Response to Comments on the Draft NPDES Permit for the Hayden Area Regional Sewer Board

United States Environmental Protection Agency
Region 10
Office of Water and Watersheds
NPDES Permits Unit
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Overview

On February 16, 2007, the EPA issued three draft reissued National Pollutant Discharge Elimination System (NPDES) permits for publicly owned treatment works (POTWs) operated by the City of Coeur d'Alene (Coeur d'Alene), City of Post Falls (Post Falls), and the Hayden Area Regional Sewer Board (HARSB) for public review and comment. The public comment period was scheduled to close on April 17, 2007, but was extended to May 17, 2007.

On July 18, 2013, the EPA reopened the public comment period pursuant to 40 CFR 124.14. The EPA issued revised draft permits and revised fact sheets for all three dischargers for public review and comment at that time. The public comment period was scheduled to close on September 3, 2013, but was extended until October 3, 2013.

This document provides the EPA's response to comments that are specific to the HARSB permit (NPDES Permit #ID0026590). The EPA received comments specific to the HARSB permit from HARSB, JUB Engineers, the Idaho Conservation League (ICL), the Center for Environmental Law and Policy (CELP), Blue Water Technologies, and Mr. Clyde Sheppard.

Comments Received during the 2013 Comment Period

Comment #1

HARSB requests that the surface water monitoring requirements apply only when HARSB is discharging to the Spokane River. Sampling and testing the Spokane River upstream and downstream of the HARSB outfall when HARSB is not discharging would not measure any influence of HARSB effluent because it was not present. The Coeur d'Alene Wastewater Treatment Plant is required to test downstream of its outfall, which is upstream of the HARSB outfall. The Post Falls Wastewater Treatment Plant is required to test upstream of its outfall, which is downstream of the HARSB outfall. These two treatment plant surface water monitoring results will provide the Spokane River data when HARSB is not discharging to the Spokane River.

Response #1

The EPA agrees with HARSB that downstream surface water monitoring is not necessary when HARSB is not discharging to the Spokane River, because the HARSB discharge would have no influence upon water quality if it is not discharging. Therefore, there is no reason to expect that the downstream water quality would be significantly different from the upstream water quality. EPA has removed the requirement for downstream surface water monitoring from the final permit, at times when HARSB is not discharging to the Spokane River.

However, the EPA does not agree with HARSB that upstream receiving water monitoring should be discontinued. The HARSB discharge would have no influence upon the upstream receiving water quality at any time, even when it is discharging. The upstream water quality is in important factor in calculating effluent limits (see the *US EPA NPDES Permit Writers' Manual* at Exhibit 6-11). Therefore, the EPA may reasonably require HARSB to monitor the upstream water quality (CWA Section 308(a)).

Comment #2

HARSB requests that the Whole Effluent Toxicity (WET) testing requirement be annually instead of semi-annually. The past results for the WET testing have not varied from sample to sample. Due to the consistency of the results, HARSB believes that an annual WET sampling and testing request is justified.

Response #2

The requirement for semi-annual WET testing is not excessive. The draft permit proposed semi-annual WET testing so that, at the end of the 5-year permit term, at least 10 WET samples will have been collected. As explained below, 10 WET results is the minimum number necessary to perform an accurate reasonable potential analysis for WET, as will occur when the permit is reissued.

The *Technical Support Document for Water Quality-based Toxics Control* (TSD) states on Page 53 that, "for less than 10 items of data, the uncertainty in the CV is too large to calculate a standard deviation or mean with sufficient confidence." Thus, for reasonable potential analyses, the TSD recommends assuming that the CV is equal to 0.6 if there are less than 10 data points available. Infrequent WET sampling, resulting in a small number of WET results, combined with the assumption that the CV is equal to 0.6, would result in a relatively large reasonable potential multiplying factor (see the TSD at Table 3-1). The large reasonable potential multiplying factor may result in the EPA making a finding that the discharge has the reasonable potential to cause or contribute to excursions above water quality standards for toxicity, even if additional data would have resulted in a finding of no reasonable potential. By ensuring that there are at least 10 data points available at the end of the permit term, the EPA will be able to use the actual CV in the WET reasonable potential analysis when the permit is reissued, , which will result in a more accurate reasonable potential analysis for WET when the permit is reissued. Therefore, the EPA has maintained the twice-per-year WET sampling frequency proposed in the draft permit.

Comments Received during the 2007 Comment Period

Comment #3

JUB Engineers stated that Table 1 on Page 6 of the draft permit requires HARSB to sample yearly for total polychlorinated biphenyls (PCBs) at low picogram per liter concentrations. JUB Engineers stated that the EPA has not provided documentation that shows that PCB contamination is an existing concern in the Spokane River in Idaho. Since these tests are difficult to gather and laboratory facilities are not available to perform these tests, the commenter requested that the EPA remove the PCB monitoring requirements from this permit.

Response #3

As explained in the 2013 fact sheet on Page 17, PCBs have been measured in the Spokane River at the Washington – Idaho border at an average concentration of 106 pg/L (Serdar et al. 2011). This is higher than the Idaho PCB criterion that is in effect under state law (64 pg/L). PCB loading from Idaho at the state line represented 30% of the overall PCB loading to the Spokane River (Serdar et al. 2011). Both

effluent and receiving water sampling is necessary to determine if HARSB (or Coeur d'Alene or Post Falls) contributes to the observed PCB loading at the border.

