STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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C.L. "Butch" Otter, Governor
Toni Hardesty, Director

October 26, 2010

Mr. Michael Lidgard
US Environmental Protection Agency, Region 10
1200 6th Avenue, OW-130
Seattle, Washington 98101

RE: Draft §401 Water Quality Certification for the Draft NPDES Permit No. ID-002022-2 for the City of Bonners Ferry

Dear Mr. Lidgard:

The State of Idaho Department of Environmental Quality (DEQ) received a preliminary draft NPDES permit for the city of Bonners Ferry to discharge from their existing wastewater treatment plant on September 10, 2010. After review of the revised permit and fact sheet, DEQ submits the enclosed draft §401 water quality certification. Also enclosed is a narrative description of our antidegradation review for this permit. After the public comment period ends, DEQ will address any comments, review the proposed final permit and issue a final certification decision.

Please direct any questions to June Bergquist at 208.666.4605 or june.bergquist@deq.idaho.gov .

Sincerely,

Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office

Enclosures (2)

c: Johnna Sandow, DEQ Boise
John Drabek, EPA Region 10, Seattle

Idaho Department of Environmental Quality

DRAFT §401 Water Quality Certification

October 26, 2010

NPDES Permit Number: City of Bonners Ferry Wastewater Treatment Plant, **ID-002022-2**

Pursuant to the provisions of Section 401(a)(1) of the Federal Water Pollution Control Act (Clean Water Act), as amended, 33 USC 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 (NDPES) 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, including 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.

MIXING ZONES

Pursuant to IDAPA 58.01.02.060, DEQ authorizes a mixing zone for chlorine and ammonia that utilizes up to 25% of the critical flow volumes of the Kootenai River.

ANTIDEGRADATION

Idaho WQS provide that existing uses and the water quality necessary to protect the existing uses shall be maintained and protected (IDAPA 58.01.02.051.01). In addition, where water quality exceeds levels necessary to support uses, that quality shall be maintained and protected unless the Department finds, after intergovernmental coordination and public participation, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located (IDAPA 58.01.02.051.02).

The City of Bonners Ferry discharges its treated wastewater to the Kootenai River (assessment unit ID17010104PN029_08 Moyie River to Deep Creek), which is listed for temperature. DEQ has not prepared a temperature TMDL, and the priority for developing a TMDL is medium. In accordance with IDAPA 58.01.02.054.05, DEQ must

assure that the discharge will not cause further impairment of the designated or existing beneficial uses.

The effluent limitations in the proposed new permit for the City of Bonners Ferry are set at levels that ensure the State's numeric and narrative criteria and other WQS provisions will be met. The numeric and narrative criteria are set at levels which protect and maintain designated and existing beneficial uses. Therefore, in accordance with IDAPA 58.01.02.051.01, the limits in the draft permit protect and maintain designated and existing beneficial uses in the Kootenai River.

Additionally, the effluent limitations in the proposed new permit for the City of Bonners Ferry are the same as in the existing permit and temperature monitoring has been added to evaluate the facility's thermal contribution to the river. Because the facility is not changing its treatment processes or expanding its design flow, the proposed permit does not authorize an increase in thermal contributions to the Kootenai River. The proposed new permit, therefore, ensures that the existing level of water quality in the Kootenai River is maintained and the analysis necessary to lower water quality set forth in IDAPA 58.01.02.051.02 is not triggered.

CONDITIONS THAT ARE NECESSARY TO ASSURE COMPLIANCE WITH WATER QUALITY STANDARDS OR OTHER APPROPRIATE WATER QUALITY REQUIREMENTS OF STATE LAW

1. The certification is conditioned upon the requirement that any material modification of this permit or the permitted activities including without limitation, any modifications of the permit to reflect new or modified TMDL waste load allocations or other new information, shall first be provided to DEQ for review to determine compliance with 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 June Bergquist, DEQ (Coeur d'Alene Regional Office) at (208) 666-4605.

DRAFT
Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office

ANTIDEGRADATION REVIEW

NPDES Permit # ID-0020141
City of Bonners Ferry Wastewater Treatment Facility

Idaho Department of Environmental Quality

The Idaho Water Quality Standards (WQS) contain an antidegradation policy providing three levels of protection to water bodies in Idaho. The first level of protection applies to all water bodies and assures that existing uses of a water body will be maintained. The second level of protection applies to those water bodies that are considered high quality and assures that no lowering of water quality will be allowed unless it is deemed to be necessary and appropriate for important economic or social development. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires activities to not cause a lowering of water quality.

Idaho has not designated any outstanding resource water bodies. In addition, Idaho is in the process of adopting antidegradation implementation procedures in its WQS. Until antidegradation implementation rules and guidance is developed, DEQ is taking a pollutant-by-pollutant approach to antidegradation implementation. Any water body that is impaired will not be considered high quality for the pollutant(s) causing the impairment. The water body will however be considered high quality for any pollutants not causing an impairment.

