

**TOXICS ADVISORY COMMITTEE
JULY 7, 2005**

A meeting of the Toxics Advisory Committee was held at the Delaware River Basin Commission Members or alternates present were:

Delaware

Rick Greene, DNREC

Academia

Dr. David Velinsky, Academy of Natural Sciences

Agriculture

Dr. Ferdows Ali, NJ DA

Pennsylvania

James Newbold

Public Health Interest

Dr. Charles V. Shorten, West Chester University

U.S. EPADr. Rollie Hemmett, EPA Region II
Denise Hakowski, EPA Region III**Federal Fish & Wildlife**

Dr. Tim Kubiak

New Jersey

Steven Lubow

Environmental/Watershed

Mary Ellen Noble, Riverkeeper

Industry

Larry Sandeen

Municipal

Dennis Blair, PWD

Environmental/Watershed

Not represented

New York

Not represented

**Delaware River Basin
Commission**Carol R. Collier
Dr. Thomas Fikslin
Dr. Ron MacGillivray
Daniel Liao
Pamela Bush
John Yagecic
Danielle Kreeger**(DRBC Continued)**Donna Gushue
Dr. Namsoo Suk**Other Attendees**Tom Harlukowicz, PSEG
Bruce Aptowicz, PWD
Roy Romano, Phila. Water Dept.
Tom Healy, Phila. Water Dept.
J. Bart Ruitter, DuPont
Brenda Gotanda, Manko, Gold
Tom Starosta, PA DEP
Dr. Steve Washburn, Environ***Recommendations & Agreements***

1. Two motions were passed and forwarded to the Commission. The motions were:
 - Motion regarding the Revised Water Quality Criterion for PCBs for the Protection of Human Health
 - Motion regarding the Development and Adoption of Variance Language or other Alternative Implementation Mechanisms

I. Call to Order

Dr. Hemmett the Toxics Advisory Committee chairperson called the meeting to order at 9:45 a.m.

II. Review of meeting minutes from April 7, 2005

The minutes from the April 7, 2005 meeting were reviewed. Mr. Greene made a motion to approve the meeting minutes. Dr. Velinsky seconded the motion. The motion carried unanimously.

III. DELEP Update (Dr. Kreeger)

1. Dr. Kreeger reported that the Partnership has revised their web site and as part of that revision, DELEP is going to have a new web presence under the Partnership, which should be completed by August 1.
2. Dr. Kreeger is going to take the messages from the Science Conference and do a white paper working with the lead moderators/ co-moderators from the different sessions to basically take stock of where DELEP is with their information, as well as what were the top 5-10 messages from the Science Conference regarding science needs. There will be prioritized list of science needs in the white paper, which will also be put up on the web for viewing.
3. Dr. Kreeger is looking at re-forming the Science & Technical Advisory Committee for Delaware.
4. Dr Kreeger informed the committee that if any attendees were not at the Science Conference and if they would be like to be listed in the DELEP resource directory, please send your name, contact information, and three key words of area of expertise to her.
5. The Partnership and DELEP are developing new funding for science based projects. The idea is that the Partnership and DELEP are taking more of an active role in coordinating scientific work and restoration in the basin by attracting new funding opportunities to the Partnership.

IV. Discussion of Revised PCB Criteria for Human Health for Zones 2-6 (Dr. Fikslin)

Summary and Background on PCB Criteria *(See presentation)*)

Coalition presentation on Revised PCB criteria for Human Health *(Steve Washburn see presentation)*

1. Dr. Fikslin presented a brief history, as well as an up-to-date report on PCB Criteria for Human Health. In early 2001, the TAC passed the unanimous recommendation that a field derived bioaccumulation factor be developed for revised human health criteria for PCBs.
2. The new EPA 2000 Guidance that had been issued in October 2000 presented 4 procedures to derive the factor. A subcommittee was then established to evaluate the data, with the first meeting in June 2001. The objectives of the subcommittee were then established.
3. In February 2003, the initial work of the subcommittee had been completed. The subcommittee presented their recommendations to the TAC. The TAC passed several motions related to the human health criteria and the wildlife criteria.
4. Appropriate risk levels for the criteria were discussed and there was a motion made that the risk level is essentially a risk management decision and the Commissioners needed to decide what the appropriate risk level was. The motion was to put forth to the Commissioners. In 2003, a value of 17.6 pg/l was presented, but there were several factors that needed to be reviewed to establish the final value.
5. Motions were presented to the Commissioners on March 19, 2003, who then passed a resolution that authorized the Executive Director to publish notice of public hearings and establish a comment period for proposal to revise human health criteria, with the impending Stage 1 TMDL in December

2003, this was suppose to occur on or after January 1, 2004 (specific date included in resolution). The other aspect of the resolution was authorizing the Executive Director to request staff to begin development of estuary-specific wildlife criteria.

6. At the last TAC meeting, the chairperson requested that motions be drafted. The first motion was regarding the numerical value of revised water criteria for PCBs. Mr. Greene offered to draft this motion, which was done and distributed. There were five comments received from TAC members that suggested changes, which were incorporated and re-sent to the TAC.

