

## EPA REGION 10'S RESPONSE BRIEF

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Attachment 2	Draft NPDES Permit for City of Homedale WWTP, NPDES Permit No. ID0020427
Attachment 3	Mid Snake River/Succor Creek Subbasin Assessment and Total Maximum Daily Load, dated April 2003 (relevant excerpts)
Attachment 4	Public Notice of Comment Period for Proposed Reissuance of NPDES Permit and draft 401 Certification for City of Homedale WWTP
Attachment 5	Letter from Justin Hayes, Program Director, ICL, to John Drabek, NPDES Permit Writer, EPA and Lauri Monnot, IDEQ re: ICL's comments on the Draft NPDES Permit and Draft 401 Certification for the City of Homedale WWTP, Permit No. ID0020427
Attachment 6	Final NPDES Permit for City of Homedale WWTP
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Attachment 8	Snake River – Hells Canyon Total Maximum Daily Load, dated July 2003 (relevant excerpts)
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Attachment 10	IDEQ Final § 401 Water Quality Certification
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## **I. INTRODUCTION**

Pursuant to 40 C.F.R. §124.19 and the October 30, 2013 Order Granting Region 10's Motion for Extension of Time issued by the Environmental Appeals Board ("EAB"), the U.S. Environmental Protection Agency, Region 10 ("Region") respectfully submits this response to Idaho Conservation League's ("ICL's") Petition for Review ("Petition") of National Pollutant Discharge Elimination System ("NPDES") Permit No. ID-002042-7 ("Permit"). The Petition was filed by ICL on September 30, 2013. For the reasons discussed below, the EAB should deny ICL's Petition.

## **II. STATEMENT OF THE CASE**

### **A. Statutory and Regulatory Background**

Section 301(a) of the Clean Water Act ("CWA"), 33 U.S.C. § 1311(a), prohibits the discharge of pollutants to waters of the United States unless authorized by, among other things, a NPDES permit. Pursuant to Section 402 of the CWA, 33 U.S.C. § 1342, EPA, or an authorized State, must issue NPDES permits that authorize the discharge of pollutants subject to limitations and requirements imposed pursuant to CWA Sections 301, 304, 306, 401, and 403, 33 U.S.C. §§ 1311, 1314, 1316, 1341, and 1343. Here, the State of Idaho does not have the authority to issue NPDES permits; therefore, EPA is the relevant permitting authority.

In general, the CWA provides for two types of effluent limits to be included in NPDES permits: technology-based effluent limits and water quality-based effluent limits. Technology-based effluent limits reflect a specified level of pollutant-reducing technology available and economically achievable for the type of facility being permitted. Water quality-based effluent limits are included to ensure that EPA-approved state water quality standards are met within a water body. Where technology-based limits are not as stringent as necessary to meet water quality standards, a more stringent water quality-based effluent limit for a particular pollutant

must be included in an NPDES permit. *See* 33 U.S.C. § 1311(b)(1)(C); *see also In re City of Moscow, Idaho*, 10 E.A.D. 135, 139 (EAB 2001).

If a receiving water is not attaining an applicable state water quality standard, Section 303(d) of the CWA, 33 U.S.C. § 1313(d), establishes a process called the total maximum daily load (“TMDL”) process to provide for more stringent water quality-based controls. In general, TMDLs contain waste load allocations (“WLAs”) for specific point sources in a water body as well as load allocations (“LAs”) for nonpoint sources in the water body. *See* 40 C.F.R. § 130.2(i). The WLAs and LAs in a particular TMDL are established at levels necessary to attain and maintain the applicable narrative and/or numerical water quality standard. *See* 40 C.F.R. § 130.7(c)(1).

If there is a TMDL for a specific water body, the permit writer must determine whether there is an available WLA for the point source. If there is a WLA for the point source, the permit writer must calculate a specific water quality-based effluent limit for the discharge that is “consistent with the assumptions and requirements of [the WLA].” 40 C.F.R. § 122.44(d)(1)(vii)(B) (emphasis added).

