

4/24/12

Ken,

Thanks for taking the time to put together some defined proposals for the implementation tools rule-making. It is obvious a lot of thought went into the document we discussed on March 28<sup>th</sup>, and your ideas highlight how complex working within the CWA can be. Information prepared in response to discussion we had at that meeting is divided into two sections below:

1. Specific issues that were discussed at the March 28 meeting that need clarification; and,
2. Comments/responses to the specific ideas in your 3/22/12 e-mail to Melissa Gildersleeve and me.

This response is not a final document. It is marked draft because (1) I want to give more time and thought to some of the ideas you presented, (2) it will need more review and discussion before it can be finalized, and, (3) there are probably areas where you will want to clarify your ideas in case I misunderstood them and need to rethink my draft response. When reviewing my draft comments please keep in mind the following items which are important as Ecology considers changes to the WQS, and as timelines are considered:

- The recent split decision from the federal court in Oregon, on Oregon’s temperature standards (*Nw. Env’tl. Advocates v. EPA*, 3:05-CV-01876-AC, 2012 WL 653757 (D. Or. Feb. 28, 2012)), clearly speaks to the concept of “intrinsically intertwined” numeric standards and control strategies to meet the numerics, as well as to how natural background provisions are used. Careful thought as to how this could affect Washington rule-making is needed.
- The current rule plan is to develop implementation tools (variances and compliance schedules) that directly address situations where long timeframes are needed to get to compliance with water quality standards. Adding new tools to the scope of the rule-making will slow the process significantly - from months to possibly years – depending on the tools being modified, and the final rule results are uncertain. For instance, opening up the mixing zone language would add significantly to the rule-making timeframe. Past experience (1990’s) with rule-making to address mixing zones showed considerable public support for the phase-out of MZs for PBTs. It is unlikely that this desire has abated. The public process that leads to a final rule does not give anyone complete certainty of the final outcome.

- Ecology’s current approach is to complete the implementation rule-making prior to work on the adoption of human health-based WQ criteria (HHC). Many stakeholder groups and nations have expressed a desire to have the HHC adopted into rule as soon as possible. Expanding the scope of the implementation tools rule-making could result in delays to the adoption of HHC that these stakeholders and nations might find unacceptable. Determining a course that will provide a workable process with an acceptable timeline for all the interested groups is not straightforward.
- Washington dischargers need the variance and compliance schedule tools currently being discussed in the implementation tools rule-making to address current permit requirements for both conventional (e.g., temperature and dissolved oxygen), and toxics criteria. Much of the concern around the tools rule-making seems to be driven by concerns with how future HHC (not yet adopted or in rule-making), based on a higher fish consumption rate, would play out in the future. As the time lines for different rule-making are considered please keep in mind that delays on the implementation tools rule-making, currently focused on addressing only long term projects, enhances the uncertainty for those dischargers dealing with current compliance schedules and long term control strategies. IEP in particular was instrumental in getting legislation passed to address longer compliance schedules given some of the pressure they were under to meet the Spokane TMDL Requirements.

I look forward to meeting with you and others on April 30<sup>th</sup> to continue the discussion on implementation tools.

Thanks,  
Cheryl Niemi

Cc: Becca Conklin, Ecology WQP

### **Specific issues addressed at the March 28 meeting**

**Question:** Will lower-concentration human health-based criteria result in immediate new effluent limits for the thousands of permitted dischargers in the state?

**Answer:** No. Most new limits are likely to be developed during TMDLs that address 303(d) listings. The reason limits will not be developed immediately revolves around limitations imposed by chemical analytical methods. Ecology, and most other states, requires the use of analytical methods found in 40CFR136 to measure concentrations of pollutants in effluent. These are the methods that EPA requires states to use to measure compliance with NPDES permit effluent limits. In the case of toxics, the Sec. 136 methods are fairly sensitive, but not sensitive enough to quantify all the different toxics at their criteria levels. *Most priority pollutant scans for human health criteria toxics result in non-detect measures for the majority of the chemicals tested. A numeric limit cannot be calculated using a non-detect value from effluent monitoring.* TMDL allocations can result in calculation of limits based on the allocation for a specific discharger, which is one reason TMDLs drive most of the limits based on HHC.

**Question:** Can new dischargers be permitted into waterbodies impaired by a human health-based toxic criterion chemical?

