

TOXICS ADVISORY COMMITTEE

May 7, 2002

A meeting of the Toxics Advisory Committee was held at the Delaware River Basin Commission offices in West Trenton, NJ. Members or alternates present were:

Delaware
Rick Greene

Pennsylvania
James Newbold

Environmental / Watershed
Dr. Laurel Standley
Maya Van Rossum

Industry
Bart Ruiter

Academia
Not represented

Public Health Interest
Not represented

New Jersey
Steve Lubow

Municipal
Dennis Blair

Agriculture
Dr. Ferdows Ali

New York
Not represented

Resources
Dr. Sandra Brewer

U.S. EPA
Charles App

Delaware River Basin Commission

Dr. Thomas Fikslin
Dr. Namsoo Suk
Dr. Daniel Liao
Dr. Ron MacGillivray
John Yagecic

Other Attendees

Dr. Roland Hemmett, EPA Region II
Forsyth Kineon, DELEP
David Katz, PWD
Dr. Steve Brown, Rohm & Haas
Tom Healy, Philadelphia Water Dept.
Bonita Moore, PA DEP
Carol A. Young, PADEP
Larry Sandeen, Rohm & Haas
Joe Greenfield, Valero Refining
Roy Romano, Philadelphia Water Dept.
Ray Wittekind Jr., Mattioni, Ltd.
Dr. Joe Rogan, Exelon Power
Tom Harlukowicz, PSEG
Chuck Kanetsky, EPA Region III

I. Recommendations & Agreements

- The TAC passed a motion recommending extending water quality criteria for toxic pollutants for the protection of aquatic life and human health to Zone 6 (Delaware Bay).
- The TAC passed a motion recommending revising the carcinogen human health criteria by updating the criteria for chlordane and N-Nitrosodi-N-methylamine to incorporate the new cancer potency factors and adding criteria for 1,3-dichloropropene.
- The TAC passed a motion recommending revisions to the systemic toxicant (non-carcinogen) human health criteria for beryllium, chromium (+3), chromium

- (+6), chlordane, 1,3-dichloropropene, and vinyl chloride; and also recommending withdrawal of the systemic toxicant (non-carcinogen) human health criteria for hexachlorobutadiene.
- The TAC passed a motion recommending that the DRBC proceed with the development and adoption of aquatic life and human health criteria for toxic pollutants in Zone 1 of the Delaware River.
 - The TAC passed a motion recommending that a fish consumption rate of 17.5 grams/day be used in Zones 1 - 6 for purposes of deriving human health water quality criteria. The TAC further recommended that the DRBC collect site-specific fish consumption data to serve as the basis for future revision of the human health water quality criteria in Zones 1 through 4.
 - The TAC endorsed Philadelphia Water Department's proposal to fund additional sampling of seven specific tributaries with the understanding that as data is collected, Philadelphia and DRBC would periodically review the data to see if any changes are warranted.

II. Call to Order

Meeting was called to order by Dr. Standley, Chair of the Toxics Advisory Committee, at 9:30 a.m.

III. Update on DELEP and EPA Activities

Mr. App reported on the following DELEP and EPA activities:

- Recent DELEP activity involved the Delaware Estuary Program's Budget for 2003, which would start in October.
- The budget proposals were reviewed by the Steering Committee. Mr. App noted short falls in the budgets (PCB's/TMDL activity area). Discussion included attempts to make-up these short falls.

Forsyth Kineon reported on the following:

- The Fish and Consumption Advisory Implantation Team made a presentation to DELEP. Ms. Kineon indicated that she would summarize the Fish Consumption Advisory presentation for the TAC, if time permitted.
- The Steering Committee of the Estuary Program is looking to create a resolution/charge to the Fish Consumption Advisory Implantation Team for methodology for Fish Consumption Advisories within six months to identify why inconsistencies exist between states. This resolution/document when finalized will be presented to the TAC.
- The State of the Estuary report is currently in the process of being completed. The final draft should be finished by the end of the month and can be presented at the next TAC meeting if desired.

