



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

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C.L. "Butch" Otter, Governor  
John H. Tippetts, Director

April 12, 2017

Mr. Michael J. Lidgard  
NPDES Permits Unit Manager  
EPA Region 10  
1200 Sixth Avenue, Suite 900  
Seattle, Washington 98101-3140

Subject: Final 401 Water Quality Certification for the City of Meridian Wastewater Treatment Facility, ID-0020192

Dear Mr. Lidgard:

The Boise Regional Office of the Department of Environmental Quality (DEQ) has reviewed the above-referenced permit for the City of Meridian WWTF. Section 401 of the Clean Water Act requires that states issue certifications for activities which are authorized by a federal permit and which may result in the discharge to surface waters. In Idaho, DEQ is responsible for reviewing these activities and evaluating whether the activity will comply with Idaho's Water Quality Standards, including any applicable water quality management plans (e.g., total maximum daily loads). A federal discharge permit cannot be issued until DEQ has provided certification or waived certification either expressively, or by taking no action.

This letter is to inform you that DEQ is issuing the attached final 401 certification subject to the terms and conditions contained therein. DEQ is requesting the following changes to the permit to ensure consistency with the Lower Boise River TMDL, other permits in the watershed and our water quality standards:

1. DEQ included continuous upstream temperature monitoring of the effluent and receiving waters upstream and downstream of the outfalls to Fivemile Creek and the Boise River. Continuous monitoring upstream of outfall 2 to the Boise River is only required when the City of Meridian is discharging.
2. The bullet point below was added to Task 3 within Table 3. *Tasks Required Under the Schedule of Compliance*:
  - And or other viable options identified in the facility plan

Michael J. Lidgard  
EPA Region 10  
April 12, 2017  
Page 2

Please contact Kati Carberry at (208) 373-0434 to discuss any questions or concerns regarding the content of this certification.

Sincerely,

A handwritten signature in black ink, appearing to read 'Aaron Scheff', written in a cursive style.

Aaron Scheff  
Regional Administrator  
Boise Regional Office

KC/am

encl: Final 401 Certification Permit ID-0020192  
City of Meridian Request for TSS Reserve for Growth  
DEQ Approval Letter for TSS Reserve for Growth

ec: Brian Nickel, EPA Region 10  
Nicole Deinarowicz, DEQ State Office  
TRIM #: 2017AFK28



## Idaho Department of Environmental Quality Final §401 Water Quality Certification

April 12, 2017

**NPDES Permit Number(s):** ID-0020192, City of Meridian WWTP

**Receiving Water Body:** Fivemile Creek, Boise River

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Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended; 33 U.S.C. § 1341(a)(1); and Idaho Code §§ 39-101 et seq. and 39-3601 et seq., the Idaho Department of Environmental Quality (DEQ) has authority to review National Pollutant Discharge Elimination System (NPDES) permits and issue water quality certification decisions.

Based upon its review of the above-referenced permit and associated fact sheet, DEQ certifies that if the permittee complies with the terms and conditions imposed by the permit along with the conditions set forth in this water quality certification, then there is reasonable assurance the discharge will comply with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, the Idaho Water Quality Standards (WQS) (IDAPA 58.01.02), and other appropriate water quality requirements of state law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

### Antidegradation Review

The WQS contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier I Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier II Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).
- Tier III Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for the impaired use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

### ***Pollutants of Concern***

The City of Meridian WWTP discharges the following pollutants of concern: five day biochemical oxygen demand (BOD<sub>5</sub>), heat, total suspended solids (TSS), total phosphorus (TP), *E. coli*, ammonia, bis(2-ethylhexyl) phthalate, copper, cyanide, mercury, zinc, nitrate + nitrite, total Kjeldahl nitrogen (TKN), arsenic, cadmium, chlorpyrifos, chromium, lead, nickel, selenium, silver and whole effluent toxicity (WET). Effluent limits have been developed for BOD<sub>5</sub>, TSS, TP, *E. coli*, ammonia, copper (outfall 1), cyanide, mercury (outfall 1-October-April), and zinc (outfall 1 (May-September)). No effluent limits are proposed for bis (2-ethylhexyl) phthalate, nitrate + nitrite, TKN, arsenic, cadmium, chlorpyrifos, chromium, copper (Outfall 2), lead, mercury (outfall 1 May-September and Outfall 2), nickel, selenium, silver, and whole effluent toxicity (WET), however monitoring requirements are included in the permit so that reasonable potential to exceed WQS can be determined for future permits. The Meridian WWTP uses ultraviolet (UV) disinfection. Therefore, there are no technology-based chlorine limits applicable to the discharge.

