

Minutes of the June 30, 2015 Meeting
Small Water Systems Technical Assistance Center (TAC)
Advisory Board

A regular meeting of the TAC Board was called to order by Dawn Hissner, Department liaison to the Board at approximately 9:00 AM in Room 105 of the Rachel Carson State Office Building. 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 sixth meeting of the Board in 2015.

The following Board members were present:

Stan Brown, Pennsylvania Public Utilities Commission (PUC)
Serena DiMagno, Water Works Operators Association of Pennsylvania (WWOAP)
Christine Hoover, Office of Consumer Advocate (OCA)
E. Lee Koch, Pennsylvania Municipal Authorities Association (PMAA)
Penny McCoy, Pennsylvania Rural Water Association (PRWA)
Mary Roland, State Board for Certification of Sewage Treatment Plant & Waterworks Operators (SBCSTPWWO)
Mike Sienkiewicz, Pennsylvania Manufactured Housing Association (PMHA)

The following Alternate members were present:

Chip Bilger, Water Works Operators Association of Pennsylvania
Robert H. Boos, Pennsylvania Infrastructure Investment Authority (PIIA)
Jennifer Case, Pennsylvania Municipal Authorities Association
Lisa Daniels, Pennsylvania Department of Environmental Protection (DEP)
Mary Gaiski, Pennsylvania Manufactured Housing Association
Mike McFadden, American Water Works Association (AWWA)
Christine Caldara Piatos, Center for Rural Pennsylvania (CRP)
James Steele, Pennsylvania Home Builders Association (PBA)
Curt Steffy, State Board for Certification of Sewage Treatment Plant and Waterworks Operators
James Wheeler, Pennsylvania State Association of Township Supervisors (PSATS)

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 Development
RCAP
Rural Utilities Service/Rural Development

The following DEP staff were present:

Dawn Hissner, Bureau of Safe Drinking Water	Christina Ackerman, Bureau of Safe Drinking Water
Jeff Allgyer, Bureau of Safe Drinking Water	Cecelia Slough, Bureau of Safe Drinking Water

Wendy Lloyd, Bureau of Safe Drinking Water
Bill McNamara, Bureau of Safe Drinking Water
Deb Rotz, Bureau of Safe Drinking Water

Bill Cumings, DEP Regulatory Counsel
Laura Edinger, DEP Policy Office
Hayley Jeffords, DEP Policy Office

Non-Members present at the meeting:

Frank Medora, Aqua Pennsylvania
Charles Hertz, Aqua America
David Lewis, Columbia Water Company
Donna Wingle, Lehigh County Authority
Tony Bellitto, North Penn Water Authority

Rita Kopanski, Philadelphia Water Department
Dennis O'Connor, Philadelphia Water Department
Chris Swailes, United Water
Douglas Crawshaw, The York Water Company
Christina Kistler, MJ Reider Associates

General Advisory Board business:

Two items of general business were introduced prior to new business:

- Tom Fridirici, DEP's liaison to the TAC Board retired; Dawn Hissner is the new liaison.
- The draft minutes from the May 26, 2015 TAC board meeting were presented for discussion. There were no revisions; Christine Hoover (OCA) made a motion to approve the minutes as presented; Robert Boos (PIIA) seconded the motion. The motion passed by a unanimous vote.

New Technical Guidance Policy and eComment System – Hayley Jeffords, DEP Policy Office

DEP published an Interim Final Policy on Technical Guidance to improve transparency and improve the involvement of advisory committees. The policy is available on DEP's website at:

<http://www.elibrary.dep.state.pa.us/dsweb/Get/Document-107398/012-0900-001.pdf>

Additionally, DEP has created a new system to track all comments received on guidance, permits and regulatory documents posted for public comment. Hayley demonstrated the new system which is accessed on DEP's website at: http://www.portal.state.pa.us/portal/server.pt/community/Public_Comments/21508

Question from TAC Board:

- What is the maximum size allowed for the 5 attachments? (A: Currently, there is a 10MB limit, but this should expand soon.)

Overview of Regulatory Review Process – Laura Edinger, DEP Policy Office

The regulatory review process involves several levels of review and approvals for both proposed and final regulations. Internal reviews include Regulatory Counsel, Executive Staff, and the Secretary; external reviews include the Attorney General, the Governor, the Independent Regulatory Review Commission (IRRC) and the appropriate standing committees of the legislature. There are several opportunities for the public to provide comments during this process.

