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June 24, 2008

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RE: Draft Spokane River Dissolved Oxygen TMDL

Dear Sirs:

Please accept the following comments by Northwest Pulp and Paper Association (NWPPA) for the record closing June 24, 2008 for the “Spokane River and Lake Spokane Dissolved Oxygen Total Maximum Daily Load – Water Quality Improvement Report” hereafter referred to as the Spokane DO TMDL.

NWPPA members own and operate pulp and paper mills on the major rivers in the states of Idaho, Oregon and Washington. All of these rivers have been subject to TMDLs for a variety of water quality issues. NWPPA’s perspective is that increasingly we are living in a TMDL-constrained environment and that it is important that TMDLs not only achieve their objectives, but that they also are equitable and maintain the financial viability of businesses committed to their environmental responsibilities.

Throughout every step of the process to develop the Spokane DO TMDL, NWPPA’s affected member, Inland Empire Paper Co., has been committed to installing the most effective technology possible. Nevertheless the Spokane DO TMDL and Ecology’s strategy for implementing it in the NPDES permit for the mill appear to be on a course that may undermine and threaten the financial viability of the facility. Meanwhile the TMDL inadequately address other contributing factors or sets very low expectations for them.

There are both laudable concepts in this TMDL and flawed concepts that could be improved. However, unless Ecology finds an equitable means to implement it that does not threaten the existence of a venerable and environmentally responsible business, it can never be more than a failed TMDL.

The following are NWPPA's specific comments. These follow the topics listed in the notice posted on Ecology's website summarizing the changes in the revised draft TMDL.

1. Topic List: Implementation Timeframe for TMDL, Permits and Ten-Year Assessment

Comment: NWPPA supports the original TMDL, Managed Implementation Plan and Foundational Concepts as memorialized by the Memorandum of Agreement and opposes the change requiring attainment of waste load allocations in 10 years instead of 20.

The current (May 2008) draft Spokane DO TMDL revises the 2007 draft that would have implemented the concepts set forth in the *Foundational Concepts for the Spokane River TMDL Managed Implementation Plan (Foundational Concepts)* as memorialized by the *Memorandum of Agreement Regarding Foundational Concept, Managed Implementation Plan, and Dissolved Oxygen TMDL for the Spokane River* signed in March of 2007 by Jay Manning on behalf of the Department of Ecology, by Wayne Andresen on behalf of Inland Empire Paper and by other dischargers.

It is clear from the above predecessor documents that Ecology intended and signed a commitment to implement a very different approach for point sources than embodied in the current draft Spokane DO TMDL. The original concept was that point sources would install the most effective treatment technology within 10 years but would have an interim limit at that point with a final waste load allocation applicable at year 20. The long time frame was established in recognition of the fact that there is no technology available today that will achieve the final waste load allocations.

Ecology has departed from this concept and proposes that the final waste load allocations will become effective in 10 years instead of the original 20. See page 37 stating that Ecology is "*clarifying* in this TMDL that compliance schedules in NPDES permits will include enforceable limits..." This is disingenuous. It is not a *clarification* rather it is an abrogation of the Memorandum of Agreement. Secondly the issue is not whether or not there are enforceable limits. The issue is the time frame for reaching the final waste load allocations.

There have been no changes in the factors (limitations of technology) that necessitated the original plan. Rather, it appears that Ecology is simply taking a narrow view of its regulations. These regulations could equally well be interpreted in a manner that reconciles with the MOA rather abrogates it. The mill has offered such an interpretation (re-attached to these comments).

In sum, NWPPA opposes the change in the timeframe for achieving final waste load allocations.