The City of Meridian WWTP has increased their design flow from 2.82 mgd (million gallons per day) to 10.2 mgd due to several upgrades and new processes.

### ***Receiving Water Body Level of Protection***

The City of Meridian's WWTP outfall 1 discharges to Fivemile Creek within the Lower Boise Subbasin assessment unit (AU) ID17050114SW010\_03 (Fivemile Creek – 3<sup>rd</sup> order). This AU has the following designated beneficial uses: cold water aquatic life and secondary contact recreation (IDAPA 58.01.02.140.12). In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

The cold water aquatic life use in Fivemile Creek is not fully supported due to excess sedimentation/siltation, chlorpyrifos, and "cause unknown" (nutrients suspected) (2012 Integrated Report). The secondary contact recreation beneficial use is not fully supported due to excess *E. coli* bacteria. As such, DEQ will provide Tier I protection only for the aquatic life use and recreation beneficial uses (IDAPA 58.01.02.051.02; 58.01.02.051.01).

In addition, the City of Meridian's WWTP outfall 2 discharges to the Boise River within the Lower Boise Subbasin assessment unit (AU) ID17050114SW005\_06 (Boise River – Veteran's Memorial Parkway to Star Bridge). Currently, Meridian does not actively use outfall 2. This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning and primary contact recreation. In addition to these uses, all waters of the state are protected for agricultural and industrial water supply, wildlife habitat, and aesthetics (IDAPA 58.01.02.100).

The cold water aquatic life and salmonid spawning uses in the Boise River are not fully supported due to excess sedimentation/siltation, temperature, low flow alterations and physical substrate habitat alterations (2012 Integrated Report). The primary contact recreation beneficial use is not fully supported due to excess fecal coliform bacteria. As such, DEQ will provide Tier I protection only for the aquatic life, salmonid spawning, and recreation beneficial uses (IDAPA 58.01.02.051.02; 58.01.02.051.01).

### ***Protection and Maintenance of Existing Uses (Tier I Protection)***

As noted above, a Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. In order to protect and maintain designated and existing beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho WQS, as well as other provisions of the WQS such as Section 055, which addresses water quality limited waters. The numeric and narrative criteria in the WQS are set at levels that ensure protection of designated beneficial uses. The effluent limitations and associated requirements contained in the City of Meridian's WWTP permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load (TMDL) must be prepared for those pollutants causing impairment. A central purpose of TMDLs is to establish wasteload allocations (WLAs) for point source discharges, which are set at levels designed to help restore the water body to a condition that supports existing and designated beneficial uses. Discharge permits must contain limitations that are consistent with WLAs in the approved TMDL.

### **BOD<sub>5</sub>**

The proposed final permit proposes less-stringent BOD<sub>5</sub> effluent limits for Fivemile Creek relative to the current permit. Effluent limits in the previous permit were based on receiving water dilution ratios, with more stringent limits for dilution ratios less than 4:1. Based on receiving water data for temperature, dissolved oxygen, BOD<sub>5</sub> and flow, the EPA has determined the current permit's effluent limits for BOD<sub>5</sub> ensures compliance with water quality criteria for dissolved oxygen in Fivemile Creek, even when the dilution ratio is less than 4:1. Therefore, the proposed final permit applies the prior permit's effluent limits for dilution ratios greater than or equal to 4:1 in Fivemile Creek at all times regardless of the dilution ratio. The BOD<sub>5</sub> effluent limits for Fivemile Creek were water quality based limits. An exception to the general provision on less stringent limits is that water-quality based effluent limits may be revised if the revised limits are consistent with the State's antidegradation policy. The increased BOD<sub>5</sub> load in the proposed final permit would not exceed narrative or numeric criteria in the Idaho WQS and therefore meet the requirements for Tier I protection (IDAPA 58.01.02.051.01.)

