

FACT SHEET

Public Comment Period Start Date: March 29, 2010 Public Comment Expiration Date: April 29, 2010

The United States Environmental Protection Agency (EPA) Plans To Modify A National Pollutant Discharge Elimination System (NPDES) Permit

CITY OF TWIN FALLS Wastewater Treatment Plant Canyon Springs Road Twin Falls, Idaho

Technical Contact:

John Drabek Email: <u>drabek.john@epa.gov</u> Phone: 206-553-8257 800-424-4372, ext. 8257

Permit No. ID-002127-0

EPA Proposes To Modify NPDES Permit

EPA is seeking public comment on modifying the NPDES permit issued on September 22, 2009 with an effective date of November 1, 2009 to the facility referenced above. The draft modification is a proposal to not include the following permit conditions:

Section I.B.1: Pollutant Trading. The permittee may engage in pollutant trading for average monthly discharges of total phosphorus, pursuant to the requirements in "State of Idaho Department of Environmental Quality Pollutant Trading Guidance" (November 2003 draft). No trading is allowed to adjust discharges to meet average weekly limits or for other pollutants. This permit only authorizes trading with other point sources in Segments 1, 2, and 3 in the Middle Snake River watershed that have NPDES permits that authorize trading. Trading with non-point sources is not authorized. See Appendix A for details about the requirements for buying and selling pollutant credits and reporting such trades to EPA and the Idaho Department of Environmental Quality (IDEQ).

Appendix A "Pollutant Trading In The Upper Snake Rock Subbasin" on pages 37-39 of the attached proposed permit modification.

The Idaho Conservation League challenged these conditions in a petition for review filed with EPA's Environmental Appeals Board on October 24, 2009. In accordance with federal regulations, EPA subsequently issued a notification withdrawing the conditions, effective March 2, 2010, and stating EPA's intent to seek public comment on a proposed permit modification to not include those provisions in the permit.

State Certification

Section 401 of the federal Clean Water Act requires EPA to seek State certification before issuing a final permit. On September 11, 2009 the Idaho Department of Environmental Quality issued a final Section 401 Water Quality Certification for the reissuance of the City Twin Falls NPDES permit. Since EPA is not including trading provisions and not adding any conditions to the draft permit the September 11 certification still applies.

Basis of Modification

The pollutant trading provisions of the permit allow for trading of total phosphorus. The total phosphorus effluent limits of the permit were developed from the Upper Snake Rock TMDL, approved by EPA in 2000 and modified in 2005. The TMDL serves as the plan to achieve water quality standards in this river segment. A pollutant trading system must be consistent with the assumptions and goals of an established TMDL in order to achieve compliance with the water quality standards. TMDL wasteload allocations are commonly established on the foundation of a mathematical water quality model that takes into account the location, flow, and pollutant concentration of each source. The trading system must fit within the constraints of the TMDL and be consistent with assumptions about how the system functions and how compliance with standards will be evaluated.

The Snake River TMDL is designed to reduce inputs of phosphorus to the river and thereby reduce the growth of aquatic plants. Some TMDLs employ simple mass balance models that assume no loss of the pollutant from the water column. Others employ water quality models that estimate pollutant loss from the water column (through nutrient uptake by aquatic plants, settling of solids, etc.). This uptake is sometimes referred to as "attenuation" of the instream phosphorus concentration or load.

The Snake River TMDL employs a mass balance model with attenuation. A percentage of the instream phosphorus load is assumed to be lost in each segment. The loss term in the TMDL allows higher overall discharges into the river than would be calculated using a mass balance model without attenuation, because the attenuation provides a greater loading capacity to achieve the instream target concentration.

The attenuation factor in the TMDL complicates a pollutant trading system, because it alters the equivalency of phosphorus loading. Since phosphorus discharged is lost over distance, one pound of phosphorus discharge at one location is not equivalent to one pound discharged at another location. In general, a downstream source must purchase more than one pound of upstream load for each pound of allowance it receives. Otherwise, the transfer of allocated loads in the downstream direction will violate the assumptions of the TMDL and potentially exceed the instream target.

The Snake River water quality trading ratios were based on assumptions that did not include attenuation and were set to 1:1 for all trades, which would correspond to an equivalency of phosphorus discharges between locations. The assumptions used to establish the water quality trading ratios are not consistent with the attenuation assumptions of the TMDL. Water quality trading utilizing the 1:1 ratio poses a risk to the water quality improvements called for in the TMDL in this segment of the Snake River. Therefore, EPA has not included the trading mechanism from the Twin Falls permit because of this inconsistency.