**Answer:** Yes, but only if certain conditions are met. The ability of a new discharge to be permitted into a 303(d) listed waterbody is directly affected by the 303(d) status and the particular parameter(s) the waterbody is listed for. Ecology does not generally permit additional new sources, at concentrations above criteria levels, of the parameter causing the listing (although there are exceptions – see example below). Other parameters may be discharged according to normal permit requirements. So, if a new discharger does not discharge the chemical causing the listing, or discharges at concentrations at or below the criterion, and the discharger can comply with other permit limits, obtaining a discharge permit occurs as usual. Here is an example:

Example:

- An applicant for a new discharge will discharge the regulated parameters of copper, zinc, heat, and mercury in its waste stream.

- The waterbody where the discharge will occur is 303(d) listed for mercury.
- The applicant submits to Ecology quantitative information on the concentrations of the regulated parameters that are expected to occur in its effluent.
- Ecology performs a reasonable potential determination (RPD) for copper, zinc, and heat to determine whether there is a potential to exceed criteria at the edge of the mixing zone. Limits will be placed in the permit for those parameters that are found to have a reasonable potential to cause an exceedance of criteria at the edge of the mixing zone.
- Because the waterbody is 303(d) listed for mercury, Ecology in general cannot permit new sources into the waterbody that are above criteria levels. The mercury limit in the permit would be set to be meet the criterion level at the “end-of-pipe.”
- If the applicant can meet the effluent limits then it would qualify for a permit.
- If the applicant cannot meet the effluent limit for mercury then it would only qualify for a permit if it can meet the exceptions spelled out in the Permit Writer’s Manual (see text box below). The applicant would not qualify for a compliance schedule because of prohibitions that exist in both federal and state regulations against compliance schedules for new dischargers.

**The Permit Writer’s Manual (<http://www.ecy.wa.gov/pubs/92109.pdf>), pages VI-40 – 41, contains detailed information on new discharges to listed waterbodies:**

### **New Discharges To Listed Water Bodies**

*No TMDL*

The applicable regulation is 122.4(i)

Section 122.4 Prohibitions. *No permit may be issued:*

*i) To a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards. ...*

A new discharge to a listed water body can not be allowed (issuance of permit is prohibited) if the discharge will cause or contribute to a violation of water quality standards. A new discharge may be allowed to discharge at the water quality criteria (for those pollutants with criteria) or at the quantitation level for those pollutants without criteria, such as BOD.

A permit applicant may be allowed to demonstrate that the listed water body has the ability to accept additional loading at the proposed point of discharge without measurable impairment or measurable increased impairment to the water body.

In some cases a new discharger may be allowed to discharge listed pollutants by trading effluent reduction (effluent trading) or discharging seasonally.

Effluent trading may entail treating a previously untreated but quantified pollutant source, such as a stormwater outfall such that the net effect of the new discharge is zero. Water reuse is encouraged by Ecology and it may be a good option for new dischargers to avoid discharge during the critical condition, typically the low flow period.

*TMDL Completed*

The applicable regulation is 122.4(i)

*...The owner or operator of a new source or new discharger proposing to discharge into a water segment which does not meet applicable water quality standards or is not expected to meet those standards even after the application of the effluent limitations required by sections 301(b)(1)(A) (BPT) and 301(b)(1)(B) (Secondary treatment) of CWA, and for which the State or interstate agency has performed a pollutants load allocation for the pollutant to be discharged, must demonstrate, before the close of the public comment period, that: (1) There are sufficient remaining pollutant load allocations to allow for the discharge; and (2) The existing dischargers into that segment are subject to compliance schedules designed to bring the segment into compliance with applicable water quality standards. The Director may waive the submission of information by the new source or new discharger required by paragraph (i) of this section if the Director determines that the Director already has adequate information to evaluate the request. An explanation of the development of limitations to meet the criteria of this paragraph (i)(2) is to be included in the fact sheet to the permit under Section 124.56(b)(1) of this chapter.*

A new source or new discharger proposing to discharge to a listed water body for which a TMDL has been completed and WLA’s assigned may obtain a permit for discharge into a water segment which does not meet applicable water quality standards by submitting information demonstrating that there is sufficient loading capacity remaining in the waste load allocations for the stream segment to accommodate the new discharge and that existing dischargers to that segment are subject to compliance schedules designed to bring the segment into compliance with the applicable water quality standards.

