CCC, which is the case for Meridian. As explained in the response to comment #4, the EPA has determined that the discharge has the reasonable potential to cause or contribute to excursions above the numeric water quality criterion for mercury at outfall 001, from October – April.

[13] Implementation Guidance for the Idaho Mercury Water Quality Criteria, April 2005, IDEQ, 212 pages, https://www.deq.idaho.gov/media/639808-idaho_mercury_wq_guidance.pdf

Comment #15 (IRU)

Idaho Rivers United supports the permit's year round limits on discharge of Total Phosphorus to Fivemile Creek and the Boise River.

As was made clear in the Fact Sheet, nuisance levels of periphyton can occur in the Boise River during what EPA previously called the non-growing season (October – April) and Total Phosphorus in the Boise River continuously exceeds the 70 µg/L load allocation in the Snake River Hells Canyon TMDL. The Meridian WWTP releases phosphorus-laden effluent continuously, pollution that has had significant negative impacts on the health of the Boise and Snake rivers for decades, and these limits are long-overdue.

Response #15

Thank you for your comment.

Monitoring and Reporting Requirements

Comment #16 (Boise and Meridian)

The City of Boise and City of Meridian stated that all of the analytes listed in Appendix A can have a method detection limit (MDL) but the ten (10) analytes listed below cannot have a minimum level (ML) as defined in the NPDES permits due to the required EPA method (e.g., titration) or reporting format (e.g., 7-day average) of the parameter.

- Biochemical Oxygen Demand
- Soluble Biochemical Oxygen
- Total Suspended Solids
- Dissolved Oxygen
- Temperature (max 7 day avg)
- Oil and Grease (HEM)
- Salinity
- Settleable Solids
- Total Dissolved Solids
- Total Hardness

ML values for 10 pollutants listed above should be listed as MDL or sensitivity of the instrument/detector for the parameter (e.g.+/- 0.2 C for temperature).

Response #16

The subject draft permit included a definition of the term "minimum level" that is consistent with the definition in the glossary of the *U.S. EPA NPDES Permit Writers' Manual* (EPA 2010). However, in 2016, the EPA promulgated a revised definition of the term "minimum level" in the methods update rule (MUR). The revised definition reads:

> *The term "minimum level" refers to either the sample concentration equivalent to the lowest calibration point in a method or a multiple of the method detection limit (MDL), whichever is higher. Minimum levels may be obtained in several ways: They may be published in a method; they may be based on the lowest acceptable calibration point used by a laboratory; or they may be calculated by multiplying the MDL in a method, or the MDL determined by a laboratory, by a*

factor of 3. For the purposes of NPDES compliance monitoring, EPA considers the following terms to be synonymous: "quantitation limit," "reporting limit," and "minimum level."

Since the revised definition allows for the minimum level to be obtained in several ways, including multiplying the MDL (as published in a method or determined by a lab) by a factor of 3, then minimum levels can be determined for any analyte for which an MDL can be determined. Thus, minimum levels can, in fact, be determined for all of the analytes in Appendix A.

As explained in the response to comment #19, below, Appendix A specifies the required level of sensitivity for monitoring, which is independent and distinct from the statistics that are to be reported. The EPA has deleted the parenthetical "(max. 7-day avg.)" from the entry for temperature in Appendix A.

For dissolved oxygen and temperature, the EPA has edited appendix A to require a "calibrated accuracy," instead of a minimum level, consistent with the USGS *National Field Manual for the Collection of Water-Quality Data*, (USGS 2015). The *National Field Manual for the Collection of Water-Quality Data* states that thermistors should have a "calibrated accuracy within 0.1 °C to 0.2 °C" and amperometric and optical dissolved oxygen probes should have a "calibrated accuracy within ±0.1 mg/L DO" (USGS 2015). In the final permit, the EPA has specified that temperature measurements must have a calibrated accuracy within 0.2 °C and that dissolved oxygen probes must have a calibrated accuracy within 0.1 mg/L.

Comment #17 (Boise and Meridian)

The City of Boise and the City of Meridian stated that the requirement to run a calibration point at the ML is consistent with the new and updated 600 series organic methods in the Proposed 2015 MUR to 40 CFR 136. However, these methods are not yet approved and it is extremely difficult finding a commercial laboratory capable of running the MUR method.

Response #17

As explained in the response to comment #16, above, under the revised definition of "minimum level" in the final MUR, which has been incorporated into the final permit, the ML need not be based on the lowest calibration standard. Thus, the final permit does not require running a calibration point at the ML.

Comment #18 (Boise and Meridian)

The minimum level requirements of "Attachment/Appendix A Minimum Levels" restrict the options of NPDES approved methods listed at 40 CFR Part 136: Table IB. The following methods could utilize calibration curves meeting the definition of a ML however the values listed are more appropriate for a MDL due to the low concentration specified. In addition, the ML requirement prevents the use of the most commonly used methods which are titrations or test kits that are analyzed on factory calibrated spectrophotometers.

- Chemical Oxygen Demand
- Total Alkalinity
- Chlorine, Total Residual

ML values in Table A for these parameters should be listed as MDLs.

Response #18

As explained in the response to comment #16, above, under the revised definition of "minimum level" in the final MUR, which has been incorporated into the final permit, the ML need not be based on a calibration curve.

Comment #19 (Boise and Meridian)

The City of Boise and the City of Meridian stated that the minimum level requirement for a statistical average is inappropriate for "Temperature (max 7 day avg)" in the "Attachment/Appendix A: Minimum Levels." ML and MDL are related to instrument sensitivity for T (+/- 0.2 C) and is not applicable or appropriate for a 7-day average temperature. ML needs to be removed from Appendix A for maximum 7-day average temperature.

Response #19

The EPA agrees that the parenthetical "(max. 7-day avg.)" should be deleted from the listing for temperature in Appendix A. Appendix A specifies the required level of sensitivity for monitoring, which is independent and distinct from the statistics that are to be reported. The statistics that are to be reported for temperature are specified elsewhere in the permit. As explained in the response to comment #16, above, in the final permit, the EPA has specified that temperature measurements must have a calibrated accuracy within 0.2 °C.

Comment #20 (Boise and Meridian)

The City of Boise and the City of Meridian stated that the minimum levels in Appendix A to the draft permits need to be adjusted, for several reasons.

EPA's proposed draft Methods Update Rule (MUR)[14] seeks to increase the MLs (and MDLs) for many of the parameters listed in Appendix A to reflect "real world" water quality and analytical conditions (e.g. matrices ranging from clean receiving waters to "dirty" receiving water) instead of ultra clean and unrealistic matrices (e.g. MLs for a pollutant in distilled water) used for development of the MLs contained in the draft permits.

The minimum level requirements of "Attachment/Appendix A Minimum levels" appear to be based on published MDLs in EPA methods. The ML values are determined by multiplying the published MDL by 3.18. These EPA methods used MDL calculation methodology are inconsistent with the "2015 Proposed Methods Update Rule (MUR)" (80 FR 8956).

The published MDLs for EPA methods need to be revised using EPA methods to be compliant with the MUR. Compliance with the new methods in MUR will increase MDLs for many methods. Since the basis for the values assigned in "Attachment/Appendix A Minimum Levels" are not consistent with 2015 MUR requirements, they create a significant liability for permittees and are inappropriate for use in NPDES permits.

The Proposed 2015 MUR also proposes significant changes in the organic EPA 600 series methods which require matrix specific MDLs. Commercial labs will need to determine MDLs in various wastewater matrices, which will increase MDLs and MLs.

[14] EPA Methods Update Rule-2015, webpage includes February 9, 2015 Federal Register Notice, Fact Sheet, and background materials; http://www2.epa.gov/cwa-methods/methods-update-rule-2015

If the GC/MS EPA methods 624 and EPA 625 for purgeables and base neutrals and acids, respectively, were used for the organics listed in Appendix A, confirmation of the analytes is not needed, however the ML values would need to be increased for this method to be available for a permittee to use.

The proposed new or updated organic EPA 600 series methods contained in the draft 2015 MUR allow blank subtraction in samples, which will have an impact on the ML and should be reflected in Appendix A.

Many of the issues in the Proposed 2015 MUR to 40 CFR 136 have been addressed by the National Environmental Laboratory Accreditation Conference (NELAC) Institute and directly impact organic methods, which are proposed to increase and should be the ML requirement contained in NPDES permits.

The MLs listed in the Proposed 2015 MUR to 40 CFR 136 for EPA methods 624 & 625 are 2-15 times higher than the levels listed in Appendix A.

Response #20

The MLs in the draft permit were not calculated by multiplying published MDLs by 3.18. Rather, they were based on MLs required by the Washington State Department of Ecology in its NPDES permits, which were in turn based on a survey of laboratories conducted in 2008. Thus, the EPA believes that the MLs proposed in Appendix A are achievable. If the permittees cannot achieve the MLs in the final permit, the permittee may request different MLs.

However, for many pollutants, the MLs in EPA Methods 608.3, 624.1 and 625.1 in the final MUR are lower than the most-stringent water quality criterion in effect in Idaho, or the EPA-recommended Clean Water Act Section 304(a) water quality criteria. For other pollutants, the State of Idaho has not established a water quality criterion for the pollutant and the EPA has not established a 304(a) criterion. Methods with an ML at or below the applicable water quality criterion are considered "sufficiently sensitive" (79 FR 49013).

The EPA has therefore revised the MLs in Appendix A to the permit to be equal to the MLs published in the final MUR, for the pollutants listed in Table 1, below. If the ML proposed in the draft permit was higher than that published in the final MUR, but less than the most stringent Idaho water quality criterion, then the ML proposed in the draft permit was retained.

Table 1: Comparison of Minimum Levels to Water Quality Criteria

Pollutant	CAS #	Draft Permits ML (µg/L)	MUR ML (µg/L)	Most Stringent ID WQC (µg/L)	Most Stringent CWA WQC (µg/L)	Most Stringent WQC (µg/L)	Ratio of WQC to draft MUR ML
1,1,1-Trichloroethane	71-55-6	2	11.4	11000		11000	965
1,1-Dichloroethane	75-34-3	2	14.1			N/A	N/A
1,2-Trans-Dichloroethylene (Ethylene dichloride)	156-60-5	2	4.8	120		120	25.0
2,4-Dichlorophenol	120-83-2	1	8.1	9.6	93	9.6	1.19
2,4-Dimethylphenol	105-67-9	1	8.1	110		110	13.6
2,6-dinitrotoluene	606-20-2	0.4	5.7			N/A	N/A
2-Chloronaphthalene	91-58-7	0.6	5.7	330		330	57.9
2-Chlorophenol	95-57-8	2	9.9	30		30	3.03

