

Response to Comments on the Draft NPDES Permit for the City of Plummer Wastewater Treatment Plant (Permit #ID0022781)

Overview

EPA issued for public comment a draft National Pollutant Discharge Elimination System (NPDES) permit for a publicly owned treatment works (POTW) owned and operated the City of Plummer, Idaho on October 28, 2011. The public comment period closed on November 28, 2011. EPA received comments on the draft permit from the State of Idaho Department of Environmental Quality (IDEQ). This document provides EPA's response to those comments.

Comment #1

IDEQ stated that it disagreed with the use of non-approved Tribal water quality standards (WQS) in setting effluent limits for the City of Plummer draft permit. IDEQ gave the following reasons (among others) for this disagreement:

- The Coeur d'Alene (CDA) Tribe does not have treatment in the same manner as a State (TAS) for Plummer Creek, into which the City of Plummer will discharge under the proposed permit, or Lake Chatcolet, into which Plummer Creek flows, although it does have TAS for a portion of Lake CDA immediately adjacent to, and downstream of, Lake Chatcolet.
- The WQS adopted by the Tribe for those non-TAS waters (referred to by EPA as "Reservation WQS") have not been submitted to EPA for approval, because of the fact that the Tribe does not have TAS for those water bodies.
- The CDA Tribe has no approved Clean Water Act (CWA) WQS for the waters (in Lake CDA) where it does have TAS.

Response #1

EPA acknowledges that the CDA Tribe does not currently have TAS for Plummer Creek or Lake Chatcolet.¹ EPA also acknowledges that EPA has not approved the CDA Tribe's WQS, either for the TAS waters or for other water bodies within the exterior boundaries of the Reservation.² See the fact sheet at Page 9.

¹ The CDA Tribe has submitted a TAS application covering those water bodies, which is pending with EPA.

² The CDA Tribe has adopted WQS and submitted them to EPA for approval, but EPA has not yet acted on them.

However, as stated on Page 9 of the fact sheet, it is EPA's policy to work with Tribes who have adopted WQS that are not approved by EPA to ensure that, to the extent practicable, NPDES permits issued in Indian Country achieve compliance with those WQS. EPA believes it is appropriate to consider the CDA Tribe's WQS in determining the applicable designated uses and criteria for Plummer Creek as long as the WQS are consistent with Section 303 of the CWA, as well as EPA's implementing regulations at 40 CFR Part 131, and they are protective of downstream waters. See the fact sheet at Pages 9-10 and "Guidance on EPA's NPDES and Sludge Management Permit Procedures on Federal Indian Reservations" (EPA 1993). Thus EPA has developed permit limits that ensure that the receiving waters, both at the point of discharge and downstream, meet the Tribe's WQS. As discussed below, these very limits also ensure that the permitted discharge will not cause or contribute to exceedances of State WQS that IDEQ asserts apply to downstream water bodies.

Comment #2

IDEQ stated that EPA should apply Idaho WQS applicable to Plummer Creek to set permit limits. IDEQ gave the following reasons for this assertion:

- There has been no determination that the Tribe, rather than the State of Idaho, has jurisdiction over Plummer Creek.
- The City of Plummer, not the CDA Tribe, owns and operates the POTW and it is located on fee land owned by non-tribal members.
- Part of Plummer Creek is within Heyburn State Park. The Park was established by an Act of Congress on April 20, 1908, which described the boundaries of the Park and provided that the lands were to be "reserved and withdrawn from allotment and settlement" and further authorized the Secretary of Interior to "convey any part thereof to the State of Idaho to be maintained by said State as a public park." 35 Stat. 78. The 1908 Act, by reserving the described lands and authorizing their conveyance to the State of Idaho, displayed Congress' intent to segregate the Park from the Tribe's jurisdiction and put it fully under the jurisdiction of the State of Idaho. Therefore, although Plummer Creek may be within the exterior boundaries of the Reservation, the portion of Plummer Creek within Heyburn State Park is subject to exclusive state jurisdiction.
- The Idaho WQS include designated uses for Plummer Creek: cold water aquatic life, salmonid spawning, and secondary contact recreation (IDAPA 58.01.02.110.11) and criteria to protect these uses. IDAPA 58.01.02.200, 210 and 250.
- Unlike the Tribe, Idaho has antidegradation implementation provisions in its WQS. IDAPA 58.01.02.052; Idaho Code section 39-3603. The Idaho WQS, including the antidegradation implementation methods have been approved by EPA.