**Ecology’s draft comments/ responses to Ken’s proposed ideas and scenarios for use in the implementation tools rule-making:**

Proposed ideas and scenarios for use	Draft Ecology comments/responses
<p><b>1. Variances per WAC 173-201A-420. What the regulation says:</b>                      Available to “individual facilities or stretches of waters”                      Variance is developed for “specific criteria”                      “reasonable progress is being made toward meeting the original criteria”                      Time horizon – five years, and can be renewed with public/government review                      Must be “incorporat(ed) into this chapter and approved by the USEPA”</p>	<p><b>Need further clarification on this idea.</b> See comments below.</p> <p>Note: EPA has developed quite detailed legal opinions, policy, and guidance on variances. Links to some of these are at:  <a href="http://water.epa.gov/scitech/swguidance/standards/library/index.cfm">http://water.epa.gov/scitech/swguidance/standards/library/index.cfm</a></p> <p>and</p> <p><a href="http://water.epa.gov/scitech/swguidance/standards/handbook/chapter05.cfm#section3">http://water.epa.gov/scitech/swguidance/standards/handbook/chapter05.cfm#section3</a></p>
Proposed scenario for use	Draft Ecology comment/response
<p>Consider all state waterbodies to be “stretches of waters”                      Variance is available to all NPDES dischargers into those waterbodies</p>	<p>Washington WQS specify that the variance can be made for a waterbody, which can equate to “stretches of waters.” I am not sure whether you are suggesting that Ecology should make a determination that all the waters of the state are one large waterbody, or go with the current language that allows us to look at stretches of waters.</p> <p>I think you are suggesting something like the statewide variance that Montana recently issued for nutrients. That approach was based on a legislative finding that addition of more treatment to reduce nutrients would not be affordable for Montana dischargers, and the bill specified the levels of nutrients that were attainable. The Montana variance approach affects multiple dischargers, and includes a 20-year timeframe for dischargers to upgrade their plants to meet WQS. I think the reason the</p>

Proposed ideas and scenarios for use	Draft Ecology comments/responses
	<p>nutrient variance was successful in Montana is because the path to attaining the final limit involves known treatment technologies with well defined levels of performance (nutrient removal) and associated costs, which the legislature was able to use to make a judgment of “too costly.” The situation for toxics is not so clear. In fact, as far as we know, it looks like there can be a variety of different sources for different toxics, and the controls for dischargers will vary in the amount of time it takes them to implement strategies to meet limits and criteria.</p> <p>In some cases we have modeling that shows background concentrations to be above criteria, and we know from the modeling that natural attenuation will be needed to remove the contaminants that have already entered the system. In this case I’d like to think more about the use of 40CFR131(10)(g)(3) as a reason to give variances for larger expanses of waterbodies.</p> <p>I think we need to talk more about exactly how you picture this working. Variances are a valid approach to meeting CWA requirements, but I don’t see a clear path for the approach I think you are suggesting. Discharge-specific variances are more straight-forward and the data needs are fairly well defined.</p>
<p>Variance is applicable to named earth metals and/or identified legacy pollutants</p>	<p>Variances are generally applicable to effluent limits that are not able to be met. In the case of HHC, these would be the specific toxics limits that a permittee would not be able to meet. This could include metals or organics, and some of these criteria are legacy contaminants.</p>
<p>“Reasonable progress” is demonstrated by Ecology identification of all statewide toxics use/release reduction regulatory programs, including WAC 173-333 <i>PBT rule</i>, WAC 173-307 <i>P2 Planning</i>, EPA’s <i>Columbia River Basin Action Plan Focuses on reducing Toxics, Restoring Basin Health</i> (February 2011), etc.</p>	<p>These would definitely be included in an assessment of reasonable progress if a discharger was participating in these programs, but a discharger would need to show progress for that specific facility to address this requirement. Again, we need to talk more about exactly how you see this being implemented in both rule language and in permits.</p>
<p>Incorporate implementation language into WAC 173-201A-240</p>	<p>Look at the Oregon temperature decision to see if you would recommend placing BMPs or other implementation language that would equate to meeting criteria in the WQS.</p>

