Minutes of the June 16, 2015 Meeting
Small Water Systems Technical Assistance Center (TAC)
Advisory Board

A regular meeting of the TAC Board was called to order by Tom Fridirici, Department liaison to the Board at approximately 9:00 AM in Susquehanna Conference Rooms A&B in the Southcentral Regional office of DEP. Chairperson Serena A. DiMagno was in attendance and assumed responsibility for the meeting immediately after the opening remarks and housekeeping. The purpose of the meeting was to gather stakeholder input specific to the distribution disinfection residual requirements in the proposed Revised Total Coliform Rule (RTCR). This was the fifth meeting of the Board in 2015.

The following Board members were present:

Penny McCoy, Pennsylvania Rural Water Association
Dan Standish, American Water Works Association
Serena DiMagno, Water Works Operators Association of Pennsylvania
Lee Koch, Pennsylvania Municipal Authorities Association
Mary Roland, State Board for Certification of Sewage Treatment Plant and Waterworks Operators
Stan Brown, Pennsylvania Public Utilities Commission
Mike Sienkiewicz, Pennsylvania Manufactured Housing Association

The following Alternate members were present:

Lisa Daniels, Pennsylvania Department of Environmental Protection
Jennifer Case, Pennsylvania Municipal Authorities Association
Chip Bilger, Water Works Operators Association of Pennsylvania
James Steele, Pennsylvania Home Builders Association
Christine Caldara Piatos, Center for Rural Pennsylvania
Ashley Everette, Office of Consumer Advocate

The following organizations were not represented:

County Commissioners Association of Pennsylvania
Pennsylvania Association of Realtors
League of Women Voters, Pennsylvania
Pennsylvania Association of Conservation Districts, Inc.
Pennsylvania Department of Community and Economic Affairs
Rural Utilities Service/Rural Development
RCAP Solutions
Pennsylvania State Association of Township Supervisors
Pennsylvania Infrastructure Investment Authority
The following DEP staff were present:

Tom Fridirici, Bureau of Safe Drinking Water  
Dawn Hissner, Bureau of Safe Drinking Water  
Joanne Nardone, Bureau of Safe Drinking Water  
Hayley Jeffords, DEP Policy Office  
Laura Edinger, DEP Policy Office  
Deb Rotz, Bureau of Safe Drinking Water  
Justin Blashaw, Bureau of Safe Drinking Water  
Bryce Beard, Bureau of Safe Drinking Water

Non-Members present at the meeting:

Sharon Fillmann, Chester Water Authority  
Anita Martin, Chester Water Authority  
Donna Wingle, Lehigh County Authority  
Douglas Crawshaw, The York Water Company  
Chris Swailes, United Water  
Mary Neutz, United Water  
Frank Medora, Aqua Pennsylvania  
Charles Hertz, Aqua America  
Matt Walborn, Western Berks Water Authority  
Jennifer Clancy, Corona Environmental Consulting  
Tony Bellitto, North Penn Water Authority  
Paul Zielinski, Pennsylvania American Water Company  
David Lewis, Columbia water Company  
Colleen Arnold, Aqua Pennsylvania  
Rita Kopanski, Philadelphia Water Department  
Dennis O’Connor, Philadelphia Water Department  
Tim Bartrand, Corona Environmental Consulting  
John Holden, City of Lancaster  
Christina Kistler, M.J. Reider  
Barbara Loner, Williamsport Municipal Water Authority  
Dave Runkle, Borough of Carlisle

General Advisory Board business:

One item of general business was introduced prior to new business:

- Minutes from the May 18th, 2015 TAC board meeting area were finalized with edits: Lee Koch made the motion, Mike Siekiewicz 2nd, motion carried. Dan Standish abstained.
Summary of State Disinfection Residual Requirements – Lisa Daniels:

Lisa provided a spreadsheet of states that require a distribution disinfectant residual greater than 0.02 mg/L. Some Board members had trouble opening the file prior to the meeting. Those members that can’t open the files should contact Dawn Hissner.

The spreadsheet lists twenty four states with disinfectant residuals from 0.1 to 0.5 mg/L. Fourteen states require mandatory disinfection. Arkansas and New York, not on the list, also require mandatory disinfection. Those states will be added to the table.

Comments from the Board:

Chip Bilger: What are the Public Notification requirements associated with the states listed? A. Tier II PN is required for distribution residual; EPA doesn’t distinguish between D samples or EP samples, violations are Tier II PN. DEP changed requirements to address Board concerns – two months to find and fix, once a system triggers in the 2nd month they have 30 days to do PN. States have enforcement discretion; states must call it a violation but enforcement is discretionary.

Serena DiMagno: Why are we still trying to require two significant figures, 0.020 mg/L? A. Decision was made to require two significant digits after a meeting with HACH representatives. Their equipment is accurate enough to get to the 100ths.

Serena DiMagno: Why are we still trying to require two significant figures when all the other states (23) on the table provided are at one significant figure?

Mary Roland: The requirement for 0.02 mg/L is not based in science but neither is 0.20 mg/L. Why do we keep making the same mistakes? Even at 0.02 mg/L there is no public health risk; we do not have a Total Coliform issue in PA.

NOTE: at 9:42 am, representatives from HACH equipment manufacturer (Barry Spiegel and Cary Jackson) arrived and were invited to participate. Cary provided an overview of various analysis sensitivity: MDL, PQL, true detection limit, etc. and their application in the lab and in the field. It is understood that in a perfect world every water system would establish their own detection limit based on their own water quality. That is an unusable scenario for regulatory public health protection.