- When the pre-draft language for the proposed rule is presented to TAC (through the TAC members).
- During the public comment period (anyone may submit comments).
- When the draft language for the final rule is presented to TAC (through the TAC members).

TAC's recommendations letter becomes part of the regulation package moving forward so TAC's comments are available at all levels of review.

Question(s) from TAC Board:

- Jennifer Case asked about the role of IRRC. A: IRRC ensures the regulation does not interfere with other agencies, that the regulation is prudent and evaluates the economic impact of regulation on small businesses. (Lisa commented that DEP also gets specific questions from IRRC and prepares a response.)
- Additional details about IRRC: IRRC does their own outreach to stakeholders requesting comments; IRRC holds a hearing on regulations – anyone that submits comments will get a notice of the IRRC hearing.

Discussion of Pre-Draft Revised Disinfectant Residual Requirements Rule – TAC Board

The discussion of the Pre-Draft Revised Disinfectant Residual Requirements Rule began with a motion made by Mary Roland that was seconded by Mike Sienkiewicz:

“Chapter 109 Annex A should only move forward with those corrections needed to correct typos and to maintain primacy with EPA federal rules. The Department did not over the past year demonstrate that current regulations needed to be revised to address an issue with protecting public health. If PaDEP would like to revisit chlorine system residuals they can be addressed in the revisited revisions to Chapter 109, which according to the Department is currently on hold.”

- DEP asked Bill Cumings, Regulatory Counsel, whether this motion was significantly different from the motion that was presented at a previous meeting and was voted down. The determination was that this is a substantially different motion.
- Discussion occurred about the science (or lack of) behind the minimum distribution residual proposed in the rule.
 - Lisa commented that HACH agrees with DEP that 0.02 ppm is not a valid number, so DEP must revise it.
 - The members agreed that 0.02 is not “right” and that it should be changed, BUT that is a separate issue from specifically requiring 0.20 ppm throughout the distribution system.
 - Question about the 2 numbers from HACH – which is the starting point? A: Lisa stated that HACH used 0.1 ppm as PQL (as determined in a lab setting) and that DEP is starting at a higher number because of issues related to the sample matrix, interferences & field tests. It is not practical to set a system-specific detection limit, so DEP is proposing 0.20 to ensure that the number represents a valid, detectable disinfectant residual.
 - Question about whether field test equipment from other manufacturers would give a different number. A: Lisa commented that it's HACH's opinion that the science behind the method limitations is true for all DPD methods/instruments. These issues have come up in discussions with SDW and wastewater programs (which have competing needs) from across the country.
- Lisa reminded the TAC members that there are now two options available to the Board:
 - Vote on the motion presented to the Board. If the motion passes, the meeting can be concluded as there is no need to continue the discussion on the specific provisions of the proposed rule.

- OR, defer a final vote on the motion and continue to discuss the Annex A language in detail (by section) to get TAC’s recommendations on an alternate number and other specific provisions. The Board can then decide whether to provide comments on the specific provisions or re-visit the motion.
- Question as to procedure: if TAC recommends a different number for the residual, what happens next – will TAC’s number get put into the regulation or is it just a comment and the regulation moves forward with 0.20? A: If TAC provides specific comments, DEP must address the comments in the preamble and other regulatory documents, including what was (or was not) changed and why.
- DEP is interested in any documentation available that shows that a number lower than 0.20 is protective of public health. Discussion took place regarding the evidence that what water systems are currently doing is not protective or is making the water unsafe.
 - Lisa responded that there is a lot of documentation on the risks associated with the distribution system (low disinfectant residuals, storage tank O&M, cross-connections) and there are studies on the correlation between coliform-positive samples and whether the residual was higher or lower than 0.2 ppm.
 - Questions were asked regarding PADWIS data and why large water systems are not reporting ND residuals. A: some may not be sampling from their most vulnerable locations.
 - Comment that 0.2 ppm is less controversial than 0.20 ppm; DEP response is that the residual level should actually be 0.2, not rounded up from 0.15 (because of interferences), which is why 0.20 is proposed.

Chip Bilger asked Mary R. to table her motion so discussion on the residual number could continue. Mary R. agreed.