<b>Proposed ideas and scenarios for use</b>	<b>Draft Ecology comments/responses</b>
<p>Review in five years and be prepared to extend and extend</p>	<p>Does this mean that you do not support extending the timelines for variances and would prefer to stay with the current 5-year timeframe for renewal and rule-making?</p>
<p><b>2. Compliance Schedules per WAC 173-201A-510(4). What the regulation says:</b>                      Available for permittees seeking to comply with water quality-based effluent limits                      Existing discharges only. Not available for new NPDES permittees.                      Must “ensure final compliance...in the shortest practical time.”                      Acceptable reasons include:</p> <ul style="list-style-type: none"> <li>• (iv) completion of necessary water quality studies,</li> <li>• (v) resolution of pending water quality standards’ issue through rule-making action.</li> </ul> <p>Numeric or nonnumeric effluent limitations to apply in interim                      Maximum 10 year compliance schedule</p>	<p><b>This approach does not guarantee compliance with federal and state requirements (WAC 173-201A-510(4); 40CFR122.44.(d)(vii)(A).</b></p> <p>Note for clarification: Ecology currently uses compliance schedules when needed. Under WAC 173-201A-510(4), compliance schedules accommodate the two bulleted items at left, as well as time to do construction, implement BMPs, and implement additional BMPs for stormwater as needed.</p>
<b>Proposed scenario for use</b>	<b>Draft Ecology comment/response</b>
<p>WDOE embarks on “necessary water quality studies” to assess presence of HH pollutants in state waterbodies, fish tissue, etc. This may take a number of years.</p>	<p>Ecology currently conducts statewide and focused ambient monitoring studies to assess levels of HHC contaminants in tissues and water.</p>
<p>Ecology makes a “case-by-case” determination that all NPDES permittees will receive a compliance schedule</p>	<p>Not clear to me what you are suggesting. Permittees are already assessed on a case-by-case basis, and if compliance schedules are appropriate they are put in the permit.</p>
<p>Standard set of BMPs adopted into rule (e.g., evaluate raw materials for presence of HH constituents, monitoring discharge for HH pollutant, evaluate BMP approaches for HH pollutant reductions, report, ...)</p>	<p>Ecology could add specific BMPs to the standards. Things to consider before doing this are:</p> <ul style="list-style-type: none"> <li>• Do these types of specific requirements in any way restrict the options that could be considered as control strategies? Do they remove flexibility?</li> <li>• Refer to Oregon Temperature Decision: Do the desired BMPs</li> </ul>

Proposed ideas and scenarios for use	Draft Ecology comments/responses
	<p>provide a path to compliance with WQS? In the Oregon decision the court said “EPA cannot choose to review and approve WQS while ignoring separate provisions which have the potential to cripple the application of those standards.” Adding BMPs that do not show a path to compliance could result in unforeseen disapproval and subsequent unforeseen actions by EPA or the state.</p> <p>If BMPs are part of the interim limits in a permit, the permit is still required to have final water quality-based limits (WAC 173-201A-510(4); 40CFR122.44.(d)(vii)(A). At present the total time available for compliance schedules is 10 years. If the BMPs did not result in compliance with limits and criteria when the permit expired, then Ecology would be unable to renew the permit for the discharger. This is why we are responding to the 2009 legislative direction with a rule-making that is addressing a longer-term, 20-year compliance schedule.</p>
<p><b>3. WAC 173-201A-400(15) <i>Mixing Zone</i>.</b> What the regulation says: “The department may establish permit limits and measures of compliance for human health based criteria (based on lifetime exposure levels), independent of this section”</p>	<p><b>Need further clarification on this idea. At present Washington MZ use for HHC is constrained by the NTR.</b></p> <p>The size of the MZ for human health is based on the aquatic life chronic MZ contained in the WQS. The NTR allows states to use mixing zones already placed in state standards, or to default to an application of the criteria at the "end-of-pipe (<i>40 CFR 131.36(c)(2)(i)</i>). For all waters with mixing zone regulations or implementation procedures, the criteria apply at the appropriate locations within or at the boundary of the mixing zone; otherwise the criteria apply throughout the waterbody including at the end of any discharge pipe, canal, or other discharge point.” Ecology’s current MZ approach for HHC follows the requirements in the NTR.</p>
Proposed scenario for use	Draft Ecology comment/response
<p>Create unique mixing zone language that creates flexibility for demonstration of water quality standards achievement of HH WQC</p>	<p>Not sure if you are suggesting opening up the mixing zone section of the rule to add specific MZ language, or to do this via guidance. See second bullet on page 1 above. The MZ size and RPD performed at the time of</p>

