PUBLIC WORKS
EVERETT

March 17, 2015

Cheryl Niemi
Washington State Department of Ecology
Water Quality Program
P.O. Box 47600, Olympia, WA 98504-7600

RE: Proposed Water Quality Standards

Dear Ms. Niemi:

The City of Everett thanks DOE for the reasonable approach taken for mercury, arsenic and PCBs. We recognize that the new human health criteria are more protective, or equally protective when compared to the currently applicable criteria. Ecology has been clear about this level of protection, but incomplete understanding of all the pieces involved in applying the creteria (over a 70 year time frame, 2 liters per day of untreated drinking water from the same source, etc.) has led to flawed assumptions that have been repeated frequently in the media.

Part of the problem is that it is incorrect to assign a single risk value to the criteria. For cancer risk, the criteria represent a range of risks covering a range of fish consumption values. This is true for the current NTR criteria, EPA's National Recommended Water Quality Criteria, and the state's proposed new criteria. Generally speaking, the new proposed risk range is about 2.7 times more protective than the NTR criteria. For non-carcinogenic based criteria, the use of a single fish consumption rate is appropriate and the resulting criteria are about 27 times more protective than the NTR criteria. Rather than saying the criteria are based on a one in a hundred thousand cancer risk rate, the water quality standards need to state that the criteria provide a range of protection for a wide range of fish consumption rates.

We agree with the use of an RSC of 1, and agree with DOE's wanting to keep the criteria relevant to water exposures and the associated CWA tools. We are pleased that Ecology eloquently voiced this position in their comments to EPA concerning EPA's proposed revisions to EPA's national recommended human health water quality criteria.

We agree that for some toxics, CWA tools are not able to address significant sources, and that alternative tools, such as Chemical Action Plans, are more appropriate. Such plans can, and have in the past, lead to some bans, and also to some push for alternative assessments, and that is appropriate. In the past, the bans have been imposed by the legislature. The Governor is linking this rule making to a legislative proposal to address toxics. We disagree with any requirement that the two activities must be linked. The rule-making is well thought out, the process was extensive and open, and the decisions made are well explained. The rule-making

stands on its own merit and should not be stalled by the toxics legislation, or by pressure from EPA.

We are concerned about the possible impacts of these proposed human health criteria in the situation where newer test methods come along that then find some substances that were not known to be exceeding criteria in receiving waters. This is the situation that could suddenly drive end-of-pipe effluent limits with no dilution benefit, while the CWA regulatory tools might be ineffective because of non-CWA regulated sources (much like for PCBs). The economic analysis acknowledged there could be possible future impacts associated with new methods, but that there was no way to quantify that now. To protect against this, we strongly recommend that the applicable test methods for each of these toxicants be spelled out and adopted in a table in this rule. The applicable methods are already known and identified by DOE in Appendix B in the DEIS accompanying this rule-making. The applicable test methods could be presented either as 1) a table immediately following table 240, 2) another column in table 240, or it could go into WAC 173-201A-260(h). In either event, WAC 173-201A-260(h) needs to be changed to preclude imposition of new methods approved by EPA before the state and permittees have had a chance to review and evaluate them, and adopt the methods into WAC173-201A through rule-making. With this strategy, the economic analysis would not have to consider the effect of future test methods, as those would be considered when such methods were adopted into the rule.

We understand that the governor made a policy call that if the newly calculated criteria were less stringent than the NTR criteria, the state would adopt the NTR criteria instead. This was sort of expressed as a "no backsliding" approach. Unfortunately, it means that if there are problems with the NTR criteria, we are stuck with the problems, and if new and better information is available that says the criteria should be less stringent, we can't consider that. Consider the carcinogenic PAH criteria. The NTR criteria treated all of these PAHs as equal to Benzo(a)pyrene, yet it is now acknowledged that they are different and can and should be treated as B(a)P equivalents. The carcinogenic PAH criteria also assume that PAHs bioconcentrate in fish tissue, when fish actually metabolize PAHs. Bioconcentration of PAHs is relevant to shellfish, which make up only part of fish consumption rates. If these could be considered, the carcinogenic PAH criteria could be less stringent, but we are effectively prohibited from this and are stuck with the faulty NTR criteria.