### **Temperature**

The City of Meridian's WWTP outfall 2 discharges to the Boise River (AU 17050114SW005\_06), which is impaired for temperature. Additionally, Meridian's WWTP

outfall 1 discharges to Fivemile Creek, which eventually flows into the Boise River where it is impaired for temperature. A temperature TMDL for the Boise River has not been completed.

Prior to the development of the TMDL, the WQS require the application of the antidegradation policy and implementation provisions to maintain and protect uses (IDAPA 58.01.02.052.07; 58.01.02.055.04). At this time, there is not sufficient data to determine whether or not the heat load in the discharge from Meridian's outfalls to Fivemile Creek and the Boise River have the reasonable potential to cause or contribute to excursions above the water quality standards for temperature. Continuous temperature monitoring of the effluent and receiving waters upstream and downstream of the outfalls to Fivemile Creek and the Boise River are permit requirements, which will allow for the assessment of potential impacts of the discharge on temperature in the lower Boise River.

Continuous temperature monitoring upstream of outfall 2 to the Boise River is only required when the City of Meridian is discharging.

### **Total Phosphorus**

The Boise River AU 17050114SW001\_06 (Boise River - Indian Creek to mouth), approximately 15 miles downstream from the Boise River outfall, is impaired for TP. The City of Meridian WWTP discharge has the potential to cause or contribute to excursions above water quality standards for nutrients (TP); therefore, the permit proposes water quality based effluent limits for TP.

The *Lower Boise River TMDL 2015 Total Phosphorus TMDL Addendum* was approved December 22, 2015. Water quality monitoring and modeling completed since 2012 have determined the extent of impairment in the Boise River as well as WLAs expected to restore beneficial uses in the Boise River. The WLAs developed in the TMDL for the City of Meridian WWTP are proposed as limits in this NPDES permit. The effluent limitations in the permit will result in a decrease of TP in the Boise River.

Fivemile Creek (AU 17050114SW010\_03) is listed in the 2012 Integrated Report for cause unknown (nutrients suspected). This segment will remain on the §303(d) list (Category 5) until such time that either: (1) water quality data demonstrates beneficial uses are no longer impaired by nutrients; (2) a TMDL is developed; or, (3) readily available data and information show the original listing was made in error.

Although a TMDL has not yet been developed for nutrients in Fivemile Creek, the *Lower Boise River TMDL 2015 Total Phosphorus TMDL Addendum* was approved for the Boise River. The proposed final permit includes TP effluent limits based on the design flow of the facility, regardless of the outfall used. The effluent limits are consistent with *Lower Boise River TMDL 2015 Total Phosphorus TMDL Addendum* and are based on supporting beneficial uses in the Boise River. The effluent limitations in the permit will result in a decrease of TP in Fivemile Creek and the Boise River.

The Hells Canyon segment of the Snake River is also impaired due to excess nutrients. The *SNAKE RIVER HELLS CANYON (SR-HC) TMDL* (DEQ 2003) established a load allocation for the Boise River based upon a TP concentration of 0.07 mg/L at the mouth of the Boise River. The 2015 TMDL Addendum for TP for the Boise River ensures that the load allocation for the SR-

HC TMDL will be achieved. DEQ believes the permit will ensure compliance with the TMDL and the applicable narrative criteria.

### Sediment and *E. coli* Bacteria

Fivemile Creek (AU 17050114SW010\_03), is also impaired for sediment and bacteria. The City of Meridian WWTP discharge meets technology-based limits for sediment (TSS) and water quality-based bacteria limits in its current permit and similar requirements are included in the proposed final permit. The *Lower Boise River TMDL 2015 Sediment and Bacteria Addendum*, which was developed to address the sediment and bacteria impairments in Fivemile Creek, was approved by EPA in June 2015. The TMDL WLAs for the City of Meridian WWTP have been incorporated into the proposed final NPDES permit.