Pollutant	CAS #	Draft Permits ML (µg/L)	MUR ML (µg/L)	Most Stringent ID WQC (µg/L)	Most Stringent CWA WQC (µg/L)	Most Stringent WQC (µg/L)	Ratio of WQC to draft MUR ML
2-Nitrophenol	88-75-5	1	10.8			N/A	N/A
4-Bromophenyl phenyl ether	101-55-3	0.4	5.7			N/A	N/A
4-Chlorophenyl phenyl ether	7005-72-3	0.5	12.6			N/A	N/A
4-nitrophenol	100-02-7	1	7.2			N/A	N/A
Acenaphthene	83-32-9	0.4	5.7	26		26	4.56
Acenaphthylene	208-96-8	0.6	10.5			N/A	N/A
alpha-Endosulfan (Endosulfan I)	959-98-8	0.05	0.042	0.056	0.93	0.056	1.33
Anthracene	120-12-7	0.6	5.7	110	9600	110	19.3
Benzo(ghi)Perylene	191-24-2	1	12.3			N/A	N/A
beta-BHC	319-85-7	0.05	0.0093	0.036	0.014	0.014	1.505
beta-Endosulfan (Endosulfan II)	33213-65-9	0.05	0.012	0.056	0.93	0.056	4.67
Bis(2-chloroethoxy)methane	111-91-1	21.2	15.9			N/A	N/A
Chlorobenzene	108-90-7	2	18	89	680	89	4.94
Chloroform	67-66-3	2	4.8	61	5.7	5.7	1.19
Diethyl phthalate	84-66-2	7.6	5.7	200	23000	200	35.1
Dimethyl phthalate	131-11-3	6.4	4.8	600	313000	600	125
Di-n-butyl phthalate	84-74-2	1	7.5	8.2	2700	8.2	1.09
Di-n-octyl phthalate	117-84-0	0.6	7.5			N/A	N/A
Endosulfan sulfate	1031-07-8	0.05	0.198	9.9	0.93	0.93	4.7
Endrin aldehyde	7421-93-4	0.05	0.07	0.38	0.76	0.38	5.4
Ethylbenzene	100-41-4	2	21.6	32	3100	32	1.48
Fluorene	86-73-7	0.6	5.7	21	1300	21	3.68
gamma-BHC (Lindane)	58-89-9	0.05	0.012	1.4	0.019	0.019	1.583
Isophorone	78-59-1	1	6.6	330	8.4	8.4	1.27
Naphthalene	91-20-3	0.6	4.8			N/A	N/A
Nitrobenzene	98-95-3	1	5.7	12	17	12	2.11
Parachlorometa cresol (4-chloro-3-methylphenol)	59-50-7	2	9	350		350	38.9
Phenanthrene	85-01-8	0.6	16.2			N/A	N/A
Phenol	108-95-2	4	4.5	3800	21000	3800	844
Pyrene	129-00-0	0.6	5.7	8.1	960	8.1	1.42
Toluene	108-88-3	2	18	47	6800	47	2.61

Comment #21 (Meridian)

For parameters listed in Table 2 and Table 3 and not listed in Tables 1, 3 and 4 of the existing NPDES permit or with different sample frequency or sample type, the city requests 90 days from issuance to effective permit date to prepare for sampling. Surface water monitoring is granted a start time of 90 days after the effective permit date. Therefore, request similar preparation time for new and modified parameters in the effluent monitoring.

In I.B.5 add, Effluent monitoring shall commence within 90 days after the effective permit date for new parameters and parameters with modified sample frequency or type from the previous permit, including temperature, pH, dissolved oxygen, bis (2-ethylhexyl) phthalate, zinc, floating matter, arsenic, chlorpyrifos, conductivity, dissolved organic carbon, molybdenum, nickel, and selenium.

Response #21

Among the parameters listed by the commenter, temperature, bis (2-ethylhexyl) phthalate, zinc, arsenic, chlorpyrifos, conductivity, dissolved organic carbon, molybdenum, nickel, and selenium are not subject to effluent limits that take effect immediately upon the effective date of the final permit. The EPA believes it is reasonable to allow monitoring for these parameters to commence no later than 90 days after the effective date of the final permit. Because they are not subject to effluent limits that take effect immediately, delaying monitoring for these parameters will not affect the enforceability of the permit. The 90-day delay will not significantly reduce the number of samples collected over the term of the permit. Rather than adding language to Part I.B.5, however, the EPA has added a footnote to Tables 2 and 3 indicating that monitoring and reporting for temperature, bis (2-ethylhexyl) phthalate, zinc, arsenic, chlorpyrifos, conductivity, dissolved organic carbon, molybdenum, nickel, and selenium must begin within 90 days of the effective date of the final permit.

The sample frequency and type for dissolved oxygen and pH in the final reissued permit are unchanged from the corresponding requirements in the 1999 permit (5 grab samples per week). Both the 1999 permit and the reissued permit include effluent limits for dissolved oxygen and pH, and the reissued permit's effluent limits for these parameters are not subject to a compliance schedule. See the final reissued permit at Tables 2 and 3 and the 1999 permit at Parts I.A.3 and I.A.5, on Page 5. Even if the monitoring requirements for dissolved oxygen and pH were different from the corresponding requirements in the 1999 permit, monitoring for these parameters cannot be suspended or delayed, because monitoring is necessary to determine compliance with the effluent limits. Therefore, the monitoring requirements for dissolved oxygen and pH will be effective immediately upon the effective date of the final permit.

Comment #22 (Meridian)

Regardless of the effective permit date, request that sample frequency align with typical calendar periods to facilitate practical reporting. For example, if the permit becomes effective in Nov or December, annual/biannual/quarterly sampling should begin in January. Annual reports would be due following a minimum of at least 6 months of a calendar year, from the effective permit date. Biannual periods would begin in January and July. Quarterly periods would begin in January, April, July, and October.

In l.B.5 add, sample frequency and periods shall coincide with typical calendar periods and start at common calendar times, such as week (Sunday), month (1st), quarterly (January 1st, April 1st, July 1st, or October 1st biannual (January 1st or July 1st), annual (January 1st and include at least six months).

Response #22

Regarding the definition of quarters, none of the influent or effluent monitoring requirements in Part I.B of the permit have a required monitoring frequency of quarterly. However, some of the receiving water monitoring requirements in Part I.D have a required monitoring frequency of quarterly. Quarters are defined in the footnotes to Tables 6 and 7 of the permit as beginning on January 1st, April 1st, July 1st and October 1st, as suggested by the commenter.

For influent and effluent monitoring that occurs twice per year, the required seasons are April 1st through October 31st and November 1st through March 31st. These seasons were chosen to ensure that

sampling is representative of both summer and winter conditions, so that seasonal changes in influent and effluent quality are captured.

For guidance regarding monthly and weekly reporting, the permittee is advised to consult the EPA's *NPDES Self-Monitoring System User Guide* (EPA 1985). The effective date of the permit is the first day of the month.

Deadlines for reporting for deliverables which are part of the compliance schedule have been specified in the State of Idaho's final Clean Water Act Section 401 certification. Specifically, the certification states that annual progress reports are due on February 15th of each year. The deadlines for other deliverables in the compliance schedule are stated as intervals after the effective date of the permit. In the final permit, these intervals from the certification have been converted to specific dates.

Comment #23 (Meridian)

Discharge is authorized to both Fivemile Creek and the Boise River, through two permitted outfalls. Monitoring and WET testing should only be required when discharge occurs to that outfall. Revise the text such that monitoring and WET testing for Fivemile Creek and the Boise River be only required when discharging to the corresponding outfall.

Response #23

It is not clear whether the commenter is referring to effluent monitoring, receiving water monitoring, or both.

Regarding effluent monitoring, in general, the EPA does not agree that it is necessary to state in the permit that monitoring is only required for a given outfall when discharge occurs from that outfall. When there is no discharge from a given outfall, it is not possible to take water samples from that outfall. However, as explained in the response to comment #47, the EPA agrees that the permit should specify that WET testing for a given outfall during a given season is required only if effluent is discharged to a given outfall during that season.

Regarding receiving water monitoring, the EPA does not agree that requirements to monitor the receiving water upstream of the outfalls should be contingent upon a discharge from the corresponding outfall, because upstream surface water monitoring results would not be influenced by the discharges. It is necessary to characterize the background concentrations of pollutants in the receiving water when developing water quality-based effluent limits, particularly when a mixing zone is authorized. See the *U.S. Environmental Protection Agency NPDES Permit Writers' Manual* at Page 6-19 (EPA 2010).

In the draft and final permits, downstream receiving water monitoring requirements are contingent upon a discharge from the corresponding outfall (Part I.E.1.c.).

Comment #24 (Meridian)

Bis (2-ethylhexyl) phthalate requires special sampling procedures and maintaining separate equipment, which is particularly onerous for composite samples. Change the sampling requirements for bis (2-ethylhexyl) phthalate to grab sample based on sampling requirements.

Response #24

Some automatic composite samplers may have components that could contribute bis (2-ethylhexyl) phthalate to a sample, thus biasing the results. If this is the case, the automatic sampler would need to

be modified or replaced to prevent sample contamination. However, in general, the EPA requires composite samples, except for parameters that are not stable during storage (e.g., pH, temperature, residual chlorine and bacteria) (64 FR 42499).

To address the City's concern about the difficulty of avoiding sample contamination with bis (2-ethylhexyl) phthalate with an automatic sampler, the EPA has changed the definition of "24-hour composite" to read as follows:

> *"24-hour composite" sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. For GC/MS Volatile Organic Analysis (VOA), aliquots must be combined in the laboratory immediately before analysis. At least four (4) (rather than eight) aliquots or grab samples must be collected for VOA and for phthalates. Only one analysis is required.*

This revised definition is adapted from the definition of "composite sample" in the instructions for EPA Form 3510-2C (EPA 1990). This definition makes it clear that aliquots may be collected manually or automatically, and also allows the collection of fewer aliquots for volatile organic compounds and for phthalates, including bis (2-ethylhexyl) phthalate. Accepting fewer aliquots will facilitate manual collection of aliquots for phthalates, including bis (2-ethylhexyl) phthalate.

Comment #25 (Meridian)

In Part I.B.1, in Tables 2 and 3, Footnote 2, Add to the end of the first sentence, " ... maximum limit violation'", from when permittee becomes aware'.

Response #25

The regulation concerning 24-hour reporting of noncompliance that may endanger human health or the environment (40 CFR 122.41(l)(6)) reads, in relevant part, "any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances." Thus, the revision requested by the commenter is consistent with the regulatory language.

The EPA has therefore edited footnote #2 to Tables 2 and 3 to read as follows:

> *Reporting is required within 24 hours from the time the permittee becomes aware of a maximum daily limit or instantaneous maximum limit violation. See Parts I.B.2. and III.G.*

This language is consistent with 40 CFR 122.41(l)(6) and communicates the same intent as the commenter's suggested language.

Comment #26 (Meridian)

The language in Part I.B.2 of the permit does not match language in Parts III.B and III.H about when the permittee becomes aware of permit violations. Part III.G states that 24 hours from the time the permittee becomes aware of the circumstances, permit violations must be reported. Revise text to "The permittee must report within 24 hours from the time the permittee becomes aware of any violation...."

Response #26

The EPA agrees that the language suggested by the commenter is consistent with 40 CFR 122.41(l)(6). The EPA has revised the language of Part I.B.2 of the permit accordingly. See also the response to comment #25.

Comment #27 (Meridian)

Part I.B.8 provides extraneous information that does not align with Standard Methods. Simply referring to Standard Methods is sufficient. The additional information is unnecessary or incorrect. It requires checking for the presence of chlorine even if chlorine disinfection is not used. It does not allow for a window for pH adjustment. It only allows for pH adjustment using NaOH. It states to add the sample to a chilled container rather than chilling the sample. Delete all text after "…(refer to Standard Methods, 4500-CN B)." If the section is not corrected to simply refer to Standard Methods, the following changes are requested:

1. Only require chlorine presence check if chlorine disinfection is used.

2. Include a window of allowance for pH adjustment (for example: "pH 12 s.u. to 12.5 s.u." or "pH>12")

3. If the pH adjustment requirement is to remain at "12.0" exactly with no window, allow for the use of an acid to correct over-adjustments of the pH. Currently, the permit only allows for use of NaOH which only adjusts pH one direction.

4. State to cool the sample to <6C (like other analyses) rather than stating to add the sample into a chilled container.

Response #27

In general, the EPA agrees with the commenter that the cyanide sampling requirements in the draft permit can be simplified.

