CITY OF SPOKANE

WASTEWATER MANAGEMENT
909 E. SPRAGUE AVENUE
SPOKANE, WASHINGTON 99202-2127
(509) 625-7900
FAX (509) 625-7940

DALE E. ARNOLD
DIRECTOR

April 2, 2010

Mr. Dustin Bilhimer
TMDL Dispute Coordinator
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600
dustin.bilhimer@ecy.wa.gov

Re: Spokane River Dissolved Oxygen TMDL
Dispute Resolution Comments

Dear Mr. Bilhimer:

The City of Spokane (City) has not submitted a request for dispute resolution regarding the Spokane River Dissolved Oxygen TMDL, which Ecology forwarded to EPA for approval on February 12, 2010. The City is, however, an "affected party" and as a result the City reviewed the various requests for dispute resolution and offers the following comments and observations. In general, the City also concurs with Spokane County's comments dated March 29, 2010; in particular the County's request that Ecology and EPA move forward expeditiously to complete the TMDL process so that the City, County and others may begin implementing it.

INLAND EMPIRE PAPER

While the City sympathizes with many of the technical concerns raised by IEP regarding the water quality standards (WQS) and the modeling performed in support of the TMDL, the overall approach to waste load allocations proposed by Ecology seems reasonable as it provides IEP (and other dischargers) with the ability to implement and test technology unique to its facility and then use off-sets to meet any "delta" that exists between what technology can achieve vs. the waste load allocation in the TMDL. The TMDL also incorporates an important review of the applicable WQS after 10 years of experience with the new technologies and "delta" reduction actions.

IEP should consider increased wastewater sampling in order to obtain a more favorable seasonal average phosphorous limit in its permit (i.e., 42 ug/l vs. 36 ug/l).

The City understands that IEP may have fewer opportunities for off-sets and is ready too work with IEP to identify appropriate opportunities, such non-point source activities and/or diverting some or all of IEP's flows to other wastewater systems or to land application. It may also be possible for IEP to use highly-treated effluent from Spokane

County's new plant as intake water and thereby obtain off-set credits for helping divert phosphorous that would otherwise be discharged to the River.

The City concurs that Long Lake Dam is not a "natural condition" under the WQS and that the agency's October 24, 2008 "interpretative guidance" is confusing and internally inconsistent.

The City concurs that Ecology needs to initiate rulemaking to address the current phosphorous standard in WAC 173-201A-602 (Table 602 WIRA 54).

The City concurs that the difference between Scenarios 1 and 2 in the TMDL analysis are insignificant whereas the additional cost of complying with the standards developed based on Scenario 2 are substantial.

SIERRA CLUB UPPER COLUMBIA RIVER GROUP

The City disagrees that the TMDL should exclude Spokane County's new plant, or that the TMDL should not provide a waste load allocation for that facility. Plans for the County's facility are sufficiently developed and specific that a waste load allocation can be calculated and should be included in the TMDL. In addition, the County's new plant will reduce the overall loading of phosphorus to the River, when combined with the other actions required in the TMDL, by providing a very high level of treatment and producing Class A reclaimed water suitable for reuse in a variety of settings in the future.

AVISTA

The City concurs with Avista's requests for additional clarification of the language in the TMDL. The most recent data should be used during the initial 10 year review of the success of the TMDL actions. The dominant aquatic habitat should specifically be assessed and considered during the initial 10 year review. Avista should, like the City, be allowed to reduce non-point sources as a means of improving water quality and meeting its obligations to help improve water quality. Table 7 in the TMDL should be corrected as requested. The TMDL should clearly indicate that Avista's responsibility is to use "reasonable and feasible" measures in accordance with the WQS and its CWA 401 certification.

CITY OF COEUR D'ALENE

The City is faced with similar concerns regarding the ability to achieve waste load allocations using technology alone. However, during the TMDL collaboration process both EPA and Ecology made it clear that technical impossibility was not a basis for

setting waste load allocations that may not achieve WQS, and that if necessary dischargers, such as the City and Coeur d'Alene, would be forced to stop discharging phosphorous to the extent necessary to achieve Washington's WQS. Faced with this prospect, combined with the agencies' willingness to allow the use of off-sets and "delta" reduction actions as a way to augment technology, and the agencies' stated willingness to take a hard look at both the TMDL waste load allocations and the WQS after 10 years, the City chose to work within the proposed TMDL framework. While the City shares Coeur d'Alene's on-going concerns, overall the TMDL is a reasonable approach that avoids the most draconian response of banning all phosphorous discharges to the River entirely.

