

**TOXICS ADVISORY COMMITTEE**

March 31, 2004

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

**Delaware**  
Rick Greene

**Pennsylvania**  
James Newbold

**Environmental / Watershed**  
Mary Ellen Noble  
Dr. Anthony Aufdenkampe

**Industry**  
Larry Sandeen

**Academia**  
Dr. David Velinsky

**Public Health Interest**  
Not represented

**New Jersey**  
Steven Lubow

**Municipal**  
Dennis Blair

**Agriculture**  
Not represented

**New York**  
Not represented

**Resources**  
Dr. Tim Kubiak

**U.S. EPA**  
Dr. Rollie Hemmett

**Delaware River Basin Commission**

Dr. Thomas Fikslin  
Dr. Ken Najjar  
Dr. Ron MacGillivray  
Ed Santoro  
John Yagecic  
Paul Scally

**Other Attendees**

Tom Starosta, PADEP  
Bruce Aptowicz, Philadelphia Water Dept.  
Chris Jepson, BCM Engineers  
Tom Healy, Philadelphia Water Dept.  
Roy Romano, Philadelphia Water Dept.  
Betty J. Boros-Russo, NJDEP  
Chris Nally, American Aquatic Testing  
Dr. Steve Brown, Rohm & Haas  
Tom Harlukowicz, PSEG  
Bart Ruiter, DuPont

**Delaware Estuary Program**

Peter Evans

**I. Recommendations & Agreements**

The TAC passed a resolution to prioritize DELEP FY-2005 grant funding requests in the following order of preference:

1. Chemical pollution histories;
2. Flame retardants;
3. Estrogenic compounds;
4. SODAR transmitters.

The TAC passed a resolution requesting the entire basis and background document with a 30-day timeframe for the TAC to review and comment before the proposed water quality regulation changes are put before the commission.

## **II. Call to Order**

Meeting was called to order by Mr. Sandeen, Chair of the Toxics Advisory Committee, at 9:40 am.

## **III. Meeting Minutes**

The TAC reviewed the minutes from the February 24, 2004 meeting. Dr. Hemmett made a motion to approve the minutes. Mr. Greene seconded the motion and the motion carried unanimously.

## **IV. DELEP Update and Funding Opportunity**

Mr. Evans presented information on the Delaware Estuary Program including:

- DELEP is developing its FY-2005 budget and has identified an opportunity to fund priority projects, as discussed at the last TAC meeting;
- The Estuary Program will meet on April 13, 2004, and is expecting to see a proposed budget
- Four proposals for review were presented to the TAC including:
  - Survey for analysis of estrogenic compounds in ambient waters of the tidal Delaware River (Mr. Santoro);
  - Insertion of automatic monitors and SODAR transmitters onto 2 Delaware Bay Lighthouses (Mr. Santoro);
  - Assessing flame retardant contamination in the Delaware River Estuary using American eels (Dr. Ashley); and
  - Chemical pollution histories in the tidal freshwater Delaware Estuary (Dr. Velinsky).

The group discussed many aspects of each proposal including the relative regulatory importance of estrogenic compounds and flame retardants, and the anticipated maintenance requirements of the automatic monitors.

A motion was made by Ms. Noble for the TAC to prioritize the proposed projects in order of preference as follows:

1. Chemical pollution histories;
2. Flame retardants;
3. Estrogenic compounds;
4. SODAR transmitters.

Mr. Lubow seconded the motion and the motion carried unanimously.

## **V. Subcommittee Update**

Dr. Fikslin updated the TAC on the Policies and Procedures Subcommittee. The subcommittee will resume meetings in the summer to develop policies and procedures for non-point sources. Initial subcommittee efforts focused on Stage 1 of the PCB TMDL, but more detailed polices and procedures are needed for Stage 2. Presently there is no chair for this subcommittee.

Dr. Fikslin also informed the group that the PCB Criteria Subcommittee met during the second week of March. The subcommittee decided to change its name from the PCB Criteria Subcommittee to the Toxics Criteria Subcommittee, as it has now been tasked to update and recommend adoption of toxics Criteria beyond PCBs. Dr. Fikslin provided a handout containing tasks for 2004 and 2005 and membership. Mr. Ruiter is the Chairmen of this subcommittee.