## **B. Factual and Procedural Background**

The City of Homedale (“City”) owns and operates a wastewater treatment plant (“Facility”) that treats domestic sewage primarily from local residents and commercial establishments. The Facility serves a population of approximately 2,750 and has a design flow rate of 0.45 million gallons per day (“mgd”). *See* Attachment (“Att.”) 1 at p. 5.<sup>1</sup>

The Facility discharges treated effluent to the Snake River at river mile 412. The segment of river that the Facility discharges to is protected for the following designated uses:

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<sup>1</sup> Copies of the portions of the relevant documents cited in this brief have been filed with this response brief as attachments. In addition, concurrent with this response brief, the Region has filed a Certified Index of the Administrative Record as well as Excerpts from the Record relevant to the issue on appeal.



cold water aquatic life, primary contact recreation, domestic water supply, industrial and agricultural water supply, wildlife habitats, and aesthetics. IDAPA §§ 58.01.02.100.03.b and c, 58.01.02.100.04, 58.01.02.100.05, and 58.01.02.130.12. In addition, this portion of the Snake River is listed on the State's CWA Section 303(d) list as impaired for nutrient/eutrophication and temperature. *See* Att. 1 at p. 8. Since this portion of the Snake River is an impaired water body on the State's CWA Section 303(d) list, the Idaho Department of Environmental Quality ("IDEQ") established, and EPA approved, the Mid Snake River/Succor Creek Subbasin Assessment and TMDL ("Mid Snake TMDL").<sup>2</sup> *See* Att. 3. The Mid Snake TMDL establishes a total phosphorus WLA of 5 kg/day (*i.e.*, 11 lbs/day) for the Facility. *Id.* at p. 177.

The Region is the permitting authority for the State of Idaho. The Facility's previous NPDES permit became effective on May 1, 2004 and expired on April 30, 2009. ("Expired Permit").<sup>3</sup> The Expired Permit did not contain total phosphorus effluent limits. On March 1, 2013, the Region issued a draft NPDES permit and Fact Sheet for the Facility for public comment. Att. 1 and 2. The public comment period ended on April 1, 2013. *See* Att. 4.

The Permit contains total phosphorus effluent limits based on the WLA for the Facility in the Mid Snake TMDL. Att. 1 at p. 23. During the comment period, ICL submitted a comment letter which, among other things, expressed concern over how EPA applied the total phosphorus WLA from the Mid Snake TMDL in the Permit. *See* Att. 5. After reviewing all of the comments received during the comment period, on August 28, 2013, the Region issued the final Permit with a response to comments document. Att. 6 and 7. The Permit had an effective date of October 1, 2013. Att. 6. On September 27, 2013, ICL filed the Petition with the EAB.

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<sup>2</sup> IDEQ submitted the Mid Snake TMDL to EPA in June 2003. EPA approved the TMDL in January 2004.

<sup>3</sup> The Expired Permit was administratively extended until a new permit became effective pursuant to 40 C.F.R. § 122.6.

### III. STANDARD OF REVIEW

Pursuant to 40 C.F.R. § 124.19(a)(4)(i), the Petitioner must demonstrate that the challenge to the permit decision is based on either a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. *See In re Three Mountain Power, LLC*, 10 E.A.D. 39, 47 (EAB 2001). It is not enough that the petitioner merely repeat the objections that it made during the comment period. Instead, where the petition raises an issue that was addressed in the response to comments document, the petitioner must explain why the permit decision maker's "response to the comment was clearly erroneous or otherwise warrants review." 40 C.F.R. § 124.19(a)(4)(ii). Moreover, the EAB assigns a heavy burden on petitioners seeking review of issues that are technical in nature. *See In re City of Moscow*, 10 E.A.D. 135, 142 (EAB 2001); *In re Town of Ashland Wastewater Treatment Facility*, 9 E.A.D. 661, 667 (EAB 2001). In reviewing technical issues, the EAB will look to "determine whether the record demonstrates that the Region duly considered the issues raised in the comments and whether the approach ultimately adopted by the Region is rational in light of all the information in the record." *Id.* As previously stated by the EAB, "[a] petitioner may not simply reiterate comments made during a public comment period, but must substantively confront the permit issuer's subsequent explanations." *In re City of Attleboro, MA Wastewater Treatment Plant*, NPDES Appeal No. 08-08, slip op. at 11 (EAB, Sept. 15, 2009).

