

RESPONSE TO COMMENTS

City of Greenleaf Wastewater Treatment Plant NPDES Permit # ID-002830-4 November 20, 2012

On July 6, 2012, the U.S. Environmental Protection Agency (EPA) issued a public notice for the issuance of the City of Greenleaf (City or Greenleaf) Wastewater Treatment Plant (WWTP) draft National Pollutant Discharge Elimination System (NPDES) Permit No. ID-002830-4. This Response to Comments provides a summary of significant comments and provides corresponding EPA responses. As a result of the comments, EPA removed the monitoring location at the Reuse Equalization (EQ) pond; the permittee is required to monitor at the end of the treatment train prior to discharge to the West End Drain. EPA also made a few minor changes to the permit, including corrections to the language for penalties and splitting Table 1 into two tables, one showing effluent limits for those pollutants being regulated in the permit (Table 1) and one showing effluent monitoring only including for those pollutants not being regulated but for which monitoring is required (Table 2).

Comments were received from the following three commenters:

1. Honorable Mayor Bradley City of Greenleaf (City)
2. Liz Paul, Boise River Campaign Coordinator, Idaho Rivers United (IRU)
3. Thomas H. Berry, City of Meridian, Public Works Director (Meridian)

1. Comment (City): “No Unit Off Line. The permit references no bypass of treatment facilities. Specifically the draft permit states:

1. Bypass not exceeding limitations. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it is also for essential maintenance to assume efficient operation.

The wastewater treatment plant includes tertiary filters that are intended to only be operated during the irrigation season to meet Idaho Class B reuse standards. During the non-irrigation season (approximately October 31 through April 30), the permit limits will be met without the need for tertiary filtration (i.e. discharge out of the secondary clarifiers followed by disinfection, which is very common for treatment systems in Idaho). The tertiary filters were not designed to be operated during the winter and having to do so would cause freezing concerns. Since the filters are not required to meet conditions included in the draft permit, the City is requesting to allow bypass of the tertiary filters from October 1 through April 30.”

Response: 40 C.F.R. 122.41(m)(4) prohibits bypass except in very limited circumstances. The EPA recognizes that the tertiary filters are designed to be operated only during the irrigation season and shut down during the winter due to freezing concerns; this is not considered a bypass.

2. Comment (City): “Total Phosphorus Monitoring in Equalization Pond. The Draft Permit includes a requirement for phosphorus monitoring of the Reuse Equalization (EQ) Pond 3

days prior to discharge to determine if phosphorus discharge limits for the West End Drain are met (Section I.B.6). The Reuse EQ Pond was specifically designed for flow equalization prior to reuse.

In the future, the EQ Pond could be included as part of a “treatment train” for phosphorus reduction. However, there is also the possibility that the pond would not be used as part of treatment train for meeting phosphorus limits. If the pond is not used for phosphorus reduction but the phosphorus monitoring is required prior to any surface water discharge, then the pond cannot be operated for equalization as needed for reuse on the land application system. This could severely limit the EQ Ponds [sic] intended use as part of the reuse system, and not allow for flexibility needed to meet both NPDES and Idaho Reuse permit requirements.

Therefore, Greenleaf requests that the phosphorus monitoring requirement be changed to monitoring at the end of pipe prior to discharge to the West End Drain. This is the standard monitoring approach for most treatment facilities, and it avoids the possible limitations that monitoring the Reuse EQ Pond could cause.”

Response: The EPA agrees that this is the standard monitoring approach for most treatment facilities. Using that standard monitoring approach in this permit is appropriate because the permit already requires the permittee to limit and monitor total phosphorus in the discharge from Outfall 1 (see Tables 1 and 2). Accordingly, that condition of the permit (Section I.B.6. in the draft permit) has been removed from the final permit.