However, rather than referencing Standard Methods, the EPA believes it would be preferable to reference Table II of 40 CFR 136.3, which lists required containers, preservation techniques, and holding times for a number of parameters, including cyanide. Thus, Part I.B.8 has been revised to read as follows:

> *Influent and effluent sampling for cyanide must be conducted as follows. Eight discrete grab samples must be collected over a 24-hour day. Each grab sample must be at least 100 ml. Prior to compositing, any interferences must be removed or suppressed and the individual grab samples must be preserved as specified in Table II of 40 CFR 136.3. The grab samples can then be composited into a larger container to allow for one analysis for the day. The composited sample must also be preserved as specified in Table II of 40 CFR 136.3.*

Comment #28 (Meridian)

Insufficient time is provided to establish methods and quality control processes for surface water monitoring, including the in-stream temperature probes. Particularly more time is necessary to implement the continuous river sampling for Outfall 002. The City needs time to develop a safe and secure access for instream continuous monitoring which may require negotiation with property owners, delivery of power, any construction time, and other setup.

Modify language in Part I.E regarding the surface water monitoring requirements that states: "The permittee must conduct surface water monitoring. At Outfall 001, surface water monitoring must start no later than 180 days following the effective date of the permit. At Outfall 002 surface water monitoring must start no later than 820 days following the effective date of the permit."

Response #28

The City's 1999 permit allowed 150 days to begin surface water monitoring (see the 1999 permit at Part I.D). The receiving water monitoring requirements in the reissued permit required monitoring at similar locations and for many of the same parameters. The EPA believes it is appropriate to allow 150 days for the City to begin surface water monitoring, consistent with the 1999 permit.

The draft and final permits require monitoring for dissolved oxygen in the Boise River only in the final full calendar year of the permit term.

The EPA does not agree that it is appropriate to delay receiving water monitoring of the Boise River for 820 days. Battery-powered instruments may be used for continuous monitoring for temperature and DO, thus, delivery of power should not be a factor in the timing of continuous receiving water monitoring. Furthermore, as explained in the response to comment #29, below, the permit no longer requires continuous upstream receiving water monitoring for DO in the Boise River.

The EPA does not anticipate that it will require significant additional time to obtain access to the required receiving water monitoring locations in the Boise River. It appears that access to the south channel of the Boise River is available at the required monitoring locations. Artesian Road (east of Linder Road), and Duck Alley road (west of Linder Road) are parallel and adjacent to the south channel of the Boise River. The 1999 permit required monitoring of the Boise River to occur on the same schedule as monitoring of Fivemile Creek.

Comment #29 (Meridian)

Sampling upstream when not discharging places an undue burden on the City to collect unnecessary data. Modify to: Sampling of the respective monitoring stations is required only at times when the City is discharging from the corresponding outfall. Additionally, eliminate upstream monitoring for Outfall 002 (Boise River outfall) since the City of Boise's downstream surface water dataset is representative of this data.

Response #29

As explained in the response to comment #23, in general, the EPA does not agree that requirements to monitor the receiving water upstream of the outfalls should be contingent upon a discharge from the corresponding outfall, because upstream surface water monitoring results would not be influenced by the discharges.

However, the NPDES permit for City of Boise's West Boise Wastewater Treatment Facility (permit #ID0023981), which discharges to the south channel of the Boise River upstream from the City of Meridian's Boise River outfall, includes downstream receiving water monitoring requirements comparable to the upstream receiving water monitoring requirements in the City of Meridian's draft permit for. Therefore, the EPA agrees with the permittee that upstream receiving water monitoring in the Boise River is not necessary for dissolved oxygen, phosphorus, copper, lead, mercury and zinc. The

EPA has removed upstream receiving water monitoring requirements for the Boise River for dissolved oxygen, phosphorus, copper, lead, mercury and zinc from the final permit.

The final permit requires continuous temperature monitoring in the Boise River upstream from outfall 002, at times with the permittee discharges from outfall 002, because this was stipulated in the State of Idaho's final Clean Water Act Section 401 certification.

Comment #30 (Meridian)

Part I.E.7.b is unnecessary and repetitive when the data have already been reported via DMR and places an undue burden on the City. Delete I.E.7.b paragraph 1.

Response #30

DMRs include only a summary of the data collected and omit much of the information required to be included in the annual report required in Part I.E.7 of the permit. The more detailed information in the annual report will allow the EPA to upload the receiving water data into the EPA's STOrage and RETreival database (STORET), thus making it available to the public.

Comment #31 (Meridian)

The text in Part I.E.4 regarding sufficiently sensitive methods for receiving water monitoring does not align with similar language in Part l.B.6. Testing requirements should be the same EPA approved Standard Methods. Delete bullet 4 and replace with Part l.B.6.b text.

Response #31

The effect of the change requested by the commenter would be to allow the use of an analytical method with a minimum level higher than that listed in Appendix A, for analysis of receiving water samples, if such method would detect and quantify the level of the pollutant.

The EPA agrees that a method with a minimum level higher than that listed in Appendix A can be used for receiving water monitoring if it would detect and quantify the level of the pollutant. The EPA has made the change requested by the commenter.

Comment #32 (Meridian)

Sampling frequency for temperature and dissolved oxygen is continuous but the interval is not defined. Add footnote to temperature and dissolved oxygen when the sampling frequency is continuous, similar as in Table 2 footnote 5 "Temperature data must be recorded using micro-recording temperature devices known as thermistors. Set the recording device to record at one-hour intervals."

Response #32

Continuous monitoring for dissolved oxygen is required only in the south channel of the Boise River, and only during the final full calendar year of the permit term. As explained in the response to comment #29, the EPA has removed upstream receiving water monitoring requirements for the Boise River for dissolved oxygen, leaving only downstream monitoring, which is required only if there is a discharge from outfall 002.

The EPA has specified a recording interval of 15 minutes for continuous dissolved oxygen monitoring in the south channel of the Boise River. To allow for calculation of dissolved oxygen saturation, the EPA has specified that downstream continuous receiving water monitoring for temperature must also have a recording interval of 15 minutes.

The recording interval for temperature for other locations remains at 1 hour.

Comment #33 (Meridian)

Laboratory analyses will only use quantifiable EPA approved analytical methods regardless of whether the MDL/ML requirement is met. This is in alignment with previous EPA response to comments that "As far as test methods are concerned, facilities permitted under NPDES permits are required to use the EPA-approved laboratory test methods listed at 40 CFR 136." Add the statement that the use of quantifiable EPA approved analytical methods supersedes any other requirements if they cannot be met.

Response #33

The permittee must comply with the requirement to use analytical methods approved under 40 CFR Part 136 and with the minimum level (ML) requirements of the permit.

If the permittee cannot comply with the ML requirements, the permittee may request different MLs. See the permit at parts I.B.6.c and I.E.4.b. See also the response to comment #20.

Comment #34 (Meridian)

The City is unsure if NetDMR will be ready and configured for all the requirements in this permit by the EDP. Add the statement, the permittee will use NetDMR once EPA has it ready and functional for all requirements in this permit.

Response #34

The permit requires electronic submission of DMRs, consistent with the electronic reporting rule (80 FR 64063). NetDMR has been operational for several years and will be ready to accept data from the City of Meridian as soon as the City's permit is coded into the Integrated Compliance Information System (ICIS) database. The EPA will make every effort to ensure that the coding is complete before the first reports must be submitted using NetDMR.

Comment #35 (Meridian)

In Part VI, #29, the final sentence indicates that the composite shall be collected and stored in accordance with the most recent edition of Standard Methods. This is in direct conflict with Part III.C, which allows for monitoring to be conducted using test procedures approved under 40 CFR 136 (which lists a variety of test methods, not just Standard Methods). The holding times and preservatives listed in SM are for their methods only and do not match those defined in other allowable methods (such as EPA methods). Change the wording to require composites to be collected and stored in accordance with the preservation requirements of the methods to be performed on the sample.

Response #35

As stated in the response to comment #24, the EPA has changed the definition of "24-hour composite" to be based on the definition of "composite sample" in EPA Form 3510-2C (EPA 1990). The definition now reads:

> *"24-hour composite" sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24 hour period. The composite must be flow proportional; either the time interval between each aliquot or the volume of each aliquot must be proportional to either the stream flow at the time of*

sampling or the total stream flow since the collection of the previous aliquot. Aliquots may be collected manually or automatically. For GC/MS Volatile Organic Analysis (VOA), aliquots must be combined in the laboratory immediately before analysis. At least four (4) (rather than eight) aliquots or grab samples must be collected for VOA and for phthalates. Only one analysis is required.

This definition does not refer to *Standard Methods*.

Compliance Schedules and Interim Limits

Comment #36 (IRU)

IRU does not support the proposed schedule of compliance for total phosphorus. EPA is also showing poor judgement in allowing Meridian 9 years and 11 months to comply with the Total Phosphorus limits. That's longer than a full permit cycle. Meridian has had more than a decade to figure out how to decrease phosphorous discharge, something that has been accomplished in less than 10 years by hundreds of WWTPs across the nation including some in the Treasure Valley. These permit limitations are no surprise to anyone, and there's no reason to give them 6 years to complete final design. The permit should be revised to require full compliance in five years.

Response #36

The EPA has reviewed the schedules of compliance for new water quality-based effluent limits for phosphorus authorized by the Idaho Department of Environmental quality in its Clean Water Act Section 401 certifications of the subject permit and has determined, consistent with 40 CFR 122.47(a)(1), that the schedules require compliance as soon as possible.

Consistent with 40 CFR 122.47(a)(3), the compliance schedules include interim requirements and the dates for their achievement. The interim requirements are substantial, including such actions as implementing biological phosphorus removal, upgrades to solids handling, implementing process optimizations for ammonia removal, obtaining funding, planning, design, and construction. The EPA believes each of these interim steps are necessary to ultimately achieve the final water quality-based effluent limits for TP. The EPA also believes that the time intervals between these interim requirements, and, in turn, the total amount of time allowed to achieve compliance, are reasonable.

Comment #37 (IRU)

When do the interim limits take effect? Are they year-round? Are the interim TP limits per discharge or for both combined? Why did EPA select 2.5 mg/L for the first 5 years and 1.0 mg/L for the second five years? Why aren't they seasonal like the final limits? Why are the final limits pounds per day and the interim limits mg/L?

Response #37

The interim limits for ammonia, TP, copper and mercury take effect immediately upon the effective date of the final permit. The interim limits apply during the seasons stated in the permit.

Since the interim TP limits are expressed in terms of concentration, they cannot be applied as a combined loading limit like the final effluent limits for TP. However, the interim TP limits apply to discharges from both outfalls. To clarify this, in the final permit, footnote #1 to Table 5 has been edited to read as follows: "The annual average total phosphorus concentration must be calculated as the sum of all daily discharges of total phosphorus measured at outfalls 001 and 002 during a calendar year,

divided by the number of daily discharges of total phosphorus measured at outfalls 001 and 002 during that year."

The EPA did not "select" the interim limits, rather, they were specified by the State of Idaho in its draft Clean Water Act Section 401 certification of the permit. The interim TP limit is lowered to 1.0 mg/L from 2.5 mg/L after 5 years because, by that time, as shown in table 7 of the permit, treatment enhancements will have been completed, allowing Meridian to achieve a lower effluent TP concentration.

The final, water quality-based effluent limits for TP are seasonal because they are based on the seasonal WLAs in the *Lower Boise River TMDL: 2015 Total Phosphorus Addendum* (IDEQ 2015b). The final, water quality-based effluent limits for copper and mercury are seasonal because of seasonal changes in the flow rate and, for copper, the hardness of the receiving waters. The interim limits are specified in the State of Idaho's Clean Water Act Section 401 certification. The State of Idaho is not required to establish seasonal interim limits simply because the final effluent limits are seasonal.