IV. Status of obtaining PCB modeling consulting expertise (Fikslin)

On March 29, 2002, DRBC sent a request for proposals (RFP) for providing consulting assistance to individuals identified by the Model Expert Panel. The RFP was sent to several individuals including John Connelly at QEA Associates, Vic Bearman and Joseph Depinto at Limno Tech, James Martin at Mississippi State University, and Dominic DiToro at HydroQual. Several individuals opted not to submit proposals in response to the RFP, and were therefore not considered by DRBC. Deadline for submittal was April 14, 2002.

Submittals of proposals received were reviewed by DRBC staff and have been sent out to the Model Expert Panel. Dr. Fikslin explained the Commission’s proposal review process. Timeframes were proposed for selection of a contractor. Dr. Fikslin will provide the States with a copy of the proposals for their review.

A meeting with the Expert Panel will be scheduled tentatively in June. Discussion at that time would include replacing Kevin Farley on the Expert Panel.

V. Water Quality Criteria Subcommittee Recommendations on Criteria

Dr. Fikslin reviewed Water Quality Criteria discussions from the last Toxics Advisory Committee Meeting. At the March 18th meeting, the TAC charged the Water Quality Criteria Subcommittee with making recommendations regarding each of the remaining actions being considered. The Water Quality Criteria Subcommittee distributed a summary of the actions they considered, dated May 1, 2002, including recommendations where appropriate,. Dr. Fikslin indicated that these actions were now being referred back to the TAC for final consideration. The actions considered by the subcommittee, TAC discussions, and final recommendations are summarized below:

Aluminum

Issue Considered by Subcommittee	Revision of aluminum chronic aquatic life criterion to include provision restricting the criterion to waters with the conditions under which the tests were conducted (low pH and alkalinity)
Subcommittee Action	Action deferred pending review of water quality data for tidal portions of tributaries in Delaware.
TAC Discussion	The TAC discussed the possibility of adding a footnote to the criteria indicating that the criteria only applies to areas with water quality similar to the test conditions used to generate that criterion. The TAC also deferred action pending review of water quality data.

Extension of Criteria

Issue Considered by Subcommittee Extension of water quality criteria for toxic pollutants to Zone 1 (non-tidal Delaware River mainstem) and Zone 6 (Delaware Bay)

Subcommittee Action The Subcommittee made the following recommendation:

Extend water quality criteria for toxic pollutants for the protection of aquatic life and human health to Zone 6 (Delaware Bay).

TAC Discussion The TAC noted that the subcommittee recommended extension of water quality criteria for toxics to Zone 6, but did not recommend extending water quality criteria for toxics to zone 1 at this time. Mr. Lubow motioned to extend the current water quality criteria for toxics to Zone 6. Mr. Greene seconded the motion. The motion carried.

Fish Consumption Rates

Issue Considered by Subcommittee Revise all water quality criteria for human health protection to include the new consumption rate of 17.5 g/day replacing the 6.5 grams/day in Zones 2,3,4 and part of 5, and 37 grams/day in lower Zone 5.

Subcommittee Action The Subcommittee made the following recommendation:

Revise all water quality criteria for human health protection to include the new consumption rate of 17.5 g/day in Zone 5 and Zone 6.

TAC Discussion Dr. Fikslin noted that currently in Zone 2 through the upper part of Zone 5, a consumption rate of 6.5 grams per day is used, based on available data from 1973-1974. Also, in lower Zone 5 the Commission uses 37 grams/day, which is a consumption rate used by Delaware as part of their human health criteria. Mr. Greene noted that Delaware will propose revising fish consumption rates to 17.5 grams per day.

Mr. Lubow provided three handouts for review:

- Chemicals in Fish, Consumption of Fish and Shellfish in California and the United States.
- Combined Regulatory Impact and Draft Environmental Impact Statement.
- Methodology for Deriving Ambient Water Quality

Criteria for the Protection of Human Health (2000).

Mr. Greene noted that the Fish Consumption Advisory Implementation Team in its first meeting did discuss the possibility of putting together a proposal for consideration for DELEP and others to fund a consumption survey. Mr. Greene provided information on how Delaware derived their consumption rates including the many demographics variables used.

