

**Draft Minutes of the  
March 24, 2016, Meeting of the  
Water Resources Advisory Committee (WRAC)**

Robert Cavett called the meeting to order at 9:35 a.m. on Thursday, March 24, 2016, in Room 105 of the Rachel Carson State Office Building, Harrisburg, PA.

**The following committee members were present:**

Myron Arnowitz, Clean Water Action  
Jeanne VanBriesen, Carnegie Mellon University  
Robert Cavett, Merck & Co.  
Kent Crawford  
Andrew Dehoff, Susquehanna River Basin Commission  
Jeff Hines, York Water Supply  
John Jackson, Stroud Water Research Center  
Theo Light, Shippensburg University  
Gary Merritt, NSG (late attendee via phone)  
Cory Miller, University Area Joint Authority  
Chuck Wunz, Wunz Associates  
Stephen Rhoads  
Jeff Shanks, Waste Management  
Steven Tambini, Delaware River Basin Commission  
Robert Traver, Villanova University

**The following committee members were not present:**

Dean Miller, Pennsylvania Water Environment Association  
Harry Campbell, Chesapeake Bay Foundation

**The following DEP staff members were present:**

Tom Barron, Bureau of Clean Water  
Rod Kime, Bureau of Clean Water  
Rod McAllister, Bureau of Clean Water  
Lee McDonnell, Bureau of Clean Water  
Bonita Moore, Bureau of Clean Water  
Michelle Moses, Bureau of Regulatory Counsel  
Kristen Schlauderaff, Bureau of Clean Water  
Hayley Jeffords, The Policy Office

**The following guests were also present:**

Neal Brofee, PennDOT  
Aaron Mavrer, Waste Management  
Josie Gaskey, Pennsylvania Aggregates and Concrete Association  
Kevin Sunday, Government Affairs - Pennsylvania Chamber  
Steve Frank, NRG Pittsburgh

Nancy Evans, Talen Energy  
Naomi George, Capital Associates  
Renee Reber, Chesapeake Bay Foundation (CBF)  
Rachel Gleason, PA Coal Alliance  
Beth Kern, Chesapeake Energy

**Approval of Minutes** – Revised minutes were distributed to the committee members. Tom Barron of the Bureau of Clean Water provided an overview of the corrections. Robert Traver made a motion to approve the minutes of the November 18, 2015, meeting. The motion was seconded by Jeff Shanks. The minutes were approved by unanimous vote.

**Fee Packages Related to NPDES Permits (Chapter 92a) and Water Quality Management Permits (Chapter 91): Overview of Proposed Changes** – Lee McDonnell of the Bureau of Clean Water offered an overview of the proposed amendments to the fee requirements outlined in Chapters 91 and 92a. Mr. McDonnell informed the committee that the schedule for taking the fee package to the EQB had been pushed back to September and therefore, the DEP was not providing a draft annex at this time. DEP will provide the draft annex to WRAC at a future meeting prior to the EQB.

Mr. McDonnell emphasized that the fee adjustments are needed to continue the DEP's critical mission to protect local water quality and fulfill commitments made in Chesapeake Bay initiatives. Current fees provide only 18% of the approximately \$20 million needed to administer the NPDES program. Increased fees will primarily support the restoration of lost program positions within the Clean Water Program and Bureau of Clean Water. It was highlighted that fees in Pennsylvania are currently significantly lower than other states, including neighboring states, with similar numbers of permitted facilities. Overall changes will include the removal of "caps" on GPs and automatic fee adjustments every 3 years based on changes in the consumer price index.

Chapter 92a permits will also include flexibility for DEP to eliminate fees for permit renewal applications and flexibility to establish specific calendar due dates for annual fees. Individual permit application and annual fee increases will be phased in over 10 years.

Chapter 91 Water Quality Management permit application fees will increase commensurate with DEP's level of effort. Fees for most permits were established in 1971, and less than 10% of the current annual program expenses come from WQM fees.

Q (Chuck Wunz): Any thought on putting fees on Act 537 plan reviews, which has to be pretty expensive?

A (Lee McDonnell): It is being not included in this package. Fees related to Act 537 are covered in statute, and it is not clear if DEP has the authority to establish fees on plan reviews. DEP will consider the comment.

Q (Chuck Wunz): What does the Department do when it reviews a WQM permit given the DEP policy that the Department is not responsible for the design of facilities?

A (Lee McDonnell): Those reviews are not as stringent as they used to be. Currently, the Department focuses on the hydraulics going through the plant and the ability to treat whatever is

needed to be treated. PennVest funding requires a uniform environmental review, which does require a more in-depth review.

Q (Chuck Wunz): Absolutely no money comes from state taxes to support these permit programs? It is not listed in the table.

A (Lee McDonnell): It does. General fund money is allocated to DEP by the legislature. The general fund budget provides the difference between other funding sources (permit fees and EPA funds) and the cost to administer the program.

Q (Steven Tambini): Are the budget numbers provided in the table on Slide 7 estimates? They appear to be the same number for each year.

