



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

November 14, 2011

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

RE: Final §401 Water Quality Certification for NPDES Permit No. ID-002507-1, Clarkia
Water and Sewer District

Dear Mr. Lidgard:

The State of Idaho Department of Environmental Quality (DEQ) received the final draft NPDES permit for the Clarkia Water and Sewer District to discharge from their existing wastewater treatment plant on November 10, 2011. After review of the draft final permit and fact sheet, DEQ submits the enclosed final §401 water quality certification. Also enclosed is a narrative description of our antidegradation review for this permit. No comments were received during the public comment period.

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

Sincerely,

A handwritten signature in blue ink that reads "Daniel Redline".

Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office

Enclosures (2)

c: Miranda Adams, DEQ Boise
John Drabek, EPA Region 10, Seattle



Idaho Department of Environmental Quality Final §401 Water Quality Certification

November 14, 2011

NPDES Permit Number: Clarkia Water and Sewer District Wastewater Treatment Plant,
ID-002507-1

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 St. Maries 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 Clarkia Water and Sewer District WWTP (Clarkia WWTP) discharges its treated wastewater to the St. Maries River (assessment unit ID17010304PN015_05 from the confluence of West Fork and Middle Fork St. Maries River to Carpenter Creek), which is listed for sediment and temperature. DEQ has prepared an EPA-approved sediment and

temperature TMDL. In accordance with IDAPA 58.01.02.055.04, DEQ must assure that the discharge is consistent with the TMDL.

The effluent limitations in the proposed new permit for the Clarkia WWTP are set at levels that ensure the State's numeric and narrative criteria and other WQS provisions, including the TMDL, will be met. The numeric and narrative criteria and TMDL wasteload allocations 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 final permit protect and maintain designated and existing beneficial uses in the St. Maries River.

Additionally, the effluent limitations in the proposed new permit for the Clarkia WWTP are the same as in the existing permit and monitoring for both temperature and total suspended sediment will continue to be required to track the facility's thermal and sediment contributions 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 or sediment contributions to the St. Maries River. The proposed new permit, therefore, ensures that the existing level of water quality in the St. Maries River is maintained and the analysis necessary to lower water quality set forth in IDAPA 58.01.02.051.02 is not triggered.

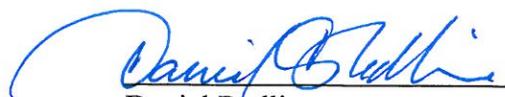
CONDITIONS THAT ARE NECESSARY TO ASSURE COMPLIANCE WITH WATER QUALITY STANDARDS OR OTHER APPROPRIATE WATER QUALITY REQUIREMENTS OF STATE LAW

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.



Daniel Redline
Regional Administrator
Coeur d'Alene Regional Office

ANTIDegradation REVIEW
NPDES Permit # ID-002507-1
Clarkia Water and Sewer District Wastewater Treatment Facility

Idaho Department of Environmental Quality
August 16, 2011

In March 2011, Idaho incorporated additional sections addressing antidegradation implementation in the Idaho Code. The new antidegradation provisions are in Idaho Code §39-3603. At the same time, Idaho adopted antidegradation implementation procedures in its Water Quality Standards. The Department of Environmental Quality (DEQ) submitted the antidegradation implementation procedures to EPA for approval on April 15, 2011.

The Idaho Water Quality Standards (WQS) contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051). The first level of protection applies to all water bodies and assures that existing uses of a water body will be maintained (Tier 1 protection). A Tier 1 review is performed for all new or reissued permits or licenses. 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 necessary to accommodate important economic or social development (Tier 2 protection). 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 (Tier 3 protection).

DEQ is employing a waterbody-by-waterbody approach to implementing Idaho's antidegradation policy. This approach to antidegradation implementation means that any water body fully supporting its beneficial uses will be considered high quality. Any waterbody not fully supporting its beneficial uses will be provided Tier 1 protection for that use, unless specific circumstances warranting Tier 2 protection are met. The most recent federally-approved Integrated Report and supporting data are used to determine support status and the tier of protection (Idaho Code §39-3603(2)(b)).

Pollutants of Concern

Clarkia Water and Sewer District Wastewater Treatment Facility discharges the following pollutants of concern: biological oxygen demand (BOD), total suspended solids (TSS), temperature, ammonia, *E. coli*, chlorine, and pH. Effluent limitations have been developed for BOD, TSS, temperature, *E. coli*, chlorine and pH. 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.

