

TOXICS ADVISORY COMMITTEE
May 7, 2012

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

Delaware

Dr. Richard Greene

Academia

Dr. David Velinsky

Agriculture

Dr. M. Ferdows Ali (Alternate)

Pennsylvania

Jenifer Fields
Thomas Starosta (Alternate)

Public Health Interest

Julie R. Petix

U.S. EPA

Wayne Jackson, EPA Reg. II
(*via conference call*)
Denise Hakowski, EPA Reg. III

New York

Not represented

Industry

Dr. Steven Brown, Dow Chemical
J. Bart Ruiter, DuPont (Alternate)

Environmental/Watershed

Maya van Rossum

New Jersey

Debra Hammond

Federal Fish & Wildlife

Dr. Timothy Kubiak

Environmental/Watershed

Not represented

Municipal

Dr. Christopher Crockett, PWD

**Delaware River Basin
Commission**

Gregory Cavallo
Dr. Thomas Fikslin
Dr. Ronald MacGillivray
Dr. Namsoo Suk
Robert Tudor
John Yagecic, P.E.

Other Attendees

Dan Caldwell, J & J
Jason Cruz, PWD
Dr. Danielle Kreeger, PDE
Bonita Moore, PA DEP
Larry Sandeen, SES

Action Items

- As part of TAC business, the need for a non-government member as vice-chair was discussed. DRBC staff will follow-up on soliciting a vice-chair.
- DRBC staff was tasked to prepare a presentation on the application of dioxins/furans Toxic Equivalents (TEQ) in DRBC water quality criteria for the next TAC meeting.
- Members voted to endorse a previous TAC motion to develop uniform criteria in shared waters of Zones 1 that harmonize DRBC criteria with basin states.
- The Toxics Criteria Subcommittee was charged to evaluate fish consumption rate and hardness use in the derivation and implementation of water quality criteria for Zone 1.

I. Call to Order

Dr. Chris Crockett, Toxics Advisory Committee chairperson, called the meeting to order at 9:10 a.m.

II. Review of the Meeting Minutes

- Meeting Minutes of 10/21/10 were adopted with one correction on the 1st bulleted item to read; “DRBC staff will contact Julie Petix, NJDOH and Laura McConnell, USDA
- Minutes of 3/21/11 meeting were adopted without revision.

III. Membership Review

- A new public health member, Julie Petix, NJDHSS was introduced.
- Wayne Jackson, EPA-R2 was voted as chairperson for FY13.
- The need for a non-government member as vice-chair was discussed. DRBC to follow-up on soliciting a vice-chair.
- Communication methods such as member access to documents in TAC online portal and public access to a new TAC listserv were reviewed.

IV. Toxics Criteria

Dr. Thomas Fikslin briefed the committee on adopted criteria, future needs and potential new revised criteria. Currently there are DRBC toxics criteria for the main stem Delaware River between Trenton to the mouth of the Bay, Zone 2 to Zone 6 but not Zone 1 above Trenton. Potential candidates for revised criteria are dioxins/furans TEQ based criteria and BLM based criteria for copper. Additional criteria work includes; revised pH, temperature, ammonia criteria and changes to designated uses for dissolved oxygen. It was noted that criteria are a patchwork and a uniform set of criteria would be desirable for the basin States. The committee also discussed hardness dependent metal criteria. The committee voted to present the standing recommendation of adoption of Toxics Criteria from Zones 2-5 to Zone 1 to the newly seated Commissioners and for the Toxics Criteria Subcommittee to move forward investigating two issues relating to hardness and fish consumption.

V. Technical Reports

Dr. A. Ronald MacGillivray gave a PowerPoint presentation entitled “Report on Emerging Contaminants in the Tidal Delaware River.” The goals of this study were to evaluate ambient water for unregulated contaminants of increasing environmental and human health concern. The study was performed to include the following: Pharmaceutical and Personal Care Products (PPCP); hormones; perfluoroalkyl and polyfluoroalkyl substances (PFASs), used in stain repellants/non-stick surfaces; polybrominated diphenyl ethers (PBDE) used as flame retardants; surfactants (nonylphenols), and plasticizers (bis-phenol A). The study was conducted in Zones 2, 3, 4 & 5 of the tidal river between Trenton and Liston Point.