The final, water quality-based effluent limits for TP are expressed in terms of mass (lb/day) because they are based on the mass WLAs in the *Lower Boise River TMDL: 2015 Total Phosphorus Addendum* (IDEQ 2015b). The interim limits are specified in the State of Idaho's Clean Water Act Section 401 certification. The State of Idaho is not required to establish interim limits expressed in terms of mass simply because the final effluent limits are expressed in terms of mass.

However, federal regulations state that, in general, effluent limits shall be expressed in terms of mass (40 CFR 122.45(f)(1)). Pollutants limited in terms of mass additionally may be limited in terms of other units of measurement, and the permit shall require the permittee to comply with both limitations (40 CFR 122.45(f)(2)). Therefore, in the final permit, the EPA has established interim TP, ammonia, copper and mercury effluent limits in terms of mass, in addition to the concentration limits that were proposed in the draft permit. The interim mass limits are calculated from the interim concentration limits based on the design flow of the POTW (10.2 mgd), consistent with 40 CFR 122.45(b).

Comment #38 (IRU)

Federal regulations generally require that interim effluent limits be at least as stringent as the final limits in the previous permit (40 CFR 122.44(l)(1)). There were no Total Phosphorus limits in the previous permit (only because no new permit has been issued for 17 years), but interim limits should certainly not be higher than current Total Phosphorus discharge.

Why would EPA allow Meridian to double their current discharge? According to the 2015 Total Phosphorus TMDL Addendum, the Meridian WWTP discharge of Total Phosphorus is 1.26 mg/L. The proposed interim limit is 2.5 mg/L. EPA needs to set the interim limit for the first 5 years to 1.26 mg/L.

Response #38

The commenter appears to be referring to Table 15 of the *Lower Boise River TMDL: 2015 Total Phosphorus Addendum* (IDEQ 2015b). This table lists the City of Meridian's mean TP concentration as 1.26 mg/L. Footnote b to this table specifies that this is the TP concentration that was measured between May 1, 2012 and September 30, 2012.

At times, the City's TP concentration has been considerably higher than 1.26 mg/L. The effluent concentration of TP has been greater than 2.5 mg/L about 7% of the time since January 2010. Because

2.5 mg/L is within the range of TP discharges measured by the City in the past 5 years, the EPA believes an annual average of 2.5 mg/L is a reasonable interim limit for TP, until treatment enhancements are completed.

Comment #39 (ICL)

Interim cyanide, zinc and bis (2-ethylhexyl) phthalate limits: The EPA has determined that this WWTP has the reasonable potential to violate water quality limits for these pollutants. As such, EPA must issue effluent limits for these pollutants to the WWTP in this permit. Failure to do so will mean that these are uncontrolled pollutants resulting in a violation of a water quality standard. This oversight needs to be rectified and interim limits need to be established.

Response #39

As stated by the commenter, in the fact sheet, the EPA determined that the City of Meridian WWTP has the reasonable potential to cause or contribute to excursions above water quality standards for bis (2-ethylhexyl) phthalate, weak acid dissociable cyanide, and, for outfall 001 from May – September, zinc. As explained in the response to comment #10, the EPA has since determined that there is insufficient information to determine if the discharge has the reasonable potential to cause or contribute to excursions above water quality standards for bis (2-ethylhexyl) phthalate. Thus, the permit includes water quality-based effluent limits for cyanide and zinc, however, these limits are subject to a compliance schedule and do not take effect immediately upon the effective date of the final permit.

The federal regulations concerning compliance schedules state that for compliance schedules longer than one-year "the schedule shall set forth interim requirements and the dates for their achievement" (40 CFR 122.47(a)(3)). However, nothing in the federal compliance schedule rule nor the State of Idaho's compliance schedule authorizing provision requires interim effluent limitations. The compliance schedule authorized by the State of Idaho has interim requirements and the dates for their achievement as required by 40 CFR 122.47(a)(3).

Federal regulations speak to interim effluent limitations at 40 CFR 122.44(l). This regulation states that, "interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under § 122.62.)" The previous permit for the City of Meridian did not have any effluent limits for weak acid dissociable cyanide or zinc. Thus, in this case, 40 CFR 122.44(l) does not require interim effluent limits for these pollutants.

Comment #40 (ICL)

We do not support the provision of this draft permit that provides for a 9 year 11 month compliance schedule for copper and zinc at Outfall 001.

EPA and DEQ have justified a 9 year 11 month compliance schedule for total phosphorus based on the time (and funding) needed to evaluate and implement various potential facility upgrades.

However, the achievement of final effluent limits for these pollutant is not based on pending facility upgrades. Rather, compliance is based on the city identifying the contributing facilities and developing and implementing a pollutant minimization plan.

There are a limited number of generally well-understood types of facilities (like circuit board manufactures) that typically discharge copper into the influent of WWTPs. Whereas total phosphorus compliance will require years of complicated construction at the WWTP, metals compliance will require that the city simply change the behavior of a limited number of facilities discharging to the WWTP. There is no justification for such a protracted compliance schedule for these pollutants and it should be greatly shortened or completely eliminated.

Similar to our comments above, we do not support a 9 year 11 month compliance schedule for cyanide or bis (2-ethylhexyl) phthalate since attaining these limits is likely a matter of limiting inflow rather than installing treatment equipment.

We do not support the provision in this draft permit that provides for a 9 year 11 month compliance schedule for mercury at outfall 001 (Oct-April). The achievement of final effluent limits for mercury is not based on pending facility upgrades. Rather, mercury compliance is based on the city developing and implementing a Mercury Minimization Plan. Developing such a plan should not take the city too long – as this is pretty standard and the city will undoubtedly be benefiting from the many other Mercury Minimization Plans that have been created in Idaho and across the United States. There are a limited number of generally well-understood types of facilities that typically discharge mercury into the influent of WWTPs. Whereas total phosphorus compliance will require years of complicated construction at the WWTP, mercury compliance will require that the city simply change the behavior of a limited number of facilities discharging to the WWTP. There is no justification for such a protracted compliance schedule for mercury and it should be greatly shortened or completely eliminated.

Response #40

As explained in the response to comment #10, the EPA has determined that there is insufficient information to determine if the discharge has the reasonable potential to cause or contribute to excursions above water quality standards for bis (2-ethylhexyl) phthalate. Thus the final water quality-based effluent limits and associated compliance schedule have been removed from the permit along with the associated compliance schedule.

The EPA believes it is reasonable for the compliance schedules for copper, cyanide, mercury and zinc to be the same length as the compliance schedule for TP. As stated in the State of Idaho's draft Clean Water Act Section 401 certification, "it is anticipated that the addition of enhanced biological nutrient removal and improved tertiary filtration implemented for phosphorus and ammonia removal will provide some level of enhanced removal for organics and metals as general effluent quality is improved."

The City of Meridian does not have any categorical industrial users or other significant industrial users and is not required by its NPDES permit to develop or implement an EPA-approved industrial pretreatment program. Thus, it is unlikely that the sources of copper, zinc, cyanide, and in the City's discharge are primarily from industrial users that could be controlled to the extent necessary to meet the new water quality-based effluent limits through pretreatment requirements.

Copper and zinc are abundant in the Earth's crust and thus occur naturally in water. Copper and galvanized (i.e., zinc-coated) steel are common materials for water pipes. Thus, domestic users of the City of Meridian's POTW likely contribute copper and zinc to the POTW, and therefore it is unlikely that

copper and zinc could be controlled through reductions in inflow. Thus, it is reasonable for the compliance schedule for copper and zinc to be the same length as the compliance schedule for TP.

The EPA agrees that the development and implementation of the mercury minimization plan will likely reduce discharges of mercury from the City of Meridian WWTP. However, it is unclear whether the reductions realized from the mercury minimization plan will be adequate to consistently achieve the final numeric water quality-based effluent limits for mercury for outfall 001 from April – October. Similar to bis (2-ethylhexyl) phthalate, copper, cyanide, and zinc, the EPA expects that enhanced biological nutrient removal and improved tertiary filtration will result in reductions in mercury discharges. Thus, it is reasonable for the compliance schedule for mercury to be the same length as the compliance schedule for TP.

Comment #41 (Meridian)

Mercury should be provided an interim limit, if effluent limits are not removed. There are no specific treatment processes for reduction and the effluent limitation is based on only 12 samples to determine if it causes or contributes to water quality exceedances. Remove the mercury effluent limitations and align interim limits with the compliance schedule, unless removed entirely.

Response #41

As explained in the response to comment #4, the EPA has removed all of the numeric water quality-based mercury limits from the permit, except at outfall 001, from October – April. The final, numeric water quality-based effluent limits for mercury, for outfall 001, from October – April, are unchanged from the draft permit.

As stated in Table 6, on Page 17 of the Fact Sheet, the EPA determined that the City of Meridian could not comply with the October – April mercury limits for outfall 001, and thus a compliance schedule, with an interim limit, was proposed in the draft permit. The compliance schedule and interim limit for the October – April mercury limits for outfall 001 remain in the final permit.

Thus, a compliance schedule, with an interim effluent limit, is authorized for the only final numeric water quality-based mercury effluent limits that remain in the final permit.

Comment #42 (Meridian)

The list of authorized effluent limits for a schedule of compliance in Part I.C.2 is impracticable. The City does not agree that all of these are necessary or appropriate. For those that are not removed, there are significant challenges to meeting these limits and compliance cannot be ensured. Many of these limits are new and unexpected. The City needs time to adjust their facility planning and cost expenditures, design, implement, and test the operation of treatments to meet these limits. Modify to (unless the effluent limitation is deleted):

a) Mercury effluent limits for outfall 001 October- April and May-September and outfall 002 November-June and July- October.

b) Total recoverable zinc effluent limits for outfall 002 November - June and July- October.

Response #42

Regarding mercury, as explained in the response to comment #4, the EPA has determined that the City of Meridian's discharge does not have the reasonable potential to cause or contribute to excursions

above water column mercury criteria except during the non-irrigation season (October – April) in Fivemile Creek (Outfall 001). Therefore, the final permit includes numeric water quality-based effluent limits for mercury only for Outfall 001, and only from October – April. As proposed in the draft permit, the final permit includes a schedule of compliance for these mercury limits.

Regarding zinc, no compliance schedule is established for zinc for outfall 002 because neither the draft nor the final permit includes any effluent limits for zinc for outfall 002.

The draft and final permits include numeric water quality-based effluent limits for zinc only for Outfall 001, and only from May – September. As proposed in the draft permit, the final permit includes a schedule of compliance for these zinc limits.

Comment #43 (Meridian)

The "Period" column in Table 6, in Part I.C. should identify the time the interim effluent limitations are in effect, not the sampling period and should be consistent with Table 5. Change the period to "Until 9 years and 11 months after the effective date of the final permit."

The ability to comply with final effluent limitations for the parameters granted interim effluent limitations in Table 6 are coincidental to overall process improvements within the schedule of compliance (Table 7); therefore, time for the overall program implementation is necessary before compliance with the final effluent limitations. There are no individual treatment processes available to reduce the parameters identified, whereas the overall treatment process improvements may provide some reduction and should be allowed to reach full implementation before imposing the final limits. Identify in Table 6 that the period for compliance is "Until 9 years and 11 months after the effective date of the final permit."

Response #43

The EPA agrees with this comment and has therefore edited Table 6 so that the "Period" column lists the length of the compliance schedule (i.e., 9 years and 11 months from the effective date of the final permit), instead of the seasons during which the interim effluent limits apply.