Section-by-section discussion:

Section 109.202(c)(1)(ii)(B) – Entry Point Disinfectant Residual Treatment Technique

- Comment that chart recorders do not allow level of detail to read 2 decimal places so some water systems will be required to install SCADA; DEP response is that the residual should be at 0.2
- Mary Roland made a motion that the entry point residual remain at 0.2 ppm (rather than 0.20 ppm); E. Lee Koch seconded. The motion passed by a vote of 10 to 3 and was recorded as follows:

Organization	Vote	Organization	Vote	Organization	Vote
DEP	No	PMHA	Yes	PIIA	Yes
PRWA	Yes	PSATS	Yes	OCA	No
PMAA	Yes	PUC	No	CRP	Yes
AWWA	Yes	SBCSTPWWO	Yes	PBA	Yes
WWOAP	Yes				

- *DEP wants to keep the 0.20, so the residual actually is 0.2 and not rounded up from 0.15.

- Question – what is response to DEP concerns? A: 95% of water systems are meeting 0.5 ppm at the entry point, so it is not necessary. (DEP comment – violations issued every year for not meeting log inactivation.)

Section 109.301(1)(i)(C) – Entry Point Disinfectant Residual Monitoring and Reporting

- The Board agreed that this is essentially the same issue as the previous section, so the previous motion and the same vote apply here.

Section 109.301(1)(i)(D) and 109.301(2)(i)(E) – Distribution Disinfectant Residual Monitoring for SW systems

- The Board agreed that weekly monitoring for smaller systems is sufficient.
- Discussion occurred that weekly monitoring should be allowed for all systems because daily (7 days/week) is an operational burden.
 - DEP explained that the reason for daily vs weekly monitoring is to avoid backsliding in the compliance determinations. The current requirement is that all measurements must meet the minimum residual; the proposed language moves to a 95% compliance calculation over a 2 month period, so more data is necessary (this was taken from Texas language); could consider 5 days/week instead of 7 days/week, but what is reasonable when water is supplied 24/7?
- Mary Roland made a motion to delete the daily measurement requirement and only require weekly measurements by deleting subclause III and modifying subclause II to remove the population numbers. Mike Sienkiewicz seconded the motion. The motion passed by a unanimous vote with one abstention (OCA).
- Jim Steele made a motion to require monthly measurements for systems serving < 1,000 people; Mike Sienkiewicz seconded the motion. The motion was voted down 8-4 with 1 abstention. The vote was recorded as follows:

Organization	Vote	Organization	Vote	Organization	Vote
DEP	Abst.	PMHA	No	PIIA	No
PRWA	No	PSATS	No	OCA	No
PMAA	Yes	PUC	No	CRP	No
AWWA	Yes	SBCSTPWWO	Yes	PBA	Yes
WWOAP	No				

Section 109.301(1)(v) – Entry Point Log Inactivation Monitoring

- Questions were asked regarding why CT calculations are needed prior to plant shut-down. A: The existing requirement is to achieve the log inactivation at all times; calculating the CT value before shutting the plant down ensures the water being provided to consumers is adequately disinfected. Comment that the issue is not maintaining CTs; the issue is the required monitoring and reporting.
- Mary Roland made a motion to delete this provision and defer to the next general update revisions. Mike Sienkiewicz seconded the motion. The motion passed by a vote of 7 to 6 and was recorded as follows:

Organization	Vote	Organization	Vote	Organization	Vote
DEP	No	PMHA	Yes	PIIA	No
PRWA	No	PSATS	Yes	OCA	No
PMAA	Yes	PUC	No	CRP	No
AWWA	Yes	SBCSTPWWO	Yes	PBA	Yes
WWOAP	Yes				

Section 109.301(7) – Asbestos Monitoring

- Request was made to clarify what does not apply to consecutive systems.

Section 109.301(13) – Distribution System Monitoring (includes groundwater systems)

- The Board agreed that this is the same as the provisions in 109.301(1)(i)(D) and (2)(i)(E), so the same recommendations, motion and vote that were recorded for those provisions apply here.

Section 109.701(a)(2)(i)(C) & (D) – Disinfectant Residual and Log Inactivation Reporting

- Mary Roland made a motion that this is linked to the log inactivation monitoring so the reporting requirement should also be deleted. Mike Sienkiewicz seconded the motion. E. Lee Koch requested that the vote for log inactivation monitoring [109.301(1)(v)] be applied here. The Board agreed.
- Lisa clarified that (C) was still being deleted and so that individual reporting of disinfectant residual data would be required. Mary R agreed because compliance is based on 95% of measurements.

