



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

11 February 2013

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 Firth, Idaho, NPDES Permit No. ID0024988.

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 Firth'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. ID0024988. Please call me at 208-236-6160 to discuss any concerns or questions regarding this final certification document.

Sincerely,

A handwritten signature in black ink, appearing to read "Bruce Olenick".

Bruce Olenick
Regional Administrator

Cc: Lynn Van Every, Regional WQ Manager
Tom Hepworth, Regional Engineering Manager
Miranda Adams, DEQ 401 Program Coordinator, Boise



Idaho Department of Environmental Quality Final §401 Water Quality Certification

February 11, 2013

NPDES Permit Number(s): City of Firth, ID-0024988

Receiving Water Body: Snake River

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 Firth discharges the following pollutants of concern: Biochemical Oxygen Demand (BOD₅), Total Suspended Solids (TSS), *E. coli* bacteria, pH, Total Phosphorus as P and Total Ammonia-Nitrogen. Effluent limits have been developed for: Biochemical Oxygen Demand (BOD₅), Total Suspended Solids (TSS), *E. coli* bacteria, pH and Total Phosphorus as P. No effluent limits are proposed for Total Ammonia - Nitrogen.

Receiving Water Body Level of Protection

The City of Firth discharges to the Snake River assessment unit (AU) - ID17040206SK022_04 (river mile 791 to American Falls Reservoir). This AU has the following designated beneficial uses: cold water aquatic life, salmonid spawning, primary contact recreation and domestic water supply. Other uses include agricultural and industrial water supply, wildlife habitats and aesthetics.

The cold water aquatic life and recreation beneficial use in this Snake River AU have been assessed and are not fully supported due to excess mercury (2010 Integrated Report). In addition, the *American Falls Subbasin TMDL* (approved by EPA August 2012) sets limits for phosphorus based on water quality impairment in American Falls Reservoir. As such, DEQ will provide Tier 1 protection only for these two uses (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 Firth 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 of supporting beneficial uses. Discharge permits must contain limitations that are consistent with wasteload allocations in the approved TMDL.

This reach of the Snake River is impaired by mercury and DEQ has not scheduled TMDL development to address this impairment listing. The WQS stipulate that either there be no further impairment of the designated or existing beneficial uses or that the total load of the impairing pollutant remains constant or decreases (IDAPA 58.01.02.055.04 and 58.01.02.055.05). DEQ has no data to suggest that the discharge from the City of Firth is contributing to this impairment. DEQ has determined that this discharge permit will comply with these provisions of Idaho WQS.

The EPA-approved *American Falls Subbasin TMDL* (August 6, 2012) establishes wasteload allocations for total suspended sediment and total phosphorus. These wasteload allocations are designed to ensure the Snake River and American Falls Reservoir 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 Firth permit are set at levels that comply with these wasteload allocations.

In sum, the effluent limitations and associated requirements contained in the City of Firth permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS and the wasteload allocations established in the *American Falls Subbasin TMDL*. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Snake River in compliance with IDAPA 58.01.02.051.01.

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 58.01.02.052.06.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 Firth permit, this means determining the permit's effect on water quality based upon the limits for BOD, TSS and *E. coli* (current permit) and BOD, TSS, *E. coli*, pH and total phosphorus (proposed permit). 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	Single Sample Limit	Average Monthly Limit	Average Weekly Limit	Single Sample Limit	
Pollutants with limits in both the current and proposed permit								
Five-Day BOD	mg/L	45	65	—	45	65	—	NC
	lb/day	300	434	—	300	434	—	
	% removal	65%	—	—	65%	—	—	
TSS	mg/L	45	65	—	45	65	—	D, TMDL
	lb/day	300	434	—	79.2	187	—	
	% removal	65%	—	—	65%	—	—	
pH	standard units	No limit			6.5–9.0 all times			New limit
<i>E. coli</i>	no./100 mL	126	—	406	126	—	406	NC
Pollutants with new limits in the proposed permit								
Total Phosphorus	lb/day	—	—	Report	3.56	5.01	—	New, TMDL
Pollutants with no limits in both the current and proposed permit^b								
Total Ammonia	mg/L	—	—	Report	—	—	Report	NC

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

^b EPA has determined there is no reasonable potential to exceed water quality standards for ammonia thus no limit is required.

The proposed permit limits for other pollutants of concern that have limits in Table 1, BOD, TSS and *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

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 Firth includes new limits for pH and total phosphorus (Table 1). The limit for pH was added to be consistent with permits currently issued and the total phosphorus limit was included in the permit to be consistent with the wasteload allocations in the approved *American Falls Subbasin TMDL*. The pH and 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

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.

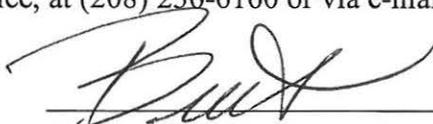
Mixing Zones

Pursuant to IDAPA 58.01.02.060, DEQ authorizes a mixing zone that utilizes 25% of the critical flow of the Snake River for ammonia.

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 e-mail at lynn.vanevery@deq.idaho.gov



Bruce Olenick
Regional Administrator
Pocatello Regional Office