The *Lower Boise River TMDL 2015 Sediment and Bacteria Addendum E. coli* wasteload allocations are based on a bacteria concentration of 126 cfu/100 mL, collected as a 5-sample geometric mean over 30 days. Current permit limits are consistent with the Meridian WWTP wasteload allocation. Sediment wasteload allocations are based on 20 mg/L, less 2.5 mg/L for natural background (TMDL section **Error! Reference source not found.**), and are expressed as 4-month averages. This TMDL is concentration based, so the WLAs are based on the design flow multiplied by a coefficient:

$$E. coli \text{ WLA (in } 10^9 \text{ cfu/day)} = Q \times 4.76$$

$$\text{Sediment WLA (in kg/day)} = Q \times 66.2$$

Where  $Q$  is the design flow of the facility in million gallons per day (mgd).

The coefficients are a collection of conversion constants:

$$E. coli: 126 \text{ cfu}/100 \text{ mL} \times \frac{3.785 \text{ L/gal} \times 10^6 \text{ gal/million gal}}{0.1 \text{ L}/100 \text{ mL} \times 10^9} = 4.76 \times 10^9 \text{ cfu}/\text{day}/\text{mgd}$$

$$\text{Sediment: } \frac{(20-2.5) \text{ mg}}{\text{L}} \times \frac{3.785 \text{ L/gal} \times 10^6 \text{ gal/million gal}}{10^6 \text{ mg/kg}} = 66.2 \text{ kg}/\text{day}/\text{mgd}$$

If the design flow were to increase in the future, then the WLAs would correspondingly increase. The present design flows and WLA are shown in the *Lower Boise River TMDL 2015 Sediment and Bacteria Addendum Error! Reference source not found.* To ensure consistency with this TMDL, DEQ expects this and future permits to contain a 4-month average effluent limit of 17.5 mg/l TSS with an associated load based on the permitted design flow of the facility and *E. coli* average monthly effluent limits of 126 cfu/100ml and maximum daily limits of 576 cfu/100 ml.

At both the Boise River outfall and the confluence of Fifteenmile Creek (the receiving water body of Fivemile Creek), the Boise River (AU 17050114SW005\_06a, Boise River – Star to Middleton) are impaired for sediment and bacteria. The EPA-approved *Lower Boise River TMDL* (DEQ 1999) and TMDL Addendum (2008) establish WLAs for sediment and bacteria for the City of Meridian WWTP and load allocations for sediment and bacteria at the mouth of Fifteenmile Creek. In accordance with the procedure outlined in the sediment TMDL, the City of Meridian requested an increase in their WLA from the sediment TMDL reserve for growth; their design flow has increased from 2.82 million gallons per day (MGD) at the time of TMDL

development to 10.2 MGD. The requested WLA increase would result in a decrease in the allowed concentration of TSS, but an increase in the mass load allocation in the Lower Boise River TMDL. DEQ has approved the requested sediment WLA increase and has adjusted the remaining reserve for growth accordingly. These sediment and bacteria allocations are designed to ensure the Boise River will achieve the water quality necessary to support its existing and designated aquatic life and recreation beneficial uses and to comply with the applicable numeric and narrative criteria. The effluent limitations and associated requirements contained in the City of Meridian's WWTP permit are set at levels that comply with these allocations.

### Summary of Tier I Analysis

In sum, the effluent limitations and associated requirements contained in the City of Meridian's WWTP permit are set at levels that reasonably ensure compliance with the narrative and numeric criteria in the WQS and the WLAs established in the *Lower Boise River TMDL 2015 Total Phosphorus TMDL Addendum*, *Lower Boise River TMDL 2015 Sediment and Bacteria Addendum*, and *Lower Boise River TMDL and SR-HC TMDL*. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Boise River and Fivemile Creek in compliance with the Tier I provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

### Compliance Schedules

Pursuant to IDAPA 58.01.02.400.03, DEQ may authorize compliance schedules for water quality-based effluent limits issued in a permit for the first time. EPA has determined the City of Meridian WWTP cannot immediately achieve compliance with the effluent limits for TP, ammonia, copper, zinc, cyanide, and mercury; therefore, DEQ authorizes a compliance schedule and interim requirements as set forth below. This compliance schedule provides the permittee a reasonable amount of time to achieve the final effluent limits as specified in the permit. At the same time, the schedule ensures that compliance with the final effluent limits is accomplished as soon as possible.

