



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

Pocatello Regional Office, 444 Hospital Way #300 • Pocatello, ID 83201 • (208) 236-6160

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

12 July 2012

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

RE: Final 401 Certification of the City of Pocatello, Idaho, NPDES Permit No. ID0021784.

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 Pocatello's 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. ID0021784. Please call me at 208-236-6160 to discuss any concerns or questions regarding this draft document.

Sincerely,

A handwritten signature in blue ink that reads "Lynn Van Every".

Lynn Van Every
Regional Water Quality Manager

Cc: Bruce Olenick, Regional Administrator, Pocatello
Miranda Adams, 401 Program Coordinator, Boise



Idaho Department of Environmental Quality Final §401 Water Quality Certification

July 12, 2012

NPDES Permit Number(s): City of Pocatello, Permit #ID0021784

Receiving Water Body: Portneuf River above American Falls Reservoir

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

In March 2011, Idaho incorporated new provisions in Idaho Code § 39-3603 addressing antidegradation implementation. At the same time, Idaho adopted antidegradation implementation procedures in the Idaho WQS. DEQ submitted the antidegradation implementation procedures to the US Environmental Protection Agency (EPA) for approval on April 15, 2011. On August 18, 2011, EPA approved the implementation procedures.

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).

Effluent Limited Pollutants

The City of Pocatello POTW discharges the following effluent limited pollutants: BOD, TSS, *E. coli*, total residual chlorine, total ammonia, pH, and total phosphorus.

Receiving Water Body Level of Protection

The City of Pocatello POTW discharges to the Portneuf River assessment unit (AU) ID17040208SK001_05. The Portneuf River is designated for the following beneficial uses: coldwater aquatic life, salmonid spawning, secondary contact recreation, agricultural and industrial water supply, wildlife habitats and aesthetics (IDAPA 58.01.02.150.08).

The cold water aquatic life use and secondary recreation beneficial use is not fully supported due to excess sediment, nutrients, oil and grease, and bacteria for which DEQ prepared total maximum daily loads which were subsequently approved by EPA Region 10 in April 2001. The Portneuf River TMDL was revised in 2010, significant revisions included new load and wasteload allocations for sediment, phosphorus, oil and grease and *Escherichia coli*. These revised TMDL's were approved by EPA Region 10 on July 29, 2010. EPA subsequently issued a correction/final approval letter on September 15, 2010. This NPDES permit applies wasteload allocations for sediment and phosphorus as approved in the 2010 Portneuf River TMDL. In addition, DEQ (2008 and 2010 Integrated Reports) added temperature and dissolved oxygen as pollutants not meeting water quality standards. TMDL's for these two additional pollutants have not yet been scheduled for development but will be the subject of future TMDL work. As such, DEQ will provide Tier 1 protection for the aquatic life use and for the recreation beneficial use (IDAPA 58.01.02.051.02; 58.01.02.051.01).

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 designated beneficial uses. The effluent limitations and associated requirements contained in the City of Pocatello POTW 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.

The EPA-approved *The Portneuf River TMDL Revision and Addendum* (July 29, 2010) that establishes wasteload allocations for sediment, phosphorus, *E. coli* and oil and grease. These wasteload allocations are designed to ensure the Portneuf River 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 Pocatello POTW permit are set at levels that comply with these wasteload allocations.

In sum, the effluent limitations and associated requirements contained in the City of Pocatello POTW permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS and the wasteload allocations established in the *Portneuf River TMDL Revision and Addendum, 2010*. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Portneuf River.

High-Quality Waters (Tier 2 Protection)

The Portneuf River has been the subject of approved TMDL's for sediment, nutrients, oil and grease, fecal coliform bacteria (2001 TMDL), *E. coli* (2010 TMDL) and therefore is protected to Tier 1. There are no uses considered high quality and thus Tier 2 protection is not warranted.

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 58.01.02.052.04.a).

Pollutants with Limits in the Current and Proposed Permit

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 58.01.02.052.04.a.i), and the future discharge quality is based on the proposed permit limits (IDAPA 58.01.02.052.04.a.ii). In addition, a wasteload allocation for phosphorus detailed in the 2010 Portneuf River TMDL Revision and Addendum will be incorporated in the City of Pocatello POTW permit. This will be a new effluent limit and the City will need an approved compliance schedule to meet this permit requirement. Table 1 provides a summary of the current permit limits and the proposed or reissued permit limits.

Table 1. Comparison of current and proposed permit limits for pollutants of concern.

Pollutant	Units	Current Permit			Proposed Permit			Change ^a
		Average Monthly Limit	Average Weekly Limit	Daily Max Limit	Average Monthly Limit	Average Weekly Limit	Daily Max Limit	
Pollutants with limits in both the current and proposed permit								
Five-Day BOD	mg/L	30	45	—	30	45	---	NC
	lbs/day	3000	4500	—	3000	4500	---	
	% removal	---	—	—	85%	---	---	
TSS	mg/L	30	45	—	30	45	---	NC
	lbs/day	3000	4500	—	3000	4500	---	
	% removal	---	—	—	85%	---	---	
pH	standard units	6.0–9.0 all times			6.5–9.0 all times			D
<i>E. coli</i> ^b	no./100 mL	---	---	---	126 geo mean	---	576	Std chg ^b
Fecal coliform ^b	no./100 mL	200	200	—	---	---	---	—
Total Residual Chlorine (final)	mg/L	0.025	---	0.058	---	---	---	---
	lbs/day	2.5	---	5.8	---	---	---	
Total Residual Chlorine (High Flow, Nov – June)	ug/L	---	---	---	16	---	41	D
	lbs/day	---	---	---	1.6	---	4.1	
Total Residual Chlorine (Low Flow, Jul – Oct)	ug/L	---	---	---	12	---	32	D
	lbs/day	---	---	---	1.2	---	3.2	
Total Ammonia (as N)	mg/L	4.4	---	8.1	---	---	---	---
	lbs/day	440	---	810	---	---	---	
Total Ammonia (as N) (High Flow, Nov – June)	mg/L	---	---	---	6.3	---	16.4	I ^c
	lbs/day	---	---	---	630	---	1640	
Total Ammonia (as N) (Low Flow, Jul – Oct)	mg/L	---	---	---	5.0	---	13	I ^c
	lbs/day	---	---	---	500	---	1300	
Numeric Effluent Limits with Compliance Schedule – Effective December 31, 2017								
Total Phosphorus	lb/day	—	—	Report	25.1	58.7	---	New, TMDL