Beneficial Uses Applicable to the St. Maries River

The St. Maries River (water body unit P-15) has the following designated beneficial uses: cold water aquatic life; primary contact recreation; domestic, agricultural and industrial water supply; special resource water; wildlife habitat; and aesthetics. There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated.

Receiving Water Body Level of Protection

Idaho has established a waterbody-by-waterbody approach for identifying the level of antidegradation protection which DEQ will provide when reviewing whether activities or discharges comply with Idaho's antidegradation policy. This approach relies upon Idaho's most recent federally-approved Integrated Report of water quality status and its supporting data.

The Clarkia WWTP discharges directly into the St. Maries River (assessment unit ID17010304PN015_05 located from the confluence of West Fork and Middle Fork St. Maries River to Carpenter Creek). According to the 2008 Integrated Report, the cold water aquatic life beneficial use in this assessment unit is not fully supported due to elevated temperatures and excess sediment. The primary contact recreation beneficial use has not been assessed. Because no data is currently available and the collection of necessary data to determine the support status of recreation uses would take considerable time, the applicant has agreed to consider this St. Maries River assessment unit a high quality water related to recreational uses for the purposes of this antidegradation review in order to prevent further delays in the issuance of this certification.

Based upon this information, DEQ will provide Tier 1 protection for aquatic life uses (Idaho Code §39-3603(20)(b)(iii)) and Tier 2 protection, in addition to Tier 1, for the recreation beneficial use (Idaho Code §39-3603(2)(b)(i)).

Protection and Maintenance of Existing Uses for All Waters

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 a showing that existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. The St. Maries River at this location has designated beneficial uses of domestic, agricultural, and industrial water supply; primary contact recreation; cold water aquatic life; special resource water; 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 055 which addresses water quality limited waters. The numeric and narrative criteria are set at levels which ensure protection of existing and designated beneficial uses. The effluent limitations and associated requirements contained in the Clarkia WWTP permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS. Because there is no available information indicating the presence of any existing uses other than the designated uses discussed above, the permit ensures that the level of water quality necessary to protect both designated and existing uses is maintained and protected, in compliance with IDAPA 58.01.02.051.01, IDAPA 58.01.02.052.05 and 40 CFR 131.12(a)(1).

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 are consistent with the approved TMDL.

As previously indicated this assessment unit of the St. Maries River is not supporting its cold water aquatic life beneficial use. This impairment is a result of temperatures above the temperature standards and sediment in excess of what is required to support the cold water aquatic life beneficial use. DEQ developed an EPA-approved temperature and sediment TMDL for this water body (*St. Maries River Subbasin Assessment and Total Maximum Daily Loads*, July 2003). The TMDL contains wasteload allocations for point source dischargers for temperature (35°C) and sediment (existing load of 5 pounds/day). The effluent limits in the permit are consistent with the wasteload allocations in the TMDL.

In summary, the effluent limitations and associated conditions contained in the Clarkia WWTP permit are set at levels that ensure compliance with the narrative and numeric criteria as well as the wasteload allocations in the TMDL. Therefore, DEQ has determined the permit complies with Tier 1 antidegradation requirements and protects existing and designated beneficial uses of the St. Maries River.

High Quality Water (Tier 2 Protection)

The St. Maries River assessment unit ID17010304PN015_05; from the confluence of West Fork and Middle Fork St. Maries River to Carpenter Creek, is not assessed for recreational use. Bacteria monitoring data collected downstream of this segment in 2000 indicate that the St. Maries River fully supports all recreational uses. However, rather than wait for site specific data to make an assessment of the recreational use, DEQ will, with consent of the discharger, consider the St. Maries River high quality for the primary contact recreation beneficial use. As such, the water quality relevant to recreational uses of the St. Maries River must be maintained and protected, unless a lowering of water quality is deemed necessary to accommodate important social or economic development.

In order to determine whether degradation will occur, DEQ must evaluate the effect on water quality of the issuance of the permit for each pollutant that is relevant to recreational uses of the St. Maries River (IDAPA 58.01.02.052.04). *E. coli* bacteria are the relevant pollutant for the St. Maries River. For pollutants that currently are 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 58.01.02.052.04ii). The proposed effluent limits for *E. coli* bacteria are set at meeting criteria at end of pipe, and these limits are identical to the limits in the prior permit. Therefore, there will be no adverse change in water quality and no degradation resulting from the discharge of these pollutants and the requirements of IDAPA 58.01.02.051.02 and IDAPA 58.01.02.052.06 are met.