3. **Comment (City):** “West End Drain Beneficial Use. The draft fact sheet (EPA note: not the public noticed fact sheet) includes the following discussion regarding designation of the West End Drain and the beneficial use classification for protection of cold water biota:

The West End Drain is not designated in the Idaho Water Quality Standards Sections 110 through 160. Therefore, in accordance with IDAPA 58.01.02.101.01, as an undesignated surface water, the beneficial uses are cold water aquatic life and primary contact recreation. Pursuant to CWA Section 101(a)(2) all waters must be assigned a designation consistent with the fishable and swimmable goal of the CWA unless that use is removed as a result of a use attainability analysis. A use attainability analysis has not been performed for the West End Drain or the Riverside Canal.

Therefore, the following beneficial use classifications apply: cold water biota, primary contact recreation, industrial and industrial water supply, wildlife habitat and aesthetics.

The Clean Water Act objective referenced by EPA is:

SEC. 101.(a) The objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters. In order to achieve this objective it is hereby declared that, consistent with the provision of this Act -

(2) it is the national goal that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983;

The City has obtained a United States Bureau of Reclamation map (attached) documenting that the West End Drain was constructed by United States Bureau of Reclamation in 1915. This supports DEQ’s position as stated in the Draft 401:

The West End Drain is a man-made water body which carries agricultural runoff, groundwater, and stormwater drainage from the lands east and south of the wastewater treatment facility. Man-made water bodies for which uses are not designated in IDAPA 58.01.02, Sections 110-160, are to be protected for the uses for which they were developed...(IDAPA 58.01.02.101.02).

The section of CWA referenced by EPA was an interim goal stated in the general policy of the Clean Water Act. However, the State of Idaho Water Quality standards are permanent and therefore should apply to West End Drain, clearly constructed for agricultural drainage. Greenleaf requests that the fact sheet be revised to reflect this information.”

Response: The EPA disagrees with the City’s position that only agricultural uses apply to the West End Drain.

The public noticed fact sheet (not the draft fact sheet referred to in the comment) provides the basis for protecting the receiving water for the beneficial uses of aquatic life and recreation which is reiterated here.

The overall objective of the Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. Section 101(a)(2) of the CWA states that, as an interim goal, water quality should provide for the protection and propagation of fish, shellfish and recreation in and on the water, wherever attainable. This is sometimes referred to as the "fishable/swimmable" goal.

The Water Quality Standards regulations effectively establish a "rebuttable presumption" that the CWA 101(a)(2) uses are attainable and therefore must be assigned to a water body, unless the State rebuts that presumption by affirmatively demonstrating, via a use attainability analysis (UAA) and/or other appropriate documentation, that such uses are not attainable. As noted in the fact sheet, a UAA has not been performed for the West End Drain or the Riverside Canal. As a result, the EPA’s position is that those water bodies have, at a minimum, the CWA 101(a) beneficial uses of fishable/swimmable.

Further, the West End Drain does not have specific use designations in the Idaho Water Quality Standards (IDAPA 58.01.02.110 through 160). The Idaho Water Quality Standards, in accordance with the CWA, state that such “undesigned waterways” are to be protected for the uses of cold water aquatic life and primary contact recreation (IDAPA 58.01.02.101.01). Therefore, in accordance with IDAPA 58.01.02.101.01, as undesignated surface water, the beneficial uses are cold water aquatic life and primary contact recreation.

The permit is not changed.

- 4. Comment (IRU):** “Term of Permit. The CWA and supporting federal regulations authorize EPA to issue an NPDES permit for a term of five years. The *NATIONAL WATER PROGRAM STRATEGY: RESPONSE TO CLIMATE CHANGE KEY ACTION UPDATE FOR 2010-2011* reinforces the importance of reviewing NPDES permits on a five-year cycle, "The five-year permitting cycle provides permit writers with a significant amount of flexibility to adapt to changing conditions." The five year term is more important than ever as climate change has the potential to impact water quality-based effluent limitations and other permit conditions.

Idaho Rivers United supports the five year permit term because it allows new information to be considered in a timely manner. This results in better protection for waters of the United States. Idaho Rivers United expects EPA to process a new Greenleaf permit by 2017.”