<b>Proposed ideas and scenarios for use</b>	<b>Draft Ecology comments/responses</b>
<p>(allow MZ boundary to be defined based on modeling or in situ measurement to show achievement of HHWQS or to get &lt;MDL/PQL)</p>	<p>permit issuance currently results in very few permit limits for HHC. This is because most toxics are at quite low levels in effluent, and the EPA-approved analytical methods that are used to screen for toxics are, in general, not sensitive enough to detect the chemicals if they are present at low concentrations. This results in a RPD of ‘no likelihood to exceed’ at the edge of the mixing zone. Effluent limits are generally driven by TMDLs, and the allocations in TMDLs result in limits that are not driven by MZ size.</p>
<p>This option is coupled with an obligation to identify HH pollutants in wastewater and to conduct an evaluation to reduce, apply BMPs, etc.</p>	<p>See above about identifying toxics in effluent.</p>
<p><b>4. WAC 173-201A-400 <i>Mixing Zones</i></b></p>	<p><b>This approach does not comply with federal regulations.</b></p>
<p><b>Proposed scenario for use</b></p>	<p><b>Draft Ecology comment/response</b></p>
<p>All reasonable potential determinations are based on in situ measurement of HH pollutant at down-gradient edge of chronic mixing zone boundary. Mean harmonic flow. Add language in -400 and in the Permit Writers Manual to detail the expectation.</p>	<p>Federal regulations require use of effluent data to characterize the effluent and to determine the potential for exceedances of criteria to occur : <i>40CFR122.44(d)(1)(ii) When determining whether a discharge causes, has a reasonable potential to cause, or contributes to an in-stream excursion above a narrative or numeric criteria within a State water quality standard, the permitting authority shall use procedures which account for existing controls on point and nonpoint sources of pollution, <b>the variability of the pollutant or pollutant parameter in the effluent</b>, the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity), and where appropriate, the dilution of the effluent in the receiving waters.</i></p>
<p><b>5. <i>Intake credit (or net pollutant addition)</i>. What the federal regulation says:</b></p> <p>a. “States may, at their discretion, include in their State standards, policies generally affecting their application and implementation, such as mixing zones, low flows and variances. Such policies are subject to EPA review and approval” 40 CFR 131.13</p>	<p><b>Agree that clarification of intake credits for use in developing effluent limits for WQ-based criteria is a reasonable idea. Ecology currently uses intake credits during effluent limit development, but having this fully developed within the state regulation is appropriate.</b></p>

Proposed ideas and scenarios for use	Draft Ecology comments/responses
<p>b. Is there a comparable WAC 173-201A section which</p>	
Proposed scenario for use	Draft Ecology comment/response
<p>Develop a new WAC 173-201A subsection directing evaluation of NPDES permittee discharge of HH pollutants to be an up-gradient/down-gradient evaluation. Compliance with HH WQC (or reasonable potential analysis) is based on comparison of receiving water samples collected at down-gradient edge of mixing zone vs. up-gradient edge of mixing zone, for the HH pollutant. No distinguishable increase = achievement of WQS. Concentration &lt;MDL/PQL = compliance with the HHWQC.</p>	<p>Agree a new subsection defining intake credits would be appropriate.</p> <p>EPA’s regulations on calculation of permit limits are clear. Federal regulations require use of effluent data to characterize the effluent and to determine the potential for exceedances of criteria to occur. See Ecology response for 4 above.</p>
<p><b>6. Amend WAC 173-201A-240(6) to read:</b></p> <p>“(6) Risk-based criteria for carcinogenic substances shall be selected such that the upper-bound excess cancer risk is <del>less than or equal</del> <u>within the range of one in ten thousand</u> to one in one million”</p>	<p><b>Risk level is a state policy choice constrained by federal guidance. Discussion of risk level will occur with future HHC rule-making.</b></p> <p>Washington’s current HHC are contained in federal rule, and are set at the 10<sup>-6</sup> risk level. We cannot change HHC in the federal rule. If Washington adopts HHC that get CWA approval from EPA then Washington will be dropped from the NTR, and the state standards will become the new CWA standards.</p> <p>When HHC are adopted in Washington, in the future (not part of the current implementation tools rule-making), risk level will be a big issue. EPA’s guidance on risk level is explicit: the most sensitive population needs to be protected at a 10<sup>-4</sup> risk level. That leaves flexibility when setting a risk level for the general population. Rule language that contains a range of risk levels might be appropriate, but the risk levels would likely need to be paired with specific target groups, which might be defined based on fish consumption rates or other factors. Statewide vs. site-specific considerations would be an issue here. Expect to have much more discussion on this topic when human health-based criteria are adopted.</p>

