



Idaho Department of Environmental Quality **FINAL §401 Water Quality Certification**

September 1, 2011

NPDES Permit Number: City of Weiser Wastewater Treatment Plant, **ID-002029-0**

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 that utilizes up to 25% of the critical flow volumes of the Snake River for chlorine, ammonia, and whole effluent toxicity.

COMPLIANCE SCHEDULE

Pursuant to IDAPA 58.01.02.400.03, DEQ may authorize compliance schedules for pollutants which have water quality based effluent limits in a permit for the first time. The City of Weiser cannot immediately achieve compliance with the final effluent limits for phosphorus; therefore, the City shall comply with the interim limits and requirements set forth in the permit. The final total phosphorus limits shall become effective four years and eleven months after the effective date of the permit if compliance is by treatment and the permittee continues to discharge to the Snake River. The permittee must achieve compliance with the final total phosphorus limits no later than seven years and six months after the effective date of the permit if compliance is by cessation of discharge to the Snake River. The compliance schedule provides the permittee a reasonable amount of time to achieve the final effluent limitations as specified in the permit, while at the same time, it ensures compliance with the final effluent limitations is accomplished as soon as possible.

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 Weiser discharges its treated wastewater to the Snake River (assessment unit ID17050201SW004_08), which is listed in Category 4a of Idaho's 2008 Integrated Report for sediment, phosphorus, dissolved oxygen, and temperature. The *Snake River – Hells Canyon TMDL* (2004) provides load allocations for each of these pollutants and has been approved by EPA.

The effluent limitations in the final draft permit for the City of Weiser are set at levels that ensure the State's numeric and narrative criteria will be met. The numeric and narrative criteria are set at levels which protect and maintain designated and existing beneficial uses. Therefore, the limits in the final draft permit protect and maintain the applicable designated and existing beneficial uses in the Snake River.

Additionally, the effluent limitations in the final draft permit for the City of Weiser are the same or more stringent than the limits in the existing permit. The limits for phosphorus and temperature are new and are consistent with the *Snake River – Hells Canyon TMDL*. Limitations for pH are new and comply with Idaho WQS at the end-of-pipe. The TSS limitations are the same as the previous permit and are consistent with the *Snake River – Hells Canyon TMDL*. The limits in the final draft permit, therefore, ensure that the existing level of water quality in the Snake River is maintained.

In summary, because the final draft permit includes limits that comply with the state's numeric and narrative criteria and limits that are the same as or more stringent than those in the existing permit, the permit (a) protects and maintains existing uses and the level of water quality necessary to protect existing uses in accordance with IDAPA 58.01.02.051.01 and (b) maintains and protects the existing water quality in accordance with IDAPA 58.01.02.051.02. Please see the attached Antidegradation Review for a more detailed discussion.

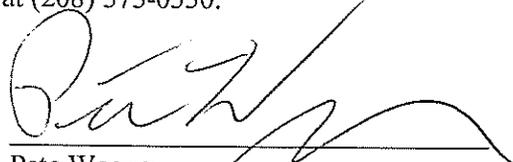
OTHER CONDITIONS

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 Lance Holloway or Lauri Monnot, DEQ (Boise Regional Office) at (208) 373-0550.



Pete Wagner
Administrator, DEQ Boise Regional Office

ANTIDegradation REVIEW
NPDES Permit #ID-002029-0
City of Weiser Wastewater Treatment Plant

Idaho Department of Environmental Quality
August 31, 2011

Antidegradation Overview

In March 2011, Idaho incorporated new provisions 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 the Idaho Water Quality Standards ("WQS"). DEQ submitted the antidegradation implementation procedures to EPA for approval on April 15, 2011. On August 18, 2011 EPA approved of the implementation procedures.

The 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 subject to Clean Water Act jurisdiction and assures that existing uses of a water body and the level of water quality necessary to protect the existing uses will be maintained and protected (Tier 1 protection). (IDAPA 58.01.02.051.01; 58.01.02.052.01). A Tier 1 review is performed for all new or reissued permits or licenses. (IDAPA 58.01.02.052.05). 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). (IDAPA 58.01.02.051.02; 58.01.02.052.06). 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). (IDAPA 58.01.02.03; 58.01.02.052.07).

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. (Idaho Code §39-3603(20)(b)(i)). 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. (Idaho Code §39-3603(2)(b)(iii)). 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

The City of Weiser Wastewater Treatment Plant (Weiser WWTP) discharges the following pollutants of concern: biological oxygen demand (BOD), total suspended solids (TSS), *E. coli*, pH, total phosphorus (TP), and temperature (heat), chlorine, ammonia, and mercury. Effluent limitations have been developed for BOD, TSS, *E. coli*, pH, TP, temperature and chlorine. No effluent limits are proposed for ammonia or mercury.

Receiving Water Body Level of Protection

The Weiser WWTP discharges to the Snake River (assessment unit ID17050201SW004_08). This Snake River assessment unit (AU) has the following designated beneficial uses: cold water aquatic life; primary contact recreation; domestic, agricultural, and industrial water supply; wildlife habitat; and aesthetics. There is no available information indicating the presence of any existing beneficial uses aside from those that are already designated.