Response: Comment noted. The permit is not changed.

- 5. Comment (IRU):** “Mercury. In early July, it was reported that it was unsafe to eat catfish from the lower Boise River because of dangerous levels of mercury. Based on data collected by the USGS, the Idaho Division of Public Health said, "The Idaho Division of Public Health wants to let fishermen and their families know that catfish in the lower Boise River have been found to have levels of mercury that could be dangerous to developing babies, children, and the general public if eaten too often. As a result, a fish advisory has been issued for catfish for the lower Boise River." This advisory is ample evidence that the Boise River is not fishable as the Clean Water Act intends, and that corrective measures need to be taken.

The draft permit does not contain any effluent limitations for mercury (as compared to the permit for the City of Boise West Boise WWTP in which the monthly average limit for mercury is 0.009 µg/L, 0.002 lbs/day).

Please explain why mercury is not discussed in the permit and why no mercury monitoring is required. The City of Boise is required to test mercury in the effluent once a week and in the surface water upstream and downstream of the outfall once a month.

Greenleaf should be required to participate in the fish tissue Methylmercury Fish Tissue Monitoring program, as should all point and nonpoint source polluters in the Boise River basin. The data collected by USGS that uncovered the dangerous levels of mercury in the catfish at Parma was not collected as part of an established ongoing fish tissue monitoring program, but was collected for other water quality monitoring purposes. To protect public health and to provide information vital to compliance with the Clean Water Act, Greenleaf should participate in the monitoring program.”

Response: With respect to the commenter’s comparisons to the City of Boise permit, EPA considers the applicable requirements for each permit individually; any limits or requirements in the City of Boise permit or any other permit are irrelevant to the City of Greenleaf permit.

With respect to the portions of the comment regarding the Methylmercury Fish Tissue Monitoring program for the Lower Boise watershed, the EPA is not including mercury effluent limitations, monitoring requirements, or a requirement to join the Methylmercury Fish Tissue Monitoring program in the Greenleaf final permit at this time for several reasons.

The EPA has no basis to believe that the City of Greenleaf is a significant contributor of mercury to the Boise River. The Greenleaf WWTP is a minor, seasonal discharge to the West End Drain. The sources are residential and commercial only, there are no industrial dischargers to the plant.

The West End Drain, Riverside Canal and Boise River are not listed on the State of Idaho’s 2010 Integrated Report Section 5 (section 303(d)) as impaired for mercury. The EPA generally includes monitoring for a particular pollutant if the receiving water body (or downstream water bodies) are impaired for that pollutant. The fact that a health advisory may have been issued does not necessarily mean that the water body is impaired. Please refer to

the IDEQ 303(d) Integrated Report for discussion on how health advisories are considered in the State's 303(d) listing processes.

In addition, based on the small size of the City of Greenleaf facility (0.24 mgd), we have no reason to include mercury monitoring for the Greenleaf permit. See also the Response to Comment 6.

Furthermore, the Methylmercury Fish Tissue Monitoring program has not yet been developed for the Boise River nor has the State required monitoring as part of the CWA 401 certification. Once a program has been developed for the Lower Boise River watershed, the EPA will consider including the participation in the program in future permits.

6. **Comment (IRU):** "From the Greenleaf draft permit, "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." Since mercury has not been identified in the permit, it appears that any discharge of mercury from the Greenleaf WWTP would be a violation of the permit - is this the case?"

Response: The permit authorizes discharges from the facility process, waste streams and operations identified in the application submitted by the City of Greenleaf. Because of size and type of facility, mercury characterization in the effluent was not required as part of the permit application. As discussed further in Response to Comment 5, the City of Greenleaf permit does not regulate mercury. As a result, a discharge of mercury would not be a violation of the permit since there are no mercury limits. However, such a discharge may be a violation of the Clean Water Act as an unpermitted discharge.

The permit is not changed.