The EPA has also added "Season" columns to Tables 5 and 6 to identify the seasons during which the interim effluent limits apply.

Comment #44 (Meridian)

In Table 7, Task No. 3, the deliverable is unclear and could imply compliance is required in 5 years which is not what the 10 year compliance schedule intends or the deadlines shown in the second column of Table 7. Conflicting information is shown in the Deadline and Task Activity columns. In Table 7, Task No. 3, modify the text after Deliverable as follows "Deliverable: Provide DEQ and EPA a schedule of design upgrades." and delete "required to achieve compliance with final limits within 5 years of the EDP."

Response #44

The EPA agrees that, as written in the draft permit, the language for the deliverable is unclear and could imply that compliance is required in 5 years. In addition, stating the deadline in the deliverable is redundant, since the deadline is already stated in the "Deadline" column of this table. Thus, the EPA has struck the phrase "within 5 years of the EDP" from the deliverable.

Comment #45 (Meridian)

Add clarity about the referenced final effluent limitations. In Table 7, Task No. 8, add to the first sentence " ... effective date of the permit)" ', achieve final effluent limits issued in this permit.'

Response #45

The EPA agrees that the language of task number 8, in Table 7, could be clearer. The EPA has revised task number 8 to read as follows:

> *Process optimization and achieve final effluent limitations in Part I.B of this permit (nine years and eleven months after the effective date of the permit).*
>
> *Deliverable: Permittee must achieve compliance with the final effluent limitations in Part I.B of this permit by June 30, 2027 and must submit written notice of compliance to DEQ and EPA.*

Comment #46 (Meridian)

Outfall requirements in Part I.D should match requirements in Tables 2 and 3. Revise to be consistent.

Response #46

Regarding the required sample frequency for WET, Tables 2 and 3 reference Part I.D.2, thus there is no inconsistency regarding required sample frequencies between Part I.D and Tables 2 and 3.

Regarding the required sample type, Tables 2 and 3 specify 24-hour composite samples for WET, which is consistent with Part I.D.1.

In order to ensure consistency in reporting requirements between Part I.D and Tables 2 and 3, the EPA has edited Tables 2 and 3 to reference the WET reporting requirements in Part I.D.4. The EPA has also edited Part I.D.4.a to specify that, if more than one WET sample is taken during the season, the permittee must report both the maximum and average results for the season on the DMR.

Comment #47 (Meridian)

Clarify that WET testing is required if discharging effluent to the outfall. Add to l.D.2.a, "...twice per year for each outfall, if effluent discharge to the outfall occurs within the testing period."

Response #47

The EPA agrees that WET testing during a given season be conducted only if effluent is discharged to a given outfall during that season. Part I.D.2.a now reads "Chronic tests must be conducted twice per year for each outfall if a discharge from the outfall occurs during the seasons specified below."

Comment #48 (Meridian)

The assessment in Table 6, on Page 16 of the Fact Sheet, that the proposed limits are achievable immediately, is impracticable. A compliance schedule negotiable with the State of Idaho is appropriate for all parameters and necessary to provide sufficient time to ensure compliance. The City requests a compliance schedule for multiple parameters and is especially concerned about not being able to meet ammonia and phosphorus requirements that are at or below the limits of technology and require significant time to design, construct, and operate.

For all parameters except for total suspended solids, the assessment of achievable immediately should be no and a compliance schedule granted. The treatment processes that will be implemented during the

compliance schedule may incidentally reduce mercury and as such should be implemented first to evaluate such potential reduction before final effluent limits are set.

Response #48

The commenter's statement that the new water quality-based effluent limits for total suspended solids (TSS) are achievable immediately upon the effective date of the final permit is not in dispute. The EPA stated in Table 6 of the fact sheet that the new water quality-based effluent limits for TSS are achievable immediately upon the effective date of the final permit.

Other than the TSS, the only new water quality-based effluent limits that the EPA determined could be achieved immediately upon the effective date of the final permit were the effluent limits for mercury for outfall 002 (for all seasons) and for outfall 001 from May – September. However, as described in the response to comment #4, the EPA has removed from the final permit all of the mercury effluent limits that the EPA determined the City could comply with immediately. This renders moot the issue of whether a compliance schedule of compliance is necessary for such proposed limits.

A compliance schedule is authorized for the only numeric water quality-based effluent limits for mercury that remain in the permit, which apply at outfall 001 from October – April.

Standard Permit Conditions

Comment #49 (Meridian)

Meridian requested that the EPA replace the word "pollutants" from the discharge authorization in Part I.A of the draft permit. Meridian stated that "pollutants" should be replaced with "effluent," to match the current permit.

Response #49

The paragraphs in the 1999 permit corresponding to Part I.A in the draft permit appear on Page 4, under the heading "I. SPECIFIC LIMITATIONS AND MONITORING REQUIREMENTS," and read as follows:

> *"During the period beginning on the effective date of this permit the permittee is authorized to discharge wastewater from Outfall 001 to Five Mile Creek, and from Outfall 002 to the Boise River provided the combined discharge from Outfalls 001 and 002 does not exceed 7.0 mgd, and the discharge meets the limitations and monitoring requirements set forth herein.*
>
> *This permit does not authorize the discharge of any waste streams, including spills and other unintentional or non-routine discharges of pollutants, that are not part of the normal operation of the facility as disclosed in the permit application."*

Part I.A of the draft permit reads as follows:

> *"During the effective period of this permit, the permittee is authorized to discharge pollutants from Outfall 001 to Fivemile Creek, and from Outfall 002 to the Boise River, within the limits and subject to the conditions set forth herein. This permit authorizes the discharge of only those pollutants resulting from facility processes, waste streams, and operations that have been clearly identified in the permit application process."*

Contrary to Meridian's comment, the word "effluent" does not appear in this part of the 1999 permit. The 1999 permit states that "the permittee is authorized to discharge *wastewater*," whereas the draft permit states that "the permittee is authorized to discharge *pollutants*."

The use of the word "pollutants" is preferable to "wastewater" or "effluent" because it is consistent with the Clean Water Act (CWA) and federal regulations. According to 40 CFR 122.1(b), "The NPDES program requires permits for the discharge of 'pollutants' from any 'point source' into 'waters of the United States.' The terms 'pollutant', 'point source' and 'waters of the United States' are defined at § 122.2."

The definition of the term "pollutant" at 40 CFR 122.2 reads, in relevant part, "Pollutant means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials…, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water." The Meridian WWTP discharges sewage and other municipal and industrial waste. Therefore, the Meridian WWTP discharges "pollutants" as defined in 40 CFR 122.2.

Since the WWTP is a "point source" and discharges "pollutants" to "waters of the United States" as those terms are defined at 40 CFR 122.2, the WWTP is required to obtain an NPDES permit (40 CFR 122.1(b), CWA §§ 301 and 402).

Comment #50 (Meridian)

The documents include multiple terms when referring to "receiving water" or "ambient" or "surface water". Please update the permit and fact sheet to consistently use only one term for "receiving water" or "ambient" or "surface water".

Response #50

The EPA has edited the final permit to use the phrase "receiving water" consistently, replacing uses of the terms "ambient" and "surface water" in the draft permit. This phrase was chosen because it is used several times in federal regulations concerning NPDES permits (40 CFR 122), whereas the terms "ambient" and "surface water" do not appear in these regulations.

Comment #51 (Meridian)

Remove the phrase "only those pollutants" from the second sentence of Part I.A. of the permit.

Response #51

The sentence in question reads, "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." This language is included to make clear the extent of the discharge authorization, and the shield from enforcement provided by the permit.

As explained in the EPA's "Revised Policy Statement on Scope of Discharge Authorization and Shield Associated with NPDES Permits" (EPA 1995):

> *A permit provides authorization and therefore a shield for the following pollutants resulting from facility processes, waste streams and operations that have been clearly identified in the permit application process when discharged from specified outfalls:*

1. *Pollutants specifically limited in the permit or pollutants which the permit, fact sheet, or administrative record explicitly identify as controlled through indicator parameters;*
2. *Pollutants for which the permit authority has not established limits or other permit conditions, but which are specifically identified in writing as present in facility discharges during the permit application process and contained in the administrative record which is available to the public; and*
3. *Pollutants not identified as present but which are constituents of wastestreams, operations or processes that were clearly identified in writing during the permit application process and contained in the administrative record which is available to the public.*

The policy statement also states that "an NPDES permit does not authorize the discharge of any pollutants associated with wastestreams, operations, or processes which existed at the time of the permit application and which were not clearly identified during the application process" (emphasis in original).

If the EPA were to delete the phrase "only those pollutants" from the permit, as suggested by the commenter, the discharge authorization would not be specific to pollutants resulting from facility processes, waste streams and operations that have been clearly identified in writing in the permit application process and contained in the administrative record. This would be contrary to the EPA's policy on the scope of discharge authorization and shield associated with NPDES permits. Therefore, the EPA has not edited Part I.A of the permit as suggested by the commenter.

Comment #52 (Meridian)

Current permit language in Part I.B.5 does not differentiate between treatment units. If the City of Meridian is capable of meeting the effluent permit limits without filtration, please allow the discharge of both filtered and unfiltered effluent. Language should be added to this section giving permission to collect effluent samples to be taken from filtered or unfiltered effluent so long as limits are still met is a concern based on the facility equipment. Revise to: The permittee must collect effluent samples from the effluent stream after the last treatment unit, which may be filtered or unfiltered effluent, prior to discharge into the receiving waters.

Response #52

The EPA does not agree that the commenter's proposed revision is necessary or consistent with federal regulations.

Bypass of treatment units, including filtration, is addressed by Part IV.F of the permit "Bypass of Treatment Facilities." This condition of the permit implements 40 CFR 122.41(m), which is a standard condition that must be included in all NPDES permits. The first paragraph of 40 CFR 122.41 reads, in relevant part:

> *The following conditions apply to all NPDES permits. … All conditions applicable to NPDES permits shall be incorporated into the permits either expressly or by reference.*

The EPA cannot change the permit to allow bypasses to a greater extent than specified in 40 CFR 122.41(m).

However, seasonal effluent limitations which allow the facility to shut down a specific pollution control process during certain periods of the year are not considered to be a bypass (49 FR 38037). Thus, if

filtration is necessary only to meet certain seasonal effluent limits, then the permittee may shut down filtration and sample the unfiltered effluent.

Comment #53 (Meridian)

In Part II.A., it is an undue burden to continually amend the O&M Plan as field conditions may necessitate minor adjustments. Modify to: The permittee must identify whenever there is a modification in sample collection, sample analysis, or other procedures addressed by the QAP and maintain appropriate records of deviations from the QAP.

Response #53

It would not be appropriate to include language regarding the quality assurance plan (QAP) in Part II.A of the permit, which concerns the operation and maintenance (O&M) plan.

The EPA assumes that the language characterized by the commenter as requiring the permittee to "continually amend the O&M Plan" is the sentence which reads, "any changes occurring in the operation of the plant shall be reflected within the Operation and Maintenance plan."

This is not intended to require amendments to the O&M plan to reflect minor adjustments that are within the scope of the existing O&M Plan.

Comment #54 (Meridian)

It is an undue burden to continually amend the QAP as field conditions may necessitate minor adjustments. Modify to: The permittee must identify whenever there is a modification in sample collection, sample analysis, or other procedures addressed by the QAP and maintain appropriate records of deviations from the QAP.

Response #54

The EPA assumes that the language characterized by the commenter as requiring the permittee to "continually amend the QAP" is the sentence which reads, "The permittee must amend the QAP whenever there is a modification in sample collection, sample analysis, or other procedure addressed by the QAP."