### IV. ARGUMENT

ICL's sole issue on appeal concerns the total phosphorus effluent limits in the Permit. The Permit contains an average monthly total phosphorus effluent limit of 11 lbs/day and an average weekly total phosphorus effluent limit of 16.5 lbs/day which are in effect from May 1<sup>st</sup> to September 30<sup>th</sup>. Att. 6 at Table 1. These effluent limits were calculated using the WLA of



5 kg/day (*i.e.*, 11 lbs/day) for the Facility set forth in the Mid Snake TMDL. Att. 1 at p. 23. ICL contends that the Region should have established a daily maximum total phosphorus effluent limit of 11 lbs/day because a WLA in a TMDL represents a maximum daily discharge amount. *See* Petition at p. 3-6. Further, ICL argues that if the Region were to establish a daily maximum effluent limit of 11 lbs/day, then the corresponding average monthly and average weekly effluent limits should not exceed 11 lbs/day. *See* Petition at p. 6. ICL made this same argument during the comment period for the Permit and has merely reiterated those comments in the Petition. *See* Att. 6. As the Region explained in its Response to Comments and explains below, ICL is incorrect because the water quality-based effluent limits in the Permit are consistent with the underlying assumptions used in calculating the WLA in the Mid-Snake TMDL. Att. 7 at p. 2-3.

The fundamental error in ICL's argument is based on a misunderstanding of the difference between a TMDL WLA and a permit effluent limit that is based on a TMDL WLA. A TMDL WLA must be expressed in terms of *daily* loads. *Friends of the Earth v. US EPA*, 446 F.3d 140, 144 (DC Cir 2006). An effluent limitation in a NPDES permit that is developed due to a TMDL WLA must be "*consistent with the assumptions and requirements of any available wasteload allocation....*" 40 C.F.R. § 122.44(d)(1)(vii)(B) (emphasis added). Notably, this regulation does not require the permitting authority to strictly apply the WLA as a daily maximum effluent limit. As explained by the EAB in *In re City of Moscow, Idaho*, "WLAs are not permit limits *per se*; rather they still require translation into permit limits." *In re City of Moscow, Idaho*, 10 E.A.D. 135, 147 (EAB 2001). The EAB went on to explain that:

The lack of a detailed procedure for establishing permit limits from available WLAs was intended to give the permitting authority the flexibility to determine the appropriate procedures for developing water quality-based effluent limits.... While [40 C.F.R. § 122.44(d)(1)(vii)(B)] require[s] *consistency*, they do not require that the permit limitations that will finally be adopted in a final NPDES permit be *identical* to any of the WLAs that may be provided in a TMDL.

*Id.* at 147-148; *see also American Farm Bureau Federation v. US EPA*, 2013 U.S. Dist. LEXIS 131075 (M.D. Pa., Sept. 13, 2013), \*103-104 (The permitting authority “may write a NPDES permit limit that is different from the WLA provided that it is consistent with the operative assumptions underlying the WLA.”). Moreover, with regard to publicly owned treatment works like the City, the permitting authority is required to establish average weekly and average monthly effluent limitations instead of daily maximum effluent limits unless it is impracticable to do so. 40 C.F.R. § 122.45(d). Here, the Region considered the fact that it was required to establish average weekly and average monthly effluent limits and looked to the assumptions and statements made in the Mid Snake TMDL when it developed the average weekly and average monthly total phosphorus effluent limits in the Permit.

A. **The Region Was Correct In Developing An Average Monthly Total Phosphorus Effluent Limit Based Upon The Assumptions Used In Calculating The WLA In The Mid Snake TMDL.**

The Mid Snake TMDL contains a WLA for the Facility of 11 lbs/day. As explained in the Region’s response to comments document, in order to determine how to implement the WLA in the City’s Permit, it was appropriate for the Region to look to the assumptions underlying the WLA in the Mid Snake TMDL and conclude that the resulting average monthly effluent limit was consistent with those assumptions. *See* Att. 7 at p. 2-3.

