Comments received during HHC Public Workshop

October 29-30, 2015

Introduction: The Division of Water held a public workshop on October 29 and 30, 2015 to engage the general public on the issue of revisions to human health criteria in state water quality standards. This is an issue that has garnered a great deal of attention amongst certain stakeholder groups.

Due to the number of presentations and questions raised during the event, DEC was unable to answer many questions raised by participants. As a result, DEC asked participants to write their questions on 3” x 5” cards so they could be documented and addressed as part of the conference follow up. The table below includes both questions and general comments submitted to DEC.

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| **Question/Comment** | **Response** |
| To clarify, there will be a cost evaluation completed on the proposed criteria that will evaluate costs to existing dischargers for increased treatment (where known technology already exists)? | House Bill 140 requires all state rulemaking to conduct a cost analysis. Per HB 140 amended AS 44.62.190(d):  (1) the reason for the proposed action, including, if applicable, an identification of the law, order, decision, or other action of the federal government or a federal or state court that is the basis for the proposed action; in this paragraph, "federal government" means a department, agency, corporation, or instrumentality of the United States government;         (2) the initial cost to the state agency of implementation;         (3) the estimated annual costs, based on a good faith effort to estimate the costs in the aggregate for each of the following categories using the information available to the state agency, to              (A) private persons to comply with the proposed action;              (B) the state agency for implementation and to other state agencies to comply with the proposed action; and              (C) municipalities to comply with the proposed action;  Based on the language of the bill, DEC will be required to conduct a cost evaluation on state services rather than affected public/private entities that may be subject to the revised regulations and associated criteria. |
| Geographical distribution of women ~five or greater | DEC does not have enough contextual information to answer this question/comment |
| Does EPA set the standards/metrics for fish consumption surveys or do States/Tribes create their own surveys?  How do you ensure all metrics are the same to develop water quality criteria? | Neither EPA nor States (to the best of DEC’s knowledge) have standards for conducting fish consumption surveys. However, a great deal of information on this subject including accepted protocols is readily available all dietary project that are funded by |
| To Washington Ecology staff: In fish surveys, did these groups of people eat similar species or parts of species: Tribes; Anglers; Asian-Pac. Islanders? Asian stores may carry lots of food items not found in other stores that are not affected by WA water quality criteria. | Pending |
| COMMENT: Audience may want to know who the technical workgroup is comprised of and how to contact members | The details about the DEC Human Health Criteria Technical Workgroup are located on the DEC Human Health Criteria webpage. |
| To Idaho Environmental Quality staff: What FCR did you use (11.2 g/day) and what risk level?  How could you possibly get 11.2 g/day approved if EPA uses 22 g/day as default? Are there studies robust enough to convince EPA to allow such a low FCR? | We used probabilistic risk assessment to derive criteria, so our fish consumption rate is a distribution that describes the the full range of fish consumption among individuals in the population. We looked at four populations: 1) Idaho general and then three expected higher risk groups within the general population: 2) Idaho anglers, 3) Nez Perce tribal members, and 4) Shoshone-Bannock tribal members. All based on dietary recall surveys conducted in the past 18 months, and all analysed by the NCI method to account for the limitations of short-term recall is estimating long term intake.  Before we had the data in hand we made several policy decisions. It was intentional to decide how the data would be used before we had the local data on fish consumption. One such decision was to base our criteria on 10-6 incremental increase in cancer. A second decision was to achieve that risk level at the 95th %tile of the general population AND at the mean for highest risk population among our three higher risk populations; acknowledging the inherent difference is risk with a population, or among subgroups within a population. Third we decided that among those two goals, whichever resulted in more stringent criteria would be the criteria we propose. Fourth, we decided to focus on freshwater fish that are resident in Idaho waters, a subset of all fish. This is akin to EPA's exclusion of marine fish in their national fish consumption rate and rooted in the limits to CWA jurisdiction over fish quality or scope of the CWA that Cheryl spoke to - basically we choose to include only fish that our rules and jurisdiction could effect.  With the data now in hand, most of the proposed criteria are based on the Nez Perce tribe's estimated fish consumption distribution of Idaho fish. This includes all the criteria based on fish intake only, and about 40% of the fish and water exposure criteria. The remaining 60% of the fish + water criteria are based on the are based on achieving the risk goal for the general population. I explained this to you in an earlier message, but it has to do with bioaccumulation and how it changes the relative importance of fish consumption interacting with the difference in the distribution of fish consumption among populations with target risk.  