This is not intended to require amendments to the QAP to reflect minor adjustments that are within the scope of the existing QAP.

Comment #55 (Meridian)

It is not feasible to comply with changing requirements beyond those that are directly incorporated within the permit. Strike Part IV.H.

Response #55

Part IV.H of the draft permit implements 40 CFR 122.41(a)(1), which reads:

> *The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.*

The first paragraph of 40 CFR 122.41 reads, in relevant part:

The following conditions apply to all NPDES permits. … All conditions applicable to NPDES permits shall be incorporated into the permits either expressly or by reference.

Thus, even if the EPA struck this language from the permit, the EPA would be required by 40 CFR 122.41 to include it by reference.

The draft permit omitted the clause in 40 CFR 122.41(a)(1) stating that the permittee shall comply with standards for sewage sludge established under Section 405(d) of the CWA. This clause has been added to the final permit.

Whole Effluent Toxicity

Comment #56 (Meridian)

Meridian stated that *Selenastrum capricornutum* is sensitive to numerous parameters that may not be related to the effluent. As stated in EPA guidance, depending on site-specific water quality conditions, it is appropriate to utilize specific species. In cases where water quality characteristics are not compatible with standard test species, the permitting authority should use best scientific judgment with local and state agencies in the selection of appropriate species. *Selenastrum capricornutum* is not appropriate to include.

Response #56

The TSD states that, "to provide sufficient information for making permitting decisions, EPA recommends a minimum number of three species, representing three different phyla (e.g., a fish, an invertebrate, and a plant) be used to test an effluent for toxicity" (Section 1.3.4, Page 16).

The only plant for which there is a chronic whole effluent toxicity test approved by the EPA for nationwide use is EPA Method 1003.0, which is a growth test for the green alga *Selenastrum capricornutum* (40 CFR 136.3, Table IA). Thus, in order to ensure consistency with the TSD's recommendation to test a minimum of three species representing three different phyla, the EPA has required *Selenastrum capricornutum* to be included in the screening for the most sensitive species.

Comment #57 (Meridian)

In Part I.D.4.b, it is unclear what must be reported for flow rate, effluent flow rate or receiving water flow rate or both. Clarify that this is the flow rate for the day since sampling is completed on a composite sample.

Response #57

This language refers to the effluent flow rate. Note that monitoring of the receiving water flow rate is required only for outfall 001. The EPA has edited this part of the permit to specify that it is the 24-hour average effluent flow rate that must be reported in the report of toxicity test results.

Comment #58 (Meridian)

In Part I.D.5, the compliance schedule on TRE and WET should provide 180 days to complete TRE and the first WET test. The TRE is a new requirement and sufficient time should be provided to initiate. Allow for time to prepare TRE workplan and initial WET testing.

Response #58

The *EPA Regions 8, 9 and 10 Toxicity Training Tool* (Denton et al., 2007) states that "EPA Regions 9 and 10 recommend that an initial TRE/TIE Work Plan be developed by the permittee within 60-90 days of the effective date of the permit." The EPA has edited parts I.D.2.a and I.D.5 of the permit to allow 90 days to complete the initial investigation TRE workplan.

Comment #59 (Meridian)

The draft permit calls for an effort to develop a toxicity reduction evaluation (TRE) workplan prior to 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 understands whether a TRE is even needed, requiring a TRE workplan be prepared and 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.

Response #59

The EPA does not agree that a TRE workplan should be completed only in the event that toxicity testing shows that the effluent exceeds the accelerated testing triggers in Part I.D.6 of the permit. The *EPA Regions 8, 9 and 10 Toxicity Training Tool* (Denton et al., 2007) states that "EPA Regions 9 and 10 recommend that an initial TRE/TIE Work Plan be developed by the permittee within 60-90 days of the effective date of the permit." Completing an initial investigation TRE workplan will allow the City of more quickly and effectively respond to an effluent toxicity problem, should it occur.

Comment #60 (Meridian)

Need to clarify that additional tests are only WET tests, and not all effluent parameters with frequency of monthly or more. In Parts I.D.6.b and c, clarify that accelerated testing is for WET tests.

Response #60

The EPA has inserted the phrase "whole effluent toxicity" into Parts I.D.6.b and c. of the permit, to clarify that the accelerated testing required therein is WET testing.

Comment #61 (Meridian)

In Part I.D.7.a of the draft permit, the TRE workplan should be completed within 180 days of effective date of the permit. Strike "prior to initiation of toxicity testing". Add "if toxicity is demonstrated."

Response #61

The timeline for development of the initial investigation TRE workplan is addressed in Part I.D.5 of the draft permit. As described in the response to comments 58 and 59, the EPA has required the completion of the initial investigation TRE workplan with 90 days of the effective date of the final permit, consistent with the recommendations of the *EPA Regions 8, 9 and 10 Toxicity Training Tool* (Denton et al., 2007).

Mercury Minimization Plan

Comment #62 (Boise)

Mercury is a bioaccumulative pollutant that is a global pollutant[15] and impacts many waters of the United States, including Idaho, the Boise River and Brownlee Reservoir[16]. Idaho fish consumption advisories[17] for mercury have been issued for the Boise River (catfish at Parma, Idaho), Brownlee Reservoir (carp, catfish, crappie, and perch), and statewide (large and smallmouth bass), making mercury an important permitting issue for all point sources discharging mercury to the Boise River.

Municipal wastewater treatment facilities are generally a minor source of mercury, however they do have a role to play in the control of mercury and the protection of human health[18,19]. The proposed Mercury Minimization Plan and Watershed based Fish Tissue testing requirements proposed in the draft permits appear to be appropriate and are actions municipalities already are or are willing to implement to protect human health and the environment.

Response #62

Thank you for your comment.

Comment #63 (Meridian)

In Part I.F, clarify the requirements for the completion of mercury minimization plan (MMP) or reports. Request only having to complete MMP or reports if not meeting mercury limits.

Response #63

As explained in the response to comment #4, all of the mercury limits have been removed from the permit, except for outfall 001 from October – April.

Even if the City had effluent limits for mercury year-round, for both outfalls, it would not be appropriate to require completion of the MMP or associated reports only if the City is not meeting its mercury effluent limits. As explained on Pages 25-26 the fact sheet, the objective of the MMP is to identify potential sources of mercury loading to the POTW, and, in turn, the receiving water, in an effort to attain compliance with the State of Idaho's human health criterion for methylmercury in fish tissue (0.3 mg/kg).

In contrast, the numeric mercury effluent limits are not based on the human health fish tissue criterion, rather, they are based on the numeric criteria for mercury in the water column, which is unrelated to the fish tissue criterion. Thus, compliance with the effluent limits for mercury does not necessarily

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[15] United Nations Environment Programme Global Mercury Assessment 2013, available at: http://www.unep.org/chemicalsandwaste/what-we-do/technology-and-metals/mercury/global-mercury-assessment

[16] Idaho Fish Consumption Advisory Program, Boise River listing for Catfish (no more the 3-11 meals per month depending on age and pregnancy, statewide large and small mouth bass advisory of no more than 2-8 meals per month with no other fish consumption; http://healthandwelfare.idaho.gov/Health/EnvironmentalHealth/FishAdvisories/tabid/180/Default.aspx

[17] Idaho Fish Consumption Advisories, Idaho Fish Consumption Advisory Program, http://healthandwelfare.idaho.gov/Health/Environmenta!Health/FishAdvisories/tabid/180/default.aspx

[18] Mercury Pollutant Minimization Program Guidance, USEPA Region 5, November 2004.

[19] USEPA, 2010, Guidance for Implementing the January 2001 Methylmercury Water Quality Criterion, 221 p, http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P1007BKQ.TXT

mean that the City's MMP is effective in reducing discharges of mercury to the extent necessary to meet the State of Idaho's human health criterion for methylmercury in fish tissue.

Comment #64 (Meridian)

The sentence at Part I.F.3.b (Page 22) does not make sense: "A summary of actions taken to reduce or eliminate mercury discharges to progress toward meeting water quality standards." Revise the sentence, such as, "A summary of actions taken to reduce or eliminate mercury discharges."

Response #64

The EPA agrees that the language of Part I.F.3.b could be clarified. The EPA has edited it to read: "A summary of actions taken to reduce or eliminate mercury discharges, with a goal of meeting water quality standards for methylmercury in fish tissue."

Comment #65 (Meridian)

In Part I.F.3.c, define "influent and effluent". The sentence is not clear. "Mercury source reduction implementation, source monitoring results, influent and effluent, and results for the previous year." Revise sentence. "Mercury source reduction implementation, source monitoring, influent, and effluent mercury concentration results from sampling."

Response #65

The EPA agrees that the language of Part I.F.3.c could be clarified. The EPA has edited it to read: "Mercury source reduction implementation, mercury source monitoring results, and influent and effluent mercury monitoring results for the previous year."

Receiving Stream Flow

Comment #66 (IRU)

Could EPA please present the Fivemile Creek low flows in cubic feet per second, not million gallons per day? This would be consistent with the way that river flow is measured and the way low flow is reported in other permits.

Response #66

The flow rates for Fivemile Creek are provided in Tables 1, C-2 and C-3 of the fact sheet. The available flow data for Fivemile Creek was collected by the City of Meridian as required by its 1999 permit. The 1999 permit required the stream flow to be reported in units of million gallons per day (mgd). See the 1999 permit at Table 5, on Page 11. Thus, the flow of Fivemile Creek was reported in units of million gallons per day in the fact sheet.

Table 1, below, lists the critical low flows for Fivemile Creek, with values reported in cubic feet per second (CFS) instead of mgd. A flow rate of 1 mgd is equivalent to 1.547 CFS.

Table 1: Estimated Low Flows in Fivemile Creek Upstream of the City of Meridian Outfall

Season	1Q10 (CFS)	7Q10 (CFS)	30Q5 (CFS)	Harmonic Mean (CFS)
October – April	1.4	1.83	2.01	N/A
May – September	28.0	36.5	40.1	N/A
Year Round	N/A	N/A	N/A	9.95

Comment #67 (IRU)

Could EPA provide the flow data that was used for Thurman Drain and provide the location of that drain?

Response #67

As explained on Page C-4 of the fact sheet, the EPA obtained flow data for Thurman Drain from the USGS NWIS, and a total of 46 flow measurements were available. Specifically, water quality data were available for two stations: Station #13208750 Thurman Drain at Mouth near Eagle, ID and station #13209450 Thurman Drain near Eagle, ID. Data from the USGS NWIS is publicly available on the internet at http://waterdata.usgs.gov/nwis.

As stated on Page C-4 of the fact sheet, the EPA used the monthly average flow rates of Thurman Drain when estimating the flow of the south channel of the Boise River at Linder Road. The monthly average flow rates calculated from the USGS NWIS data are provided in Table 2, below.

Table 2: Monthly Average Flow Rates for Thurman Drain

Month	Average Flow Rate (CFS)	Number of Measurements
Jan	7.4	1
Feb	11.4	2
Mar	7.1	3
Apr	13.3	3
May	17.7	7
Jun	19.3	5
Jul	16.6	4
Aug	22.4	5
Sep	20.0	4
Oct	13.1	4
Nov	11.9	5
Dec	12.5	3

The locations of the monitoring stations are shown in Figures 1 and 2, below.