To the extent Coeur d'Alene feels Idaho law or Federal law do not allow for off-sets or "delta" reduction activities such as enhanced storm water controls, water reuse, non-point source controls, or water conservation, the City urges Coeur d'Alene to work with the Idaho Legislature, Idaho DEQ, EPA and local citizen groups such as The Lands Council to develop reasonable alternatives similar to those available to the City under Washington law and Federal law. The City notes that some form of off-set or water quality trading is already available in Idaho. See, e.g., *Water Quality Pollutant Trading in Idaho* (IDEQ 2004) (http://www.deq.idaho.gov/water/prog_issues/waste_water/pollutant_trading/pollutant_trading_guidebook.pdf); and, http://www.deq.idaho.gov/WATER/prog_issues/waste_water/pollutant_trading/executing_trade.cfm).
These same mechanisms should be available to Coeur d'Alene to meet its obligations with respect to Washington's WQS.

Coeur d'Alene should consider increased wastewater sampling in order to obtain a more favorable seasonal average phosphorous limit in its permit (i.e., 42 ug/l vs. 36 ug/l). The City also encourages EPA to permit the use of reasonable statistical methods in deriving effluent limits based on higher sampling frequencies for Idaho dischargers.

The City concurs that the difference between Scenarios 1 and 2 in the TMDL analysis are insignificant whereas the additional cost of complying with the standards developed based on Scenario 2 are substantial.

The PSU report, Tables 14 and 15, do indicate that Idaho dischargers cause approximately 5% of the DO decrease in Long Lake. The PSU report also indicates that Idaho dischargers cause a 0.17 mg/l reduction in oxygen in Long Lake compared to the "no source" scenario. This is 85% of the 0.2 mg/l reduction in DO allowed for ***all*** human caused sources according to the WQS.

Coeur d'Alene's comment that Idaho sources, set at 100 or 200 ug/l, contribute 0.7 to 3% of the decrease in DO is confusing. According to Coeur d'Alene's study, these levels of treatment produce DO reductions of between 0.011 and 0.045 mg/l in Long Lake. The

WQS allow a decrease of 0.2, which means that the impact is between 5.5% (0.011 / 0.2 = 0.055) to 22.5% (0.045 / 0.2 = 0.225).

Ecology's approach to allocating nutrient loading in the Spokane River was neither arbitrary and capricious, nor inequitable. Ecology assumed that all existing municipal point sources could install similar, highly-efficient technology, and then used that assumption along with estimates of future wastewater flows provided by the TMDL participants. Coeur d'Alene and Post Falls provided wastewater flow projections at the same time the City did (October 2005) and Ecology has been using those flow projections in good faith throughout the TMDL process. While allocating based solely on population projections, without regard to what technology exists, might be one way to allocate pollutant loading it is certainly not the only reasonable way. Thus, Ecology's approach is not arbitrary and capricious. Moreover, given the overall goals of the Clean Water Act to improve water quality by adopting improving levels of technology over time, Ecology's approach of using technology improvements as the primary basis for allocating pollutant loadings is more fair generally, and more consistent with the CWA specifically, than simply dividing pollutant loadings based on population projects that may or may not be accurate.

The City shares Coeur d'Alene's concerns with the current WQS for Lake Spokane and looks forward to a thorough review by the agencies after the initial 10 years of TMDL implementation.

CDA has incorporated by reference all of the issues and arguments raised by Post Falls and Hayden Area Regional Sewer Board. The City's responses below are equally applicable.

POST FALLS AND HAYDEN AREA REGIONAL SEWER BOARD

The City would not object to NPDES permits issued to Idaho dischargers with mass limits for phosphorous and no effluent concentration limits. EPA's regulations generally require that effluent limits be expressed as concentrations but also offer some flexibility when implementing a TMDL. See, e.g., 40 CFR 122.41(d)(1)(vii) (permits to be "consistent with the assumptions and requirements" in a TMDL) and 122.45(d) and (f).

The City does not interpret the TMDL as setting any specific waste load allocations for Idaho dischargers, individually or collectively. Rather, following EPA's decision in September 2008 to reject Ecology's prior modeling efforts, Ecology needed to model the potential, cumulative effects of Idaho and Washington point sources on water quality in Washington State. EPA participated extensively in that modeling effort, presumably so that EPA will be in a position to develop appropriate NPDES permit limits for Idaho point sources that protect water quality in Washington.

The use of population trends/projections or gross surface area as the bases for allocating pollutant loadings would not be consistent with the goals of the Clean Water Act. Rather, it is more appropriate to allocate pollutant loadings based on each community implementing the most effective pollution controls and then providing off-sets and other "delta" reduction actions to the extent necessary to achieve WQS. One vendor of potentially-relevant pollution controls, Blue Water Technologies, is located in Kootenai County and has developed experience removing phosphorous from municipal wastewater in North Idaho. Idaho cities may be able to address some of the economic impact of meeting WQS by investing in local technology provided by a local company.