2. Topic List: Avista Dams, Load and Waste Load Allocations, Stormwater

Comment: NWPPA Opposes Premise of the Spokane DO TMDL that Point Sources are Subject to Extremely Stringent Requirements While Non-point Sources Bear Far Less Responsibility

The Spokane DO TMDL should equitably address all factors that contribute nutrients (namely phosphorous and ammonia) *and* all factors that create the environment whereby the nutrients cause eutrophication and oxygen depletion. Instead Ecology is proposing, in effect, that the responsibility will primarily fall upon point sources. This is very similar to the approach in the 1989 TMDL and Phosphorous Management Plan. The primary feature of the 1989 effort was that municipalities would reduce phosphorous by 85%. Page 3 of the current draft Spokane DO TMDL acknowledges that the 1989 approach did not adequately protect water quality and the problems continued.

Although the current draft Spokane TMDL contains creative discussions regarding the non-point sources, at its essence, it is basically the same idea as the failed 1989 approach. Not only on this water body, but virtually every water body in the state, Ecology initially focuses its efforts on requirements for point sources through NPDES permits. After a period of time, population increases and expanded non-point activities compensate for the initial improvements and the water remains impaired. Then Ecology seeks another round of improvements from point sources. Ultimately Ecology needs to recognize that this mind-set will not lead to lasting water quality improvements nor can point sources compensate for growing non-point water quality problems, particularly those associated with population growth.

In the context of the Spokane DO TMDL Ecology has failed to impose objective, measurable or enforceable requirements on the following sources:

a. Avista Dams, particularly Long Lake Dam that creates Lake Spokane (p. 4 -5)

Long Lake Dam creates Lake Spokane, a 24 mile-long reservoir. It is one of four dams (the others are run-of-the-river hydroelectric facilities) operated by Avista that are currently being re-licensed by the Federal Energy Regulatory Commission. The relicensing requires that Ecology issue a permit under Section 401 of the Clean Water Act. Ecology indicates that it has added new language on p. 4-5 describing the certification process: “this permit will require that flows through the hydroelectric facilities have adequate levels of dissolved oxygen in accordance with this TMDL for downstream uses.” Ecology’s modeling indicates that dissolved oxygen is only a problem behind Long Lake Dam.

Contrary to Ecology’s assertions above, neither the 401 certification process nor the language of the TMDL contain any requirements that Avista produce “adequate levels of dissolved oxygen in accordance with this TMDL...”

NWPPA has reviewed the 401 certification (comments attached) and finds little or nothing that imposes objective, measurable and enforceable requirements on Avista for the operation of Long Lake Dam for the purpose of improving dissolved oxygen. Ecology is requiring some increased flows for aesthetic reasons but not for water quality improvement. Ecology instead has “soft” requirements that Avista continue participation in the TMDL Advisory Committee and perform some studies (two-year water quality assessment) and perhaps if needed, something might be required in 10 years. It begs credibility that this set of requirements is in any way equitable or comparable to the burden on point sources to install costly technology that may run to the tens to hundreds of millions of dollars.

The TMDL assumptions do not account for any change in operating conditions for Long Lake Dam or any of the mitigation that might be required as part of the 401 certification process. It is also indicative of Ecology’s thinking that P. 47 (Table 7) summarizes the organizational commitments to meet the TMDL. ***There are no commitments mentioned for Avista.*** The other parties mentioned are Ecology, the dischargers, the treatment plants, stormwater dischargers and the Spokane River TMDL Oversight Committee. If neither the 401 certification process nor the TMDL impose requirements on Avista for the purpose of improving water quality, then Ecology’s new language on p 4-5 of the revised TMDL are without effect.

Although Avista does not contribute phosphorous and other nutrients, nevertheless Avista’s role is not a passive one. Long Lake Dam creates the environment whereby the nutrients have an opportunity to cause eutrophication and water quality degradation. There would be no hypolimnion with depressed dissolved oxygen at the lower strata if there were no reservoir. Furthermore, river flows have declined over the past 100 years compounding the issue.