Comments from the Board:

Mary: What is the magic number? Has Pennsylvania done any studies to determine what is specific to typical Pennsylvania water? A: No.

Tony Bellitto (NPWA): So if we use HACH’s logic why have other states determined that one significant figure is adequate? A: we look to other states for the 0.2 mg/L; our significant figure is similar to the GWR value of 0.40 mg/L

Sharon Fillmann: Setting a new residual isn’t part of the RTCR. PA has the burden of proof to establish a valid number. Two significant figures is only useful for scientific glassware. Delaware uses 95% compliance and HPC. A: DEP is using 2 significant figures in a number of rules because it’s scientifically supportable.
Dan Standish: Will DEP and HACH get together for additional study? A: DEP is going to try to reproduce the Colorado study. Dan: IF the study shows something other than 0.2 will we then change the rule? A: This is the proposed draft, we are looking for comments.


Dawn reviewed the proposed changes found in Annex A. Changes were made in response to TAC Board comments. Most of the proposed Annex A remains unchanged

Mary: reading two significant figures on a strip chart is very difficult, without SCADA it is hard to read that second decimal, was the change to two sig figs done to meet a primacy requirement? A: No, changed to match up with the other rules that use 2 sig fig.

Mary: why require a chlorine residual reading in the distribution system every day, weekend and holiday included? A: the regulation currently requires 100% compliance. Changing to 95%, for over two months is backsliding in compliance determination so we need to go to daily monitoring.

Dan: daily measurements, on top of daily EP samples, if EP is OK why go to the distribution system to look for problems? A: two completely different issues.

Mary: This is another new proposal (95%) that the Board has not had time to review. A: the 95% suggestion came from the TAC Board. DEP is trying to find a way to avoid so many PNs.


Mary: Is the daily requirement necessary for primacy? No, it’s necessary to demonstrate compliance. Q: Why wasn’t it moved to the non-RTRC part of the proposed regulation? A: residual is part of RTCR compliance.

Mike Sienkiewicz: There are 2200 CWS, 89% of those have less than 1000 connections. One half of the 2200 are less than 100 connections, the costs to operate are huge. DEP should lighten up when it comes to small systems.

Penny McCoy: small systems don’t serve 10,000 or 33,000 persons but more like 3300 and less, the TAC Board has lost sight of that. Mary: TAC Board makes comments on all Chapter 109 issues. Lisa: small systems are different when looking at compliance determinations, they can’t do 95% when they sample once per month, we are asking for weekly measurements. Mike: is DEP looking at the whole package, PWS with less than 100 persons can’t do samples once per day. We need to treat small systems differently that the large systems.

Paul Zielinski: The EQB moved to split the RTCR package, what are we actually proposing? Lisa: The RTCR part of the package has moved forward, it will be in the July or August Pa Bulletin. The Disinfection requirements and primacy revisions are part 2 of the three part package. Part three are the permitting, source protection etc. and that part is on hold and will come back to TAC in the future.

There was discussion from audience and TAC Board members regarding possible scenarios there in low residuals would be found in the distribution system and how the PWS would respond to those low sample measurements. Would violations be created if there were low reading two months in a row from the same location? Can sample results be averaged? If the second sample is low does the system have 24 hours to restore it? Lisa: Once there is a violation in the second month there is no additional time to find and fix. We are trying to come up with a way to prevent the same people from getting bad water every month.
Jim Steele: to be clear, can we use continuous, online monitoring for weekends and holidays? A: Yes.

Can we have relaxed compliance determinations for systems less than 3300, ex: 95% of the 4 weekly samples? A: This is pre-draft language, so we are asking for comments.

Chairperson DiMagno identified some TAC Board business for discussion:

PACD responded to the Boards letter requesting nominations. Dan Farnham and Dennis Beck were suggested; Board members had no comments re: those nominations. Letters of intent were also sent to Pa Association of Realtors and RUS soliciting new members due to non-attendance at the Board meetings.

Lee Koch read a motion (see attached) referred to as TAC Board Resolutions – June 16, 2015 TAC Board Meeting. Before the vote Lisa mentioned that 1.) the Department had never proposed 0.5 mg/L in the distribution system, that was a proposed EP number. 2.) our change in response to TAC Board comments was 0.20 mg/l in the distribution system. 3.) changes to the chloramination requirements – 1.0 in the design standard, changed to 0.5 and now at 0.2 plus a nitrification plan...in response to TAC Board comments. Board members voted on the Lee Koch motion, the motion fails to carry, vote was 6 Nays/5 Yeas. (Nays – DEP, PRWA, PBA, PUC, CRP, OCA); (Yea – PMAA, AWWA, WWOAP, PMHA, SBC- STPWWO)

Tim Bartrant (Corona): asked to submit a scientific analysis for measuring residual levels in the D system.

Tony Bellitto: Lisa mentioned data quality issues...is there more information on that? A: we have data from the last five years, our numbers of samples with HPC readings don’t match up with chlorine residual readings. Are people aware that they need to report lack of chlorine residual?

Serena: Will we post that data to the website. A: Yes.

Dave Runkle (Carlisle Water): some systems aren’t sampling at the problem/vulnerable locations. Once PWS start sampling at those locations we’ll probably see more problems.

Chip Bilger: the Chlorine issue is a national debate and it’s the same as the TAC Board concerns, PA utilities need to come up with our own residual number.

Barry Spiegel: understand the difference between measurable and detectable; operator training is the key, no matter what number we come up with.

No further discussion. Dan Standish made a motion to adjourn, Jim Steele seconded, motion carried and the meeting ended at 12:22 pm.