The TAC discussed incorporation of fish consumption rates for Zones 1 through 6. The group drafted an initial statement regarding fish consumption rates. A motion was made to adopt the statement and the motion carried, but during subsequent discussion, the group determined that additional refinements were required. After a vote, the resolution was rescinded, and the wording was revised to the following:

6B - It is recommended that a fish consumption rate of 17.5 grams/day be used in Zones 1 - 6 for purposes of deriving human health water quality criteria. The TAC further recommends that the DRBC collect site-specific fish consumption data to serve as the basis for future revision of the human health water quality criteria in Zones 1 through 4.

Mr. Lubow made a motion to adopt statement 6B. Mr. App seconded the motion and the motion carried.

Carcinogen human health criteria

Issue Considered by Subcommittee	Revision of carcinogen human health criteria for chlordane, 1,3-dichloropropene, N-Nitrosodi-N-methylamine due to revised cancer potency factors.
Subcommittee Action	Action deferred pending revision of spreadsheets showing current and revised criteria for these compounds.
TAC Discussion	Dr. Fikslin stated that these proposed revisions involve cancer potency factors that have either been updated or added. Cancer potency factors have been updated for chlordane and N-Nitrosodi-N-methylamine; new cancer potency factors have been added for 1,3-dichloropropene and vinyl chloride. However, the current vinyl chloride criteria is actually the MCL and is not based on the cancer potency factor in the 1980 EPA document. Therefore, the subcommittee did not consider revising the vinyl chloride criteria at

this time.

Dr. Standley made a motion to recommend revising the carcinogen human health criteria by updating the criteria for chlordane and N-Nitrosodi-N-methylamine to incorporate the new cancer potency factors and adding criteria for 1,3-dichloropropene. Mr. Lubow seconded the motion. The votes were counted with 8 in favor, 0 opposed, and 1 abstention, and the motion carried.

The group agreed to defer action on vinyl chloride until more information is available.

Systemic toxicant (non-carcinogen) human health criteria

Issue Considered by Subcommittee	Revision of systemic toxicant (non-carcinogen) human health criteria for beryllium, chromium (+3), chromium (+6), chlordane, 1,3 – dichloropropene, and vinyl chloride due to revised reference doses.
Subcommittee Action	Action deferred pending revision of spreadsheets showing current and revised criteria for these compounds.
TAC Discussion	The TAC discussed a recommendation to revise the non-carcinogen human health criteria based upon the new information and to withdraw the criteria for hexachlorobutadiene. Discussion focused on the observation that systemic toxicant criteria are typically higher than the carcinogen criteria, and the need for the non-carcinogen criteria. Mr. Lubow and Mr. Greene both indicated that for some parameters, non-carcinogen criteria can be controlling and that the conditions under which the criteria are applied can also determine which criteria is controlling. Mr. Lubow made a motion to recommend revision of the listed criteria and withdrawal of the systemic toxicant (non-carcinogen) human health criteria for hexachlorobutadiene. Dr. Standley seconded the motion. The motion carried.

In the afternoon, the TAC resumed discussion of extension of water quality criteria. The TAC drafted the following statement:

5A - It is the recommendation of the TAC that the DRBC proceed with the development and adoption of aquatic life and human health criteria for toxic pollutants in Zone 1 of the Delaware River.

Mr. Lubow made a motion to adopt 5A. Ms. van Rossum seconded the motion. The vote was counted with 6 in favor, and 3 opposed, and the motion carried.

VI. Data Adequacy Subcommittee Proposal

Mr. Ruiter noted data quality issues that need to be discussed. Mr. Ruiter referred to the paper entitled “Data Adequacy Evaluation Development of a PCB TMDL for the Delaware Estuary”. Mr. Ruiter proposed that a subcommittee be formed for data adequacy issues.

Mr. Greene questioned Mr. Ruiter regarding what specifically would be the charge of the subcommittee, as well as what types of things would be considered. Mr. Sandeen discussed the need for data adequacy.

Dr. Fikslin stated that some of the points raised are addressed in the Quality Assurance Plans. Other items, such as the use of qualified data, will be referred to the Expert Panel. Likewise, the TMDL subcommittee will discuss conservative assumptions and central tendencies. Dr. Fikslin questioned how this proposed subcommittee would interact with and relate to other subcommittees already in existence, with similar roles and responsibilities.