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

^b Standards change from current permit to proposed permit

^c See Fact sheet page 20.

The proposed permit limits (aside from ammonia) are the same, 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. Ammonia limits have changed in the proposed permit based on a change in Idaho’s water quality standards.

The water quality-based ammonia limits proposed in the draft permit are less stringent than the water quality-based ammonia limits in the 1999 permit. Section 303(d)(4)(B) provides that a permittee may backslide from a water quality-based effluent limitation where water quality meets or exceeds applicable water quality standards, if the revision is consistent with the State’s approved antidegradation policy. Two factors contributed to the change in the permit limits for ammonia as compared to the 1999 permit: 1) The change in the methodology for calculating the chronic ammonia criterion in the Idaho’s WQS resulted in a higher ammonia criterion than was used in the current permit.

In 2002, DEQ adopted new WQS which changed the methodology for calculating the chronic criterion for ammonia. Based on the same receiving water pH assumption, the criterion based on the current WQS is higher than was used in the current permit. Additionally, the EPA published a notice in the Federal Register, December, 22, 1995, new ambient water quality criteria for ammonia which changed the methodology used to calculate the effluent limits for ammonia; 2) Idaho's WQS require that the potential for a discharge to contribute to violations of the criteria be evaluated under critical flow conditions. The availability and use of new flow data to estimate critical design flows for the Portneuf River in the vicinity of the discharge resulted in lower dilution than were used in the current permit, and allowed for the determination of seasonally-based critical flows. The previous permit did not use critical flows to evaluate reasonable potential or establish permit limits, but rather used the minimum of only four river flow values.

New Permit Limits for Pollutants Currently Discharged

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 58.01.02.052.04.a.i). Future discharge quality is based upon proposed permit limits (IDAPA 58.01.02.052.04.a.ii).

The proposed permit for City of Pocatello POTW includes new a limit for total phosphorus consistent with the wasteload allocations in the approved *Portneuf River TMDL Revision and Addendum 2010*. The total phosphorus limits in the proposed permit reflect a maintenance or improvement in water quality from current conditions. Therefore, no adverse change in water quality and no degradation will occur with respect to these pollutants.

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 Pocatello POTW cannot immediately achieve compliance with the effluent limits for total phosphorus; 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.

Proposed Compliance Schedule to meet Total Phosphorus Limit

1) December 31, 2013 Planning

- The permittee must develop a facility plan that evaluates the options that would allow the facility to meet the phosphorus effluent limitations and select a preferred alternative.
- Deliverable: The permittee must provide written notice to EPA that the facility plan has been submitted to the IDEQ for the necessary approvals.

2) December 31, 2014 Design

- The permittee must complete design of the selected alternative for meeting the phosphorus effluent limitations.
- Deliverable: The permittee must provide written notice to EPA that the design plans and specifications have been submitted to the IDEQ for the necessary approvals.

3) December 31, 2015 Award Bid for Construction

- The permittee must complete the awarding of the bid for construction of the project to meet the phosphorus effluent limitations.
- Deliverable: The permittee must provide written notice to the EPA and the IDEQ that the bid award is complete.

4) December 31, 2016 Construction Complete

- The permittee must complete construction to reduce phosphorus in the discharge from outfalls 001 to achieve the phosphorus effluent limitations.
- Deliverable: The permittee must submit construction completion reports to the EPA and the IDEQ.

5) December 31, 2017 Meet Effluent Limitation for Phosphorus

- Construction and optimization of process such that compliance with the phosphorus effluent limitations is achieved.
- Deliverable: The permittee must provide written notice to the EPA and the IDEQ that the phosphorus effluent limitations are achieved.

Mixing Zones

Pursuant to IDAPA 58.01.02.060, DEQ authorizes a mixing zone that utilizes 25% of the critical flow volumes (high and low flow periods) of Portneuf River for chlorine and ammonia.

Pollutant Trading

Pursuant to IDAPA 58.01.02.055.06, DEQ authorizes pollutant trading for pollutants that have approved TMDL load and wasteload allocations in the Portneuf River TMDL Revision and Addendum 2010. 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.

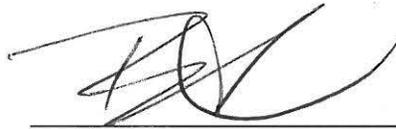
Other Conditions

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 regarding the actions taken in this certification should be directed to Lynn Van Every, Pocatello Regional Water Quality Manager, at 208-236-6160 or via e-mail at lynn.vanevery@deq.idaho.gov.



Bruce Olenick
Regional Administrator
Pocatello Regional Office