Two of the assumptions underlying the City’s WLA are (1) IDEQ’s use of the maximum monthly flow design capacity for the Facility and (2) IDEQ’s use of an average discharge concentration for unmonitored facilities. Specifically, the TMDL states that: “The point source wasteloads for the two WWTPs are based on a discharge of 3.5 mg/L of [total phosphorus] (average discharge [concentration] for unmonitored facilities as determined by [the Snake River-Hells Canyon TMDL (SR-HC TMDL)]) ... at design capacity.” Att. 3 at p. 176. The design



capacity that IDEQ used to calculate the WLA was 0.4 mgd. *Id.* at p. 149. This design capacity is the maximum *monthly* flow rate for the Facility. *Id.* at p. 319 (City Engineer commented that “Homedale’s wastewater treatment lagoon facility was designed for a *monthly maximum* flow rate of 0.45 MGD.”). It is not a maximum daily flow rate.

Further, IDEQ used an *average* concentration of 3.5 mg/L in calculating the Facility’s WLA which comes from the SR-HC TMDL. *Id.* at p. 176. 3.5 mg/L represents the average discharge concentration of total phosphorus in the effluent for facilities that do not currently monitor total phosphorus. *See* Att. 8 at p. 280. An average concentration is not the same as a maximum concentration amount. *See* Att. 3 at p. 176. In calculating the WLAs for municipal WWTPs in the SR-HC TMDL, IDEQ used the 3.5 mg/L average concentration and the design capacity of a facility to determine the WLA in pounds per day. *See* Att. 8 at p. 446, Table 4.0.8. This is the same methodology that IDEQ used in the Mid-Snake TMDL to determine the WLA for the City.<sup>4</sup> IDEQ stated in the SR-HC TMDL that the WLAs are to be applied “on a *monthly average* basis.” *Id.* at p. 445. Therefore, to be consistent with the assumptions made in the Mid-Snake TMDL which are based, in part, on assumptions made in the SR-HC TMDL, the Region translated the Facility’s WLA into an average monthly effluent limit in the Permit.

**B. The Region Was Correct In Developing An Average Monthly Total Phosphorus Effluent Limit Based Upon Statements Made In The Mid Snake TMDL Concerning Total Phosphorus And The Effect Of The WLA On The City.**

In addition to looking at the data and assumptions that IDEQ used to calculate the Facility’s WLA in the Mid Snake TMDL, the Region also looked at statements IDEQ made in

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<sup>4</sup> The calculation of the City’s WLA is as follows:

$$\text{WLA} = 0.4 \text{ mgd} \times 3.5 \text{ mg/L} \times 3.7854 = 5.3 \text{ kg/day (i.e., 11 lbs/day)}$$

Where: 3.7854 is the conversion factor from gallons to liters.

*See* Att. 7 at p. 2



the Mid Snake TMDL concerning the nature of phosphorus, the pollutant of concern, and the effect of a WLA of 11 lbs/day. First, the Region looked at the statements in the Mid Snake TMDL concerning the nature of total phosphorus, the pollutant of concern. The primary concern with respect to excess phosphorus or nutrients in a water body are algal blooms that deplete oxygen in the water column thus impairing designated and protected beneficial uses. See Att. 3 at p. 59-62. Phosphorus has a cumulative seasonal effect on the Snake River. As IDEQ explained in the Mid Snake TMDL:

The phosphorus [load capacity] is identified for an *average* flow scenario.... Transport and deposition of phosphorus, and the resulting algal growth within the reach, is *seasonal* in nature. Therefore, application of the ... [total phosphorus] target is also *seasonal* in nature.

*Id.* at 164 (emphasis added).<sup>5</sup> Thus, in determining how the City's WLA should be translated into the Permit, the Region considered the fact that the concern with phosphorus is the seasonal, not daily, effect on the Snake River.