In addition to being more consistent with the CWA, Ecology's approach to waste load allocation in the TMDL is, in fact, fair. For example, as indicated in Fig. 12 of the report prepared by TischlerBise, the TMDL assumes Coeur d'Alene will reduce its phosphorous loading by 91.7% (i.e., from 27.54 lbs/day to 2.28 lbs/day); Post Falls will reduce its phosphorous loading by 92.5% (i.e., from 20.03 lbs/day to 1.5 lbs/day); Hayden will reduce its phosphorous loading by 88.3% (i.e., from 12.50 lbs/day to 0.96 lbs/day); and, the City of Spokane will reduce its phosphorous loading by 94.6% (i.e., from 266.76 lbs/day to 14.3 lbs/day). This is neither unfair nor unreasonable.

Even if one assumes that population trends/projections are an appropriate basis for allocating pollutant loadings consistent with the goals of the Clean Water Act, there are significant flaws in the March 2010 report by TischlerBise. TischlerBise assumes a direct and uniform relationship between population, demand for wastewater services, and phosphorous impacts. This may not be the case, and the science may indicate that the relationship is actually far more complex. The simple relationship intimated in the TischlerBise report fails to consider demand management, land use diversity, variations in phosphorous output by housing density, application of technology to reduce phosphorous impact, or any other factors that may add significant fluctuation in a ratio the report presumes is constant.

For example, the percentage of households connected to sewer systems may be different in Idaho and Washington. Due to aggressive land use policies, there should be a higher percentage of households connected to sewer systems in the Spokane County, but the TischlerBise report does not consider this or how it might bear on a reasonable phosphorous allocation. As another example, the TischlerBise report does not acknowledge the comparative levels of urbanization in Spokane County and Kootenai County and the effect this has on demand for wastewater services. Spokane County is more industrialized and more intensely developed, with a wide range of housing types and a mature commercial and industrial landscape. The report acknowledges that many Kootenai County residents travel to Spokane County to work but fails to note that few Spokane County residents commute to Kootenai County to work. Spokane County's industrial, commercial and institutional sector is more robust than Kootenai County's, arguing for a different approach to allocating phosphorous than one solely based on population.

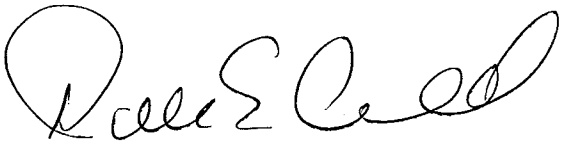
By making assumptions and refusing to consider alternative ways of managing phosphorous loads, the "de facto growth cap" is something of a self-imposed hardship. This makes sense only presuming that Idaho jurisdictions will consider no changes to policy that directly influence the supply of phosphorous in wastewater (such as a ban on high levels of phosphate in detergents) or its management in other ways (such as land use policy or water conservation). If parity in outcomes is what the TischlerBise report seeks, then parity in policy commitment should also be considered. By presuming Idaho policy to be static, the report effectively admits that Idaho jurisdictions will make no policy adjustments to help preserve the water resource shared by Idaho and Washington.

Population forecasts in the TischlerBise report are pinned solely on the Woods and Poole 2008 study. Local agency plans developed in Washington State under the Growth Management Act present population forecasts that are thoroughly vetted through a public, political and academic process, establishing population levels that are consistent with local agency plans. There are no such local agency plans developed in Idaho, so any population forecast proposed for that area has no comprehensive vetting process in place to validate it. If subjected to a local agency planning process, those population figures would likely be quite different than the solely market-based forecast provided in the report.

In addition, we note that Woods and Poole issued an updated version of their forecasts in 2010 which may render the TischlerBise March 2010 report out-of-date.
See, Complete Economic and Demographic Data Source 2010;
www.woodsandpoole.com/main.php?cat=country. The 2008 data may misrepresent actual demographic trends, and, by extension, the population forecasts. The region's economy, particularly in northern Idaho, changed dramatically in 2008 and 2009, terminating abruptly the development boom that had transformed much of the Rathdrum Prairie into a suburban residential landscape. It may distort the gross regional product forecast as well, basing the forecast's trajectory on an economic boom that the last two years has proven to be failing.

Thank you for the opportunity to provide these comments. The City is committed to implementing the TMDL. We will be present at the April 5 dispute resolution meeting to listen to the discussion and answer any questions the panel members may have regarding the City's comments.

Sincerely,



Dale Arnold