7. **Comment (IRU):** "**Effluent Limitations:** Given currently available information and analysis, IRU supports the total Phosphorus limits assigned in the draft permit for May 1 - September 30. IRU does not support the absence of limits for Total Phosphorus for October 1- April 30, and does not agree with the conclusions on page 26 of the factsheet. Those conclusions conflict with EPA's findings in the final permit for the City of Boise West Boise WWTP in which EPA determines that "effluent limits for phosphorus are needed year-round."(City of Boise permit Response to Comments, page 27).

The situation is complicated because phosphorus pollution problems commonly manifest at a temporal and geographic distance from the discharge, but huge amounts of information have been collected on nutrient pollution as it is the nation's foremost water pollution problem and complicated doesn't mean impossible to determine. EPA is incorrect in stating that "At this stage, it is not possible to evaluate the need for winter limits." (Factsheet, pg 26). For Brownlee Reservoir to meet water quality standards, the inflow of phosphorus to Brownlee Reservoir must be reduced or eliminated throughout the entire year, and there must be near-zero sediment enrichment at the reservoir. Winter discharge limits of phosphorus into the Boise River watershed **are clearly needed**. What those limits should be at the Greenleaf WWTP needs to be determined by the EPA, just like EPA determined the May- September limits. EPA should amend the draft permit to include winter limits on phosphorus.

Response: The EPA disagrees that phosphorus limits for the months of October 1- April 30 are appropriate at this time for the Greenleaf permit. Additional analysis of Greenleaf's effluent, of the seasonal nature of nutrient discharges, and of any relevant, approved TMDL

allocations for sources of phosphorus are necessary before winter phosphorus limits can be included in the Greenleaf permit. See also the Responses to Comments 8 and 9.

In addition, EPA notes that whether or not winter phosphorus limits were appropriate for any other permit is irrelevant to whether they are appropriate for the current permit. EPA also notes that the commenter's quote from the West Boise Response to Comments is taken out of context. The complete statement is:

"Based on our review EPA has determined that effluent limitations for phosphorus are needed year-round. Additional analysis of the seasonal nature of nutrient discharge and allocations for point and non-point sources of phosphorus for the Boise River and Snake River are necessary in light of this information. The EPA is not including October through April limits in the permit at this time. The EPA will be reviewing information and data and determining the appropriate phosphorus limits to apply to the effluent from October through April and these limits will be incorporated into the next permit that is issued to the facilities. The discussion below presents some of the information the EPA used to determine that year-round limits are necessary."

The permit is not changed.

8. **Comment (IRU):** "Further support for IRU's request [for winter limits] is found in EPA's response to comments in the City of Boise permit as follows: [lengthy excerpt from Boise response to comments omitted]."

Response: Although the commenter discusses at length the details contained in another NPDES permit, EPA considers the applicable requirements of each permit individually; any limits or requirements in the City of Boise permit or any other permit are irrelevant to the City of Greenleaf permit. The basis for seasonal limits for phosphorus in the City of Greenleaf permit is the elevated phosphorus concentration in the Boise River that is contributing to the impairment of the Snake River. The *Snake River Hells Canyon TMDL* (Idaho DEQ and Oregon DEQ 2003, 2004) (SR-HC TMDL) calls for a reduction in phosphorus loading to the Snake River from the Boise River and other tributaries during the critical season from May 1st through September 30th. Pursuant to 40 C.F.R. § 122.44(d)(1)(vii)(B), NPDES permit effluent limits must be consistent with the assumptions and requirements of any available wasteload allocations. Although the SR-HC TMDL contains only load allocations, EPA is taking the load allocation for the mouth of the Boise River into account in this permit in an abundance of caution. Accordingly, it is consistent with the load allocation for the SR-HC TMDL and is protective of Idaho's narrative water quality criterion for phosphorus to not include winter limits for phosphorus in this permit. EPA will continue to evaluate all relevant information. See also the Responses to Comments 7 and 9.

The permit is not changed.

