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Submitted via email to: Nickel@Brian@epa.gov and june.bergquist@deq.idaho.gov

March 26, 2018

RE: Re-Proposed NPDES Effluent Limits for Total Phosphorus, City of Sandpoint WWTP and Idaho's 401 Certification of Same

Dear Mr. Nickel and Ms. Bergquist:

Since 1973, the Idaho Conservation League has been Idaho's leading voice for clean water, clean air and wilderness—values that are the foundation for Idaho's extraordinary quality of life. The Idaho Conservation League works to protect these values through public education, outreach, advocacy and policy development. As Idaho's largest state-based conservation organization, we represent over 25,000 supporters, many of whom have a deep personal interest in protecting Idaho's human health and environment.

Attached, please find my comments on behalf of the Idaho Conservation League regarding the re-proposed NPDES total phosphorus effluent limits for the City of Sandpoint WWTP and Idaho's 401 Certification of same.

Please do not hesitate to contact me at (208) 265-9565 or mnykiel@idahoconservation.org if you have any questions regarding our comments or if we can provide you with any additional information on this matter.

Thank you for your time and consideration.

Sincerely,

A handwritten signature in blue ink that reads "Matthew Nykiel".

Matthew Nykiel
Conservation Associate

ICL Comments

Introduction

We thank the Environmental Protection Agency (EPA) and Idaho Department of Environmental Quality (DEQ) for their patience and work reviewing the law and policy regarding mixing zone rules in Idaho. This process exemplifies the great care Idahoans have for protecting the quality of all the waters in this State. The thoroughness with which the permitting agencies and general public have pursued examining this permit will undoubtedly ensure the protection of the Pend Oreille River.

However, EPA's re-proposal of total phosphorus (TP) effluent limits in the NPDES Draft Permit, City of Sandpoint, Idaho, #ID0020842, issued in February 2018, violates the Clean Water Act, 33 U.S.C. §1251 et seq., because the permit authorizes total phosphorus effluent limits based on mixing zones that utilize 47% and 60% of the Pend Oreille River's stream flow volume.

Idaho's EPA-approved Mixing Zone Policy restricts DEQ to authorizing mixing zones that include no more than 25% of the stream flow volume of the discharge-receiving water body. Accordingly, EPA cannot approve and issue the City of Sandpoint WWTP's NPDES permit, as drafted, because it violates this mixing zone restriction in Idaho's EPA-approved Water Quality Standards.

It is critical that EPA base its approval and issuance of this NPDES permit on the correct application of Idaho's EPA-approved Mixing Zone Policy because the precedent will impact water quality throughout Idaho and influence effluent limits for all NPDES permits EPA issues going forward.¹

For purposes of appeal, ICL incorporates by reference all prior comments we have submitted regarding NPDES Permit #ID0020842. We also include here two comments regarding EPA's calculation of critical low flow in the Pend Oreille River.

25% Maximum Mixing Zone Principle

One of Idaho's four EPA-approved principles for designing mixing zones in flowing receiving water states:

“Mixing zones in flowing receiving waters are to be limited to the following...
The mixing zone is not to include more than twenty-five (25%) of the volume of the stream flow.”

IDAPA 58.01.02.060.e.iv. (2014).

¹ Although DEQ is seeking authorization from EPA to administer the NPDES permitting program for the State of Idaho, DEQ's request may not be approved by EPA, so EPA's decision in this case remains significant and important.

² See EPA Revised Fact Sheet, City of Sandpoint Wastewater Treatment Plant, April 19, 2016 at C-1.

As an EPA-approved Idaho Water Quality Standard, this rule precludes DEQ from defining mixing zones that include more than 25% of the stream flow volume. DEQ will consider the 25% maximum mixing zone principle when defining a mixing zone, according to Idaho's EPA-approved Mixing Zone Policy. No EPA-approved regulatory provision in Idaho's Water Quality Standards grants DEQ the discretion to define a mixing zone that exceeds 25% of the stream flow volume, as EPA and DEQ claim.

At page 9 of EPA's Fact Sheet for Re-Proposal of Total Phosphorus Limits, EPA summarizes its basis for approving and issuing the re-proposed total phosphorus limits for the City of Sandpoint WWTP (City), stating:

"...the mixing zones authorized by IDEQ in its certification of the City of Sandpoint permit are consistent with the State's prior Mixing Zone Policy, which remains in effect for Clean Water Act purposes and which allows IDEQ [to] authorize mixing zones larger than 25% of the stream flow volume."

EPA's statement above is mistaken. Idaho's EPA-approved Mixing Zone Policy has no provision, which authorizes DEQ to design a mixing zone that exceeds 25% of the stream flow volume. EPA's statement above is based on a flawed interpretation of Idaho's EPA-approved Mixing Zone Policy that is not authoritative in this instance.