Response #2

The point of discharge is several miles upstream from the boundary of Heyburn State Park, and is within the exterior boundaries of the CDA Reservation. Therefore, IDEQ's claim of State of Idaho jurisdiction

within the Park does not affect the applicability of Idaho's WQS at the discharge point, though this claim is relevant to Idaho's assertion of downstream state status, as discussed below in Response #4.

With one exception discussed in the next paragraph, the CDA Tribe's WQS for the pollutants present in the discharge are as stringent as, or more stringent than, the corresponding Idaho WQS. The permit limits are stringent enough to meet both Tribal WQS, and State WQS where IDEQ asserts that they apply (see also the fact sheet at Page 10 and the response to comment #4).

The exception is Idaho's temperature criterion for salmonid spawning (an instantaneous maximum of 13°C and a maximum daily average of 9°C). According to the permit application, the maximum summer effluent temperature is 16°C. However, heat is not a conservative pollutant. Since the point of discharge is several miles upstream from the nearest point at which Idaho asserts that its WQS apply, EPA does not expect the discharge to have any discernible effect on the temperature of those waters. The permit requires continuous monitoring of the effluent temperature and monthly monitoring of the receiving water temperature, both upstream and downstream of the outfall, during June, July, August, and September. If the effluent and receiving water monitoring shows that the discharge has the reasonable potential to cause or contribute to excursions above water quality standards for temperature, EPA will establish effluent limits for temperature or heat when the permit is reissued.

EPA agrees that although the CDA Tribe's WQS contain an antidegradation policy (see the TAS WQS and the Reservation WQS at Section 6), the Tribe's WQS do not identify antidegradation implementation methods. However, EPA used the State of Idaho's waterbody-by-waterbody approach as guidance when determining the applicable level of antidegradation protection for Plummer Creek, in order to maintain consistency with other permits recently issued in the State of Idaho. Since the beneficial use support status of Plummer Creek was not assessed in the State of Idaho's 2010 CWA Section 303(d)/305(b) integrated report (IDEQ 2011),³ and the CDA Tribe has not prepared an integrated report, EPA determined based on available information that Plummer Creek should receive only Tier I antidegradation protection, which is consistent with Idaho Code Section 39-3603(2)(b)(ii) for streams subject to State jurisdiction. See the fact sheet at Pages 11-13. Therefore, EPA conducted an antidegradation review that was substantively consistent with the State of Idaho's antidegradation implementation methods.

For these reasons, the permit limits that EPA developed are adequate to protect the receiving waters, and the waters downstream, consistent with State WQS where the State asserts that they apply.

Comment #3

IDEQ stated that EPA should also apply Idaho WQS applicable to Chatcolet Lake to set permit limits. As noted above, it is Idaho's position that it has exclusive jurisdiction over waters within Heyburn State Park. Chatcolet Lake is within Heyburn State Park. Therefore, the Idaho WQS applicable to Chatcolet Lake must also be considered by EPA in setting permit limits for the Plummer discharge. Chatcolet Lake

³ Whether that report *could* have assessed any portion of Plummer Creek is a point on which the State and Tribe would likely disagree, but does not affect this analysis; in any case, the report did not assess Plummer Creek.

is an undesignated water. IDAPA 58.01.02.110.11. Idaho applies cold water aquatic life and primary or secondary contact recreation criteria to undesignated waters. IDAPA 58.01.02.101.01.

Response #3

The CDA Tribe's WQS for the pollutants in the discharge are as stringent as, or more stringent than, the corresponding Idaho water quality criteria that IDEQ asserts apply in Lake Chatcolet. Thus the permit limits are stringent enough to prevent the discharge from causing or contributing to any exceedances of the WQS that IDEQ asserts apply to Lake Chatcolet. See also the fact sheet at Page 10 and the response to comment #4. The difference in the State's and the Tribe's temperature criterion, discussed in Response #2, is not an issue for Lake Chatcolet because that criterion applies to the salmonid spawning designated use, and Lake Chatcolet is not designated for salmonid spawning.

Comment #4

IDEQ stated that Idaho is a downstream state and EPA must provide Idaho with notice and the opportunity to object as provided in Section 401(a)(2) and must ensure the permit complies with Idaho WQS.

As noted, it is Idaho's position that its WQS are applicable to Plummer Creek and Chatcolet Lake, into which Plummer Creek discharges. In addition, there is no dispute that the Idaho WQS are the approved WQS applicable to that portion of CDA Lake that is not within the Reservation boundaries. At the very least, Idaho is a downstream state that is entitled to notice, an opportunity to object, and assurance that Idaho WQS will be met.