Priority PPCP were identified and are proposed for further study in the Delaware Estuary. PBDEs were measured at low levels. Additional monitoring by DRBC focused on bioaccumulation of PBDEs in fish tissue. Nonylphenol levels were below recently developed EPA National Water Quality Criteria. Bis-phenol A was not detected. Natural and synthetic hormones were detected in ng/L levels. PFAS was detected at ng/L (ppt) levels in water, PFNA (C9) was the highest PFAS concentration in the sampled water. Concentrations of PFAS in water appear to be going down. PFAS in Delaware River fish fillets were an order of magnitude higher at ng/g (ppb) levels. Additional ecotoxicology information is needed on the bioaccumulative and persistent longer chain and sulfonated compounds.

Dr. MacGillivray requested that Committee Members submit comments to him by the end of May as his intention is to submit a report to EPA.

John Yagecic gave a PowerPoint presentation entitled “Water Quality Assessment Results for the Delaware River and Bay 2012.”

John Yagecic reported that over the last year or so DRBC has been engaged in two large assessment efforts where the 2012 Delaware River and Bay Water Quality Assessment Report recognizing 305(b) of the Clean Water Act, and the State of the Estuary Basin Report (TREB). Specifically, the Monitoring, Modeling and Assessment Branch worked on Chapter 3, the Water Quality Chapter. DRBC also worked on other chapters as well. The Water Quality Assessment Report compares observations to criteria. The specific goal of the report is to look at criteria and see what observations are relative to criteria, and whether designated uses are supported or not. A 5 year data window is used and focuses on the mainstem Delaware River only. The States do the assessment for the tributaries; DRBC does the assessment for the mainstem.

The TREB is different and looks at indicators, not necessarily parameters for which there are criteria; many things don't actually have criteria. The TREB looked at the current status, the long term trends and also makes some forecasts about future conditions. The TREB looked at a 10 yr. data window for current status and for long term trends. The TREB looks at the entire basin not just the mainstem but tributaries as well. The presentation focuses mostly on the Water Quality Assessment Report (WQAR) but from time to time the TREB is highlighted. For Water Quality Assessment Report the DRBC team was Ron MacGillivray, Erik Silldorff, Tom Fikslin, Bob Limbeck. and John Yagecic; State / Partners included Deb Hammond, NJ, Dave Wolanski, DE, Gary Walters, PA and Jeff Myers, NY.

For the TREB, DRBC had assistance from USGS, Eric Vowinkel and Jack Gibs, Jack in particular did a very extensive technical review of the TREB.

(To view the presentation in its entirety it has been posted on the TAC portal)

VI. 2012 DRBC Monitoring

Dr. Fikslin gave a PowerPoint presentation entitled “DRBC Monitoring Programs – 2012”

This presentation was done for the Commissioners back in December. Dr. Fikslin selected material that would be of interest to the TAC. The monitoring that is conducted by the Commission has two main objectives:

1. Support DRBC’s management programs which are in compliance with Water Quality (WQ) standards and compliance with existing water quality targets or EWQ in Special Protection Waters. Those waters are the entire basin above Trenton including tributaries. However, monitoring is focused on the mainstem.
2. Develop TMDLs and assimilative capacity determinations under the Commission’s authority. This includes monitoring to establish and calibrate WQ models such as tracking the salt for reservoir operations. Water quality and quantity have started to merge in terms of how reservoir operations affect constituent concentrations in the river. Also to evaluate emerging threats to the water resources. Monitoring is focused on the main stem.

(To view the presentation in its entirety it has been posted on the TAC portal)

VII. Status of NG Regulations

Dr. Fikslin gave a brief report on the status of Natural Gas Regulations and activity. Between December 2010 and April 2011, DRBC was in the midst of a Public Comment period. During the Public Comment period, 69,000 comments were received. The comments were evaluated and a response document prepared. There was a planned meeting on Nov. 21, 2011 for action on the Proposed Natural Gas Regulations. That particular meeting was canceled.

In terms of an update, you can go to the DRBC website, the Final Proposed Regulations are posted as well as the Comment and Response document. The regulations include a number of monitoring activities either DRBC led or required including; monitoring of flow back water, ambient monitoring in terms of biological assessment, water chemistry, temperature, and conductivity, as well as monitoring of groundwater wells within 2,000 feet of a well pad prior to construction and annually thereafter.

As of right now discussion is still continuing with the Commissioners.

VIII. Meeting Adjournment

The meeting was adjourned at 11:50 AM.