Proposed ideas and scenarios for use	Draft Ecology comments/responses
<p><b>7. Amend WAC 173-201A-240 Toxic Substances:</b></p> <ul style="list-style-type: none"> <li>a. HHWQC for mercury will be based on methyl mercury</li> <li>b. HHWQC for arsenic will be based on inorganic arsenic</li> </ul>	<p><b>Already the case for arsenic, most likely future scenario for mercury.</b></p> <p>EPA’s recommended HHC for mercury is a tissue residue value for methyl mercury. This is the criteria type most likely to be adopted when HHC are adopted in the future. The current HHC in the NTR is a total mercury criterion (elemental mercury - CAS# 7439-97-6). Washington’s current HHC for arsenic (in the NTR) are for inorganic arsenic, and EPA’s recommended criteria are also for inorganic arsenic.</p>
<p><b>8. Add/perfect the regulatory authority in WAC 173-201A-240 to utilize Water Effects Ratio and the biotic ligand model processes for adjustment of metals criteria.</b></p>	<p><b>Agree with idea on WERs. When aquatic life-based criteria for toxics are next updated Ecology plans to propose adoption of EPA recommended freshwater criteria for copper that are based on the BLM.</b></p>
<p><b>Proposed scenario for use</b></p>	<p><b>Draft Ecology comment/response</b></p>
<p>Other states have figured this out, including Oregon. Should be a priority for Washington as this measure can yield more appropriate and protective WQC and effluent limits consistent with EPA guidelines.</p>	<p>Use of WERs in permits is a priority for Washington, but has currently been overshadowed by efforts to respond to issues associated with future HHC development and the current implementation tools rule-making. Please see the triennial review responsiveness summary, pages 19-21 at : <a href="http://www.ecy.wa.gov/programs/wq/swqs/triennial_review.html">http://www.ecy.wa.gov/programs/wq/swqs/triennial_review.html</a>. When aquatic life-based criteria for toxics are next updated Ecology plans to propose adoption of EPA recommended freshwater criteria for copper that are based on the BLM. This will likely not occur before 2014-15.</p>
<p>Be mindful of EPA’s “Establishing Site-Specific Aquatic Life Criteria Equal to Natural Background,” Davies, (1997) (Will provide)</p>	<p>Recommendations in this memo should not affect use of WERs or adoption of freshwater copper criteria based on the BLM.</p>
<p><b>9. WAC 173-201A-260 Natural Conditions. What the regulation says:</b></p> <ul style="list-style-type: none"> <li>e. “When a water body does not meet its assigned criteria due to natural climatic or landscape attributes, the natural conditions constitute the water quality criteria.”</li> </ul>	<p><b>Ecology currently implements the natural conditions provision in a manner similar to the suggested idea.</b> Need to discuss this to clarify whether or not you are suggesting something different.</p>

<b>Proposed ideas and scenarios for use</b>	<b>Draft Ecology comments/responses</b>
<b>Proposed scenario for use</b>	<b>Draft Ecology comment/response</b>
<p>Ecology EAP monitoring allows for assertion in -240 or -260 language that certain earth metals are naturally present above WQC, thus effectively resetting the WQC</p>	<p>Ecology currently uses this approach when assessing ambient data and when permitting.</p>
<p>Can declare this state-wide, or for specific waterbodies.</p>	<p>Ecology currently uses this approach when assessing ambient data and when permitting.</p>
<p>Be cognizant of Davies (EPA, 1997)</p>	<p>Ecology is aware of this.</p>
<p><b>10. WAC 173-201A-260 Irreversible Human Conditions. What the regulation says:</b></p> <p>f. “When a water body does not meet its assigned criteria due to human structural activities that cannot be effectively remedied..., then alternative estimates of the attainable water quality conditions,..., may be used to establish an alternative criteria for the waterbody.”</p>	<p><b>Need to look into this more.</b></p>
<b>Proposed scenario for use</b>	<b>Draft Ecology comment/response</b>