Mr. Blair presented an update on the Loading subcommittee. This subcommittee will meet on April 13<sup>th</sup>, at which time they will begin to look at the tributary loadings and the contaminated site loadings. Mr. Blair requested that DRBC send out information related to these two issues about a week before the meeting. The Implementation Advisory Committee is also considering matrices on loadings and has requested that experts involved in loadings estimates develop briefing papers on how the loadings were computed and addressing some of the uncertainty surrounding the loadings.

Mr. Sandeen presented an update on the Data Quality Subcommittee which met this week. Greg Cavallo is chair of this subcommittee. Next meeting is late April.

## **VI. Proposed Changes to Water Quality Regulations**

Dr. Najjar reviewed the proposed changes to the Water Quality Regulations discussed at the previous TAC meeting, including an overview of the activities of the Water Quality Advisory Committee pertaining to the regulations:

- The Water Quality Advisory Committee has been working to re-codify the regulations;
- The majority of the work involved re-organizing the document, especially Article 3 (Water Quality Regulations) and Article 4 (Applications of Regulations). There were also changes to the special protection waters sections and to some of the criteria.
- Previous TAC motions recommended adoption of certain revised criteria (see TAC minutes for February 20, 2002 and May 7, 2002).
- At the April 21, 2004 Commission Meeting, DRBC would present a basis and background document and would be requesting initiation of public participation to adopt the changes.

Dr. Najjar stated Articles 3 and 4 were given to the TAC on February 24, and he is now asking for any comments. Dr. Fikslin stated that two weeks were given to submit any comments on the proposed changes to Article 4 and Article 3. If any members submitted comments, Dr. Fikslin was unaware of them.

Mr. Ruitter discussed proposed DO criteria changes to emphasize his overall concerns with the way the regulation changes were being proposed. Although DO is not a toxics criteria, the issues apply to the approach taken by DRBC. Mr. Ruitter indicated that DRBC proposed to change the DO criteria but provided no context or evaluation or technical basis to support making the change. Additionally, DRBC provided no data indicating whether or not the proposed revised criteria could be met, although they stated that the proposed revised criteria are being met. Mr. Ruitter said that DRBC stated they would run the DO model to set new wasteload allocations after the DO criteria has been revised. Since the DRBC Water Quality Standards and Implementation Guidance states that the DO model will be run at low flow with point discharges set to design flows and permit limits, Mr. Ruitter felt that a steady state model would most likely result in additional point discharge load reductions. Mr. Ruitter felt this was inconsistent with DRBC's claim that proposed revised DO criteria are already generally being met. Mr. Ruitter felt that at a minimum, DRBC regulations should be revised to call for dynamic modeling for wasteload allocations.

Similarly, Mr. Blair indicated that using equal marginal percent reduction (EMPR) for wasteload allocations for non-toxics disproportionately burdens larger utilities and that the commissioners should be made aware of the issue.

The group discussed whether the time provided had been adequate to consider all the changes proposed. The group also discussed whether it was reasonable to make a recommendation to the Water Quality Advisory Committee without having the basis and background document. Several members indicated that the changes to Article 4 were presented to the TAC for the first time at the previous TAC meeting. Some members stated that it was difficult for the TAC to identify significant issues in the limited time provided especially considering that the basis and background document was not provided for TAC review.

After the lunch break, Mr. Zangwill indicated that a more clear articulation of the TAC's deliberations should be provided to the Water Quality Advisory Committee. Mr. Blair made a motion requesting the entire basis and background document with a 30-day timeframe for the TAC to review and comment before the proposed water quality regulation changes are put before the commission. Mr. Lubow seconded the motion. The motion carried with nine in favor, and one abstained (see Attachment 1).

## **VII. Integrated List Assessment Methodology**

Mr. Zangwill presented DRBC's 2004 assessment methodology for the integrated list under Clean Water Act Sections 303(d) and 305(b). Mr. Zangwill reviewed the states'

and DRBC's responsibilities under the Clean Water Act and the changes reflected in the most recent EPA guidance documents. Mr. Zangwill reviewed the new listing categories, which included:

- 1: All uses supported
- 2: Same as 1 except where insufficient data
- 3: Insufficient data for any use
- 4: Water body impaired but no TMDL
  - TMDL is already in underway
  - Impairment not caused by a pollutant
  - Other enforceable measures will fix problem
- 5: Water body impaired by pollutant( s) and requires a TMDL

Mr. Zangwill reviewed the sources of data and monitoring locations and the designated uses. Mr. Zangwill showed maps of the assessment units used and the data needed to assess support of designated uses for each assessment unit.