9. **Comment (IRU):** "Nancy Stoner, Acting Assistant Administrator of the EPA issued a memo on March 16, 2011 that states, in part, "States, EPA and stakeholders, working in partnership, must make greater progress in accelerating the reduction of nitrogen and phosphorus loadings to our nation's waters." Ms. Stoner referenced the 2009 Urgent Call to Action of the EPA Nutrient Innovations Task Group that said, "nutrients now pose significant water quality and public health concerns across the United States." The lack of

winter limits in this draft permit does not reflect the urgency with which this serious pollution problem must be eliminated.”

Response: See also the Responses to Comments 7 and 8. The EPA recognizes the need for making greater progress in accelerating the reduction of phosphorus loadings to the nation’s waters. The Greenleaf permit is consistent with that effort. Although progress must be made, applicable water quality standards and criteria also must be taken into account – EPA could not include a numeric winter phosphorus limit in this permit in the absence of any relevant criteria or wasteload allocations to inform what that limit should be. Thus, although EPA understands that some recent studies may indicate the need for year-round phosphorus limits for certain Idaho water bodies, the science is not yet evolved to enable a determination of what those limits should be for this particular permit. As discussed, EPA remains committed to reviewing all relevant information, and to potentially including winter phosphorus limits in a subsequent permit for Greenleaf should the science and data enable EPA to determine what limits would be appropriate.

EPA has incorporated relevant information to the extent possible in this permit. In an abundance of caution, EPA included nutrient limitations in the permit which were consistent with the approved SR-HC TMDL. The permit includes a stringent effluent limit for phosphorus of 70 micrograms per liter, matching the target established by the SR-HC TMDL. EPA also applied the limitations to the summer season only, consistent with the approved SR-HC TMDL.

We understand from Idaho DEQ that it intends to submit a draft nutrient TMDL for the Lower Boise watershed to the EPA for approval by Spring 2014. We expect the TMDL to address the issue of year-round nutrients limits or seasonal limits.

The permit is not changed.

- 10. Comment (IRU): “Effluent Monitoring Requirements:** IRU supports the requirement that Total Phosphorus be monitored at the Outfall weekly throughout the entire year. As planned, this would be the outfall to the Reuse Pond during the irrigation season (at a minimum May 1- September 30) and the outfall to the West End Drain the rest of the year.

IRU also supports the requirement that if, during the term of this permit, the permittee, for any reason, decides to discharge wastewater to the West End Drain at any time between May 1 and September 30, the permittee must sample the effluent three days prior to beginning that discharge and not discharge if the total phosphorus exceeds 70 micrograms/liter. If the discharge will be piped directly to the West End Drain without any interaction with whatever is in the Reuse Equalization Pond, then the permittee should sample the effluent before it enters the Pond. If the effluent will enter and interact with whatever is in the Pond before entering the West End Drain, then the permittee must sample near the outfall of the Pond.”

Response: EPA appreciates the commenter’s support. EPA would like to clarify, however, that the permit requires the permittee to collect effluent samples from the effluent stream after the last treatment unit prior to discharge to the receiving waters (i.e., Outfall 001). (See Part I.B.5 of the permit). In addition, in response to a comment received from the City of Greenleaf, the requirement to monitor from the Reuse Equalization Pond was removed from the permit, since that location in an internal monitoring location, which may not represent the last treatment unit prior to discharge. (See Response to Comment 2). Also in response to a

comment received from the City of Greenleaf, the provision to monitor the effluent at the Outfall three days prior to discharge from May 1 through September 30 is removed in the final permit. (See Response to Comment 2). The permittee must still monitor the effluent prior to discharge, but the permit does not mandate that it be three days prior to discharge. As provided in Table 2, the permittee must conduct weekly 24-hour composite sampling for phosphorus. If the permittee discharges from May 1 to September 30, the permittee must meet the effluent limitations for phosphorus for Outfall 001 as shown in Table 1 of the permit.

11. Comment (IRU): “Surface Water Monitoring: Why is the required surface water monitoring only going to last for five years?”