A 9 year and 11 month (two-permit-cycle) compliance schedule is authorized for constituents with new effluent limits that cannot be immediately achieved. Further, the compliance schedule and annual reporting requirements will allow for a more accurate assessment of treatment performance for all constituents. 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. Improvements to enhance removals of phosphorus and nitrogen through process enhancements, such as longer solids retention time (SRT) in the biological treatment process, effluent filtration improvements to reduce effluent solids, solids side-stream controls to reduce loadings, recycling back to the liquid stream, and sustained and stable operational performance will all contribute to improved effluent quality.

A schedule of compliance is authorized only for the following effluent limits, outfalls and seasons:

Outfall 001 – Fivemile Creek

- Phosphorus, Total as P (TP)
- Ammonia, Total as N (ammonia)

- Copper, Total Recoverable (copper)
- Cyanide, Weak Acid Dissociable (cyanide)
- Mercury, Total (mercury) (October-April)
- Zinc, Total Recoverable (zinc) (May-September)

Outfall 002 – Boise River

- Phosphorus, Total as P (TP)
- Ammonia, Total as N (ammonia)
- Cyanide, Weak Acid Dissociable (cyanide)

While the schedules of compliance are in effect, the City of Meridian WWTP must comply with the following interim requirements:

- The City of Meridian WWTP must comply with the interim effluent limitations (Table 1 and Table 2 below) and monitoring requirements in Part I.B. of the Permit.
- Until compliance with the final effluent limitations are achieved, the City of Meridian WWTP must complete the tasks listed in Table 3 below, as required under the schedules of compliance.
- In addition, the City of Meridian must submit an annual progress report outlining progress made towards reaching the final compliance dates for the effluent limitations. The annual progress report based on data gathered through December 31<sup>st</sup> must be submitted to the EPA and DEQ annually by February 15<sup>th</sup> of the subsequent year. The first report through December 31, 2017 is due on February 15, 2018 and annually thereafter, until compliance with effluent limitations is achieved. See also the Permit Part III.K., “Compliance Schedules.” At a minimum, the annual progress report must include:
  1. An assessment of the previous year’s TP, ammonia, copper, zinc, cyanide, and mercury effluent data and comparison to the final effluent limitations in the permit. This includes an evaluation of improvements in toxic pollutant concentrations that result from treatment process optimization and side-stream projects. Any improved treatment from these processes should be considered in decision making for final upgrades to meet final TP and ammonia effluent limits.
  2. A description of progress made towards meeting the final effluent limitations, including the applicable deliverables required under in Table 3. Include any exceedances of interim permit limits or anticipated challenges for compliance within the next year. This may include a technological explanation and/or a request to modify the permit.
  3. A description of actions and milestones targeted for the upcoming year towards meeting the final effluent limitations.
- The City of Meridian WWTP must achieve compliance with the final effluent limits of the Permit Part I.B.I within 9 years and 11 months after the effective date of this permit (EDP).
- The City of Meridian WWTP must provide written notification to the EPA and the DEQ within fourteen (14) days upon completion of each of the above-

mentioned tasks at the addresses provided in the Permit Part III.J (also See Part III.K).

**Table 1. City of Meridian Interim Effluent Limitations and Schedule for TP and Ammonia for Outfall 001 and Outfall 002.**

Parameter	Unit	Average Monthly Limit	Maximum Daily Limit	Period
Phosphorus, Total as P	mg/L	Seasonal average 2.5		EDP to 4 years and 11 months after EDP
	mg/L	Seasonal Average 1.0		From 5 years to 9 years and 11 months after EDP
Ammonia, Total as N	mg/L	12	20	9 years and 11 months after EDP

**Table 2. City of Meridian Interim Effluent Limitations for Copper, Cyanide, Zinc, and Mercury.**

Parameter	Unit	Average Monthly Limit	Maximum Daily Limit	Period	Outfall
Copper, Total Recoverable	µg/L	13.3	18.5	Year Round	Outfall 001
Cyanide, Weak Acid Dissociable	µg/L	No interim limit <sup>1</sup>	No interim limit <sup>1</sup>	Year Round	Outfall 001 and Outfall 002
Zinc, Total Recoverable	µg/L	No interim limit <sup>1</sup>	No interim limit <sup>1</sup>	May - September	Outfall 001
Mercury, Total	µg/L	0.015	0.033	October - April	Outfall 001

<sup>1</sup> For pollutants with no interim limit, there is no limit in effect until the end of the compliance schedule.

