From: Nickel, Brian
To: Tanner Weisgram
Cc: Brett M. Converse; June Bergquist
Subject: KPSD permit clarifications
Date: Tuesday, June 30, 2015 12:15:00 PM
Attachments: KPSD Draft FS Seasonal P.pdf

Dear Mr. Weisgram:

I'm writing in response to the letter you sent to me on May 26, 2015, in which you asked a number of questions about the pending new NPDES permit for the Kootenai-Ponderay Sewer District. I will try to address some of the issues you raised in your letter.

Your letter states that:

> "(I)t is not clear when effluent limits, and reasons for those limits, are applied to the three receiving water options—the unnamed tributary, Boyer Slough or Lake Pend Oreille—used to establish the effluent limits. KPSD cannot understand how and why all three are used to justify various effluent limits without considering existing beneficial uses, mixing and dilution specific to each water body."

In general, the effluent limits in the preliminary draft permit are based on conditions in the immediate receiving water, i.e., the unnamed arm of Boyer Slough where the outfall is located. That is to say, the limits are based on the available dilution in the unnamed arm as well as the beneficial uses and water quality criteria applicable to the unnamed arm. As stated on Pages 8 and 9 of the fact sheet (attached):

> "Neither Boyer Slough nor its unnamed tributary have specific use designations in the Idaho Water Quality Standards (IDAPA 58.01.02.110 through 160). The Water Quality Standards state that such 'undesignated waterways' are to be protected for the uses of cold water aquatic life and primary contact recreation (IDAPA 58.01.02.101.01). In addition, the Water Quality Standards state that all waters of the State of Idaho are protected for industrial and agricultural water supply, wildlife habitats and aesthetics (IDAPA 58.01.02.100.03.b and c, 100.04 and 100.05)."

However, because the effluent can also affect Lake Pend Oreille, the limits for nitrate + nitrite and phosphorus are based on conditions in and water quality standards applicable to Lake Pend Oreille. Lake Pend Oreille has a designated use of domestic water supply. To protect this use, the EPA proposed to apply the EPA's recommended criterion for consumption of water and organisms of 10 mg/L nitrate + nitrite (see link below) to Lake Pend Oreille, but not to Boyer Slough or its unnamed arm. This is why the dilution factor is different for nitrate + nitrite; it is the estimated dilution that the effluent will experience at the point where it reaches Lake Pend Oreille. See the fact sheet at Pages C-2 and C-3. There are no limits that are based specifically on the conditions in the main stem of Boyer Slough (as distinct from the unnamed arm of the slough where the outfall is located). Boyer Slough's only relevance in setting effluent limits is that it conveys the effluent to Lake Pend Oreille and dilutes the effluent before it reaches the lake.

http://water.epa.gov/scitech/swguidance/standards/criteria/current/index.cfm#hhtable

Your letter also states on that "permit limits were established to comply with Tier 2 protection of Boyer Slough when Boyer Slough does not appear to be high

Quality." None of the effluent limits in the preliminary draft permit result from the State of Idaho's decision to provide Tier 2 antidegradation protection to Boyer Slough. All of the proposed water quality-based effluent limits (i.e., the limits for E. coli, chlorine, nitrate + nitrite, ammonia, and phosphorus) are based on the State of Idaho's numeric and narrative water quality criteria for these constituents. The water quality criteria apply regardless of the antidegradation protection that is

applicable to a waterbody. The basis for the proposed effluent limits is provided in Appendices D and E to the fact sheet. The decision of which tier of antidegradation protection is applicable to a waterbody is made by Idaho DEQ.

Before the draft permit is issued for public comment, I will edit the fact sheet in an effort to make the bases for the effluent limits more clear.

Your letter asserts that I made incorrect assumptions about the current capabilities of the District's storage and land application system, and, as a result, reached incorrect conclusions about compliance schedules and interim limits for phosphorus and ammonia limits. Please note that Idaho DEQ authorizes compliance schedules for new limits in its 401 certification, however, I will work with the District and IDEQ to establish appropriate compliance schedules for any new limits that the District cannot comply with immediately. These compliance schedules would need to require compliance as soon as possible (40 CFR 122.47(a)(1)) and include interim requirements and dates for their achievement (40 CFR 122.47(a)(3)).

Regarding your statement that KPSD has a wasteload allocation under the State of Idaho's *Total Maximum Daily Load (TMDL) for Nutrients for the Nearshore Waters of Pend Oreille Lake, Idaho* (see link below), the TMDL states, on Page 13, "No point sources discharge to the defined nearshore waters of Pend Oreille Lake covered by this TMDL. Therefore, the wasteload allocation is zero (Table 5)."

http://www.deq.idaho.gov/media/464368-_water_data_reports_surface_water_tmdls_pend_oreille_lake_ns_pend_oreille_ns_nutrient_entire.pdf

I hope this message answers some of the questions you raised in your letter. I understand Brett Converse is working to set up a meeting between EPA, the District, and I assume Idaho DEQ and perhaps the City of Sandpoint, and we can discuss your letter further at that meeting. In the meantime, please feel free to contact me with any questions you may have.

Thank you,

Brian Nickel, E.I.T.
Environmental Engineer
US EPA Region 10 | Office of Water and Watersheds | NPDES Permits Unit
Voice: 206-553-6251 | Toll Free: 800-424-4372 ext. 6251 | Fax: 206-553-0165
Nickel.Brian@epa.gov
http://epa.gov/r10earth/waterpermits.htm

Please conserve natural resources by not printing this message.