EPA inappropriately interpreted and applied Idaho's EPA-approved Mixing Zone Policy on the basis of DEQ guidance documents. The DEQ guidance documents cited by EPA do not have the force or effect of a rule and do not supersede state or federal statutes and regulations effective for Clean Water Act purposes. The primary authority defining the meaning of Idaho's EPA-approved Mixing Zone Policy is the plain language of the EPA-approved policy.

Furthermore, EPA also inappropriately relied on DEQ's interpretation of Idaho's EPA-approved Mixing Zone Policy. At page 8 of EPA's Fact Sheet for Re-Proposal of Total Phosphorus Limits, EPA cited DEQ's response to comments regarding the City's 401 Certification, stating:

"DEQ's interpretation of the prior provisions also allowed [DEQ] to vary from the 25% limit on mixing zones, but only if the mixing zone still ensured protection of uses."

DEQ's interpretation of Idaho's EPA-approved Mixing Zone Policy provided above is erroneous and simply not supported by the plain language of the effective rules. Indeed, a DEQ "Response to Comments" cannot supersede the plain language of the effective rules.

Request

ICL requests:

1. DEQ revise its 401 Certification for the City's NPDES permit to limit any mixing zone for total phosphorus to no more than 25% of the stream flow volume of the Pend Oreille River, as measured or estimated at the City's outfall location.
2. EPA recalculate the total phosphorus effluent limits and revise the City's NPDES permit according to a mixing zone for total phosphorus that includes no more than 25% of the stream flow volume of the Pend Oreille River, as measured or estimated at the City's outfall location.

Critical Low Flow

The critical low flow used to calculate total phosphorus effluent limits, as well as the other effluent limits identified in the City's permit, should be adjusted downward to account for tributary water flow into the Pend Oreille River that is downstream of the City's outfall location. The associated effluent limits should also be adjusted accordingly.

EPA calculated the critical low flow of the Pend Oreille River, at the City's point of discharge, by subtracting the flow from the Priest River from the flow in the Pend Oreille River at Newport, WA.² However, there are at least 20 tributaries to the Pend Oreille River and two municipal discharge inflows downstream of the City's point of discharge. The flows of these tributaries and municipal discharges were "baked in" to the EPA's critical low flow estimates. In other words, the critical low flow estimated for the City's point of discharge is artificially high.

While it may be that the tributaries and municipal discharges into the Pend Oreille River downstream from the City's point of discharge contribute a small volume of water compared to the flow of the Pend Oreille River, the City's point of discharge and existing conditions in the Pend Oreille River create extremely poor circumstances for dispersing phosphorus and other effluent. In fact, at page 21 of DEQ's 401 Certification issued on February 23, 2016, DEQ states:

"The point of discharge is in a slack water area [] does not benefit from the main river flow during summer pool conditions. Increasing the amount of phosphorus as illustrated in Image 2, even by a relatively small amount, greatly increases the size of the plume during low flow conditions."

Given the sensitivity of the Pend Oreille River in which the City discharges, we request EPA collect, and estimate as needed, stream flow data for the tributaries between the USGS gage station at Newport, WA and the City's point of discharge. DEQ likely possesses stream flow

² See EPA Revised Fact Sheet, City of Sandpoint Wastewater Treatment Plant, April 19, 2016 at C-1.

data for these tributaries as part of its BURP data inventory.³ These flows should then be subtracted from the critical low flow EPA used to calculate effluent limits in the City's NPDES permit, and the effluent limits should be adjusted accordingly.

Phosphorus Dispersion During Winter Drawdown

We request EPA use a more conservative critical low flow for the Pend Oreille River based on the impact of low water levels in the Pend Oreille River during winter drawdown. We are concerned that the flow of the Pend Oreille River may not be as high nor effectively disperse phosphorus during low water levels in the winter time.

Stream flow in the shallow areas of the Pend Oreille River tends to be lower compared to the deeper portions. And, the City's diffuser only extends 925 feet into a segment of the Pend Oreille River that spans 1.8 miles in width. So, during winter drawdown, the diffuser may be located in a shallow portion of the river with far less stream flow. In lieu accurate data, EPA should use a more conservative critical low flow in recognition of the effects of dam operations at Albeni Falls Dam on effluent dispersion at the City's outfall location.

³ Less recent flow data for some of the smaller tributaries to the Pend Oreille River is also available in the Portland State University Report: Idaho Pend Oreille River Model: Model Development and Calibration (2006) *available at* https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1153&context=cengin_fac.