**Table 3. Tasks Required Under the Schedules of Compliance.**

Task No.	Completion Date	Task Activity
1	Feb 1, 2018 and annually thereafter	Annual Progress Report including an assessment of the previous calendar year's treatment performance and comparison to the final effluent limitations for TP, ammonia, copper, zinc, cyanide, and mercury.
2	Two (2) years after the Effective Date of the Permit (EDP)	Amended Facility Planning: Evaluate treatment options to achieve both final TP and ammonia limits.  Deliverable: Permittee must provide DEQ with an amended facility plan for approval within 2 years of the EDP.
3	Five (5) years after EDP	Implementation of Treatment Enhancements: <ul style="list-style-type: none"> <li>• Process optimizations for ammonia removal</li> <li>• Centrate equalization and side-stream treatment design and construction</li> <li>• Evaluation of recycled water program</li> <li>• Phase 2 fermentation evaluation</li> <li>• Evaluation of tertiary filtration enhancements</li> <li>• And or other viable options identified in the facility plan</li> </ul> Deliverable: Provide DEQ and EPA a schedule of design upgrades required to achieve compliance with final limits.
4	Five (5) years after EDP	Achieve TP interim limit not to exceed 1.0 mg/L (seasonal average).
5	Six (6) years after EDP	BNR Design Phase: The Permittee will have completed the detailed design for upgrades to the BNR process to meet the final ammonia and TP limitations.  Deliverable: Permittee must provide EPA with written notice that the final design report has been completed within 6 years of the EDP.
6	Eight (8) years after EDP	BNR Construction Phase: The Permittee will have completed the construction for the BNR to meet the final ammonia and TP limitations.  Deliverable: Permittee must provide DEQ and EPA with written notice that the facility construction has been completed within 8 years of the EDP.
7	Nine (9) years after EDP	Tertiary Filtration Construction and Process Optimization: The Permittee will have completed the construction of tertiary filtration and begun process optimization to meet the final ammonia and TP limitations.  Deliverable: Permittee must provide DEQ and EPA with written notice that the facility construction has been completed within 9 years of the EDP.
8	Nine (9) years and eleven months after EDP	Process optimization and achieve final effluent limitation (nine years and eleven months after the effective date of the permit).  Deliverable: Permittee must achieve compliance with the final effluent limitations within 9 years and 11 months of the EDP and must submit written notice of compliance to DEQ and EPA.

## Mixing Zones

Pursuant to IDAPA 58.01.02.060, DEQ authorizes the mixing zones summarized in Table 4.

**Table 4. Authorized Mixing Zones.**

Pollutant	Outfall	Receiving Water	Season	Authorized % Critical Flow Mixing Zone
Ammonia	Outfall 001	Fivemile Creek	Year Round	25%
	Outfall 002	Boise River		
	Outfall 002	Boise River		
Copper	Outfall 001	Fivemile Creek	Year Round	25%
	Outfall 002	Boise River		1%
Cyanide	Outfall 001	Fivemile Creek	Year Round	25%
	Outfall 002	Boise River		
Mercury	Outfall 001	Fivemile Creek	Year Round	25%
	Outfall 002	Boise River		
Nickel	Outfall 001	Fivemile Creek	May-Sept	14%
Zinc	Outfall 001	Fivemile Creek	May-Sept	25%

## Other Conditions

This certification is conditioned upon the requirement that any material modification of the permit or the permitted activities—including without limitation, any modifications of the permit to reflect new or modified TMDLs, wasteload allocations, site-specific criteria, variances, or other new information—shall first be provided to DEQ for review to determine compliance with Idaho WQS and to provide additional certification pursuant to Section 401.

## Right to Appeal Final Certification

The final Section 401 Water Quality Certification may be appealed by submitting a petition to initiate a contested case, pursuant to Idaho Code § 39-107(5) and the “Rules of Administrative Procedure before the Board of Environmental Quality” (IDAPA 58.01.23), within 35 days of the date of the final certification.

Questions or comments regarding the actions taken in this certification should be directed to Kati Carberry, DEQ Boise Regional Office at 208.373.0434 or [Kati.Carberry@deq.idaho.gov](mailto:Kati.Carberry@deq.idaho.gov).

