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Date: December 17, 2010

**Washington Dept. of Ecology  
Surface Water Quality Standards  
P.O. Box 47600  
Olympia, WA 98504-7600**

**RE: Triennial Review of Surface Water Quality Standards – Comments on  
Human Health-based Toxics Criteria**

**Attn: Becca Conklin**

The following are the comments of the Northwest Pulp and Paper Association regarding the scoping process for the Triennial Review of Surface Water Standards commenced in November 2010. NWPPA appreciates the effort required to organize this large complex issue and the effort that Ecology devoted to the initial round of public meetings to initiate this reviews. These comments are in response to the opportunity to provide preliminary comments on issues of concern.

Oregon Effort to Adopt Higher Fish Consumption Rates for Surface Water Quality Standards is Based on a Directive to Include Adequate Implementation Measures

NWPPA is concerned primarily with the proposal that Ecology may adopt higher fish consumption rates based on the work of the State of Oregon to adopt 175 grams per day as requested by the Confederated Tribes of the Umatilla Indian Reservation (CTUIR). In October 2008, the Oregon Environmental Quality Commission (EQC) directed that the Department of Environmental Quality (DEQ) undertake a process that would result in standards based on the 175 grams per day and that the rulemaking be scientifically sound and include implementation measures. It is critically important that any effort undertaken by Ecology also be based on sound science and includes implementation measures.

If Oregon and Washington adopt human health water quality standards based on 175 grams per day, these standards will be, by far, the most stringent statewide water quality standards in the nation.

NWPPA has participated in the Oregon process for the past three years and supported the effort to increase the fish consumption rate that for the purpose of

developing new human health based water quality standards *provided that* adequate implementation measures are included.

In the context of this issue, “implementation measures” means flexible mechanisms included in water quality standards to address that provide a pathway to compliance for dischargers that cannot immediately comply with the more stringent standards or where a compliance obligation would produce a strange outcome.

Examples include:

- Natural earth metals in water may exceed the more stringent standards. These include arsenic, iron and others due to the volcanic origins of the region.
- Human caused pollutants may exist at trace levels and be ubiquitous in the water due to air deposition and re-entrainment from sediments. Examples include long-range transport of mercury and PCBs from combustion sources.
- Technology may not exist or may not be proven to be reliable to treat very trace levels of contaminants.

NWPPA is strongly of the opinion that it is not sufficient to simply adopt numeric criteria based on a higher fish consumption rate.

Ecology must have a plan that moves toward reduction of toxics but that also addresses two categories of issues:

1. *Individual Permit Issues*
2. *Landscape Issues*

These are described in greater detail below.

**1. Individual Permit Issues: Ecology Does Not Currently Have Adequate Implementation Measures “Tools” in the Standards and Will Need To Make These Tools More Useable and Create New Tools.**

Ecology must also examine each of the categories of issues above and include adequate measures to provide relief to dischargers either where it would not be meaningful to require treatment or where treatment technology is unproven or prohibitively costly.

Ecology’s presentation at the public meetings discussed the need for adoption and updates to toxic criteria and discussed the “tools” in the standards for implementation.

The tools listed by Ecology include:

- Mixing Zones for permitted dischargers
- Compliance Schedules where standards cannot immediately be met
- Natural conditions provisions
- Water quality offsets
- Although Ecology did not include it, variances should also have been on the list.

These measures, as now applied by Ecology, **will not** be sufficient to address the types of new situations that will be triggered by more stringent toxics water quality standards. For each of the tools listed above, Ecology has an interpretation that limits the utility of the tool in the context of toxic water quality standards based on a much higher fish consumption rate. For example, mixing zones may not be allowed for toxics. Compliance schedules (and variances) are typically for limited duration and appropriate technology may not be available within the available time period. Ecology has a track record of not using the natural conditions provision. Water quality offsets are of uncertain status.

In addition to adjustments to make these tools more functional, Ecology will need to consider additional tools including:

- Pass through credits
- De Minimus exemptions
- Functional long-term variances
- Multi-discharge variances

**2. Landscape Issues: Ecology Needs Plan (using available mechanisms under the CWA) to Address Future Widespread Listings of Impairment That Cannot Be Solved Through The TMDL Process**

Ecology needs to commence long-term planning to address the fact that the state will have more water bodies listed as impaired waters in the future, even where actual water quality remains the same or shows improvement. Additional listings of impaired waters will of course occur if water quality degrades below water quality standards. However, additional listings will also be driven by two factors: (1) Ecology will ultimately have more stringent water quality standards that incorporate higher fish consumption rates of native Americans; and (2) Analytical detection methods will continue to improve and many substances, toxic and conventional, will be measurable that are not measurable today.

With three decades of controls of point sources, most of the “new” water quality listings due to the two factors cited above would likely involve substances that are ubiquitous in the environment. These substances may either be naturally occurring or human-caused. Arsenic is an example of naturally occurring earth metal that is ubiquitous in Pacific Northwest surface and groundwater and is present in many

locations at levels that exceed water quality standards. With new more stringent water quality standards likely to be adopted in the near future, most Washington waters will be many times over the arsenic criteria. A similar situation will exist for other naturally occurring earth metals. PCBs are an example of a man-made substance that has become ubiquitous in Pacific Northwest waters at very low levels but at levels below the detection limits of the most commonly used EPA approved methods. PCBs will become detectable virtually everywhere using the new methods EPA is in the process of approving. Mercury is an example of a substance that will likely exceed water quality standards in the future and is both a naturally occurring earth metal and is also present due to long-range air deposition from combustion sources such as coal-fired power production in China.

Ecology should commence a comprehensive long-term strategic process to review and develop existing mechanisms under the federal and state clean water acts to address these issues. For example, Ecology should include the following mechanisms in a comprehensive long-term strategic plan:

1. Ecology should commence rulemaking to implement flexible implementation mechanisms allowed under the federal clean water act, for example:
  - Use state discretion to reduce regulatory risk levels (now 10–6) where naturally occurring earth metals exceed this level.
  - Articulate guidance *and commit to expeditious processing* of any Use Attainability Analysis or site-specific water quality standards revision petitions/applications that might be received.
2. Ecology should commence rulemaking to implement mechanisms currently authorized by the state legislature, for example:
  - RCW 90.48.605 provides: The department shall amend the state water quality standards to authorize compliance schedules in excess of ten years for discharge permits issued under this chapter that implement allocations contained in a total maximum daily load under certain circumstances. Any such amendment must be submitted to the United States environmental protection agency under the clean water act. Compliance schedules for the permits may exceed ten years if the department determines that: (1) The permittee is meeting its requirements under the total maximum daily load as soon as possible; (2) The actions proposed in the compliance schedule are sufficient to achieve water quality standards as soon as possible; (3) A compliance schedule is appropriate; and (4) The permittee is not able to meet its waste load allocation solely by controlling and treating its own effluent.

- RCW 90.48.422(2) provides: “When a water quality standard cannot be reasonably met through the issuance of permits or regulatory orders issued under the authority of this chapter, the department may use voluntary, incentive-based methods including funding of water conservation projects, lease and purchase of water rights, development of new storage projects, or habitat restoration projects in an attempt to meet water quality standards.”

Thank-you for your consideration of these comments and I look forward to being part of this process as it moves forward.

Sincerely,

Llewellyn Matthews,  
Executive Director

Cc. Melissa Gildersleeve, Ecology  
cpSusan Braley, Ecology