Specifically, EPA has determined that Section I.B.1 and Appendix A would have authorized pollutant trading based on trading ratios that are not technically defensible based on the administrative record.

1. The trading ratios are in the "State of Idaho Department of Environmental Quality

Pollutant Trading Guidance" (November 2003 draft). The trading ratios were derived in "Upper Snake Rock Subbasin – Middle Snake River Pollutant Trading Ratios" (IDEQ October 17, 2002). A flow weighted mass balance of surface water inputs, ground water inputs and point source inputs to the Snake River from the Twin Falls Municipality to below the Box Canyon Creek found uniformity or "equity" of phosphorus concentrations throughout the three segments. Based on this uniformity for all areas of these segments a trading ratio of 1:1 was developed for all the segments.

2. The mass balance did not include any attenuation of phosphorus such as settling to the river bottom or plant uptake. However, "The Upper Snake Rock TMDL Modification, Upper Snake Rock Watershed Management Plan – Modification - A Modification of Mid-Snake TMDL and Upper Snake Rock TMDL to Account for the Aquaculture Wasteload Allocation of the Part 1(Fish Production Faculties & Conservation Hatcheries), Part 2 (Fish Processors), and Part 3 (Billingsley Creek Facilities)" IDEQ July 22, 2005 found on page 34 the following total phosphorus percent loss/attenuation:

Compliance Point	Loss/Attenuation
Milner Dam	
Pillar Falls	2.8%
Crystal Springs	32.4%
Box Canyon	18.3%

The percent reduction in phosphorus by attenuation does not support a trading ratio of 1:1 for this reach of the Snake River which was the area where trading was to occur.

3. Idaho Department of Environmental Quality (IDEQ) staff has indicated to EPA its intent to revise the "State of Idaho Department of Environmental Quality Pollutant Trading Guidance" (November 2003 draft) and to produce final guidance.

Description of the Facility

The City of Twin Falls owns and operates a facility that treats wastewater from domestic, industrial, and commercial sources. The facility discharges secondarily treated wastewater throughout the year to the Snake River at approximately river mile 608.5. The discharge is approximately 10 feet from shore and two feet below the surface of the River.

The sewer system consists of separate, municipally-owned sewers that collect sewage from both the City of Twin Falls (population 35,633 (from permit application received in June 2006)) and the City of Kimberly (population 2,672) and treats the collected wastewater at the Twin Falls wastewater treatment plant (WWTP). The WWTP has a design flow rate of 8.56 million gallons per day (mgd) and a peak design flow of 10.92 mgd.

The State of Idaho Water Quality Standards and Wastewater Treatment Requirements (16 IDAPA § 58.01.02) protect the segment of the Snake River to which Twin Falls discharges (HUC 17040212, Upper Snake-Rock Subbasin, segment US-20, Milner Dam to Twin Falls) for the following uses: cold water biota, salmonid spawning, primary contact recreation, agricultural and industrial water supply, wildlife habitat, and aesthetics.

Public Comment

Persons wishing to comment or request a public hearing on the proposed modification to not

include Section I.B.1 and Appendix A in the permit for this facility may do so in writing by the expiration date of the public comment period. A request for a public hearing must state the nature of the issues to be raised as well as the requester's name, address and telephone number. All comments and requests for public hearings must be in writing and should be submitted to EPA as described in the public comments section of the attached Public Notice.

