5/9/11

Hi Mike,

I’ve had some additional time to look through your questions below and have provided some responses…  Thanks again for reviewing the criteria—it was great to have that critical eye.

Andrea

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5/6/11

Mike,

Thanks so much for your thorough review!  I really appreciate the fast turn around.  I will need to think about some of your comments a little bit more before I can respond and it may necessitate a follow up call to you.  However, I did want to give you a general explanation of what we did as part of this rule.  The main objective was to revise our human health criteria based on a more accurate fish consumption rate, rather than extensively reviewing individual toxic chemicals.   Our earlier toxics criteria review in 2004 did focus more on specific chemicals, so we didn’t re-analyze the information as part of this rule.  Since we generally adopt EPA’s nationally recommended water quality criteria, we cross referenced the most accurate data EPA used to develop the human health criteria to update our criteria, but we did not do a separate analysis of methods, risk, etc. or propose additional toxic chems outside of EPA’s nationally recommended criteria.  Having said that, however, I do want to look more closely at some of your comments, because we may still need to clarify some of the questions you brought up into Table 40.  I also appreciate your grammatical type suggestions as well.

Note on arsenic---this one is an outlier….  The EQC just adopted the new arsenic criterion last month.  This was a separate rulemaking to account for the presence of naturally occurring arsenic in Oregon waterbodies.  Ambient surface waters show levels quite a bit above what are current arsenic human health criteria are and of course, that discrepancy would further increase based on 175 g/day fish consumption rate at 10-6.  Although we have used 10-6 as the risk level for carcinogens (and continue to do so through this rulemaking), we made a policy decision (supported by data) to use a risk level of 10-4 (water + organism) and 10-5 (organism only) for arsenic to account for naturally occurring arsenic.   The new rule is also supported by an arsenic reduction policy as well which is in the Toxics Substances provision (340-041-0033)  in the rulemaking documents.

Not sure if this helped or not, but again, thanks for your input!

Andrea

**From:** POULSEN Mike   
**Sent:** Thursday, May 05, 2011 4:21 PM  
**To:** MATZKE Andrea  
**Cc:** WISTAR Gil; GRABHAM Cheryl; KISHIDA Koto; 'ANDERSON Jim M'; PETERSON Jenn L; SEIDEL Paul; TURNBLOM Susan  
**Subject:** RE: Toxics Rulemaking: For IRT Review and Agenda for tomorrow's meeting

Andrea –

I cannot speak for the tox group, but I did a quick review of the new tables. I do not have complete knowledge of WQ rules, so perhaps you should view my comments as noting the differences I saw between WQ and Cleanup. I realize the tables are the result of many years of hard work, and are based on AWQC. The comments may show my lack of knowledge of new AWQC changes.

* I admit to not understanding if the excess cancer risk of 10‑4 is being applied broadly, or just for arsenic (2.1 ug/L). The Cleanup Program and EPA have low risk-based drinking water screening values for arsenic (0.045 ug/L) based on 10-6. By the way, often the term “risk” is used alone in the proposed rule and supporting documentation. We typically use the phrase “excess lifetime cancer risk”, although I think “excess cancer risk” would work fine. I think it is important to be explicit about what is meant by “risk”, because it has many meanings. Already provided an answer above…
* I do not understand the difference between “benzene [represents range]” and “benzene” in the same table. It might be nice to explain this in a footnote. Good point…. I have asked EPA whether or not we need criteria representing a range.  We have never had range criteria looking back at our tox tables and I couldn’t see that EPA had nationally recommended criteria for a range.  It was in the EPA human health criteria calculation spreadsheet, which is probably how it made its way to Table 40.  Unless we hear differently from EPA, we will remove the benzene range criteria.
* Last fall, I mentioned concern about chromium VI, which is included in the list of chemicals removed from the table. Given the new determination of chromium VI as an oral carcinogen, we will have a very low screening level for drinking water (0.043 ug/L). I suppose this will be covered by a drinking water standard. Yes, EPA no longer has human health criteria for Cr VI, so EPA approved its withdrawal in June 2010.  EPA does have a MCL for total Cr, although I believe they’re assessing Cr VI data to evaluate whether or not a MCL is warranted.
* You may want to clarify that dioxin (2,3,7,8-TCDD) should be evaluated as a TEQ, if in fact that is the way you evaluate it. I do not think I have seen an EPA or DEQ table where this is clearly stated. Under the 2004 toxics criteria review, the TAC evaluated this approach and although they recommended using a TEQ approach there was disagreement with the PAC so DEQ recommended only proposing a dioxin criterion and not using a TEQ approach.  As I explained earlier, we didn’t revisit this level of technical information for this go around.  We were mainly focused on the fish consumption rate.  So, we followed the 2004 decision.  To change it now would require stakeholder input and more discussion.
* We evaluate ethylbenzene as a carcinogen. If naphthalene is included, you should be aware that we also consider it a carcinogen, at least by inhalation. .  EPA calculated the human health criteria for ethylbenzene as a noncarcinogen, so we will continue to do so.  Sounds like the clean up program has more flexibility and WQ probably could evaluate it further as well, but it just wasn’t the focus of this rulemaking.
* I mentioned last fall that we incorporate early-life exposure in evaluating cPAH risks, but that may be the least of our differences. AWQC use the same value (0.0013 ug/L) for all cPAHs. We have known for a few decades that the cPAHs have different potencies. The use of one value (apparently based on benzo[a]pyrene toxicity) for all cPAHs penalizes the other less toxic compounds. Because we use AWQC for source control, we also have this problem. But our actual risk-based screening values incorporate the relative toxicity of the compounds. Again, we’re tiering toward EPA methodology for AWQC…  Thanks for the information though.

