BEFORE THE ENVIRONMENTAL APPEALS BOARD
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In the Matter of:	)	
	)	
CITY OF TWIN FALLS	)	NPDES Appeal Nos. 09-12 & 10-08
	)	
	)	
NPDES Permit No. ID-002127-0	)	
	)	

EPA REGION 10'S RESPONSE TO ORDER REQUESTING ADDITIONAL INFORMATION

U.S. Environmental Protection Agency (EPA), Region 10 (Region) respectfully submits this response to the Environmental Appeals Board's (Board) November 5, 2010 Order Requesting Additional Information. The Board's order requests "the parties to provide additional information delineating the process for the TMDL modification the City describes, and a schedule of the milestones expected to be accomplished throughout the requested six-month period."[1]

Upon approval of a revision to the Upper Snake Rock Subbasin TMDL for the City of Twin Falls, Idaho (City) wastewater treatment plant, the Region intends to modify NPDES

[1] Order Requesting Additional Information 1 (Nov. 5, 2010).

U.S. ENVIRONMENTAL PROTECTION AGENCY
1200 Sixth Avenue
Seattle, Washington 98101
(206) 553-1037

Permit No. ID-002127-0 to reflect new total suspended solids (TSS) effluent limits based on the revised TMDL. Idaho Department of Environmental Quality (IDEQ) has indicated to EPA that IDEQ intends to submit a revised TMDL for EPA review and approval by mid-December 2010. To this end, IDEQ proposed a TMDL revision, specifically to the TSS waste load allocation (WLA) for the City's wastewater treatment plant, on October 27, 2010. The public comment period on the proposed revision ends on November 26, 2010.[2]

EPA estimates that it will take approximately five and a half months or less from the time IDEQ submits a revised TMDL for EPA to issue a final permit modification incorporating effluent limits based on the revised WLA. This estimated time frame is derived from the following:

Once the TMDL revision is submitted to EPA, the Region expects it will take a maximum of thirty days to review and either approve or disapprove the TMDL revision. Assuming the revised TMDL is approved, EPA anticipates that two to three weeks will be required to prepare the draft permit modification, at which point it will be forwarded to IDEQ for a thirty-day period to either grant or deny CWA section 401 certification. After IDEQ grants or denies certification, the draft permit modification will be made available for public comment for thirty days. EPA expects that it will require approximately two months to address any comments received and to prepare the final permit modification. Accordingly, EPA estimates that a final

[2] *See* EPA Exhibits 1 & 2.

U.S. ENVIRONMENTAL PROTECTION AGENCY
1200 Sixth Avenue
Seattle, Washington 98101
(206) 553-1037

modification to NPDES Permit No. ID-002127-0 can be issued in approximately May 2011 or earlier.

Dated this 17th day of November, 2010.

Respectfully submitted,

/s/

Stephanie Yu
Assistant Regional Counsel
U.S. EPA, Region 10
1200 Sixth Avenue, Suite 900, ORC-158
Seattle, Washington 98101
Tel: (206) 553-1138
Fax: (206) 553-0163

Of Counsel:

James Curtin
Attorney Advisor
Water Law Office
Office of General Counsel
(202) 564-5482

CERTIFICATE OF SERVICE

I certify that the foregoing EPA Region 10's Response to Order Requesting Additional Information was sent to the following persons, in the manner specified, on the date below:

By CDX, to:

Ms. Eurika Durr, Clerk of the Board
U.S. Environmental Protection Agency
Environmental Appeals Board
Colorado Building, Suite 600
1341 G Street, NW
Washington, D.C. 20005

One copy by fax and first class U.S. mail, to:

Fritz Wonderlich
Wonderlich & Wakefield
Attorney at Law
P.O. Box 1812
Twin Falls, Idaho 83303-1812
Fax: (888) 789-0935
Phone: (208) 352-0811

Dated: November 17, 2010

/s/
Stephanie Yu
Assistant Regional Counsel
U.S. EPA, Region 10

EPA EXHIBIT 1

Related Links

News Releases

Public Comment Opportunities

Media Contact

Marti Bridges
DEQ State Water Quality Division
(208) 373-0502

Related Documents

Proposed Revision Document
(pdf 36 kb, 6 pages)

October 27, 2010

DEQ seeks comment on proposed revision to TSS wasteload allocations to city of Twin Falls

TWIN FALLS — The Idaho Department of Environmental Quality (DEQ) is seeking public comment on a proposed revision to the limit on the amount of Total Suspended Solids or TSS that the city of Twin Falls wastewater treatment plant may discharge into the Mid-Snake River.