The FEIS for the 401 certification notes the impacts of project operations on Long Lake reservoir dissolved oxygen levels. Specifically it notes that the model shows the 8.0 milligrams per liter DO standard would be met under unimpounded conditions whereas under current conditions the standard is not met 3 to 5 months of the year.

NWPPA is not an advocate of dam removal or breaching. Rather NWPPA advocates that all contributing factors must be accounted for with objective, measurable and enforceable requirements in a TMDL particularly as circumstances change over time.

For the purpose of these comments, NWPPA believes it is a fundamental technical and legal flaw for the TMDL to fail to state the impact of the dam based on information Ecology has readily available due to its role in the 401 certification process. Secondly, NWPPA wishes to point out that Ecology has authority under its water quality regulations to condition in-stream flows to meet

water quality objectives. Ecology successfully argued for this authority and was affirmed by the Washington Supreme Court in *Department of Ecology v. PUD No.1 of Jefferson County*, 121 Wash2d 179, 189-849.

The failure of the TMDL to mention the actual role of the dams, the failure of the TMDL to impose meaningful conditions, and Ecology's failure to impose conditions in the 401 certification process appears arbitrary and capricious in light of the significance of the issues identified in this TMDL.

NWPPA strongly urges that Ecology develop waste load allocations for point sources and load allocations for the dams in a coordinated fashion by pursuing one of the following options:

- The dams should be assigned a load allocation as part of this TMDL revision process; or
- Avista be allowed to complete the two-year water quality assessment and that information used to re-calculate waste load allocations for point sources and load allocations for the dams; or
- Ecology should proceed with plans for point sources to install the most effective technology as planned but establish allocations at the 10-year assessment.

b. The Spokane DO TMDL Fails to Adequately Address Non-Point Sources.

The Spokane DO TMDL assigns a load allocation to the mouths of the tributaries: Hangman Creek, Coulee Creek, and the Little Spokane River (P. 28). However, no load allocation is assigned to non-point sources directly on the mainstem. In other words, all of the non-point sources on the middle Spokane and lower Spokane watersheds are not accounted for. This includes a large track of un-sewered homes in the Suncrest development on Lake Spokane and the entire surface run-off from the City of Spokane. The TMDL simply fails to impose any requirements on these undoubtedly large contributors of nutrients.

c. The Spokane DO TMDL Fails to Adequately Address Up-River Contribution from Sources in Idaho.

The Spokane DO TMDL states on P. 21: "According to EPA, the Idaho permit requirements for phosphorous, ammonia and CBOD ensure the Idaho sources achieve the Washington dissolved oxygen standard for Lake Spokane. The permit conditions ensure that these sources will no measurable impact on dissolved oxygen levels in Washington, both at the state line and in Lake Spokane."

There are several things wrong with these statements. First, the TMDL provides no documentation to support the assertions. Secondly, for TMDL purposes, it cannot be enough that an up-river state simply deliver to a down-river state water quality at or near the water quality standard. This position, would hypothetically

allow the up-river sources to consume most of the loading capacity (just short of exceeding the water quality standards) while leaving a disproportionate burden on the down-river sources.

Furthermore, it appears in separate actions, EPA permits for the Idaho sources impose far less stringent requirements for phosphorous than this TMDL would require for Washington sources. Idaho sources would be required to attain 50 µg/liter phosphorus versus less than 10 µg/liter for Washington sources. In effect, it appears that EPA is allowing the Idaho sources to “pre-load” the river.

Under the U.S. Supreme Court decision in *Oklahoma v. Arkansas*, it is well established that one state has the right to impose conditions on an up-river state in order to achieve its water quality standards. Washington’s Department of Ecology should assert that right and require EPA permits for Idaho sources be at least as stringent as the Washington permits for point sources.

d. The Spokane DO TMDL appears to overstate the contribution of Washington Point Sources

The TMDL summarizes the technical analysis, P. 14 -19. Five scenarios are examined: “Current,” “No-point sources from Washington,” “No-Source,” “SOD or no-point with maximum sediment oxygen demand,” and “Permitted.”