7. Two motions and comments on the revised water quality criteria were received from Mr. Ruiter. One motion was to expedite the development of variance language or other alternative implementation procedures for incorporation into the DRBC Water Quality Regulations. The other motion recommended the preparation of a report assessing the attainability of the revised PCB criteria.

8. Dr. Fikslin presented some of the issues related to using multiple target criteria for the PCBs, the TMDLs for Stage 2, and the impact of using several existing criteria versus one revised uniform criterion.

9. Some of the impacts on the major tributaries were looked at. The loadings from Stage 1 and Stage 2 as a result of using the existing criteria were discussed, as well as the predicted increases in the tributary loadings as a result of using 16 picograms per liter.

10. Discussion involved choosing correct flows and which flows to use for Stage 2. Dr Suk noted that the Expert Panel recommended when this TMDL was done rather than run the same flow year after year for several years, to run what the river is actually doing. In addition, the Expert Panel recommended using actual flow and actual tide rather than design fixed constant flow and tidal conditions.

Comments from Mr. Washburn representing the Delaware Estuary TMDL Coalition (See Attachment 1)

1. Mr. Washburn commented that from his perspective the differences between the existing Water Quality Criteria and the TCS (Toxics Criteria Subcommittee) calculated water quality criteria really are inconsequential compared to current concentrations that are being seen in the Delaware Estuary.

2. Mr. Washburn stated when you looked at the different criteria being talked about and how the concentration are measured, he thinks that the actions that need to be taken to reduce PCBs loadings to the Delaware Estuary really are independent of these different numbers. Mr. Washburn's thinks there is some weakness in the science basis for the criterion that has been calculated.

3. Mr. Washburn thinks an important point is that we have water quality criteria for total PCBs based on a BAF for total PCBs that do not take into account variability in the PCB homologues.

4. Mr. Washburn's recommendations again would not be the adoption of a revised water quality criterion at this time.

TAC Responses:

- Mr. Greene expressed his opinions regarding Mr. Washburn's presentation, including moving forward and making adjustments as necessary. ***Mr. Sandeen raised issues regarding the probabilistic analysis. He stated a paper that was presented last week (and this***

is the only section that he has on probabilistic analysis) he feels is lacking in detail.

- Dr. Fikslin made a point regarding the probabilistic analysis noting that it is not new and that it was done in 2003 and if anything it was expanded to other parameters. He stated that all of the documents and spreadsheets, etc. have been provided over the years to the subcommittee. Ultimately, the question right now is requesting public participation of this information. Basically, what is being recommended is to formally public participate this information because it has been worked on substantially for a number of years now. ***Dr. Kubiak commented that he discussed and tried to give Mr. Brown an idea on how he might better obtain a comfort index understanding the derivation of BAF to weigh the result.***

Comments presented by Brenda Hustis Gotanda, Esq. re representing the Delaware Estuary TMDL Coalition (See Attachment 2)

Ms. Hustis Gotanda stated she does not believe that the TAC should be recommending that DRBC initiate public notices and comments on this new criteria without also recommending the following:

1. That DRBC first undertake efforts to incorporate variance procedures or some other alternative implementation mechanisms into its water quality regulations in order to address the implementation issues that are going to occur for the NPDES discharges that are going to be in a situation where they would be unable to attain this new criteria.
2. Ms. Hustis Gotanda also felt that it was inappropriate to go forward creating this new standard and not first addressing implementation issues that it's going to create when there is general agreement and acknowledgement that the existing water quality standards are not currently being met and that there is nothing in place to make DRBC address that inconsistency leaving this issue for the dischargers and the state.
3. Ms. Hustis Gotanda recommended that, to the extent possible, if there is any motion that is adopted today recommending that that DRBC go forward with this new criteria, that this motion also include the additional recommendation that the DRBC first amend its own regulations to address the implementation issue.

TAC Comments:

- Mr. Ruiter expressed his opinion regarding the new criteria reiterating what Ms. Hustis Gotanda had stated.
- Dr. Hemmett summarized what both Mr. Ruiter and Ms. Hustis Gotanda had stated. Dr. Hemmett stated that the PCB criteria of 44 pg/l is currently in place and variance is not used, but if the TAC moves forward with the 16 picograms per liter, some sort of a variance will be requested, so it allows dischargers to meet the goals over some period of time
- Ms. Hustis Gotanda stated that she is standing up now and asking the TAC to acknowledge that in their recommendations. Ms. Hustis Gotanda stated that in the two motion proposals, one of them has some language concerning this issue with variance and implementation, and what is in there talks about having the Water Quality Advisory expedite the development of language
- Dr. Hemmett asked if there is new language to propose. Ms. Hustis Gotanda stated that they do not have it written. Dr. Hemmett noted that if this is written and if the TAC saw what they had, they could put that in as an alternative, if that is the case

- Mr. Greene stated that what he heard Brenda, Bart, and Larry state is that they felt it is very important to move forward with the variance language independent of whether or not a new criteria is done, because we are in the same situation. Mr. Greene noted that Brenda, Bart and Larry all make a validate point; and do not expect this criteria to be met anytime soon. Mr. Green acknowledges that for the last couple of years that this is a problem, and that is why Delaware contributed significant financial resources to the IAC.
- Mr. Ruitter noted that Mr. Sandeen could not speak right now for coalition and this issue would need to be discussed further. The TAC agreed to discuss this matter after lunch.