TSS are solids in water that can be trapped by a filter. TSS can include a wide variety of material, such as silt, decaying plant and animal matter, industrial wastes, and treated sewage.

Based on an analysis of water quality conditions in the Mid-Snake River mainstem, DEQ has determined that water quality standards will not be adversely impacted by revising the limit. Overall targets of the water quality management plan for the Mid-Snake and the TSS loading capacity of the water body will be maintained.

The proposed revision was requested by the city of Twin Falls, which has indicated that compliance with the limits originally set in the plan would be cost-prohibitive.

The revision document is available for review at DEQ's Twin Falls Regional Office, 1363 Fillmore St., and on DEQ's Web site (download at left).

Submit written comments on DEQ's Web site or by mail, fax, or email by 5 p.m. MST, Friday, November 26, 2010, to:

Marti Bridges
DEQ State Office
Water Quality Division
1410 N. Hilton
Boise, ID 83706
Fax: (208) 373-0576
Email: *marti.bridges@deq.idaho.gov*

Public Comment Form

Name:

Email:

Affiliation:

Comments:

Enter code below: More Info

Submit Reset

EPA EXHIBIT 2

Upper Snake Rock Subbasin TMDL (2000) TSS Revision

INTRODUCTION

A TMDL prescribes an upper limit (or *load capacity*) on discharge of a pollutant from all sources to assure water quality standards are met. This load capacity (LC) can be represented by an equation:

LC = MOS + NB + LA + WLA

Where:

Current load = the current concentration of the pollutant in the water body

MOS = margin of safety. Because of uncertainties regarding quantification of loads and the relation of specific loads to attainment of water quality standards, 40 CFR Part 130 requires a margin of safety, which is effectively a reduction in the load capacity available for allocation to pollutant sources.

NB = natural background. When present, NB may be considered part of load allocation (LA), but it is often considered separately because it represents a part of the load not subject to control. NB is also effectively a reduction in the load capacity available for allocation to human-made pollutant sources.

LA = the load allocation for all nonpoint sources

WLA = the wasteload allocation for all point sources

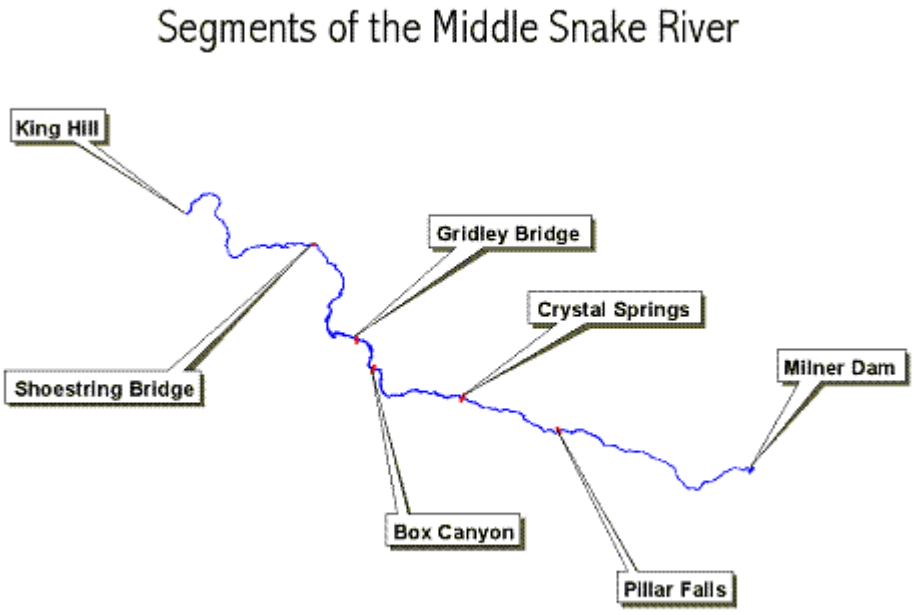
A load is a quantity of a pollutant discharged over some period; numerically, it is the product of concentration and flow. Due to the diverse nature of various pollutants, and the difficulty of strictly dealing with loads, federal rules allow for "other appropriate measures" to be used when necessary. These "other measures" must still be quantifiable, and relate to water quality standards, but they allow flexibility to deal with pollutant loading in more practical and tangible ways. The rules also recognize the particular difficulty of quantifying nonpoint loads and allow "gross allotment" as a load allocation where available data or appropriate predictive techniques limit more accurate estimates. For certain pollutants whose effects are long term, such as sediment and nutrients, EPA allows for seasonal or annual loads.