<b>Proposed ideas and scenarios for use</b>	<b>Draft Ecology comments/responses</b>
<p>Studies indicate that long-range transport/air deposition of mercury, PCB, maybe other HH pollutants, represent a significant input to Washington waterbodies.</p> <p>Studies indicate (from prior Chemical Action Plans) that some legacy pollutants exist in the environment at &gt;HHWQC.</p> <p>Ecology declares that out-of-state contributions and/or legacy pollutants arise from and represent a “human structural activity that cannot be effectively remedied.”</p> <p>Consider this factor in establishing alternative HH WQC for urban and low elevation main stem rivers.</p>	<p>Ecology cannot currently develop site specific criteria for HHC because Washington is under the NTR. Would like to think more about how the approach of looking at “sources beyond a state’s control” could be used. EPA currently has an analogous approach they use in the 303(d) listing process: Category 5m for mercury.</p> <p>Is there a way to account for non-natural background in a way that does not require rule-making to change the use? (Also – please read the antidegradation requirements at 163-201A-310) <i>I do not think there is a path for this, but will talk more with EPA.</i></p>
<p><b>11. WAC 173-201A-450 Water Quality Offsets. What the regulation says:</b></p> <ul style="list-style-type: none"> <li>g. Opportunity for a project proponent to implement or finance the implementation of controls for nonpoint/point sources to reduce the levels of pollution to create assimilative capacity to allow new or expanded discharges.</li> <li>h. Offsets must target specific water quality parameters, offsets are described in a technical analysis, secured through binding legal instruments, + much more.</li> </ul>	<p><b>Implementation idea does not meet state and federal requirements. See comments below.</b></p>
<b>Proposed scenario for use</b>	<b>Draft Ecology comment/response</b>
<p>Ecology identifies all state regulatory programs (regulations, permits, TMDLs, etc.) targeting HH toxics reductions</p>	<p>Ecology can do this</p>
<p>Ecology declares that these programs accomplish reduced loadings of specific HH pollutants into state waters.</p>	<p>Ecology can do this</p>

Proposed ideas and scenarios for use	Draft Ecology comments/responses
<p>Ecology declares these HH reductions create capacity state-wide to accommodate existing and new HH discharges from NPDES permittees NPDES permittees are granted a discharge allowance of the HH pollutant against the benefits of the accruing offsets NPDES permittees are required to evaluate raw material inputs, HH in wastewater discharges, and apply BMPs to reduce, etc.</p>	<p>Ecology cannot declare that these types of statewide activities provide full protection for the designated uses on a statewide basis. The water quality criteria apply to designated uses that are applied on a waterbody-by-waterbody basis, and “off-site’ mitigation cannot be used. Under federal and state regulation all existing and designated uses must be fully protected.</p>
<p><b>12. Regulatory determination that a waterbody is impaired from a HH pollutant requires conclusive and substantial ambient waterbody quality or tissue data.</b> In short, change the Category 5 - 303(d) listing criteria. Seek to avoid 100’s or 1000’s of Category 5 listings.</p>	<p><b>Please see responsiveness summary that will accompany Policy 1-11.</b></p>
<p><b>Proposed scenario for use</b></p> <p>Review/revamp WQP Policy 1-11 to require much more than “two samples above criteria in a three year period” or one average/composited tissue sample above the applicable criteria. The Policy should require more data; i.e., multiple seasons, multiple years, conclusive evidence that any &gt;HHWQC are not due to a NPDES permittee, etc.</p> <p>Ecology is presently reviewing the WQP Policy 1-11 as a precursor to 2012 section 303(d) list developme3nt</p>	<p><b>Draft Ecology comment/response</b></p> <p>Please see responsiveness summary that will accompany Policy 1-11.</p>
<p><b>13. WAC 173-201A-430 Site-Specific Criteria. What the regulation says:</b></p> <ul style="list-style-type: none"> <li>i. Must protect “attainable condition of existing and new designated uses for the waterbody”</li> <li>j. Action must be consistent with 40 CFR 131 and include public/government process</li> <li>k. Must be scientifically justifiable</li> </ul>	<p><b>Will wait for further discussion as suggested in your proposed scenario.</b></p>