LUNCH

- Dr. Hemmett stated that the discussion involved two things: 1) the motion for the 16 picograms/liter and 2) that there had to be some sort of implementation mechanism in order to move the 16 forward. Dr. Hemmett questioned the TAC on how they would like to proceed. His opinion was that the TAC has had a lot of discussion and that the TAC understands the derivation of the 16 pg/l and the risk factor. Dr. Hemmett asked the committee members if they had any more comments.
- Mr. Sandeen read a written statement from Steve Brown involving the Water Quality Standards to the TAC (see Attachment 3). Dr. Fikslin responded to Steve. Brown's letter noting that the letter suggests that there is a consensus that it would be premature to vote on a resolution supporting a revised criterion of 16 pg/l. Dr. Fikslin stated that he did not agree with this position and that he was mischaracterizing a discussion they had at the recent WEF TMDL 2005 Conference. Furthermore, Steve Brown is in error when he states that I "privately agreed that it would be a mistake to not utilize the available data for PCB concentrations in sediment, invertebrates, etc. to calculate the "baseline BAF" and WQC via the BSAF approach", and that the data was specifically collected for that purpose. Ms. Hustis Gotanda also presented further comments on the issue of the variances.
- Dr. Hemmett noted that this committee recommended extension of toxics criteria to Zone 6 and to Zone 1 on a schedule that is already two years behind (that was done in 2002); we probably need to revisit that because it speaks to the actions of the Committee as well. Dr. Hemmett asked that this item be tabled to the next meeting. Dr. Fikslin agreed to this.
- Dr. Hemmett noted that Mr. Sandeen brought up the fact that there was a third recommendation that the TAC recommends that the Commission evaluate and prepare a written report for assessing attainability of the calculated PCB Water Quality Criteria. The discussion of this issue was tabled.

The following motions were presented:

Motion regarding the Revised Water Quality Criterion for PCBs for the Protection of Human Health

1. The Toxics Criteria Subcommittee of the Toxics Advisory Committee (TAC) has developed a revised numerical human health water quality criterion for Total PCBs that is applicable to Zones 2 - 6 of the Delaware Estuary. Consistent with the instructions of the TAC, the revised criterion incorporates the current EPA cancer potency factor [from IRIS

2005]; a calculated Estuary-specific bioaccumulation factor (BAF) [determined as described in the attached Background and Basis Document]; and an Estuary-specific fish consumption rate. The approach used to develop the revised criterion is consistent with U.S. EPA guidance issued in October 2000 (EPA-882-B-00-004). The Commissioners previously determined that the appropriate cancer risk level selected risk range for this criterion be subject to public notice and comment. The Total PCB criteria developed by the TAC is based upon a 10⁻⁶ risk level. The TAC recommends that the Commission proceed with the process of public notice and comment for the adoption of a revised criterion of 16 picograms/liter of total PCBs at a risk level of 10⁻⁶, or 160 picograms/liter of total PCBs a risk level of 10⁻⁵ to replace the current criteria for Zones 2 - 5 and establish a criterion for total PCBs for Zone 6 (Delaware Bay).

Motion made by Mary Ellen Noble. Seconded by Steve Lubow. Vote 7 yes, 0 no and 3 abstain, motion carries.

***Motion regarding the Development and Adoption of Variance Language
or other Alternative Implementation Mechanisms***

2. TAC recommends that the Commission expedite development and adoption of variance language or other alternative implementation mechanisms for incorporation into the DRBC's Water Quality Regulations where water quality criteria are currently unattainable. The TAC also recommends that the commissioners take immediate steps to move this action forward. The TAC recommends that consideration of the PCB water quality criterion and variance language is subject to public notice and comment at the same time, if feasible.

Motion made by Dr. Velinsky. Seconded by Larry Sandeen. Vote 9 yes, 0 no and 1 abstain, motion carries.

V. Loading Subcommittee Update on Tributary Monitoring (Dennis Blair)

Mr. Blair presented an update on the Loadings Subcommittee, which has not met since the last TAC meeting but he thinks that they have finished the spreadsheet, which prioritizes the tributary sampling stations. Mr. Blair will forward this spreadsheet to Dr. Fikslin, so that they are attached to the minutes.

VI. Update of Chronic Toxicity Workgroup

Dr. MacGillivray will present his update at another meeting of the TAC.

VII. Meeting adjournment

The meeting was adjourned at 3:30 p.m. The next meeting of the Toxics Advisory Committee will be held on August 18, 2005.