(As a minor note: benz[a]anthracene and dibenz[a]anthracene should be spelled without an “o”. Other PAHs, like benzo[a]pyrene, get an “o” because the “benz” comes before the consonant in “pyrene”.) Thanks—I’ll make those changes

* You should be aware that the Cleanup Program will soon be using the non-cancer breastfeeding pathway to establish screening levels for PCBs. Oregon is unique in this approach, even though it is based on EPA equations. I doubt we will see EPA modify their approach. (Note that “Aroclor” is spelled without an “h”.) Thanks—I’ll remove the “h”
* Table 20 is now limited to aquatic life criteria, but still contains a column that indicates the chemical’s status as a carcinogen. Perhaps I do not understand the final format of the table (or tables). Thanks for catching that—I’ll definitely remove that column.

I don’t know if the other toxes will have time to look at this. Jennifer Peterson is probably the tox most knowledgeable about AWQC, but she is out this week doing training.

Best of luck with this big effort.

* Mike

**From:** WISTAR Gil   
**Sent:** Wednesday, May 04, 2011 4:16 PM  
**To:** [All DEQ] Toxicology Work Group  
**Cc:** DIETZ Annette  
**Subject:** FW: Toxics Rulemaking: For IRT Review and Agenda for tomorrow's meeting  
**Importance:** High

FYI. Tox Team members may want to look at the most recent “criteria tables” document; if you have comments or questions, please send them directly to Andrea and copy Cheryl and Koto (and me) by Monday, May 9.

Gil

**From:** MATZKE Andrea   
**Sent:** Wednesday, May 04, 2011 11:38 AM  
**To:** ADES Dennis R; BLOOM James; BROWN Courtney; BURKHART Robert; CARLOUGH Les; CHRISTENSEN Lyle; DOMBROWSKI Tonya; GEIST Gregory; SCHNURBUSCH Steve; WISTAR Gil; YON Donald R; 'Knudsen Larry'; CLIPPER Chris  
**Cc:** WIGAL Jennifer; LIEBE Annette; FOSTER Eugene P; KISHIDA Koto; BOHABOY Spencer; STURDEVANT Debra; MULLANE Neil; GRABHAM Cheryl; HICKMAN Jane; MATZKE Andrea  
**Subject:** Toxics Rulemaking: For IRT Review and Agenda for tomorrow's meeting

Hi All,

Attached are the rulemaking documents for IRT review.  We are requesting your review and comment by no later than May 9.  We need to incorporate IRT changes, if needed, then send to the EMT for their review on May 13, so we have a tight turn around to meet.  To help in your review, I have provided information about each document.

1. **Proposed New and Amended Rule Language:**  This document contains the proposed language that was sent out for public comment.  The redline/strikethrough edits are the changes we made based on public comment and/or staff.  Go ahead and use track changes in this document for your comments.
2. **Criteria Tables**:  Shows changes to Table 40 description and several in the table itself.
3. **Draft Response to Comments:**  We received many comments, so they are not all accounted for yet, but we believe we have the majority of the responses needed for the substantive comments.  You will notice comments in the margin indicating that we either need to account for some of the other commenters who may have made similar comments and need to be included yet, or that we still need to respond to or refine some of the existing responses.  Go ahead and use track changes for any comments, suggestions you may have.
4. **Draft Staff Report:**  Please use track changes for any comments
5. **Existing OAR language in Divisions 41, 42, and 45:**  I’ve enclosed our currently effective OAR rules in the Divisions we’re considering changes to for your reference.