  
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 Aaron Scheff  
 Regional Administrator  
 Boise Regional Office



Mayor Tammy de Weerd

City Council Members:

Keith Bird  
Luke Cavener  
Charlie Rountree

Joe Borton  
Genesis Milam  
David Zarembo

April 2, 2014

Attn: Pete Wagner, Regional Administrator  
Idaho Department of Environmental Quality  
1445 N. Orchard St.  
Boise, ID 83706

RE: Total Suspended Solids Waste Load Allocation

Dear Mr. Wagner:

In the document *Sediment and Bacteria Allocations Addendum to the Lower Boise River TMDL, Final, April 2008, Table 15 Reserve for Growth revised June 12, 2012*, Table 15 shows the design flow for Meridian as 2.82 mgd. The City of Meridian has been discharging at approximately 7 mgd for the last few years and has a current design flow of 10.2 mgd. Using an old design flow to set the waste load allocation for a fast growing community concerns the City of Meridian and may cause issues for its wastewater treatment facility.

The document further states "Until the reserve is gone, DEQ shall allocate the remaining reserve on a first come first served basis. When a new or existing facility receives a draft NPDES permit from EPA, the facility may contact DEQ and request an allocation based on new or expanded flows." The City of Meridian is requesting a portion of the reserve to account for greater flows.

There is a significant remaining reserve for growth shown in Table 15. Ideally, the City of Meridian requests their row in the table be changed as follows.

Facility Name	Design Flow (mgd)	Monthly Average Permit Limit TSS, mg/L	TSS Average Waste Load Allocations lbs/day
Meridian	10.2	30	2550 lbs / day monthly 3820 lbs / day weekly

If you have any questions, please contact me at either 208-898-5500 or [cdolsby@meridiancity.org](mailto:cdolsby@meridiancity.org).

Sincerely,

Clint Dolsby, P.E.  
City of Meridian  
Assistant City Engineer



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor  
Curt Fransen, Director

April 15, 2014

Mr. Clint Dolsby  
Assistant City Engineer  
City of Meridian  
131 SW 5<sup>th</sup> Avenue, Suite A  
Meridian, Idaho 83642

Subject: City of Meridian – TSS Reserve for Growth Load Allocation for the Lower Boise River TMDL

Dear Mr. Dolsby:

The Boise Regional Office of the Department of Environmental Quality (DEQ) received a request from the City of Meridian to be granted a portion of the total suspended solids (TSS) reserve for growth allocation. This reserve was set aside in the *Sediment and Bacteria Allocations Addendum to the Lower Boise River TMDL* (2008).

On February 18, 2014, EPA requested 401 certification of a draft NPDES permit for the City of Meridian Wastewater Treatment Plant (WWTP). The draft permit includes a technology-based monthly average effluent limit of 30 mg/l TSS with a mass-based limit of 710 lbs/day from the *Lower Boise River TMDL* (1999). DEQ understands that the mass-based limit is no longer achievable since the design flow for the facility increased from 2.82 million gallons per day (MGD) in 1999 to 10.2 MGD.

This letter is to inform you that DEQ is revising Table 15 of the *Sediment and Bacteria Allocations Addendum to the Lower Boise River TMDL* (2008) to allow Meridian a 2550 lbs/day and 3820 lbs/day for the monthly average and weekly average limits, respectively. Additional revisions to this table change the design flow of Meridian's facility from 2.82 MGD to 10.2. The resulting total remaining reserve for growth in the sediment TMDL will be 1.98 tons/day.

An additional requirement of the increased TSS wasteload allocation is that all or a portion of this allocation be returned to the reserve for growth after facility upgrades are completed and the system meets its final total phosphorus and ammonia effluent limits. Determination of the portion of the reserve for growth allocation to be returned will be dependent upon the facility design flow and performance after facility upgrades.

Clint Dolsby  
City of Meridian  
April 15, 2014  
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Please contact Lauri Monnot at the DEQ Boise Regional Office at (208) 373-0277 to discuss any questions or concerns regarding the wasteload allocation.

Sincerely,



Barry N. Burnell  
Water Quality Division Administrator

BNB:MB:ls

c: Pete Wagner, DEQ Boise Regional Office