We believe that there is an additional implementation tool that needs to be specifically recognized in the rule. That is the use of Chemical Action Plans in lieu of a TMDL. The TMDL approach is limited to CWA tools focused on NPDES permitted discharges. Sometimes, that isn't going to accomplish much, while it could impose great costs and liability if unable to comply. The TMDL-imposed PCB limit for the City of Walla Walla of 1 gram per year is an example of an ineffective action, as the POTW loadings account for less than 2% of the total. A CAP approach can recognize the bigger picture, identify what is feasible to do and also identify what is not feasible. The mercury CAP and the proposed PCB CAP are good examples. CAPs such as for mercury and PCBs should count in the 303(d) process as a Category 4(b) action. There should be a new section in the rule that acknowledges that non-TMDL implementation tools should be encouraged, especially where traditional TMDL and CWA tools will not be very useful.

The following pages include comments tied to specific sections in the regulation and the supporting documents.

These comments were produced with the assistance of Mr. Lincoln Loehr. Thank you for the opportunity to participate meaningfully in this process.

Sincerely,

Heather Kibbey
Surface Water Manager

CC:
Pat McClain
Jim Miller
Lincoln Loehr
Attachments

Specific Comments re regulatory language.

WAC 173-201A-240(5)(b) human health protection. Delete the third sentence which says:

"The human health criteria in the tables were calculated using a fish consumption rate of 175 g/day."

And replace it with the following:

"The human health criteria for non-carcinogens are based on a hazard quotient of 1 and a fish consumption rate of 175 grams/day (11.6 pounds/month). The human health criteria for carcinogens covers a range of fish consumption rates and associated risk levels such that 17.5 grams/day (1.2 pounds/month) is protected at one in a million risk level, 175 grams/day (11.6 pounds/month) at one in a hundred thousand risk level, and 1750 grams/day (116 pounds/month) at one in ten thousand risk level."

The reason for this recommendation is to better convey information about the criteria.

Table 240. Acute marine copper criteria should have listed footnote "b" instead of "c".

Table 240. There are 18 compounds included on the list for which there are no criteria. These compounds should be removed, as including them on the list serves no purpose. [Or, if there is a purpose, then there should be a footnote applied to each compound explaining the purpose for including it in the table.]

Table 240, footnote "dd". Remove the second sentence which pertains to cyanide. Footnote "dd" is not used for cyanide. Footnote "ee" is used for cyanide and has the same observation as the sentence in "dd", which is appropriate.

Table 240, footnote "C". Change the first sentence to read,

"This criterion was calculated based on an additional lifetime cancer risk of one in one hundred thousand (1 x 10-5 risk level) for an average fish consumption rate of 175 grams/day. The criterion is protective over a range of fish consumption such that 17.5 grams/day is protected at one in one million (1 x 10-6 risk level) and 1,750 grams/day is protected at one in ten thousand (1 x 10-4 risk level)."

This better conveys that the criteria relate to a range of risk levels for a range of fish consumption rates. (See comment re WAC 173-201A-240(5)(b) above.)

Table 240, footnote "H". The footnote pertains to the mercury criteria. Consider adding a sentence noting

"The chronic aquatic life criteria are more stringent, are actually based on human health (see footnote "s") and are more protective of human health than the criteria in 40 CFR 131.36."

WAC 173-201A-420(3)(f)(iii) says that

"If the variance is for a water body, or stretch of water, the following information must also be provided to the department." ..... "(iii) Best management practices for nonpermitted sources that meet the requirements of chapter 90.48 RCW."

What does this mean? Is atmospheric transport and deposition included? Is groundwater included? What about bacteria contributions from wildlife? How is an entity initiating a variance request supposed to provide this information? It clearly goes beyond what the entity has operational control over. Perhaps this is where a Chemical Action Plan could be referred to, if the state has prepared one for the parameter of concern.

Specific comments re DEIS

Page 23, Comparison of alternatives – Arsenic, Table describing Usability

The Note in the table says that Alternative 2 criteria concentrations are exceeded frequently in the state, but less frequently than Alternatives 1 and 2.

Assuming the statement is intended to pertain to surface waters, it is incorrect to say that the Alternative 2 criteria (10 ug/l) is exceeded frequently. It is not. On page 22, in the first paragraph, the DEIS says that in Washington, natural levels of inorganic arsenic in surface waters, based on discrete samples, may infrequently exceed the SDWA MCL of 10 ug/l. In actuality, exceedances will be very rare and where found may have just been because Ecology failed to note that they were less than a detection level.