



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

444 Hospital Way #300 • Pocatello, ID 83201 • (208) 236-6160
www.deq.idaho.gov

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

February 23, 2017
Michael J. Lidgard
NPDES Permits Unit Manager
EPA Region 10
1200 Sixth Avenue, Suite 900
Seattle WA 98101-3140

RE: Final 401 Certification for the City of Preston Wastewater Treatment Facility, NPDES Permit No. ID-0020214.

Dear Mr. Lidgard:

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

Attached under this cover please find the Final 401 Certification for NPDES Permit No. ID-0020214. Please call me at 208-236-6160 to discuss any concerns or questions regarding this final document.

Sincerely,

A handwritten signature in blue ink that reads "Lynn Van Every". The signature is fluid and cursive, with a long horizontal line extending from the end.

Lynn Van Every
Regional Water Quality Manager

Cc: Bruce Olenick, Regional Administrator, Pocatello
Nicole Deinarowicz, 401 Program Coordinator, Boise



Idaho Department of Environmental Quality Final §401 Water Quality Certification

February 10, 2017

NPDES Permit Number(s): ID0020214, City of Preston Wastewater Treatment Plant

Receiving Water Body: Worm Creek

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. Section 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 1 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 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier 2 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 3 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 1 protection for that use, unless specific circumstances warranting Tier 2 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 Preston Wastewater Treatment Plant (WWTP) discharges the following pollutants of concern: BOD₅, TSS, *E. coli*, pH, ammonia, phosphorus, chlorine, DO, antimony, arsenic, chromium, copper, nickel, zinc, and mercury. Effluent limits have been developed for BOD₅, TSS, *E. coli*, Total Residual Chlorine (TRC), pH, Total Ammonia, and Total Phosphorus (TP). No effluent limits are proposed for DO, antimony, arsenic, chromium, copper, nickel, and mercury, however monitoring is required. Although the metals (antimony, arsenic, chromium, copper, nickel and zinc) are present in detectable amounts, none of the pollutants have reasonable potential to exceed WQS.

Receiving Water Body Level of Protection

The City of Preston WWTP discharges to Worm Creek within the Middle Bear River Subbasin assessment unit (AU) ID16010202BR005_02b (Worm Creek (lower) – Glendale Reservoir to Border). This AU has the following designated beneficial uses: coldwater aquatic life and secondary 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).

According to DEQ's 2012 Integrated Report, this AU is not fully supporting one or more of its assessed uses. The cold water aquatic life use is not fully supported. Causes of impairment include sediment and total phosphorus. The contact recreation beneficial use is fully supported. As such, DEQ will provide Tier 1 protection (IDAPA 58.01.02.051.01) for the aquatic life use and Tier 2 protection (IDAPA 58.01.02.051.02) in addition to Tier 1 for the contact recreation use (IDAPA 58.01.02.052.05.c).

Protection and Maintenance of Existing Uses (Tier 1 Protection)

As noted above, a Tier 1 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 existing and designated beneficial uses. The effluent limitations and associated requirements contained in the City of Preston 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 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 wasteload allocations in the approved TMDL.

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 58.01.02.055.04).

The EPA-approved *Bear River/Malad River Subbasin Assessment and Total Maximum Daily Load Plan (2006) and the Bear River Basin Addendum to the 2006 TMDL* (original TMDL approved by EPA June 2006, Addendum approved by EPA September 2013) establishes wasteload allocations for sediment (TSS) and total phosphorus (Table 1). These wasteload allocations are designed to ensure Worm Creek will achieve the water quality necessary to support its existing and designated aquatic life beneficial uses and comply with the applicable numeric and narrative criteria. The effluent limitations and associated requirements contained in the City of Preston WWTP permit are set at levels that comply with these wasteload allocations.

Table 1. Pollutants with New Limits in the Proposed Permit.

Pollutant	Units	Current Permit			Proposed Permit			Change ^a
		Average Monthly Limit	Average Weekly Limit	Single Sample Limit	Average Monthly Limit	Average Weekly Limit	Single Sample Limit	
Total Phosphorus	lbs/day	—	—	Report	Ave. Month Limit 0.75	Ave. Weekly Limit 1.5	Ave. Annual Limit 0.48	New, TMDL
Total Phosphorus Interim Limit	lbs/day	—	—	—	13.6	27.3	—	

^a NC = no change, I = increase, D = decrease.

In sum, the effluent limitations and associated requirements contained in the City of Preston WWTP permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS and the wasteload allocations established in the *Bear River TMDL and Addendum*. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in Worm Creek in compliance with the Tier 1 provisions of Idaho's WQS (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

High-Quality Waters (Tier 2 Protection)

The water quality relevant to secondary contact recreation use of Worm Creek must be maintained and protected, unless a lowering of water quality is deemed necessary to accommodate important social or economic development.

To determine whether degradation will occur, DEQ must evaluate how the permit issuance will affect water quality for each pollutant that is relevant to secondary contact recreation use of Worm Creek (IDAPA 58.01.02.052.05). These include the following: *E. coli*, TP, mercury, antimony, arsenic, chromium, copper, nickel, and zinc. Effluent limits are set in the proposed and existing permit for only *E. coli*. In the proposed permit, TP is given a new limit which decreases

the phosphorus load and will improve recreational water quality. Arsenic, chromium, copper, nickel, zinc, and mercury are required to be monitored and reported.