Response: The purpose of the surface water monitoring is to characterize the background receiving waters for pollutants. Monitoring for five years will provide 60 samples for each of the six parameters that require grab sampling as the method. This quantity should provide enough data to characterize the receiving water for reasonable potential of ammonia, nitrate-nitrite and nitrite and to characterize the receiving water for phosphorus. Five years of continuous temperature monitoring will provide enough data to characterize the receiving waters for temperature.

The permit is not changed.

12. Comment (IRU): “Why isn't there any temperature monitoring in the West End Drain above the influence of the discharge? Why isn't sampling required below the discharge (with the exception of temperature in Dixie Slough)? IRU believes that the permittee should monitor below the discharge point in both the West End Drain and Dixie Slough during any month that discharges occur.”

Response: Condition I.C.1. requires continuous temperature monitoring upstream of the influence of the West End Drain. 40 C.F.R. 122.4(i) places restrictions on the issuance of NPDES permits to new sources or new dischargers. Specifically, it states that:

“...no NPDES permit may be issued to a new source or a new discharger if the discharge from its construction or operation will cause or contribute to the violation of water quality standards.”

Greenleaf cannot cause or contribute to violations of the water quality standards for total ammonia, nitrate-nitrite and nitrite. The procedures for calculating the reasonable potential to violate water quality standards is to measure and use the upstream concentrations, not the downstream concentrations. To determine if Greenleaf is causing or contributing to violations the background needs to be better characterized. That is why the permit requires upstream monitoring of total ammonia, nitrate-nitrite and nitrite. Only temperature monitoring will be required downstream. That monitoring is intended to provide adequate data to conduct a reasonable potential analysis for the next permit term.

The permit is unchanged.

13. Comment (IRU): “Modification for Cause: New information is being collected about water quality in the Boise River, the Snake River and Brownlee Reservoir as part of Idaho DEQ's development of a nutrient TMDL for the Boise River, as part of ongoing efforts of the Lower Boise Watershed Council and as part of Idaho Power's relicensing of the Hells

Canyon Complex. It is possible that a new wasteload allocation or load allocation will be established during the 5-year term of this permit. Therefore, this permit should include the following paragraph.

This permit may be modified for cause in compliance with 40 CFR 122.62. Causes for modification include, but are not limited to, new information which was not available at the time of permit issuance and which would have justified the application of different permit conditions at the time of issuance. A wasteload allocation for the permitted discharge in an approved total maximum daily load established pursuant to 40 CFR 130.7 would be considered new information.

Idaho Rivers United does not support EPA's intention (Fact Sheet pg 26) to "incorporate the wasteload allocation for nutrients in the next permit," given EPA's dismal record at issuing new permits in a timely fashion. If the future is like the past, the next permit may not be issued until 2025 or later. EPA should modify this permit to include pertinent wasteload allocations when the nutrient TMDL is completed. At that point, a compliance schedule may be warranted.”

Response: Section V.A of the permit describes various methods by which the permit can be modified, terminated, etc. The provision of the regulations cited by the commenter (40 C.F.R. 122.62) is already included. EPA disagrees that the remainder of the language suggested by the commenter, which interprets the federal regulations, is necessary. EPA notes, however, that it included section 122.63 of the regulations (40 C.F.R. 122.63) in Section V.A of the final permit, as that section was inadvertently omitted from the draft permit.

14. Comment (Meridian): “The City of Meridian is concerned about the recent pattern of NPDES permits following a common template for dischargers in the Lower Boise River Watershed; see recent permits issued by EPA in the Lower Boise River watershed. EPA agreed that it is not appropriate to follow a template and stated that a site specific review of the facility discharge and the location of the discharge will be used to develop NPDES permits for facilities in the Lower Boise River watershed. The City of Meridian expects this to occur as the template does not fit the City of Meridian’s facilities.”

Response: This comment is outside the scope of the permit. EPA notes, however, that it may or may not be appropriate to use some form of template for certain aspects of NPDES permits, and EPA determines whether that is appropriate on a case-by-case basis.

The permit is not changed.