A (Lee McDonnell): They are most likely an average number. The Department will review the amounts.

Q (Robert Traver): Is the income considered uniform? Is the Department expecting a lot of revenue in some years and not as much in others (shortfalls)? Does it all need to be spent within the budget year?

A (Lee McDonnell): Fee income is expected to be uniform and stable. The Department has not experienced any difficulty with spending the money each budget year. Shortfalls are not expected.

Q (Chuck Wunz): From time to time, PennDOT farms out permit reviews to other entities. Would the Department give consideration to having other entities conduct permit reviews as a cost saving benefit?

A (Lee McDonnell): There is an environmental amendment in the Pennsylvania constitution that requires the Department to make an independent review.

Q (Stephen Rhoads): Why can't the Department require a report or NOI every 5 years instead of annually to reduce workload?

A (Lee McDonnell): The proposed changes will improve staff work load. DEP requires an annual report because significant changes to a facility can occur over a 5 year period.

WRAC members made the following additional comments: If PennVest reviews require extra effort on the Department then there should be a higher fee if a PennVest review is required.

Anything the Department can do to encourage groupings of permits (municipalities) would be a benefit to the Commonwealth.

Increased fees on point sources should be directed to improving water quality issues and should be used to address non-point sources. Members would like to see in the preamble how the 65 positions will be filled. The Department responded that increased fees will not create new additional positions; instead it will re-establish program positions lost since 2007. These positions are needed to administer the NPDES program. However, the positions may include other job duties depending upon the priorities of the current administration.

**Triennial Review of Water Quality Standards: Presentation of the Overview of Changes –**

Rod Kime of the Bureau of Clean water presented an overview of the changes that will be included as part of the Triennial Review package. DEP is planning to include the following updates: Updated aquatic life criteria for ammonia, Updated recreational use criteria to include E.coli indicators, Revised human health criteria for toxic substances, aquatic life criteria for chloride, Provide clarification and reference in the use of the Biotic Ligand Model for copper, additional clarification about the application of water quality standards established under interstate or international agreements, corrections of typos and errors within the drainage lists and additional changes to 25 PA Code Chapter 16 (relating to Water Quality Toxics Management Strategy.)

Q (Myron Arnowitt): What is the deadline for submittal to EPA?

A (Tom Barron): November 2017 is the target.

Q (Robert Cavett): It looks like DEP is removing a lot of the tables in Chapter 16?

A (Rod Kime): Yes, many of the methods are maintained by EPA; therefore, the tables are duplicative. State developed methods will be moved to a public website to improve manageability.

**Triennial Review of Water Quality Standards: Presentation of the Chloride Methodology –**

Rod Kime and Bonita Moore of the Bureau of Point and Non-Point Source Management gave a presentation on the development of revised chloride criteria for aquatic life. Pennsylvania currently has chloride criteria of 250 milligrams per liter. However, it only applies for potable water supplies, which is applied only at the point of water supply intake. Research indicates that chloride criteria should be developed for aquatic life use. DEP relied upon chloride toxicity research conducted by Stroud Water Research Center using water taken from Pennsylvania streams and mayfly species endemic to Pennsylvania. Based upon this research in combination with the approved EPA chloride toxicity dataset and using EPA and DEP's Chapter 93 criteria development methodologies, DEP developed two separate equations – an acute chloride criterion and a separate chronic chloride criterion – that account for water hardness and sulfate concentrations. PA stream survey data confirmed that state waters are calcium/bicarbonate dominant.

Q (Kent Crawford): All of the calculation methodologies were provided by EPA, correct?

A (Bonita Moore): Yes, DEP followed the 1985 guidelines for developing aquatic life criteria.

Q (Myron Arnowitt): Why the use of Sodium Chloride (NaCl) and not other chloride compounds? What about the toxicity of other types of chlorides?

A (Rod Kime): The goal of this was to isolate the chloride toxicity. That is why DEP wanted to use the least toxic of all of the cations (Na<sup>+</sup>) in this so we could see the effect of the chloride. Most of the chloride is coming from NaCl.

Q (Jeanne VanBriesen): Is there a particular reason we think that these fitted parameters are ok to five significant digits?

A (Rod Kime): They were used from studies conducted by the Great Lakes Environmental Center. The Department will consider the comment and review the rationale.

Q (Kent Crawford): If this is put into law, who is monitoring the 4-day average of chloride? How will this be implemented in the field for monitoring?

A (Lee McDonnell): This is an implementation question. We do have implementation guidance on 4-day averages. Ideally a data sonde would be used to measure conductivity, but a minimum of 2-3 samples would be required if the levels are relatively consistent and not experiencing spikes.

**Triennial Review of Water Quality Standards: Open Discussion on the Chapter 93 Annex –** Lee McDonnell, Bureau of Clean Water, opened a general discussion on the Chapter 93 annex. Questions submitted by Chuck Wunz to DEP in advance of the meeting were reviewed.