Mr. Ruiter proposed forming a Data Quality Subcommittee and Modeling Subcommittee either as separate subcommittees, or as a combined subcommittee. Mr. Ruiter requested feedback from the TAC.

Dr. Fikslin noted that, in response to the Expert Panel’s request, future meetings of the Expert Panel would include one day to interact with DRBC staff on detailed technical issues and a second day devoted to interaction with the TAC. Therefore, it was not clear what role a separate modeling subcommittee would play. Dr. Fikslin also recommended regular updates on the modeling activities, similar to the TAC DELEP update. Mr. App stressed the need to make the process as open as possible. The group discussed the need to provide information to the TAC at the same time as it is provided to the Expert Panel.

The group discussed the proposal of creating new subcommittees. Alternatively, the group recommended the following:

- The TAC should review the issues raised in the Data Adequacy Subcommittee Proposal handout and determine which issues are already being addressed by existing subcommittees.
- Each subcommittee chair should provide a goal statement for the next TAC meeting, to facilitate matching outstanding issues and the appropriate subcommittee to address those issues.
- Identify any issues which are not already being addressed. If the issue is appropriate for an existing subcommittee, direct that subcommittee to consider the issue and provide a recommendation.

- Identify any remaining issues which can not easily be directed to an existing subcommittee or panel. Devise a strategy to address those remaining issues.

Mr. Ruiter motioned to create a Modeling and Data Quality Subcommittee. Mr. Blair seconded the motion. The votes were counted with 3 in favor, 5 opposed, and 1 abstention, and the motion was denied.

Dr. Hemmett noted the importance of the quality of the data and model. Dr. Hemmett suggested looking at the model situation after the modeling consultant is hired by DRBC. At that time, if Mr. Ruiter still has concerns about the information that he is receiving that the TAC reconsider his proposal.

Mr. Ruiter proposed a two-day workshop/seminar to present an overview of all the data, to be coordinated in conjunction with DRBC, EPA, and the States. A request was made for volunteers for a work group to frame this workshop. Volunteers included Mr. Hemmett, Mr. Greene, Mr. Brown, and a DRBC staff member.

VII. Discussion of Supplemental Tributary monitoring proposed by PWD

Dr. Fikslin discussed the additional tributary monitoring involving Philadelphia Water Department (PWD). Mr. Blair expressed concerns regarding the tributary monitoring including the locations of some of the monitoring stations and the timeframe for completion of the tributary monitoring.

Mr. Yagecic noted that DRBC had begun collecting wet weather samples. There were a couple of tributaries where one of the sub-committees was discussing head of tide locations, so DRBC had not collected on those tributaries. Mr. Yagecic noted that previous points raised by Mr. Blair could be discussed and addressed at the subcommittee meeting.

Mr. Yagecic stated that DRBC had provided a transparent process by which tributaries were selected for characterization. Mr. Yagecic indicated his concern that PWD's proposal identified seven tributaries, but had not gone through the same selection process. Mr. Yagecic noted the proposed work establishes direction for the project without a review of the technical evaluation used to select those 7 tributaries for additional wet weather sampling. Several TAC members indicated that the proposed work was supplemental, and did not prevent DRBC from selecting other tributaries for additional characterization in the future.

Mr. Ruiter proposed to go forward with the City of Philadelphia's work and that it be included under the TAC. Mr. Ruiter motioned that the TAC accept Philadelphia's money to do the additional sampling of the seven sites that they proposed; however, that as data is collected, the City of Philadelphia and DRBC periodically get together to review the data to see if they should make any changes on the data collection. In addition, if PWD and DRBC could not reach an agreement, the issue would be brought back to the TAC.

Mr. Blair seconded the motion. The votes were counted with 7 in favor and 2 abstentions, and the motion carried.

VIII. Scheduling of Topics and Dates for Upcoming TAC Meetings

Presentations on Toxics Data used in 305(b) Report for the Delaware Mainstem and Fish Consumption Advisories will be deferred to the next meeting.

The next meeting of the TAC was confirmed for June 12, 2002 at DRBC.

IX. Public Comment

No public comments were presented at this time.

X. Adjourned

Ms. van Vossun motioned to adjourn. Mr. Ruiter seconded the motion. The motion carried, and the meeting was adjourned at 3:50 p.m.