For a reissued permit or license, the effect on water quality is determined by looking at the difference in water quality that would result from the activity or discharge as authorized in the current permit and the water quality that would result from the activity or discharge as proposed in the reissued permit or license (IDAPA 58.01.02.052.06.a). For a new permit or license, the effect on water quality is determined by reviewing the difference between the existing receiving water quality and the water quality that would result from the activity or discharge as proposed in the new permit or license (IDAPA 58.01.02.052.06.a).

Pollutants with Limits in the Current and Proposed Permit- *E. coli*

For pollutants that are currently limited and will have limits under the reissued permit, the current discharge quality is based on the limits in the current permit or license (IDAPA 58.01.02.052.06.a.i), and the future discharge quality is based on the proposed permit limits (IDAPA 58.01.02.052.06.a.ii). For the City of Preston WWTP permit, this means determining the permit's effect on water quality based upon the limits for *E. coli* in the current and proposed permits. Table 2 provides a summary of current permit limits and the proposed or reissued permit limits that pertain only to Tier 2 protections (secondary contact recreation).

Table 2. Comparison of current and proposed permit limits for pollutants of concern relevant to uses receiving Tier 2 protection.

Pollutant	Units	Current Permit			Proposed Permit			Change ^a
		Average Monthly Limit	Average Weekly Limit	Single Sample Limit	Average Monthly Limit	Average Weekly Limit	Single Sample Limit	
Pollutants with limits in both the current and proposed permit								
<i>E. coli</i>	no./100 mL	126		576	126		576	NC
Pollutants with no limits in both the current and proposed permit								
Arsenic	mg/L	—	—	—	2x/yr	—	Report	NC
Chromium	mg/L	—	—	—	2x/yr	—	Report	NC
Copper	mg/L	—	—	—	2x/yr	—	Report	NC
Mercury	µg/L	—	—	—	2x/yr	—	Report	NC
Nickel	mg/L	—	—	—	2x/yr	—	Report	NC
Zinc	mg/L	—	—	—	2x/yr	—	Report	NC

^a NC = no change, I = increase, D = decrease.

The proposed permit limits for these pollutants of concern in Table 2 (*E. coli*) are the same as, or more stringent than, those in the current permit (“nc” or “D” in change column). Therefore, no adverse change in water quality and no degradation will result from the discharge of these pollutants.

New Permit Limits for Pollutants Currently Discharged-TP

When new limits are proposed in a reissued permit for pollutants in the existing discharge, the effect on water quality is based upon the current discharge quality and the proposed discharge quality resulting from the new limits. Current discharge quality for pollutants that are not currently limited is based upon available discharge quality data (IDAPA 58.01.02.052.06.a.i). Future discharge quality is based upon proposed permit limits (IDAPA 58.01.02.052.06.a.ii).

The proposed permit for City of Preston WWTP includes new limits for total phosphorus (Table 1). These limits were included in the permit to be consistent with the wasteload allocations in the approved *Bear River/Malad River Subbasin Assessment and Total Maximum Daily Load Plan (2006) and the Bear River Basin Addendum to the 2006 TMDL*. The total phosphorus limits in the proposed permit reflect a reduction in the amount of TP discharged and an improvement in water quality from current conditions. Therefore, no adverse change in water quality and no degradation will occur with respect to this pollutant.

Pollutants with No Limits- Arsenic, Chromium, Copper, Mercury, Nickel, Zinc

There are six pollutants of concern relevant to Tier 2 protection of recreation that currently are not limited and for which the proposed permit also contains no limits: arsenic, chromium, copper, mercury, nickel, and zinc. (Table 2). For such pollutants without effluent limits, a change in water quality is determined by reviewing whether changes in production, treatment, or operation that will increase the discharge of these pollutants are likely (IDAPA 58.01.02.052.06.a.ii). Monitoring for these metals which were reported at quantifiable levels in the application have had their monitoring increased to 2x/year in order to gather additional information. Mercury monitoring has been added to assist in determining reasonable potential in the next permit reissuance. With respect to these pollutants, there is no reason to believe they will be discharged in quantities greater than those discharged under the current permit. This conclusion is based upon the fact that there have been no changes in the design flow, influent quality, or treatment processes that would likely result in an increased discharge of these pollutants. Based on the above, DEQ has concluded that the proposed permit should not cause a lowering of water quality for the pollutants with no limits. As such, the proposed permit should maintain the existing water quality in Worm Creek.

In sum, DEQ concludes that this discharge permit complies with the Tier 2 provisions of Idaho's WQS (IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.06).

Conditions Necessary to Ensure Compliance with Water Quality Standards or Other Appropriate Water Quality Requirements of State Law

Compliance Schedule

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. City of Preston WWTP cannot immediately achieve compliance with the effluent limits for total phosphorus; therefore, DEQ authorizes a compliance schedule and interim requirements as set forth in the Permit. 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 by 8 years and 6 months from the permit effective date.

DEQ authorizes the compliance schedule to meet the total phosphorus effluent limit as detailed in Part II.C. of the draft NPDES permit found on pages 15 and 16.

Pollutant Trading

Pursuant to IDAPA 58.01.02.055.06, DEQ authorizes pollutant trading for total phosphorus. Trading must be conducted in a manner that is consistent with the most recent version of DEQ's *Water Quality Pollutant Trading Guidance*, available at:

http://www.deq.idaho.gov/media/488798-water_quality_pollutant_trading_guidance_0710.pdf.

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 **Lynn Van Every, Pocatello Regional Office, at 208-236-6160 or via email at Lynn.vanevery@deq.idaho.gov**.



Bruce Olenick
Regional Administrator
Pocatello Regional Office