Idaho has established a water body-by-water body approach for identifying what level of antidegradation protection DEQ will provide when reviewing whether activities or discharges will comply with Idaho's antidegradation policy. This approach relies upon Idaho's most recent federally-approved Integrated Report (IR) of water quality status and its supporting data. The cold water aquatic life use in this Snake River AU is not fully supported due to excess sedimentation, total phosphorus, temperature and low levels of dissolved oxygen (DEQ, 2008 IR). There is a TMDL for excess sedimentation, total phosphorus, temperature and low levels of dissolved oxygen in this assessment unit. The primary contact beneficial use was assessed and determined to be fully supported, using *E. coli* bacteria data collected in July and August 2011. As such, DEQ will provide Tier 1 protection only for the aquatic life use (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 (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 CWA, and requires a showing 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 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 in the WQS are set at levels which ensure protection of designated beneficial uses. The effluent limitations and associated requirements contained in the Weiser 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 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 consistent with WLAs in the approved TMDL. A permit with effluent limitations consistent

with TMDL wasteload allocations will provide the level of water quality necessary to support existing and designated uses and therefore satisfies Tier 1 antidegradation requirements.

The EPA-approved *Snake River – Hells Canyon TMDL* (DEQ 2004) establishes wasteload allocations for TSS, temperature, and total phosphorus. The total phosphorus target and resulting load allocations are expected to result in meeting dissolved oxygen criteria as well. These wasteload allocations are designed to ensure the Snake River will achieve the 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 Weiser WWTP permit are set at levels that comply with these WLAs.

In sum, the effluent limitations and associated requirements contained in the Weiser WWTP permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS as well as the wasteload allocations established in the *Snake River – Hells Canyon TMDL*. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Snake River.

High Quality Waters (Tier 2 Protection)

The Snake River is considered high quality for the primary contact recreation beneficial use. As such, the water quality relevant to recreational uses of the Snake 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 Snake River. (IDAPA 58.01.02.052.04). These include the following pollutants: *E. coli*, TP, and mercury. Effluent limits are set in the proposed and existing permit for *E. coli*. The proposed permit has a new limit for TP. There are monitoring requirements, but no effluent limits for mercury.

For a reissued permit, 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 currently are limited and will have limits under the reissued permit, the current discharge quality is based on the limits in the current permit (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(ii)). For the Weiser permit this means determining the effect on water quality based upon the limits for *E. coli* in the current and proposed permits.

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 the parameters of concern.

Parameter	Units	Proposed Permit			Current			Change ¹
		Average Monthly Limit	Average Weekly Limit	Single Sample Limit	Average Monthly Limit	Average Weekly Limit	Single Sample Limit	
<i>Pollutants with limits in both the current and proposed permit</i>								
<i>E. coli</i>	#/100 mL	126		406	126		406	nc
<i>Pollutants with new limits in the proposed permit</i>								
Total Phosphorus (interim)	lbs/day (May 1 – September 30)	72	108		-	-	Report	New TMDL
	lbs/day (October 1 – April 30)	-	-		-	-	Report	nc
Total Phosphorus (final)	lbs/day (May 1 – September 30)	14	21		-	-	Report	New TMDL
	lbs/day (October 1 – April 30)	-	-		-	-	Report	nc
<i>Pollutants with no limits in either the current or proposed permit</i>								
Mercury	ng/L	-	-	Report	-	-	Report	nc

¹ nc = no change, I = increase, d = decrease.

The proposed limits for *E. coli* in Table 1 are the same as the limits in the current permit (nc in the change column). Therefore, there will be no adverse change in water quality and no degradation resulting 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 58.01.02.052.04.a (i)) Future discharge quality is based upon proposed permit limits. (IDAPA 58.01.02.052.04.a (ii)).

The proposed permit for Weiser contains new limits for total phosphorus. These limits were included in the permit in order to be consistent with the WLAs in the approved Snake River-Hells Canyon TMDL. The TP limits in the proposed permit reflect a maintenance or improvement in water quality from current conditions. Therefore, there will be no adverse change in water quality and no degradation with respect to these pollutants.

Pollutants with no limits

There is one pollutant of concern relevant to Tier 2 protection of recreation, mercury, that currently is not limited, and for which the proposed permit also contains no limits. For such pollutants, a change in water quality is determined by reviewing whether there will likely be

changes in production, treatment or operation that will increase the discharge of these pollutants (IDAPA 58.01.02.052.04.a (ii)). With respect to mercury, there is no reason to believe this pollutant will be discharged in quantities greater than that which is discharged under the current permit. This conclusion is based upon the fact that there has been no change in the design flow, influent quality or treatment processes that would likely result in an increased discharge of these pollutants. Because the proposed permit does not allow for any increased water quality impact from this pollutant, DEQ has concluded that the proposed permit should not cause a lowering of water quality for the pollutant that has no limit. As such, the proposed permit should maintain the existing high water quality in the Snake River.