Pollutants of Concern

The City of Bonners Ferry Wastewater Treatment Facility discharges the following pollutants of concern: biological oxygen demand (BOD), total suspended solids (TSS), *E. coli*, pH, chlorine, ammonia, phosphorus, nitrogen and temperature. Effluent limitations have been developed for BOD, TSS, *E. coli*, pH and chlorine. The reasonable potential analysis completed by EPA and checked by DEQ, shows that there is no reasonable potential for the facility's discharge to cause or contribute to an exceedance of the acute or chronic criteria for ammonia, therefore, effluent limits are not required for this pollutant. Additionally, effluent limitations were not deemed necessary for phosphorus or nitrogen; however, effluent monitoring is required for these pollutants. Monitoring will be conducted during the permit cycle for temperature for further analysis during the next permit renewal.

Receiving Water Body Level of Protection

Bonners Ferry discharges into the Kootenai River (assessment unit ID17010104PN029_08). This assessment unit of the Kootenai River is located between the Moyie River and Deep Creek and is listed as impaired due to temperature. Therefore, the receiving water body is considered high quality for all other pollutants of concern except temperature.

Protection and Maintenance of Existing Uses for All Waters

The Kootenai River at this location has designated beneficial uses of domestic, agricultural, and industrial water supply; primary contact recreation; cold water aquatic life; salmonid spawning; wildlife habitats; and aesthetics. In order to protect and maintain designated and existing beneficial uses, a permitted discharge must comply with Idaho water quality standards (WQS), which contain narrative and numeric criteria as well as other provisions of the WQS such as

Section 054 which addresses water quality limited waters. The numeric and narrative criteria are set at levels which ensure protection of existing and designated beneficial uses.
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 any water quality limited water body. 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 comply with the approved TMDL.

In the absence of a TMDL, IDAPA 58.01.02.054.03, requires impaired water bodies to be prioritized for TMDL development. For waters considered to be medium and low priority for TMDL development, IDAPA 58.01.02.054.04 stipulates no further impairment of the designated or existing beneficial uses of these waters. For waters considered to be high priority, IDAPA 58.01.02.054.05 stipulates that the total load of the impairing pollutant must remains constant or decrease. The Kootenai River is a medium priority water per DEQ's 2008 Integrated Report.

Kootenai River is not supporting its cold water aquatic life or salmonid spawning beneficial uses. This impairment is a result of temperatures above the temperature standards required to protect the cold water aquatic life and salmonid spawning beneficial uses as well as the Kootenai River sturgeon, an endangered species. To date, DEQ has not developed a temperature TMDL for this water body. Since the Kootenai River is considered a medium priority water body for TMDL development purposes, DEQ must ensure that permitted discharges from point sources do not further impair the uses of the Kootenai River.

To ensure this level of protection, the effluent limitations and associated conditions contained in the Bonners Ferry permit are set at levels in compliance with the narrative and numeric criteria as well as Section 054 of Idaho WQS. Because the facility is not increasing its design flow or altering its treatment practices, DEQ believes that this permit will not further impair the uses of the Kootenai River. Furthermore, temperature monitoring of the effluent has been added to the permit to gather information on this pollutant of concern. Prior to the next permit reissuance and TMDL development, DEQ will examine this temperature data to determine if this discharge is a significant thermal contributor in the Kootenai River. In conclusion, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Kootenai River.

High Quality Waters
As indicated previously, the Kootenai River is considered a high quality water body for the following pollutants: BOD, TSS, pH, chlorine, ammonia, and phosphorus. As such, the quality of the Kootenai River must be maintained and protected, unless it is deemed appropriate and necessary to allow a lowering of water quality. Table 1 provides a summary of the existing permit limits and the proposed reissued permit limits.

Table 1. Comparison of proposed permit limits with current permit limits for those parameters which Kootenai River are considered high quality.

		Proposed Permit			**Current Permit**		
Parameter	Units	Average Monthly Limit	Average Weekly Limit	Instanta-neous Maximum Limit	Average Monthly Limit	Average Weekly Limit	Instanta-neous Maximum Limit
Five-Day BOD	mg/L	45	65	-	45	65	-
	lb/day	169	244	-	169	244	-
	% removal	65%	-	-	65%	-	-
TSS	mg/L	45	65	-	45	65	-
	lb/day	169	244	-	169	244	-
	% removal	65%	-	-	65%	-	-
E. coli	#/100 mL	126		406	126		406
pH	s.u.	6.5 – 9.0 all times			6.5 – 9.0 all times		
Total Residual Chlorine	mg/L	0.5	0.75	-	0.5	0.75	-
	lb/day	1.9	2.8	-	1.9	2.8	-
Total Ammonia	mg/L	-	-	-	-	-	-
	lb/day	-	-	-	-	-	-
	Monitoring Requirement				Monitoring Requirement + Reasonable potential analyses = no potential to violate standards		
Temperature	Monitoring Requirement				-		

The proposed permit limits in Table 1 are the same as those in the current permit. Furthermore, there are no new pollutants present in the discharge that aren't currently being discharged and there is no reason to believe that existing pollutants will be discharged in quantities greater than that which is currently being discharged. Therefore, DEQ has concluded that the proposed permit does not allow for a new or increased water quality impact and will not cause a lowering of water quality. As such, the proposed permit will maintain the existing water quality in the Kootenai River.