

Response to Comments on the Draft NPDES Permit for the City of Post Falls

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Region 10
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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 Post Falls permit (NPDES Permit #ID0025852). The EPA received comments specific to the Post Falls permit from the Idaho Conservation League (ICL), the Center for Justice (CFJ), and Post Falls.

Comments Received during the 2013 Comment Period

Comment #1

ICL commented that the Post Falls draft permit contains limits for a number of pollutants, particularly chlorine, are more generous than in the current permit. ICL objects to an increase in the concentration for chlorine, particularly after the city has implemented the use of ultraviolet treatment in lieu of chlorine. ICL believes this violates the antibacksliding provision of the Clean Water Act and could negatively impact aquatic life.

Response #1

The basis for less-stringent water quality-based effluent limits for chlorine is explained in the 2013 Post Falls fact sheet at Page 23. An exception to the general prohibition on backsliding in the Clean Water Act (CWA) is applicable to Post Falls in this case. Specifically, the switch from chlorine to ultraviolet disinfection is a material and substantial alteration to the permitted facility.

It should be noted that total residual chlorine effluent limits and monitoring requirements apply to Post Falls only if chlorine is used for disinfection or elsewhere in the treatment process. As explained on Page 23 of the 2013 fact sheet, effluent data indicate that the facility does not have the reasonable potential to cause or contribute to excursions above water quality standards for chlorine if chlorine is not used in the treatment process, and therefore no effluent limits or monitoring requirements are required when chlorine is not being used for disinfection or elsewhere in the treatment process.

The revised effluent limits for total residual chlorine ensure compliance with all applicable water quality standards, including antidegradation requirements. Regarding Tier 1 antidegradation, as explained in Idaho's draft CWA section 401 certification, "the effluent limitations and associated requirements contained in the Post Falls permit are set at levels that ensure compliance with the narrative and

numeric criteria in the WQS. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Spokane River” (see the draft certification at Page 4). As explained in the draft certification at Page 2, the Spokane River is not provided Tier 2 antidegradation protection for aquatic life uses. The chlorine effluent limits in the Post Falls permit are necessary to protect aquatic life from the toxic effects of chlorine.

Comments Received during the 2007 Comment Period

Comment #2

Post Falls stated that Table 1 on Page 6 of the 2007 draft permit requires that zinc and copper meet a concentration standard while the Fact Sheet Tables E-2 and E-3 did not indicate any reasonable potential for negative water quality impacts. As a result, Post Falls requested that zinc and copper be listed as a reportable test similar to cadmium rather than listed with a concentration and mass limit.

Response #2

Tables E-2 and E-3 of the 2007 fact sheet used the previous (1999) permit’s maximum daily effluent limitation as an input to the reasonable potential calculations for zinc and copper. These tables demonstrated that the effluent limits for zinc and copper in the 1999 permit were adequately stringent to protect water quality. However, these tables do not demonstrate that effluent limits for zinc and copper are not required under the CWA.

The zinc and copper effluent limits in the 2007 draft Post Falls permit were identical to those in the 1999 permit. As stated on Page D-5 of the 2007 fact sheet, these limits were retained in the 2007 draft permit to ensure compliance with the anti-backsliding provisions of the CWA (§§303(d)(4) and 402(o)).

In the 2013 draft permit and in the final permit, once again, the EPA determined that the concentration (i.e., µg/L) limits for copper and zinc in the 1999 permit are stringent enough to ensure compliance with water quality criteria, with no mixing zone. Therefore the concentration limits for copper and zinc in the 1999 permit were continued forward in compliance with the anti-backsliding provisions of the CWA (§§303(d)(4) and 402(o)).

However, in the 2013 draft permit and in the final permit, the loading (i.e., lb/day) limits for copper and zinc were increased because the design flow of the POTW has increased from 3.48 mgd at the time to 1999 permit was issued, to 5.0 mgd. This is a material and substantial alteration or addition to the permitted facility, which provides an exception to the anti-backsliding provisions of the CWA (§402(o)(2)(A)). See the 2013 fact sheet at pages C-6 – C-7.

The revised effluent limits for copper and zinc ensure compliance with all applicable water quality standards, including antidegradation requirements. Regarding Tier 1 antidegradation, as explained in Idaho’s draft Clean Water Act (CWA) section 401 certification, “the effluent limitations and associated requirements contained in the Post Falls permit are set at levels that ensure compliance with the narrative and numeric criteria in the WQS. Therefore, DEQ has determined the permit will protect and maintain existing and designated beneficial uses in the Spokane River” (see the draft certification at

Page 4). As explained in the draft certification at Page 2, the Spokane River is not provided Tier 2 antidegradation protection for aquatic life uses. The copper and zinc effluent limits in the Post Falls permit are necessary to protect aquatic life from the toxic effects of copper and zinc.

Comment #3

Post Falls stated that the 2007 draft permit unnecessarily required Post Falls to conduct short-term chronic toxicity testing. Post Falls further stated that nothing has changed since test was conducted in 2000-20001, except a 20% increase in flow, and therefore no further testing should be required.

Response #3

The 2013 draft permit proposed effluent monitoring for whole effluent toxicity (WET) twice per year, and this requirement has been retained in the final permit.

In order to provide a complete application for renewal of its NPDES permit, Post Falls, like all POTWs with design flow rates greater than or equal to one million gallons per day must provide the results of valid whole effluent toxicity tests (40 CFR 122.21(j)(5)). Thus, even if the EPA removed the WET testing requirements from the permit, Post Falls would nonetheless be required to perform WET testing in order to continue discharging after the expiration date of the permit. 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.

Comment #4

Post Falls stated that Table 1 on Page 6 of the 2007 draft permit has a typographical error for lead mass sample type. It should be listed as a calculation and not as a grab sample.

Response #4

This comment was addressed in the revised draft permit issued in 2013. The sample type for lead loading in the 2013 draft permit and in the final permit is “calculation.”

Comment #5

Post Falls states that the 2007 Fact Sheet, Appendix A, incorrectly lists the facility as having pre-aeration (it does not exist), a separate headworks for Rathdrum (it does not exist), primary clarification (it does not exist), biological nutrient removal (rather than biological phosphorus removal) and primary digestion (rather than aerobic digestion of secondary clarifier solids). As such, the 2007 Fact Sheet should be corrected.

Response #5

The EPA regrets any confusion these errors may have caused. However the 2007 fact sheet is nonetheless a final document that explains the conditions proposed in the 2007 draft permit. Although the 2007 fact sheet will not be edited, the EPA understands and recognizes that there were errors in the description of the treatment process in the 2007 fact sheet.

Comment #6

Post Falls states that Table 1 on Page 6 of the 2007 draft permit requires yearly sampling for total polychlorinated biphenyls (PCBs) at low picogram per liter concentrations. There is no documentation provided that PCB contamination concern exists in the Spokane River in Idaho. Further, PCB testing is extremely difficult and labs who do this testing are not readily available. As such, Post Falls requests EPA to remove the testing requirements from the permit.

Response #6

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. This is higher than Idaho’s 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 Post Falls (or Coeur d’Alene or HARSB) contribute 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.

¹ <https://fortress.wa.gov/ecy/laboratorysearch/>. Accessed September 26, 2014.

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.

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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.

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