The key approvable elements of a TMDL include the load capacity, wasteload allocation for point sources, load allocation for non point sources, a margin of safety that may be implicit or explicit, seasonal variation, reasonable assurance that the load reductions called for can be achieved, and public participation and comment opportunities.

PURPOSE OF PROPOSED REVISION

The City of Twin Falls is seeking to change its total suspended solids (TSS) wasteload allocation in the 2000 EPA-approved Upper Snake Rock Subbasin TMDL from the existing wasteload allocation of 146.4 tons/yr to 390.92 tons/yr, which is an allocation that reflects the application of technology-based standards in the Snake River. The net balance of TSS overall would remain the same. The current City of Twin Falls NPDES permit includes the following interim TSS technology-based effluent limits (TBEL): average monthly limit of 30 mg/L and 2,142 lbs/day; average weekly limit of 45 mg/L and 3,213 lbs/day. The Twin Falls permit also includes a compliance schedule that requires the city to meet, by July 1, 2014, the following

water quality-based effluent limits (WQBEL) based upon the wasteload allocation of 146.4 tons/yr: average monthly limit of 980 lbs/day; average weekly limit of 1,390 lbs/day. The final WQBELs: (1) are more restrictive than the in-stream TSS target set in the Upper Snake Rock Subbasin TMDL; (2) are extremely cost-prohibitive to implement by the City and would create a financial burden that the City could not meet; (3) would require a major infrastructure change in the facility in order to meet the 2014 deadline; and (4) are not supported by the current water quality monitoring that indicates the Snake River throughout the entire TMDL reach is meeting the TSS target of 52 mg/L 97% of the time. DEQ proposes to allocate a portion of the nonpoint source sediment load allocation (as TSS) to the City of Twin Falls as a wasteload allocation, thereby reducing the nonpoint source sediment allocation by the same amount.



TMDL WATER QUALITY OBJECTIVES

The proposed revison is consistent with Idaho's overall TMDL targets and loading capacity for the Middle Snake River. The overall TMDL targets and loading capacity of the Middle Snake River will be maintained. The revision involves a simple shift of the existing TSS pollutant loads from the nonpoint source Load Allocation (LA) to the point source Wasteload Allocation (WLA). Furthermore, there is a reasonable assurance that the nonpoint source reductions reflected by the change in the allocations will be achieved because the City of Twin Falls has agreed to implement nonpoint source reduction projects that might never have been implemented, since nonpoint source reductions are generally done on a voluntary basis. Thus, there is a reasonable assurance that the proposed revision of the Upper Snake Rock Subbasin TMDL (2000) will not cause or contribute to an exceedance of water quality criteria or violation of water quality standards. This revision DOES NOT open up any other portions of the TMDL for revision for TSS or any other pollutants with existing LA's or WLA's for any sector. Public Comment WILL BE LIMITED strictly to the revision proposed for the City of Twin Falls POTW TSS WLA.

It should be noted that the City of Twin Falls design flow of 8.560 mgd (= 13.24428 cfs) used in the NPDES permit (2009-2014) is not the flow used in the Upper Snake Rock TMDL (2000). Nor is the TSS concentration used in 2000 (23.7 mg/L) the same as the TBEL (30 mg/L). A comparison of the calculations used to derive wasteload allocations under both scenarios are as follows:

Upper Snake Rock TMDL (2000), page 358:
Design Flow: 6.28 cfs = 4.05887 mgd
6.28 cfs x 23.7 mg/L TSS x 5.39 = 802.2 lb/day TSS
802.2 lb/day TSS x 0.1825 = 146.4 ton/year TSS

NPDES Permit (2009-2014):
Design Flow: 13.24425 cfs = 8.560 mgd
13.2443 cfs x 30 mg/L TSS x 5.39 = 2142 lb/day TSS
2142 lb/day TSS x 0.1825 = 390.92 ton/year TSS

Revising the WLA for the City of Twin Falls will make the WLA consistent with the TBEL the City is currently required to meet, and will remove the need to impose a more stringent WQBEL, particularly in light of the fact that the TBEL is more stringent than the target of 52 mg/L TSS prescribed in the EPA approved TMDL.