Section 401(a) (2) of the CWA provides that, whenever a discharge may affect waters of any other State, EPA within thirty days of the date of notice of application for a federal license or permit, shall so notify such other state. In addition, the downstream state has a right to object and request a public hearing. Finally, no license or permit may be issued that will not insure compliance with a downstream state's WQS.

While DEQ believes the Idaho WQS are applicable to Plummer Creek, at the very least it is a downstream state with respect to waters within Heyburn State Park and CDA Lake outside Reservation boundaries. Therefore, EPA must provide Idaho notice and an opportunity to object and ask for a public hearing, and must ensure that the Plummer permit complies with Idaho's WQS.

Response #4

EPA agrees that the Idaho WQS apply in that portion of Lake CDA that is not within the Reservation boundaries. However, EPA believes that any effect that the discharge may have upon water quality in that portion of Lake CDA (as opposed to Plummer Creek or Lake Chatcolet) will be negligible. The minimum annual total surface water inflow into Lake CDA from 2000 – 2005 was 85,909,000,000 cubic feet, in 2001 (Maupin and Weakland 2009). The design flow of the Plummer WWTP is 0.32 million

gallons per day (mgd), which is 15,613,889 cubic feet per year. Thus, the City of Plummer WWTP design flow is only 0.018% of the total surface water inflow to Lake CDA, in a low-flow year. The fact that the discharge represents such a small fraction of the inflow into Lake CDA, combined with the stringent effluent limits in the permit (discussed below) demonstrate that the discharge will not have any discernible effect upon the water quality anywhere in Lake CDA.

The discharge is subject to effluent limits that ensure compliance with the CDA Tribe's water quality criteria for total suspended solids (TSS), bacteria, ammonia, total phosphorus, and pH at the end-of-pipe, i.e., dilution was not considered in the calculation of effluent limits for these parameters (see the fact sheet at Page 14 and Appendices C and E). The water quality-based effluent limits for five-day biochemical oxygen demand (BOD₅) ensure that there will be no dissolved oxygen sag within Plummer Creek resulting from the BOD in the discharge (see the fact sheet at pages 14 and C-7). EPA has determined that the discharge does not have the reasonable potential to cause or contribute to excursions above the CDA Tribe's WQS for temperature or total nitrogen.

Similar to the effluent limit calculations, EPA's reasonable potential determinations did not consider dilution (see the fact sheet at Appendices C and D). Since the permit is conditioned to ensure compliance with the CDA Tribe's WQS, without considering dilution, and, with the exception of temperature for waters designated for salmonid spawning by the State of Idaho, the CDA Tribe's WQS for the pollutants of concern are at least as stringent as the State of Idaho's WQS, the permit conditions will also ensure compliance with the Idaho WQS at any point downstream from the discharge where the Idaho WQS may apply (see also the fact sheet at Page 10). For temperature, as discussed above in Response #2, though the Tribe's temperature criterion is less stringent than the State's, the effluent will not have any discernible effect on the temperature of any of the downstream waters over which the State asserts jurisdiction.

Therefore, in practical effect, the State was not denied the substantive or procedural protections afforded to downstream states by CWA Section 401(a)(2). Idaho did in fact receive notice of the discharge, and did in fact have the opportunity to submit comments regarding the effect of the permitted discharge on the downstream waters over which it asserts it has jurisdiction. For the reasons explained in the prior responses, the State of Idaho could not have made a reasonable finding that the City of Plummer discharge will affect the quality of its waters so as to violate any water quality requirements in Idaho, and thus a hearing would not have been warranted; in fact, though IDEQ provided extensive comments on the draft permit, the comments do not assert that the Idaho WQS would be violated as a result of the discharge.

References

EPA. 1993. "Guidance on EPA's NPDES and Sludge Management Permit Procedures on Federal Indian Reservations." Memorandum from Cynthia C. Dougherty, Director, Permits Division, Office of Water to Water Management Division Directors Regions I and XI, and IV – X.

IDEQ. 2011. Idaho Department of Environmental Quality Final 2010 Integrated Report. Boise, ID: Idaho Department of Environmental Quality.

Maupin, M.A., and Weakland, R.J., 2009, Water budgets for Coeur d'Alene Lake, Idaho, water years 2000–2005: U.S. Geological Survey Scientific Investigations Report 2009-5184, 16 p.