Q (Chuck Wunz): What are some typical limits test calculated various surface waters? This is to get an idea of how much more or less that the PWS standard would apply for Cl2. Also this is to get an idea about whether any conflicts are created between 95.10 and 93. Does 95.10 become unreasonable or overly restrictive?

A (Lee McDonnell): The Department looks at both technology based limits and water quality based limits. The most stringent value is applied to permit limits. 95.10 is more of a technology based standard that will continue to apply. In addition, we will still consider the 250 mg/L drinking water standard. The average chloride discharged by many POTWs is approximately 140 mg/L or less. As long as facilities are only taking residential wastewater and not industrial sources, treatment upgrades are unlikely to be necessary.

Q (Chuck Wunz): Links to hardness and sulfate data. How much exists, how current is it, what geographic holes in the data exist. Where data does not exist, what exactly is the permit writer's direction? What does he do to make the required calculation?

A (Lee McDonnell): The Water Quality Network (WQN) stations distributed throughout the state will serve as the source of most of the Hardness and Sulfate values used to calculate the limits. These network stations provide a robust dataset.

Q (Chuck Wunz): How many new streams will be added to the 303(d) list?

A (Lee McDonnell): It is unknown at this time, but this criterion is not expected to add many new streams. The Department expects that many streams with biological communities that are being stressed by high chloride are already impaired for other reasons. Episodic events (i.e. road salting in winter) generally do not result in a 303(d) listing.

Q (Chuck Wunz): Is there to be a mixing zone? Will the mixing zone be the same in the 4 waters that Cl2 applies to? Where is the mixing zone defined?

A (Lee McDonnell): Pennsylvania does not have mixing zones; we have criteria compliance mixing time and that's not going to change. This parameter will be evaluated in the same manner as the rest of the Department's toxics criteria. The following documents are available for reference: Water Quality Toxics Management Strategy, Determining Water Quality Based Effluent Limits, Implementation Guidance for Design Conditions, and the technical reference guide for PENNTOX. Because of the nature of chloride, there will not be a decay coefficient associated with this parameter.

Q (Chuck Wunz): For the new toxic substances, what are the QL's for each? What is QL's exceed or are near the limits? What procedures are used in DMR's in that case?

A (Lee McDonnell): If a criterion cannot be reasonably measured then the quantitation limit generally becomes the permit limit.

Q (Chuck Wunz): Is there a complete draft 93 available or only the one you sent. Have to refer back and forth between existing reg and proposed reg to see effect of new reg.

A (Lee McDonnell): No, there is not a complete draft of Chapter 93. The format of the annex is the format that DEP is required to submit to the Legislative Reference Bureau (LRB.)

Q (Chuck Wunz, Myron Arnowitt): Are we going to have a WQS for Total Dissolved Solids (TDS)? Bromide?

A (Lee McDonnell): The Department does not expect to include TDS in the next triennial review, but it will likely include sulfate. A bromide standard is not being actively pursued, but DEP won't rule out the possibility.

Q (Gary Merritt): Are streams being added or removed to the drainage lists?

A (Rod Kime): No, streams are not being added or removed. The changes are simply due to a reformat of select drainage lists.

Mr. McDonnell thanked Mr. Wunz for his questions and informed the committee that the Department is considering a change to the current annex that will be provided to the EQB as part of the Triennial Review package. The proposed change will alter one or more definitions in Chapter 93 such that conservation easements held by private entities meeting specific qualifying conditions may be considered as a qualifier when waters are being evaluated for "Exceptional Value" use protection. The committee discussed the implications of this change at length and agreed to vote on the proposed concept since they did not have draft annex language to review at this meeting.

Stephen Rhoads made a motion that WRAC endorses the Department's desire to move forward with the proposed Chapter 93 regulations as presented with minor modifications and corrections to the EQB. Robert Traver seconded the motion. Further discussion clarified that any other modifications to the package would be minor edits involving word usage. The motion was approved by unanimous vote.

Stephen Rhoads made a second motion that WRAC supports in concept the addition of language in section 93.1, relating to "outstanding national, state, regional or local resource water," to consider conservation easements, held in perpetuity and protective of water quality, when designating EV waters. The motion was seconded by Myron Arnowitt. No further discussion occurred. Thirteen members voted in favor of the motion. Chuck Wunz abstained from the vote. No members were opposed.

### **General Discussion –**

Q (Jeanne VanBriesen): Does the Department have any intentions to consider an Enterococci standard in place of *E.coli*?

A (Tom Barron): We did consider it. It was included in the 2012 recommendations for recreational use criteria. They (EPA) gave the choice to the states to either or both (Enterococci and *E.coli*.) We selected *E.coli* because we were already implementing it in the Great Lakes and Lake Erie beach program. We had already started a monitoring program for *E.coli*. It is unlikely at this time that we will move to an Enterococci standard.

### **Public Comment Period –**

No public comments were made by the public.

**Adjourn** – The meeting adjourned at 12:09 p.m.