JUSTIFICATION AND ENVIRONMENTAL BENEFITS

The proposed revision to the Upper Snake Rock Subbasin TMDL (2000) is specific to TSS only for the City of Twin Falls. No other pollutant is being considered at this time. The justification and environmental benefit derived from this proposal is as follows:

1. TBEL versus WQBEL. The quality of the 30/45 mg/L TSS effluent is more stringent than the TMDL instream target of 52 mg/L TSS, thus providing an environmental benefit to the Middle Snake River. In addition, the TMDL revision will not remove the instream target of TSS (52 mg/L) in the Middle Snake River.

2. Nonpoint Source Implementation Project(s). The City of Twin Falls is currently meeting the TBELs, and so the revision to the City's WLA will simply reflect the level at which the City is currently discharging. The City has agreed to implement nonpoint source BMP projects that, given the general voluntary nature of nonpoint source BMPs, might otherwise not be implemented. The implementation of nonpoint source BMP projects would provide additional reasonable assurance that TSS nonpoint source reductions will be achieved. The project(s) would be located in River Segment 1 (Milner Dam to Pillar Falls), which lies upstream of the City of Twin Falls POTW, or River Segment 2 (Pillar Falls to Crystal Springs), which is the same river segment that the City of Twin Falls Municipality is located and discharges to.

3. TSS Discharge Influence to Middle Snake River. In the Upper Snake Rock TMDL (2000, Executive Summary, Table 9b, page A-31; and Table 10, pages A-38), the influence of TSS from the City of Twin Falls into the Middle Snake River is 146.4 tons/year. This represents 0.27% of the Overall (Net) Total (prior to export loss and

attenuation) after implementation of water quality reduction plans. By increasing the TSS load to 390.92 ton/year, the effect from this TSS increase would be 0.72% to the load capacity for Segment 2. DEQ concludes that this increase represents a *de minimus* increase (less than 1%) to the sediment load in the Middle Snake River at the point of discharge and, therefore, represents a minor contribution to the sediment load in the Middle Snake River. The margin of safety is implicit, incorporating conservative estimates of load capacity to achieve a narrative instream target of 52 mg/L TSS.

4. TSS Instream Target Achievement in Middle Snake River. The Upper Snake Rock Watershed Management Plan Five Year Review (2010) indicates that Segment 2 of the Middle Snake River has been achieving its instream TSS target (52 mg/L) 97% of the time (See Table 3.4.2a, Upper Snake Rock Watershed Management Plan Five Year Review).

SUMMARY OF TBEL AND WQBEL PERMIT LIMITS

The net difference in Table 2 represents the amount of TSS that is needed by the City to achieve the TBEL in its permit.

Table 2. Comparison of TBEL and WQBEL for the City of Twin Falls TSS Proposal

TSS NPDES PERMIT LIMIT	MONTHLY AVERAGE LIMIT lb/day (ton/year)	WEEKLY AVERAGE LIMIT lb/day (ton/year)
TBEL (30/45 mg/L TSS)	2,142 (390.92) 3,213	(586.37)
WQBEL (13.5/20.2 mg/L TSS)	980 (178.85)	1,390 (253.68)
Upper Snake Rock TMDL	802.2 (146.4)	- (-)
Net = TBEL – WQBEL	1,162 (212.07)	1,823 (332.70)
TSS = Total Suspended Solids. TBEL = Technology Based Effluent Limit. WQBEL = Water Quality Based Effluent Limit. TMDL = Total Maximum Daily Load. The TBEL of 30/45 mg/L TSS is currently the Interim TBEL Limits in the NPDES permit. The proposed revision would not be greater than the TBEL; and it would be more stringent than the 52 mg/L TSS instream target.		

TMDL REALLOCATION OF THE TSS LOAD

Based on the EPA approved Upper Snake Rock Subbasin TMDL (2000), Table 2-A, the reallocation of the TSS load is shown in Table 3 of this Revision Document. A discussion of Table 3 follows.