Moreover, IDEQ repeatedly stated that the current WLA would not require the Facility to do any upgrades as long as the Facility was discharging at or below the maximum monthly design capacity of 0.4 mgd:

- "In regards to the point sources in the watershed, since their current allocation is based on their operation at design capacity, any growth that requires expansion of the existing facility triggers phosphorus removal requirements." *Id.* at p. 178;
- "For the two point sources in the basin (Marsing and Homedale WWTPs), it is the initial expectation that the sources will meet their specific WLAs immediately. This is because their WLAs are based on loads at their design capacity and both plants are discharging at below capacity." *Id.* at p. 185;

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<sup>5</sup> "Load capacity" is the amount of pollutant that a water body can receive without exceeding water quality standards. Att. 3 at p. 163.

- “This TMDL allows the [Facility] to continue discharging at their current level .... The [Facility] will have to experience considerable growth before design capacity is met....” *Id.* at p. 319.

If the Region translated the WLA of 11 lbs/day as a daily maximum effluent limit in the Permit, the City would be forced to upgrade its facility before reaching design capacity which was clearly not the intent IDEQ expressed in the TMDL. *See* Att. 9.

**C. The Region Was Correct In Translating The TMDL WLA To An Average Monthly Effluent Limit Based Upon IDEQ’s CWA 401 Certification.**

As the Region explained in the response to comments document, IDEQ certified through the CWA Section 401 certification process that the conditions and limits in the Permit, including the total phosphorus effluent limits, were consistent with the State’s water quality standards, including the Mid Snake TMDL. Specifically, in the 401 Certification, IDEQ stated that “the effluent limitations and associated requirements contained in the [Permit] are set at levels that comply [with the] waste load allocations” in the Mid-Snake TMDL. Att. 10 at p. 3. IDEQ further stated in its response to ICL’s comments on the 401 Certification that “[t]he [total phosphorus] wasteload allocation ... is based on operation at facility design capacity and monthly monitoring of total phosphorus. Therefore, this is a *monthly* allocation.” Att. 11 at IDEQ response to ICL comments attachment (emphasis added). In finalizing the Permit, the Region took into consideration and relied, in part, upon the statements made by IDEQ, the agency who established the Mid Snake TMDL, during the 401 Certification process. Att. 7 at p. 2-3.

**D. Summary**

As explained above and in the Region’s Response to Comments document, in translating the City’s WLA in the Mid Snake TMDL to an average monthly effluent limit in the Permit, the Region looked at the assumptions IDEQ made in calculating the City’s WLA in the TMDL, the nature of total phosphorus, statements made by IDEQ in the TMDL concerning the effect of the

WLA on the City, and statements made in IDEQ's CWA 401 Certification. ICL has failed to explain how the Region's translation from TMDL WLA to permit effluent limit is clearly erroneous or otherwise warrants review. Therefore, the EAB should deny ICL's Petition.

## V. CONCLUSION

ICL has failed to demonstrate that the Region committed clear error and has failed to raise any important policy considerations on any grounds raised in the Petition. Accordingly, for the foregoing reasons, the Region respectfully requests that the EAB deny the ICL's Petition for Review.

DATED: December 6, 2013

Respectfully Submitted



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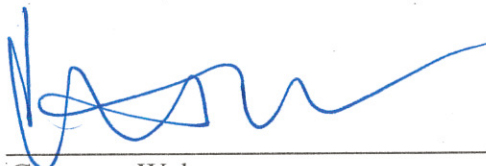
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## STATEMENT OF COMPLIANCE WITH WORD LIMITATION

I, Courtney J. Weber, hereby certify, in accordance with 40 C.F.R. § 124.19(d)(1)(iv), that this Response Brief, including headings, footnotes and quotations, contains less than 14,000 words.

DATED: December 6, 2013



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Courtney Weber  
Assistant Regional Counsel

**CERTIFICATE OF SERVICE**

I certify that the foregoing "EPA Region 10's Response Brief" was sent to the following persons, in the manner specified, on the date below:

By electronic filing (and hard copy via U.S. Mail) to:

Clerk of the Board  
U.S. Environmental Protection Agency  
Environmental Appeals Board  
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DATED: December 6, 2013



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