15. Comment (Meridian): “The City of Meridian supports the following items in regards to NPDES permits: (1) The use of compliance schedules and interim limits to allow for the implementation of wastewater facility plans, (2) The use of seasonal average mass based effluent limitations. Seasonal limits for non-toxic constituents are protective of water quality. This is demonstrated by the EPA’s approval of seasonal limits in other NPDES permits; for example refer to Spokane County permit WA-0093317 and, and [sic] (3) EPA approval of pollutant offsets and trading and associated policy and regulation adopted by the State of Idaho. The City of Meridian appreciates the acknowledgement that these are applicable elements of NPDES permits for discharges in the Lower Boise River watershed, although not included in the conditions for the City of Greenleaf.”

Response: The commenter does not state that it believes the permit elements it lists should be included in the Greenleaf permit; as such, this general comment is outside the scope of the Greenleaf permit. However, EPA would like to clarify certain aspects of the comment. First, the Greenleaf permit contains average monthly and average weekly limits (concentration and mass) for total phosphorus that are applicable from May through September; they are not seasonal average mass based effluent limits. Additionally, the Greenleaf permit does not authorize offsets or trading projects, and there are no compliance schedules in the Greenleaf permit. Finally, EPA does not “approve” either Washington state NPDES permits or Idaho state regulations.

The permit is not changed.

- 16. Comment (Meridian):** “The Snake River Hells Canyon (SR-HC) TMDL (DEQ 2003) includes a load allocation for the Boise River based upon a total phosphorus concentration of 0.07 mg/L at the mouth of the Boise River. This load allocation is at the mouth so it allows for variability within the Lower Boise River watershed and does not include timing thus implying that a seasonal average of 0.07 mg/L at the mouth meets the target for the Snake River –Hells Canyon TMDL. A seasonal target at 70 µg/L translates to an effluent limitation set at an average seasonal limit of 0.14 lbs/day from May 1 through September 30. This would sufficiently meet the TMDL and water quality standards. The average monthly and average weekly limits should be removed.”

Response: As the fact sheet states: “While the 70 ppb interpretation of the narrative criterion applies to the Boise River at the mouth as opposed to the West End drain at the point of discharge, the current concentrations of total phosphorus in the Boise River, West End Drain and the Riverside Canal are greater than 70 µg/L. Therefore, neither the West End Drain, Riverside Canal nor the Boise River can provide dilution of the effluent phosphorus. Any discharge of phosphorus from the City of Greenleaf wastewater treatment plant at a concentration greater than 70 µg/L will contribute to an excursion above the 70 µg/L total phosphorus load allocation at the mouth of the Boise River.” Therefore, the proposed permit requires the City to meet the 70 µg/L target total phosphorus concentration consistent with the EPA-approved Snake River Hells Canyon TMDL at the end-of-pipe from May 1 through September 30. See also Responses to Comments 19 and 20.

Weekly and monthly limits are required pursuant to 40 C.F.R. 122.45(d)(2).

The permit is not changed.

- 17. Comment (Meridian):** “The Lower Boise River Watershed Council and the Idaho Department of Environmental Quality have agreed to develop a TMDL for phosphorus on the Lower Boise River. As the TMDL is intended to identify waste load allocations for dischargers within the Lower Boise River Watershed, it seems appropriate to allow the TMDL to transpire prior to the prescription of ultra-low phosphorus limits being placed on dischargers via NPDES permits. . . . EPA’s action to require municipalities to plan for ultra-low phosphorus concentrations in advance of a nutrient TMDL for phosphorus on the Lower Boise River seems to conflict with cooperative progress.”

Response: See Response to Comment 16. The EPA supports development of a TMDL for phosphorus on the Lower Boise River. If a TMDL for phosphorus is developed by the IDEQ

and approved by the EPA, the permit may be re-opened and modified to incorporate any applicable requirements in the TMDL (see 40 C.F.R. 122.62).

The permit is not changed.