Table 3. Pillar Falls To Crystal Springs (Segment 2) Allocations for TSS with City of Twin Falls WLA Revision

TSS SOURCES	CURRENT TSS - TMDL ton/year	TSS – ALLOCATION REVISION ton/year	NET DIFFERENCE BETWEEN CURRENT AND REVISION
Total Load at Pillar Falls	217,817.06	217,817.06	0.00
Overall Nonpoint Sources Accounted			
NPS (Ag, Graze, Private, Corridor)	1,757.75	1,757.75	0.00
FERC, LAFs, CFOs	0.00	0.00	0.00
Stormwater – Construction Activities	35.87	35.87	0.00
Warm Creek TMDL	11,959.13	11,959.13	0.00
Rock Creek TMDL	11,248.64	11,248.64	0.00
Crystal Springs TMDL	18,782.68	18,782.68	0.00
Alpheus Creek TMDL	1.28	1.28	0.00
Ellison Creek TMDL	1.66	1.66	0.00
East Perrine Coulee	1,497.20	1,497.20	0.00
Main Perrine Coulee	560.10	560.10	0.00
West Perrine Coulee	129.40	129.40	0.00
43 Drain	16.40	16.40	0.00
Jerome Golf Course Drain	398.00	398.00	0.00
30 Drain	312.00	312.00	0.00
LQ/LS Drain	1,550.90	1,550.90	0.00
LS2/39A Drain	270.12	270.12	0.00
N42 Drain	452.20	452.20	0.00

N42 Drain (Rim)	518.70	518.70	0.00
39 Drain	244.00	244.00	0.00
Sub Total – Accounted NPS's	49,736.03	49,736.03	0.00
Overall Nonpoint Sources Unaccounted			
Unaccounted Springs and Seeps	191.70	191.70	0.00
Unaccounted Surface Waters	4,076.70	3,832.18	-244.52
Sub Total – Unaccounted NPS's	4,268.40	4,023.88	-244.52
Point Sources			
GAP-104 Canyon Springs FH	58.00	58.00	0.00
City of Twin Falls POTW	146.40	390.92	+244.52
Sub Total – Point Sources 204.40		448.92	+244.52
Margin of Safety & Total Load Calculations			
Margin of Safety - Implicit	0.00	0.00	0.00
Sub Total Load at Crystal Springs	272,025.87	272,025.87	0.00
Sub Total Load as mg/L TSS	50.3	50.3	0.00
TSS Export Loss + Attenuation	-27,202.59	-27,202.59	0.00
Total Load at Crystal Springs	244,823.28	244,823.28	0.00
Total Load as mg/L TSS	45.3	45.3	0.00

TSS = Total Suspended Solids. NPS (Ag, Graze, Private, Corridor): NPS = Nonpoint Source, Ag = Agriculture, Graze = Grazing, Private = Private Property, Corridor = Stream Corridor, FERC = Federal Energy Regulatory Commission, LAFs = Land Application Facilities, CFOs = Confined Feeding Operations. TMDL = Total Maximum Daily Load. GAP = General Aquaculture Permit. POTW = Publicly Owned Treatment Works.

The Point Sources category in Table 3 indicates an increase of +244.52 ton/year TSS to the City of Twin Falls wasteload allocation. The original 146.40 ton/year TSS is now shown as 390.92 ton/year TSS (or an increase by +244.52 ton/year TSS).

The Nonpoint Source section in Table 3 indicates a decrease of -244.52 ton/year TSS from the Unaccounted Surface Waters portion (or from 4,076.70 ton/year TSS to 3,832.18 ton/year TSS). This is where the reallocation will occur in the reduction of the load allocation for these nonpoint sources. This reallocation does not affect the Overall Nonpoint Sources Accounted category.

The Sub Total Load accounting at Crystal Springs is still 272,025.89 ton/year, which means that the loading is still the same. It is only the reallocation components between the nonpoint source (reduction by -244.52 ton/year TSS) and the point source (increase by +244.52 ton/year TSS) that are modified. The instream target of 52.0 mg/L TSS is still the same.

PUBLIC PARTICIPATION

The pre public draft TMDL revision was presented to the Mid Snake Watershed Advisory Group on October 13, 2010. The WAG supported the proposed Revision and recommended to DEQ that the document go to public comment.