Please send your comments to myself, Koto Kishida, and Cheryl Grabham—THANK YOU!

**Larry:**  I have included you on this review since we made substantive changes to the Background Pollutant Allowance.  We would really appreciate your thorough review of the language.  Also, please look at the other changes to the rule language.

**\*\*Meeting Tomorrow\*\***

For tomorrow’s meeting from 1-3 at HQ in Rm. 6A (conference call # in earlier message), we’ll be reviewing the changes we’ve made since the version that went out for public comment.  It shouldn’t take too long to go over the NPS changes, and we’ll mainly focus on the background pollutant allowance provision on the permitting side.  Based on EPA’s comments, we needed to establish a site specific criterion as a result of the background allowance.  EPA approval is required for each discharger requesting a site specific criterion.  However, as EPA suggested, we have incorporated a performance based approach into the rule itself which would allow EPA to only approve the provision, as opposed to each request.

I have received positive attendance responses from the following IRT members:  **Steve, Les, and Don**

I have received negative attendance responses from:  Lyle, Greg, and Tonya

I have not heard responses from the rest of the IRT group (except HQ staff people).  If only 3 people are attending, we’ll probably end sooner than 3:00.

Here’s the agenda:

**AGENDA**

1. Highlights of Responses to Comments
2. Nonpoint Source Changes
   1. Opportunity for Questions
3. NPDES Changes
   1. Focus on Background Pollutant Allowance
   2. Other minor changes in the variance and Intake Credit provisions
   3. Opportunity for Questions

Thanks!

Andrea

**From:** MATZKE Andrea   
**Sent:** Monday, April 18, 2011 1:03 PM  
**To:** MATZKE Andrea; ADES Dennis R; BLOOM James; BROWN Courtney; BURKHART Robert; CARLOUGH Les; CHRISTENSEN Lyle; DOMBROWSKI Tonya; GEIST Gregory; SCHNURBUSCH Steve; WISTAR Gil; YON Donald R  
**Cc:** WIGAL Jennifer; LIEBE Annette; FOSTER Eugene P; KISHIDA Koto; BOHABOY Spencer; STURDEVANT Debra  
**Subject:** RE: Toxics Rulemaking: Update and meeting next week

Hi All,

We are still working on revising some of the rule language, so we are pushing our schedule back several weeks, but are still planning on meeting the June EQC schedule.  Consequently, I’m postponing our scheduled IRT meeting this Thursday.  I’ll reschedule a meeting sometime around May 5.

Thanks,

Andrea

**From:** MATZKE Andrea   
**Sent:** Tuesday, April 12, 2011 8:48 AM  
**To:** ADES Dennis R; BLOOM James; BROWN Courtney; BURKHART Robert; CARLOUGH Les; CHRISTENSEN Lyle; DOMBROWSKI Tonya; GEIST Gregory; SCHNURBUSCH Steve; WISTAR Gil; YON Donald R  
**Cc:** WIGAL Jennifer; LIEBE Annette; FOSTER Eugene P; KISHIDA Koto; BOHABOY Spencer; STURDEVANT Debra; MATZKE Andrea  
**Subject:** Toxics Rulemaking: Update and meeting next week

Good Morning All,

We have completed 9 hearings on the toxics rulemaking and the comment period was closed on March 21.  We received approximately 1000 comments on the rule, although many of those comments were submitted as various form letters.  We are busy responding to comments and making any changes, if necessary, to the rule language.  I’ve set up a meeting for next week (see details below) to give you an opportunity to ask questions about any of the changes we’re proposing.  I’ll be sending out a partial rulemaking package this Tuesday (draft response to comments, revised rules, draft staff report) for your review.  The objective of the meeting is for HQ to give the IRT a summary of the changes, what it means, and then provide an opportunity for questions.  Hopefully, that will help focus your review of the rulemaking package.  You are welcome to attend in person, but I have also set up a conference call line for the regional staff.  Hope you can attend!

Thanks,

Andrea

**Meeting Info**

April 21

8:00 – 10:00

HQ:  Rm. 6A

Conference Call:  (866)680-0146

Participant code:  839266

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