The TMDL concludes on P. 19: “Point sources of nutrients cause the majority of dissolved oxygen depletion in the Lake Spokane interflow zone (metalimnion) during the summer.

This conclusion appears at odds with Figure 2 on P. 18, which shows virtually identical model results for the “Current” conditions and the “No-point” source condition. If these graphs are virtually identical, does that not suggest instead that point sources have virtually no impact?

3. Topic List: Language Changes – non-point source reductions on mainstem of the Spokane River and that dischargers should pursue actions to reduce non-point pollution (p 27 and 40)

Comment: The Spokane DO TMDL creates unrealistic expectation that point sources unable to meet final numeric waste load allocations will be able to obtain the remaining reductions from non-point sources given that Ecology itself is not able to address most non-point sources.

The Spokane DO TMDL recognizes that technology does not exist to achieve the very low waste load allocations assigned to point sources. To address this problem, the TMDL contains an innovative and admirable concept whereby point sources would prepare a “Delta Elimination Plan” and schedule for other types of

phosphorous removal termed “target pursuit actions.” These could be further technology upgrades, if any become available in the future. However it appears that Ecology is primarily advocating that point sources will undertake measures to reduce non-point contributions. Ecology also will provide assistance in reaching non-point sources. A Regional Non-point Source Reduction Program will be established and funding will be sought.

NWPPA commends Ecology for this creative program and wishes to encourage the general idea.

NWPPA has concerns that this approach should be a voluntary one for point sources and not become, in effect, involuntary as the primary route to achieving the needed “Delta Elimination” to meet the terms of an NPDES permit.

NWPPA’s concerns are:

- The TMDL seems to offer potential opportunities to meet “Delta Elimination” requirements in the form of reductions from non-point sources on the mainstem. A significant portion of this will be from stormwater. However, Ecology itself has not shown that it can address stormwater effectively. By Ecology’s estimation 95% of general stormwater permittees are in non-compliance. This extraordinary level of non-compliance persists even though Ecology has full enforcement powers. It seems unlikely that a private sector entity will do better under a mere contractual arrangement.
- Ecology does not have any policies detailing what level of documentation will satisfy the need that such measure “provide reasonable assurance” that water quality standards will be met.
- The idea is a fine one in hypothetical terms, but point sources will never be able to produce the assurances of compliance comparable to what is expected in the NPDES permitting regime.
- Point sources typically are in the business of running their own business, not running the compliance affairs of others.

4. Topic: New Recommendation

NWPPA Recommends that Ecology include an additional mechanism for meeting the “Delta Minimization” needs of Point Sources.

As stated above, NWPPA applauds the creative thinking Ecology has exhibited in the TMDL, but does not believe that the mechanisms identified go far enough or are practical, primarily because Ecology has not shown itself able to address non-point stormwater.

NWPPA recommends that Ecology include a commitment in the Spokane DO TMDL on p 31 to: (a) quantify the margin of safety (MOS), and (b) be prepared to “lend” from the

MOS if needed for existing point sources that have installed the most appropriate technology possible but are still unable to meet the very low waste load allocations. Page 31 states that the required MOS is implicit, meaning that it is based on using conservative assumptions in the modeling and issuance of waste load allocations equal to instream concentrations. Furthermore, over time, reducing phosphorous and CBOD loads will reduce sediment oxygen demand. This was not considered in the modeling and therefore is considered an additional margin of safety.

Ecology should quantify this additional margin of safety as part of its commitments (Table 7) and if appropriate, make additional allocations from the excess MOS.

This is basically an approach under consideration in the Willamette Temperature TMDL and may offer a measure of additional flexibility for NPDES permitted point sources.

NWPPA would be happy to meet with you to discuss this concept further. Thank-you for consideration of these comments.

Sincerely,

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Llewellyn Matthews, Executive Director

Attachments

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