Figure 1: Location of Station Number 13208750 (Thurman Drain at Mouth)

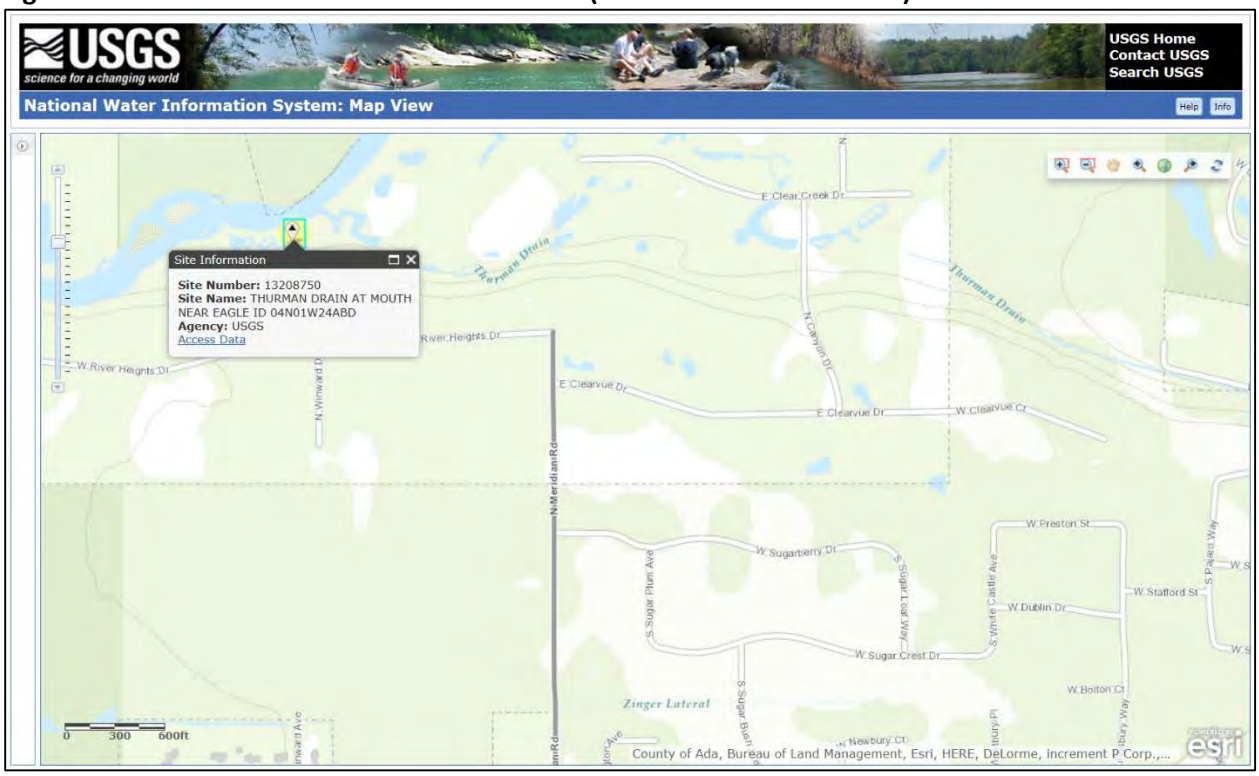
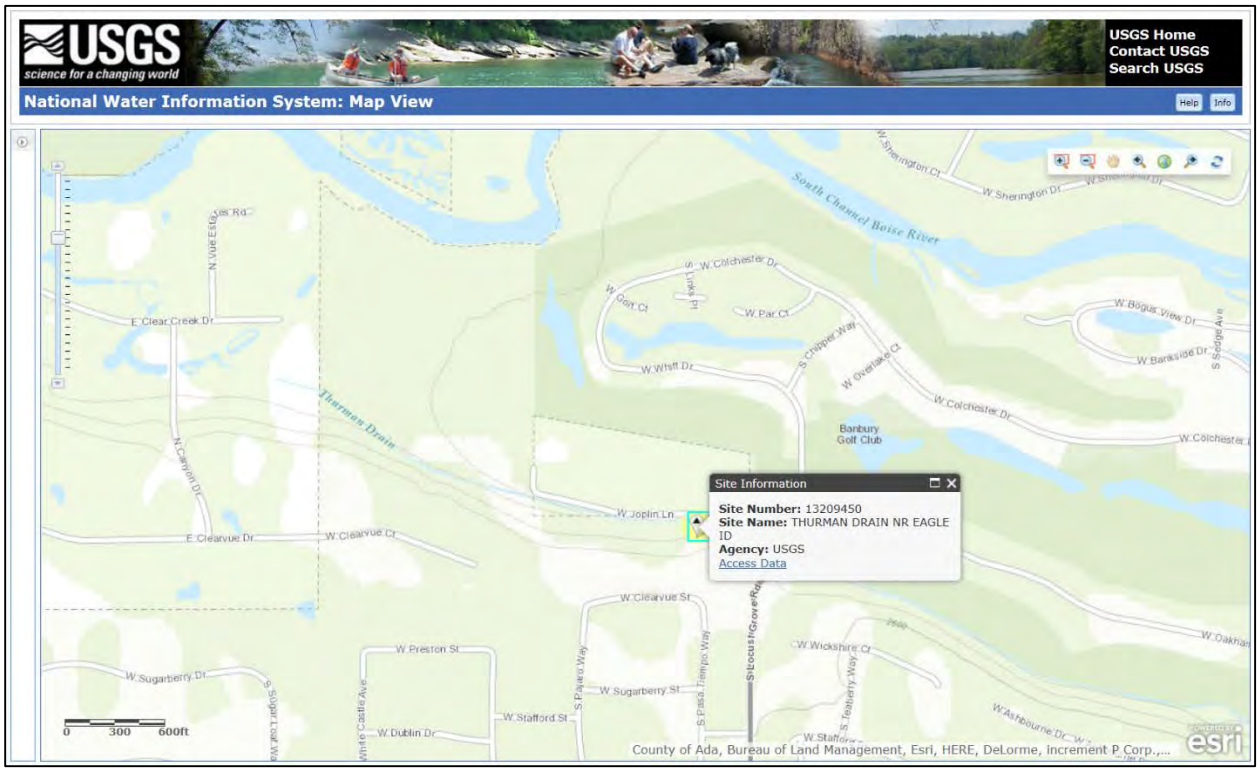


Figure 2: Location of Station Number 13209450 (Thurman Drain near Eagle, Idaho)



Clarification of Permit Requirements

Comment #68 (Meridian)

Entries for TSS and phosphorus in Table 2 and Table 3 include "See Table 1." A similar reference should be included for BOD_5. Add to the row for Biochemical Oxygen Demand (BOD_5) in Table 2 and Table 3, "See Table 1." Revise to consistent terms in Table 2 for TSS from "See also Table 1" to "See Table 1."

Response #68

Tables 1 lists combined BOD_5 loading limits for outfalls 001, while Tables 2 and 3 list outfall-specific effluent limits for BOD_5. Thus, the EPA agrees that it would clarify the permit if the BOD_5 effluent limits in Tables 2 and 3 referenced the combined loading limits in Table 1. Therefore, the phrase "See also Table 1" has been included in the BOD limits listed in Tables 2 and 3.

To make the expression of the TSS limits consistent with the BOD_5 limits, TSS mass limits for outfall 002 are now listed in Table 3, and Table 3 now also references Table 1 by using the phrase "See also Table 1."

Comment #69 (Meridian)

Copper should be footnoted with an 8 in Table 2 and Table 3. Add footnote 8 to Copper in Table 2 and Table 3.

Response #69

In Table 3 of the draft permit, which lists the effluent limits and monitoring requirements for outfall 002, footnote #8 reads, "samples for dissolved organic carbon, pH, hardness, conductivity and copper must be collected on the same day." The EPA agrees that this footnote should be applied to copper in Table 3, and the EPA has made this change to the final permit.

In Table 2 of the draft permit, which lists the effluent limits and monitoring requirements for outfall 001, footnote #8 referred to Part I.B.10, which concerned effluent limits for phosphorus, and footnote #9 to Table 2 was identical to footnote #8 in Table 3. However, Part I.B.10 and footnote #8 to Table 2 were deleted from the final permit (see the response to comment #6, above). In the final permit, footnote #9 of the draft permit has been re-numbered as footnote #8, and it has been applied to copper.

Comment #70 (Meridian)

In Tables 2 through 4, the terms total and total recoverable are used interchangeably. In 40 CFR 136 Table IB, footnote 4, it states that "total" and "total recoverable" are equivalent.

Response #70

Footnote #4 to Table IB in 40 CFR 136.3 is specific to metals; it is not applicable to other nonmetal parameters that are required to be reported as "total" such as phosphorus or ammonia.

For metals, the EPA has edited the final permit to use the term "total recoverable" consistently throughout the permit. This is consistent with 40 CFR 122.45(c), which states that, in general, "all permit effluent limitations, standards, or prohibitions for a metal shall be expressed in terms of 'total recoverable metal' as defined in 40 CFR part 136…."

Comment #71 (Meridian)

Include language to recognize that water quality trading, offsets, and/or other methods may be employed to meet water quality standards, particularly for phosphorus. Add a footnote to the effluent limitations tables stating that the mass limits (such as for phosphorus) shown may be met with a combination of treatment, trading, and/or other EPA approved methods. If the City can demonstrate a reduction in the annual loads beyond those required in the permit, then the City may provide that load as an offset and/or trade for another load requirement.

Response #71

As stated in Section 5.5.5.3 of the *Lower Boise River TMDL: 2015 Total Phosphorus Addendum* (IDEQ 2015b), "After adoption of an EPA-approved TMDL, DEQ, in concert with the WAG, must develop a water quality trading framework document. The Lower Boise River subbasin has an existing trading framework that DEQ is currently evaluating to revise ratios and policies consistent with this TMDL and the Joint Regional Recommendations (JRR) for water quality trading."

Permits may be modified for cause during their term, according to 40 CFR 122.62. This is also stated in the permit, in Part V.A. If the necessary revisions to the water quality trading framework for the Lower Boise River subbasin are completed during the term of this permit, this would be new information, which would be cause to modify the permit to allow trading. Since the ability to modify permits for cause during their terms is provided in the regulations as well as a standard permit condition, it is not necessary to include additional language in the permit to allow for such modification.

A permit modification would not be necessary to allow reuse of wastewater to aid in compliance with the TP limits. The final water quality-based TP limits are expressed in terms of monthly average mass. The monthly average mass discharged is calculated as the average of the daily discharges measured, which are, in turn, the product of the effluent TP concentration, the effluent flow rate at the time of sampling, and the density of water (8.34 lb/gallon). See the NPDES Self-Monitoring System User Guide (EPA 1985) at Pages 17-18. Since diversion of effluent flow to reuse would reduce the effluent flow rate, it would also proportionately reduce the effluent TP loading, thus aiding in compliance with the final TP effluent limits.

Errors in the Draft Permit

Comment #72 (Meridian)

The Schedule of Submissions' list of submissions is incomplete and omits the Mercury Minimization Plan. Add the Mercury Minimization Plan to the Schedule of Submissions.

Response #72

The EPA agrees that the mercury minimization plan should be listed in the schedule of submissions and has added it to the schedule of submissions in the final permit.

Comment #73 (Meridian)

Footnote 2 in Table 2 and 3 requires reporting within 24 hours for several parameters. Add ammonia in the footnote to match requirements in Part l.B.2.

Response #73

The EPA agrees that footnote #2 should be applied to ammonia in Table 2.

Comment #74 (Meridian)

Footnote 4 requires updating to follow the 401 Certification. Request 11 Add footnote 4 to phosphorus (Table 1) and zinc (Table 2).

Response #74

In Tables 2 and 4, footnote #4 identifies effluent limits that are subject to a compliance schedule. In Table 1, however, footnote #1 identifies limits subject to a compliance schedule. Thus, Table 1 notes that the TP limits are subject to a compliance schedule, consistent with the Clean Water Act Section 401 certification.