Proposed ideas and scenarios for use	Draft Ecology comments/responses
<p>I. Requires amendment of WAC 173-201A and EPA approval</p>	
Proposed scenario for use	Draft Ecology comment/response
<p>Let’s talk about this one</p>	
<p><b>14. Narrative Effluent Limits. What the applicable statutory language and regulation say:</b></p> <p>m. 40 CFR 122.44 allows for narrative effluent limits  n. RCW 90.48.555 allows for narrative effluent limits.</p>	<p><b>Allowance for narrative effluent limits does not supercede requirements for numeric effluent limits except in certain circumstances (40 CFR 122.44).</b></p>
Proposed scenario for use	Draft Ecology comment/response
<p>Create boilerplate language for NPDES permittees which requires long-term characterization of wastewater for the presence of earth metals and/or legacy HH pollutants.</p>	
<p>If HH pollutant in effluent, narrative effluent limit is imposed which requires engineering studies to determine source/origin of pollutant, report to Ecology, and identification of viable measures to reduce HH loading.</p>	<p>40 CFR 122.44(k) allows for narrative effluent limits in specific circumstances. The strategies you’ve listed fit the types of interim limits that are included in compliance schedules. BMPs in some permits are narrative limits that are applicable to the types of discharges described in 40CFR122.44(k). In the case of HHC, limits would be based on quantitative information from TMDL allocations or on effluent monitoring data, and would thus fit the regulatory situation addressed at 40CFR122.44(d).</p>
<p><b>15. WAC 173-201A-260 Natural Conditions and other water quality criteria and applications. What the regulation says:</b></p> <p>o. Subsection (2) identifies that narrative criteria apply to all existing and designated uses to ensure “Toxic...concentrations</p>	<p><b>States are required to adopt numeric criteria for specific toxic chemicals, as per CWA 303(c)(2)(B).</b></p> <p><b>Water quality standards are required to fully protect designated and existing uses of the waterbody (see antidegradation language: 173-201A-</b></p>

Proposed ideas and scenarios for use	Draft Ecology comments/responses
<p>must be below those which” could “adversely affect public health.”</p> <p>p. Subsection (3)(a) directs that “water quality requirements for water bodies” will be established “on a case-specific basis where determined necessary to provide full support for designated and existing uses.”</p>	<p><b>340; 40CFR 131.12)</b>  <b>Allowance for narrative effluent limits does not supercede requirements for numeric effluent limits except in certain circumstances (40 CFR 122.44 – see information in response above).</b></p>
Proposed scenario for use	Draft Ecology comment/response
<p>Ecology determines that the most direct and relevant approach to not “adversely affect public health” and “provid(e) full support for designated and existing uses” will be based on fish tissue analyses and risk assessment approach. (Will provide Lincoln Loehr 1994 memo and State of Minnesota documents).</p>	<p>States are required to adopt numeric criteria for specific toxic chemicals, as per: <i>“CWA 303(c)(2)(B) Whenever a State reviews its water quality standards pursuant to paragraph (1) of this subsection, or revises or adopts new standards pursuant to this paragraph, such state shall adopt criteria for all toxic pollutants listed pursuant to section 307(a)(1) of this Act for which criteria have been published under section 304(a), the discharge or presence of which in the affected waters could reasonably be expected to interfere with those designated uses adopted by the State, as necessary to support such designated uses. Such criteria shall be specific numeric criteria for such toxic pollutants...”</i></p>
<p>Ecology expresses in WAC 173-201A the intention to favor fish tissue/risk assessment, instead of HHWQC based on FCR formula. These are described and developed as “narrative criteria.”</p>	
<p>Ecology EAP collects fish, works with Washington Department of Health, and gives area-specific guidance to fish consumers on acceptable consumption.</p>	<p>Water quality standards are required to fully protect designated and existing uses of the waterbody (see antidegradation language: 173-201A-340; 40CFR 131.12). I do not think limiting the CWA “fishable” use based on current concentrations of toxics equates to “full protection” in a CWA sense.</p>
<p>Ecology focuses BMP efforts on waterbodies with contaminated fish, and identifies all state/EPA regulatory programs directed at toxics reduction into the environment.</p>	
<p>NPDES permittees required to assess wastewater for HH pollutants. If HH pollutant in effluent, narrative effluent limit is imposed which requires engineering studies to determine source/origin of pollutant,</p>	<p>Allowance for narrative effluent limits does not supercede requirements for numeric effluent limits except in certain circumstances (40 CFR 122.44).</p>

CNIEMI DRAFT 4/12 - Draft comments/responses to Ken Johnson implementation ideas – language from Ken cut and pasted directly into first two columns of comment/response table in this draft (no edits of Ken’s language)

**DRAFT**

**FOR DISCUSSION PURPOSES ONLY**

**DRAFT**

<b>Proposed ideas and scenarios for use</b>	<b>Draft Ecology comments/responses</b>
report to Ecology, and identification of viable measures to reduce HH loading.	