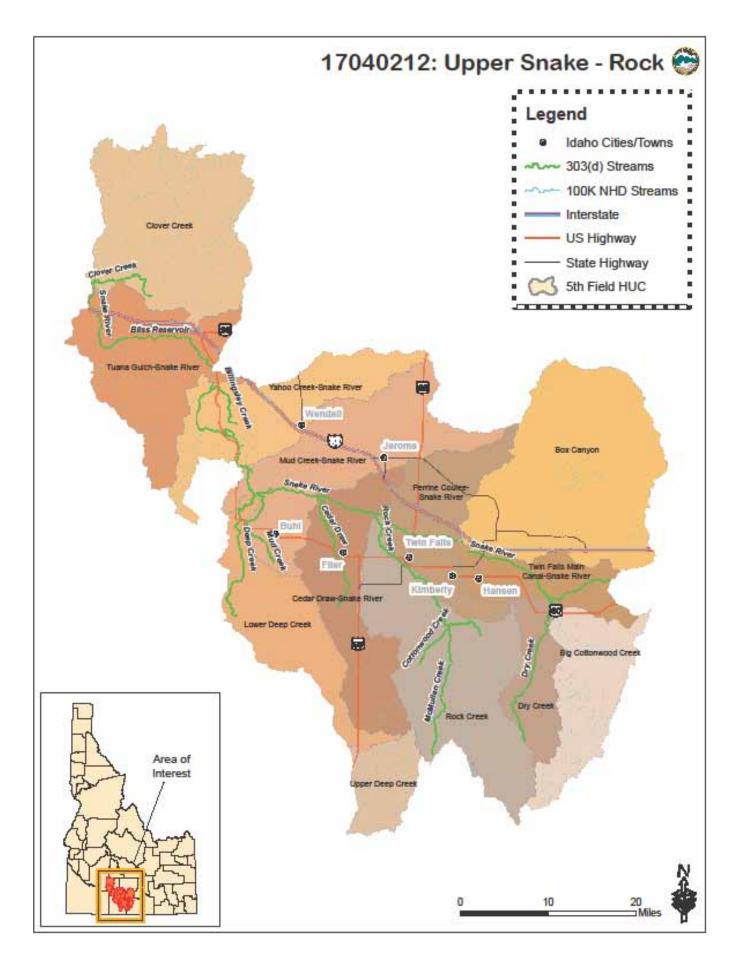
After the public notice period expires, and all comments have been considered, EPA's Regional Director for the Office of Water and Watersheds will make a final decision regarding permit modification. The modification will become effective 30 days after the date of the Regional Director's decision, unless an appeal is submitted to the Environmental Appeals Board within 30 days.

Documents are Available for Review.

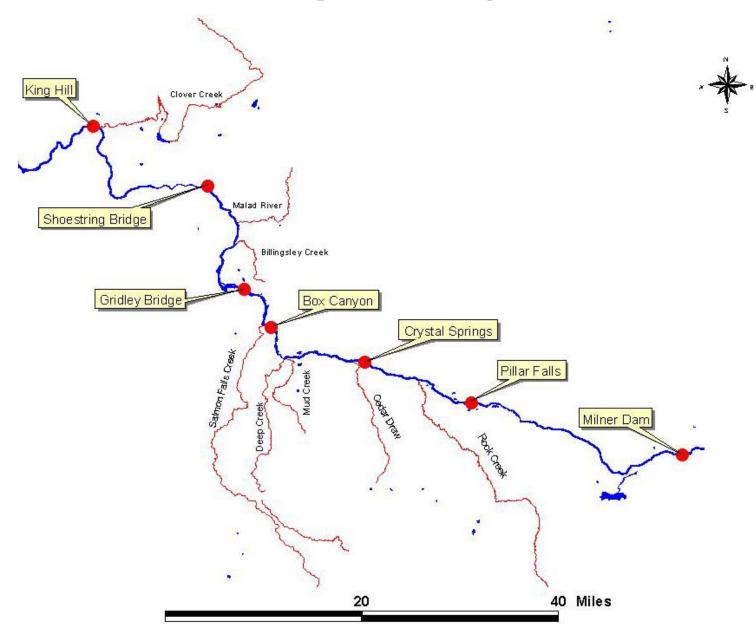
The draft permit and fact sheet are posted on the Region 10 website at <u>http://yosemite.epa.gov/r10/WATER.NSF/NPDES+Permits/DraftPermitsID</u>. Copies may also be requested by writing to EPA at the Seattle address below, by e-mailing <u>washington.audrey@epa.gov</u>, or by calling Audrey Washington at 206-553-0523 or (800) 424-4372 ext 0523 (within Alaska, Idaho, Oregon, & Washington). Copies may also be inspected and copied at the offices below between 8:30 a.m. and 4:00 p.m., Monday through Friday, except federal holidays. In Seattle, visitors report to the 12th floor Public Information Center.

EPA Region 10 1200 Sixth Avenue, Suite 900, OWW-130 Seattle, Washington 98101-3140	(206) 553-0523
EPA Idaho Operations Office 1435 North Orchard Street Boise, Idaho 83706	(208) 378-5746
Idaho Department of Environmental Quality Twin Falls Regional Office 1363 Fillmore Street Twin Falls, ID 83301	(208) 736-2190

Location Map



Middle Snake River - Segments and Major Tributaries



Outfall Discharge Location