Mr. Sandeen recommended that a follow up presentation be made at the next TAC meeting showing the results of the assessment.

### **VIII. Chronic Toxicity Workgroup Update**

Dr. MacGillivray presented an expanded update on the activities of the Chronic Toxicity Workgroup in response to a previous TAC request. As required by the Clean Water Act, water should be free from toxics in toxics amounts. Dr. MacGillivray indicated that DRBC has water quality criteria for toxicity (0.3 TUa for acute toxicity and 1.0 TUc for chronic toxicity).

Dr. MacGillivray reviewed potential sources of toxicity and indicated that the task of the Chronic Toxicity Workgroup was to study and characterize the nature and extent of cumulative chronic toxicity in the Delaware River. The Workgroup is considering how to evaluate the toxics being released into the estuary and their toxic effects. Deliberations include which chemicals to monitor and which toxicity endpoints to measure.

Dr. MacGillivray presented a chronic toxicity strategy suggested by Dr. Brown that had yet to be discussed by the workgroup. The goals of the strategy are to collect information to assess status and trends related to ambient chronic toxicity and to develop a scientifically sound sampling and analysis plan to determine if ambient chronic toxicity occurs in the estuary.

Current toxicity monitoring includes end-of-pipe testing (whole effluent toxicity (WET)) and ambient receiving water monitoring. Ambient testing allows assessment of both point sources and non-point sources, assessment of mixtures, and assessment of toxicants without criteria and/or not being monitored.

Dr. MacGillivray said DRBC conducted ambient water toxicity studies in 1990, 1992, 1999, 2000, and 2001. Samples were collected at twelve fixed stations between river miles 63 and 115. Three freshwater and two saltwater species were tested for survival growth and reproduction. An EPA review concluded that the data was inconclusive and recommended further study. Reasons for EPA's conclusion include the possibility that salinity/ion effects (interference) may have led to "false positive" indications of toxicity in Ceriodaphnia. An important change proposed for 2004 sampling/analysis is that such tests will be conducted using appropriate controls (based on conductivity) in order to identify possible salinity/ion effects. Other proposed changes for the 2004 study include using only the fresh water species, expanding the number of sample stations, sample collection over two flow regimes, and measuring metals and ions. The Workgroup is working with EPA Region 3 and ORD to identify estuarine test species for post-2004 monitoring. The workgroup will also be working to outline a scope of work and proposal for a scientifically credible sampling and analysis program sufficient to monitor and assess (identify) spatial and temporal trends in ambient chronic toxicity.

Dr. MacGillivray reviewed other monitoring of toxics in the Delaware Estuary including tissue concentration measurements in fish and shellfish, and sediment toxicity measurements collected as part of the National Coastal Assessment. DRBC's 2004 budget for toxicity testing is \$30K.

#### **IX. Public Comment**

No public comments were presented at this time.

#### **X. Adjourned**

Mr. Lubow motioned to adjourn the meeting. Dr. Velinsky seconded and the motion carried unanimously. The meeting adjourned at 3:35 pm.

**Attachment 1  
Resolution and Voting Record**

Toxics Advisory Committee  
March 31, 2004

**Motion:** *Mr. Blair made the following motion:* Request the entire basis and background document with a 30-day timeframe for the TAC to review and comment before the proposed water quality regulation changes are put before the commission.

<b><u>Group Represented</u></b>	<b><u>Name</u></b>	<b><u>YES</u></b>	<b><u>NO</u></b>	<b><u>ABSTAIN</u></b>
Delaware	Rick Greene	X		
Pennsylvania	James Newbold	X		
New Jersey	Steven Lubow	X		
New York	Not represented	***	***	***
Resources	Dr. Tim Kubiak	X		
U.S. EPA	Dr. Rollie Hemmett	X		
Industry	Larry Sandeen	X		
Academia	Dr. David Velinsky	X		
Municipal	Dennis Blair	X		
Environmental / Watershed (1)	Mary Ellen Noble			X
Environmental / Watershed (2)	Dr. Anthony Aufdenkampe	X		
Public Health Interest	Not represented	***	***	***
Agriculture	Not represented	***	***	***

**Results:** Motion carried.

YES Votes = 9

NO Votes = 0

ABSTAIN = 1