- 18. Comment (Meridian):** “The City of Meridian does not support the 70 µg/L phosphorus limit at this time. The City of Meridian appreciates the recognition that when a TMDL for phosphorus is developed by the IDEQ and approved by the EPA, the permit will be re-opened and modified to incorporate the phosphorus WLAs and conditions as stated in the TMDL (see 40 CFR 122.62). The City of Meridian appreciates the recognition that compliance schedules of 10 years after the permit is issued for compliance with the final effluent limits will be included to allow for appropriate planning.”

Response: See Response to Comment 16 for justification of the 70 µg/L phosphorus limit. It’s unclear what the commenter is referring to with regards to “the recognition” of reopening the permit or including a 10-year compliance schedule. As a result, EPA is unable to respond to those portions of this comment. Typically, any new, relevant TMDL allocations are incorporated at the time of permit reissuance and can include a compliance schedule. However, a ten-year compliance schedule may not be allowed. Most compliance schedules are less than ten years and must be as short as possible (see 40 CFR 122.47(a)(1)).

- 19. Comment (Meridian):** “Table 1 Effluent Limitations (p. 5 and 6): The effluent limitations are over specified with the inclusion of both concentration and mass based limits for a weekly and monthly basis for all parameters.

* * *

While the effluent limitations in Table 1 may be acceptable for the City of Greenleaf, these effluent limitations would provide a disincentive for a permittee to develop a recycled water program, and the City of Meridian will request alternative mass-based, seasonal effluent limitations in its NPDES permit. Alternative effluent limitations have been used by EPA in NPDES permits for other dischargers, which have included mass limits for total phosphorus.

The effluent limits are over-specific with the inclusion of both mass and concentration based limits for a weekly and monthly basis for all parameters. While the regulation allows pollutants limited in terms of mass to also be limited in terms of other units of measurement such as concentration, the regulations do not necessitate such restrictive conditions and a basis for including concentration in this specific situation is not provided.”

Response: The EPA disagrees that both concentration and mass are over specified. As the fact sheet states “The Snake River Hells Canyon TMDL requires the Boise River to achieve a load allocation of less than or equal to 70 µg/L. The EPA has used this 70 µg/L load allocation to interpret Idaho’s narrative criterion for nutrients.” The unit of the Snake River load allocation and target for the Snake River is concentration (µg/L) and not mass (lbs/day). Mass limitations are required by 40 CFR 122.45(f). See also Responses to Comments 16 and 20.

The permit is not changed.

- 20. Comment (Meridian):** “Phosphorus does not contribute acute toxicity and the methodology used to calculate permit effluent limits of toxic compounds should not be applied to phosphorus. The EPA’s Nutrient Technical Guidance Manual, Rivers and streams (page 3),

states “In flowing systems, nutrients may be rapidly transported downstream and the effects of nutrient inputs may be uncoupled from the nutrient source.” Algal growth in streams, especially nuisance algal growth, requires sustained concentrations of nutrients in amounts above growth limitation (among other factors such as light and temperature) for sustained periods of time, such as a season, to impair water quality.”

Response: The EPA has incorporated the relevant load allocation for the Snake River Hells Canyon TMDL to develop the phosphorus effluent limitation for this permit. The TMDL target for phosphorus for the Boise River at its mouth to the Snake River is 70 µg/L. The 70 µg/L is an average monthly target and has been implemented in the permit as the average monthly limit. See also Responses to Comments 16 and 19.

The permit is not changed.

21. Comment (Meridian): “The City of Meridian appreciates that EPA customizes permits specifically to each discharger; however, remains concerned about changes and specificity in Section VI. Definitions between permits issued to dischargers in the Lower Boise River watershed. The City of Meridian supports the preference to have common definitions for frequently used terminology in NDPES permit for surrounding communities.”

Response: EPA is unable to respond to the portion of the comment regarding “changes and specificity,” as the commenter does not provide any specific examples of the changes or specificity that cause it concern. With respect to the portion of the comment regarding common definitions, EPA notes that the definitions included in Section VI of the permit are largely derived from the relevant definitions in the federal regulations.

The permit is not changed.