The EPA agrees that footnote #4 should be applied to the zinc effluent limits for May – September, for outfall 001, in Table 2, and the EPA has made this change to the final permit.

Comment #75 (Meridian)

The footnote 8 is not identified in the body of Table 2. Add a citation for footnote 8 in the body of Table 2, to the parameter Phosphorus, Total as $P^{4,8}$.

Response #75

In the draft permit, footnote #8 to Table 2 had referred to Part I.B.10 of the draft permit. As stated in the response to comment #6, The EPA did not intend to include Part I.B.10 in the draft permit, and it has been deleted from the final permit. As explained in the response to comment #69, in the final permit, footnote #9 of the draft permit has been re-numbered as footnote #8.

Comment #76 (Meridian)

Regarding the temperature monitoring requirements in Table 3, there is no Table 5. Twelve months are identified with no differences. Delete reference to unknown Table 5. Merge the two rows for temperature to appear the same as in Table 2.

Response #76

There is, in fact, a Table 5 in the draft permit. However, Table 5 of the draft permit does not concern temperature, rather, it lists interim effluent limits for TP and ammonia.

The EPA agrees that the reference to Table 5 was erroneously included in Table 3. In the final permit, Table 3 has been revised so to reference footnotes 5 and 6, instead of "Table 5."

Comment #77 (Meridian)

In Part I.B.6.a (p 10), the reference should be to all the effluent limitation and monitoring requirements tables. Revise the table citations to Tables 1, 2, 3 and 4.

Response #77

The EPA agrees that Part I.B.6.a should refer to Tables 1, 2, 3, and 4.

Comment #78 (Meridian)

In Part I.C.3.c.i and c.ii, bis (2-ethylhexyl) phthalate is misspelled and some of the wording is awkward. Meridian requested that the EPA correct the spelling error and revise the first sentence of Part I.C.3.c.ii to delete the word "under" so that this sentence reads, "A description of progress made towards meeting the final effluent limitations, including the applicable deliverables required in Table 7."

Response #78

As explained in the response to comment #10, the EPA has deleted the effluent limits for bis (2-ethylhexyl) phthalate from the permit, as well as the associated compliance schedule.

The EPA has deleted the word "under" from the first sentence of Part I.C.3.c.ii, as requested by the commenter.

Comment #79 (Meridian)

Meridian stated that there is a typographical error in Part I.C.3.e of the draft permit. Meridian requested that the EPA revise "...of each of the above mentioned tasks at the..." to "...of each of the above mentioned tasks at the...." Meridian also requested that the EPA delete Part I.C.3.e as it is unclear what tasks are being referred to that require 14 day notification. All tasks in Part l.C. already have timelines identified in the other subsections.

Response #79

The 14-day notification requirement is in federal regulations at 40 CFR 122.47(a)(4), which reads as follows:

> *The permit shall be written to require that no later than 14 days following each interim date and the final date of compliance, the permittee shall notify the Director in writing of its compliance or noncompliance with the interim or final requirements, or submit progress reports if paragraph (a)(3)(ii) is applicable.*

Thus, the 14-day notification requirement applies to all of the interim dates in the compliance schedule as well as the deadlines for compliance with the final effluent limits. Part I.C.3.e has been revised to clarify this.

Comment #80 (Meridian)

In Table 6, in Part I.E, chromium does not have units listed. Add units for chromium.

Response #80

The final permit specifies that receiving water monitoring for chromium shall be reported in units of µg/L.

Comment #81 (Meridian)

Tables 6 and 7 are incorrectly numbered. Renumber to Tables 8 and 9 and correct reference citations in text.

Response #81

The EPA agrees that Tables 6 and 7 are incorrectly numbered. The EPA has renumbered these tables as Tables 8 and 9 and has updated references to these tables in the permit.

Comments on the Fact Sheet

Comment #82 (Meridian)

In the fact sheet, on Page 9, update the contact information. Change Tracy Crane to Laurelei McVey.

Response #82

The fact sheet is a final document and will not be edited. Persons authorized to sign reports required by the permit may be designated as described in 40 CFR 122.22(b).

Comment #83 (Meridian)

In the fact sheet, in Table 7 on Page 19, footnotes 1 and 2 are not present. Add footnotes 1 and 2 to the bottom of Table 7.

Response #83

The EPA regrets this error and apologizes for any inconvenience it may have caused. However, the fact sheet is a final document and will not be edited. The intent was for footnote #1 to explain how loading (i.e., in lb/day) is to be calculated and for footnote #2 to explain how percent removal shall be calculated.

Calculation of percent removal is explained in Part I.B.4 of the draft and final permits.

The EPA has added footnotes to Tables 1, 2, and 3 to explain how loading shall be calculated and reported.

Comment #84 (Meridian)

In Appendix B, under the numeric criteria for toxic, monitoring for phenol has been less than the detection limit. Remove phenol from the bulleted list.

Response #84

According to the permit application dated April 28, 2004, phenol was detected in the effluent at a maximum concentration of 7.00 µg/L. The reported ML or MDL for phenol was 2.0 µg/L, and the analytical method was EPA Method 625.

Thus, according to the permit application, phenol has been measured in the effluent at a concentration greater than the detection limit, as stated in the fact sheet.

Comment #85 (Meridian)

On Pages 21-23 of the fact sheet, the requirements under Part C, Surface Water Monitoring, are unclear and should be revised.

Modify to:

Tables 11 and 12, below, present the proposed surface water monitoring requirements for the draft permit for Fivemile Creek and the Boise River. Surface water monitoring results must be reported on the DMR. Concurrent sampling need only occur at the receiving water that effluent is being discharged to. If there is no discharge to the outfall, then no surface water monitoring is required. If there is discharge to an outfall, then monitoring of all Tables 11 and 12 parameters upstream and downstream must occur within one week or prior to ceasing the discharge. If the discharge continues for longer than the monitoring frequency, then additional monitoring is required following the schedules in Tables 11 and 12.

Response #85

The fact sheet is a final document and will not be edited. The purpose of the fact sheet is to explain the conditions in the draft permit; it contains no enforceable requirements.

See the responses to comments 23, 28 – 32, and 50 regarding the receiving water monitoring requirements in the permit.

Administrative Extension

Comment #86 (IRU)

National Pollution Discharge Elimination System permits are issued for a period of five years for many good reasons, first and foremost being the opportunity provided every five years to improve permit conditions to better protect the rivers of the United States. In the sixteen years since the City of Meridian Wastewater Treatment plant was last permitted, significant events have occurred that, if they had been considered every five years as required, would have decreased pollution of Fivemile Creek and the Boise River starting in 2004. These events include the approval of Total Maximum Daily Loads for Fivemile Creek, the Boise and the Snake rivers, the collection of relevant water quality data by US Geological Survey and others, many EPA-approved reports on the status of Idaho's water quality, and advancements in wastewater treatment technology. During those eleven years, unlimited amounts of phosphorus have been allowed to be discharged to Fivemile Creek and the Boise River contributing to the impairment of Fivemile Creek and the Boise and Snake rivers.

Idaho Rivers United does not support administrative extensions of NPDES permits and asks EPA to ensure the timely renewal of this permit five years from issuance.

Response #86

The EPA has issued the subject permit as expeditiously as possible. Administrative extensions of this permit was provided in accordance with federal regulations (40 CFR 122.6).

References

ATSDR. 2002. ToxGuide™ for Di (2-ethylhexyl) phthalate. U.S. Department of Health and Human Services Public Health Service Agency for Toxic Substances and Disease Registry. September 2002. http://www.atsdr.cdc.gov/toxguides/toxguide-9.pdf

Denton DL, Miller JM, Stuber RA. 2007. *EPA Regions 8, 9 and 10 Toxicity Training Tool (TTT)*. January 2010. San Francisco, CA. http://www2.epa.gov/sites/production/files/documents/ToxTrainingTool10Jan2010.pdf

EPA. 1985. Ambient Water Quality Criteria for Mercury – 1984. United States Environmental Protection Agency. Office of Water. Regulations and Standards. Criteria and Standards Division. EPA 440/5-84-026. January 1985. http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100043A.TXT

EPA. 1985. *NPDES Self-Monitoring System User Guide*. United States Environmental Protection Agency Office of Water. Enforcement and Permits. EPA-830-R-85-901. March 1985. http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=200049AL.TXT

EPA. 1990. *Application Form 2C – Wastewater Discharge Information*. United States Environmental Protection Agency. Office of Enforcement. EPA Form 3510-2C. Revised August 1990. http://www3.epa.gov/npdes/pubs/3510-2C.pdf

EPA. 1991. *Technical Support Document for Water Quality-based Toxics Control*. United States Environmental Protection Agency. Office of Water. EPA/505/2-90-001. March 1991. http://www3.epa.gov/npdes/pubs/owm0264.pdf

EPA. 1995. "Revised Policy Statement on Scope of Discharge Authorization and Shield Associated with NPDES Permits." Memorandum from Robert Perciasepe, Assistant Administrator for Water, Steven A. Herman, Assistant Administrator for Enforcement and Compliance Assurance, and Jean C. Nelson, General Counsel to Regional Administrators and Regional Counsels. April 11, 1995. http://www3.epa.gov/npdes/pubs/owm0131.pdf

EPA. 2002. *Method 1003.0: Green Alga,* Selenastrum capricornutum*, Growth Test; Chronic Toxicity*. Excerpt from: Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. United States Environmental Protection Agency. Office of Water. EPA-821-R-02-013. October 2002. http://www.epa.gov/sites/production/files/2015-12/documents/method_1003_2002.pdf

EPA. 2010. Guidance for Implementing the January 2001 Methylmercury Water Quality Criterion. United States Environmental Protection Agency. Office of Science and Technology. EPA-823-R-10-001. April 2010. http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P1007BKQ.TXT

EPA. 2010. *U.S. Environmental Protection Agency NPDES Permit Writers' Manual*. United States Environmental Protection Agency, Office of Wastewater Management, EPA-833-K-10-001. September 2010. http://www.epa.gov/sites/production/files/2015-09/documents/pwm_2010.pdf

EPA. 2011. Fact Sheet: West Boise Wastewater Treatment Facility, City of Boise. United States Environmental Protection Agency. October 17, 2011. http://www3.epa.gov/region10/pdf/permits/npdes/id/west_boise_fs.pdf

IDEQ. 2015a. *Lower Boise River TMDL: 2015 Sediment and Bacteria Addendum*. Final. Idaho Department of Environmental Quality. Boise Regional Office. Boise, Idaho. June 2015. http://www.deq.idaho.gov/media/60176728/lower-boise-river-tmdl-sediment-bacteria-addendum.pdf

IDEQ. 2015b. *Lower Boise River TMDL: 2015 Total Phosphorus Addendum*. Final. Idaho Department of Environmental Quality. Boise Regional Office. Boise, Idaho. August 2015. http://www.deq.idaho.gov/media/60177413/lower-boise-river-tmdl-total-phosphorus-addendum-0815.pdf

IDEQ. 2016. *Idaho Mixing Zone Implementation Guidance*. Idaho Department of Environmental Quality. Water Quality Division. Boise, Idaho. December 2016. http://www.deq.idaho.gov/media/60179492/mixing-zone-implementation-guidance-1216.pdf

Kissire, Travis. 2016. *Summary of bis (2-ethylhexyl) phthalate Evaluation and Results*. City of Meridian, Idaho. November 23, 2016.

USGS. 2015. *National Field Manual for the Collection of Water-Quality Data: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 9*. U.S. Department of the Interior. U.S. Geological

Survey. Compiled October 2015.
http://water.usgs.gov/owq/FieldManual/