The commenter's statement that laboratories are not available to perform analyses for PCBs at the sensitivity required by the permit is not accurate. Washington's laboratory accreditation program has accredited 12 laboratories to perform EPA method 1668, which is the method that the permit generally requires for analysis of PCBs.[1]

The EPA has added language to Part I.B.11.e of the final permit stating that, "for any analysis of influent or effluent PCB congeners using EPA Method 1668, the permittee must target MDLs no greater than the MDLs listed in Table 2 of EPA Method 1668 Revision C (EPA-820-R-10-005)." This will provide clarity as to the acceptable MDLs for each congener.

Comment #4

CELP stated that Hayden should not receive less stringent phosphorus removal limits when the river is above 2,000 CFS. CELP argued that EPA needs to correct the HARSB Permit and restore the season discharge requirements as originally agreed upon when HARSB's discharge was approved.

Response #4

HARSB's final water quality-based phosphorus limits are independent of river flow.

However, during the term of the phosphorus compliance schedule, HARSB does have interim phosphorus limits that apply from June to September and when the river flow is greater than 2,000 CFS. A compliance schedule is *not* authorized for any effluent limit from June through September when river flows are less than or equal to 2,000 CFS, but a compliance schedule (with interim limits) *is* authorized for water quality-based effluent limits for phosphorus from June through September when river flows are greater than 2,000 CFS. That is, the final permit allows discharges during periods of low river flow (less than or equal to 2,000 CFS) from June through September *only* in compliance with the final effluent limits.

No compliance schedule may be authorized for any effluent limit in effect from June through September when river flows are less than 2,000 CFS because the previous permit did not allow a discharge under those circumstances. Any nonzero effluent limit is effectively less stringent than the discharge prohibition in the 1999 permit.Therefore, the interim phosphorus limits comply with the anti-backsliding provisions of the Clean Water Act and with 40 CFR 122.44(l)(1).

The authorization of a discharge from June to September regardless of river flow (subject to stringent effluent limits for which no compliance schedule has been granted) was done in compliance with the anti-backsliding provisions of the Act, as explained at Pages 23-24 of the 2013 HARSB fact sheet.

Comment #5

Mr. Clyde Sheppard, representing the Spokane River Property Owner's Association, stated that, in the last permit issuance, the Association opposed the permit on the basis that it was discharging during

[1] https://fortress.wa.gov/ecy/laboratorysearch/. Accessed September 26, 2014.

summer (June to September) low-flow conditions (less than or equal to 2,000 CFS). The previous permit did not authorize discharges from June through September under low-flow conditions. The Association understands the current proposed permits as continuing this prohibition until the WWTP achieves compliance with the final, water quality-based effluent limits for total phosphorus. The Association would like EPA to state whether this understanding is correct.

Response #5

The commenter is correct. Although the permit allows a discharge to the river at all times, regardless of river flow, the permit does *not* allow schedules of compliance for any effluent limit in effect between June and September when river flows are less than or equal to 2,000 CFS.

This means that any discharge to the Spokane River from June through September when river flows are less than or equal to 2,000 CFS would need to be in compliance with all of the final effluent limits in the final permit. The final permit contains stringent water quality-based effluent limits for total phosphorus and $CBOD_5$ that the facility cannot immediately comply with. Therefore, the absence of a compliance schedule for water quality-based phosphorus and $CBOD_5$ limits during river flows less than or equal to 2,000 CFS from June through September effectively requires HARSB to cease or substantially decrease the volume of its discharge to the river, until the WWTP is upgraded to the extent necessary to meet the final water quality-based effluent limits.

Comment #6

BlueWater Technologies stated that they do not believe that the long-term target of 10 ug/l in the 2007 draft HARSB permit is reasonable. As such, BlueWater Technologies requests that HARSB be allowed to resume summertime discharges if they demonstrate that they discharge at a level of 20 ug/l phosphorus in a condensed time frame.

Response #6

This comment was addressed by the revised draft permit issued for public review and comment in 2013. In the 2013 revised draft permit, HARSB's final water quality-based effluent limit for phosphorus loading is equivalent to 66 µg/L at the POTW's design flow of 2.4 mgd.

Regarding the time frame for achieving final water quality-based effluent limits, as explained in Appendix G to the 2013 fact sheet, the EPA has determined that the 10-year schedule of compliance for the new water quality-based phosphorus limits requires compliance as soon as possible, in compliance with 40 CFR 122.47(a)(1).

References

EPA. 1991. *Technical Support Document for Water Quality-based Toxics Control*. US Environmental Protection Agency. Office of Water. EPA/505/2-90-001. March 1991. www.epa.gov/npdes/pubs/owm0264.pdf

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Serdar, Dave, B. Lubliner, A. Johnson, and D. Norton. 2011. *Spokane River PCB Source Assessment 2003-2007*. Toxics Studies Unit. Environmental Assessment Program. Washington State Department of Ecology. Olympia, WA. Publication # 11-03-013. April 2011. https://fortress.wa.gov/ecy/publications/publications/1103013.pdf