I should also note that because fish consumption is right skewed (log normal) the population mean risk for the Nez Perce corresponds to about 70% of the their population having an individual risk <= 10-6. Their population mean risk is of course the target of 10-6.  That is a long answer to a simple question, but if I gave you a short answer it would be wrong.  So if you must know, the 95th %tile in the distribution of consumption of Idaho freshwater resident fish in Idaho's general population is 11.2 g/day. For the Nez Perce tribe the mean (~70th %tile) consumption of Idaho freshwater resident fish is 16.1 g/day. But those numbers were not used in criteria calculation.  And, yes, we think our local and very recent data supports our proposed criteria as being protective of Idaho's designated uses.  Don E. |
| Why use mean consumption values for ‘consumers’ when within the group of consumers you still have uncertainty of age, bodyweight, etc.? | The use of a mean value for the general population is part of the EPA 2000 Methodology. Consumer data was based on an adult (age ≥ 21 years). Uncertainty is considered when developing the Reference Dose value (non-carcinogens); Cancer Slope Factor; and use of the upper percentile values for drinking water consumption (90th percentile) and body weight. |
| COMMENT: EPA Guidance- Please incorporate Native American/Alaska Native/Pacific Islanders in the ethnicity breakdown | DEC understands that EPA may be releasing a Technical Support Documents for determining state-specific exposure values. This comment would be most appropriate in that context. |
| Regarding lifetime exposure- Area allowances made for populations more susceptible such as children? Many of the HHC compounds are neurotoxins or endocrine disrupters that predominately affect children. | Toxicity to children is accounted for when determining Reference Dosage and Cancer Slope Factor. |
| Analyzing contaminates with a low detection limit is possible if analyzing deionized water. Analyzing wastewater with a high salt content and other non-pollutants is possible only if the lab dilutes the sample, which raises the detection limit. What happens when the detection limit is higher than the standard? | Addressing the issue of recommending criteria below detection limits is a key issue of discussion between EPA and states. Tools such as variances may be a way to accommodate dischargers until the technology is available to detect extremely low concentrations of these chemicals. |
| What exactly is the role of drinking water-specifically why is there a drinking water intake factor? Drinking water varies significantly across the state such as in wells. I cannot figure out if it is included because of potential contaminates (such as heavy metals) or if it is included as a detection factor. | The transmission of certain toxics can take place through a variety of media (e.g., dermal, ingestion, inhalation). In the context of water quality standards, the criteria for the designated use of Drinking Water addresses the regulated amount of a certain pollutant in *treated* water; the human health criteria for water and aquatic organisms considers untreated water consumption. |
| COMMENT To Idaho Environmental Quality Staff: Idaho Survey Considerations- Surveys were done by phone and I am assuming that home phones were called. I am curious if that is biasing the survey towards older generations who use home phones rather than the younger generation that does not use home phones. | The Idaho FCR survey used a dual-frame methodology. 56% of all completed surveys were completed from within the cell phone sample. 40% of completed surveys were completed by individuals who noted that they only make or receive calls via cell phone. |
| If a water quality standard is below analytical detection limits, how will the adequacy of treatment be demonstrated for issuing a discharge permit from a wastewater treatment plant? | Addressing the issue of recommending criteria below detection limits is a key issue of discussion between EPA and states. Tools such as variances may be a way to accommodate dischargers until the technology is available to detect extremely low concentrations of these chemicals. |
| What about pollutants picked up in ocean waters and taken upstream in fish caught in state waters? | The Clean Water Act and state regulations of pollutants are only applicable to sources within three (3) miles of Alaska’s coastline. The EPA 2000 methodology addresses marine sources of pollutants by accounting for marine species in the Relative Source Contribution of the formula (for non-carcinogens). The methodology is silent for how to address potential sources of carcinogens that may be present and transported by fish to state waters. Alaska is considering how to address this issue as part of the HHC rulemaking process. |
| What about early exposure to children? | Toxicity to children is accounted for when determining Reference Dosage and Cancer Slope Factor. |
| Would herring roe on kelp be listed under “other fish” or plants? | DEC is uncertain how this may be addressed as herring are considered to be a marine species and considered to be part of the Relative Source Contribution under the EPA 2000 methodology. DEC also recognizes that EPA recommends a ‘market basket” approach in which the consumption of all fish (and their derivatives) could be considered under the fish consumption rate. This is one of the issues that DEC will be considering over the course of this rulemaking effort. |