Section 109.701(a)(2)(iv) – HPC Reporting

- Chip Bilger made a motion to keep HPC as an option for compliance because it is a useful tool for many systems. E. Lee Koch seconded the motion. DEP explained that this is just the reporting section; Chip amended the motion to apply to both monitoring and reporting. The motion passed by a unanimous vote with one abstention (DEP).

Section 109.710 – Distribution System Disinfectant Residual Requirements

- Discussion occurred about the inability of strip charts to read to 2 decimal places and that the glass vials used for field tests do not provide an accurate measurement to 2 decimal places.
- Discussion took place about the national workgroup that is reviewing disinfection requirements and a comment was made to wait for the recommendations from this group to develop a minimum residual number. Lisa explained that this workgroup is making recommendations for the 6-year review of the federal rule and that the group is not developing a minimum number at this time. There is evidence that the current level is not valid so DEP cannot wait for the 6-year review to be completed.
- Discussion continued that 0.2 ppm is possibly acceptable, but 0.20 is too stringent.
- Discussion took place to propose an alternate number, such as 0.1 ppm or to delay specifying a number until the next general update.

- DEP explained the tentative schedule for this revision: present proposed rule to EQB in October; publish as a proposed rule in January 2016; present the draft final rule to TAC in May 2016; present the final rule to EQB in August 2016; publish final rule in December 2016.
- Chip Bilger made a motion to set the minimum disinfectant residual level to 0.1, keep HPC as an option (when a residual measurement is not detected) and use the 95% for compliance determinations. Mary Roland seconded the motion. The motion passed by a vote of 8 to 5 and was recorded as follows:

Organization	Vote	Organization	Vote	Organization	Vote
DEP	No	PMHA	Yes	PIIA	No
PRWA	Yes	PSATS	Yes	OCA	No
PMAA	Yes	PUC	No	CRP	No
AWWA	Yes	SBCSTPWWO	Yes	PBA	Yes
WVOAP	Yes				

- Lisa asked whether 0.1 ppm is being recommended as the new detection limit or the minimum residual level and what is the science behind this number? The 0.20 is based on the PQL and known interferences in the method.
A: There is a white paper by Corona. A comment was made that not everything will go wrong all the time (not all interferences will apply to all water systems all the time) so it is better to be less conservative and this is a starting point –the residual level may be raised higher in a future regulation. Many water systems will likely need capital improvements (adding booster disinfection plants in the distribution system) to achieve 0.2 ppm, but they can likely achieve 0.1 ppm with less expensive operational changes (best management practices). Comments were made that by getting individual data, there will be additional information on which to base the next regulation.
- Lisa requested links to or copies of any studies that show 0.1 ppm is protective of public health.
- Questions were asked on what is the range of interferences in the method? A: It is system specific based on water chemistry (manganese, organic chloramines), but it may be as high as 0.2 ppm, so DEP chose the number to ensure all water systems have a true, meaningful, detectable disinfectant residual.

Section 109.715 – Chloramination & Nitrification Control Plan

- Comments were made that not all content elements will apply to every system that chloraminates, and nitrification control can be done through permitting on an as-needed basis.
- Mary Roland made a motion to delete this provision; E. Lee Koch seconded the motion.
- DEP explained that the Water Research Foundation recommends a 0.5 ppm distribution system residual for water systems that use chloramines; the concession to reducing the residual level to 0.20 ppm needs to include provisions for nitrification control (DEP cannot assume voluntary compliance). There is existing case law (Rushton vs. DEP) that prohibits regulating by permit if the requirement will apply to all water systems – it must be captured in a regulation.
- Mary R revised the motion to recommend that the language say the monitoring plan *may* include... the motion passed by a vote of 8 to 5 and was recorded as follows:

Organization	Vote	Organization	Vote	Organization	Vote
DEP	No	PMHA	Yes	PIIA	No
PRWA	Yes	PSATS	Yes	OCA	No
PMAA	Yes	PUC	No	CRP	No
AWWA	Yes	SBCSTPWWO	Yes	PBA	Yes
WWOAP	Yes				

The discussion on the pre-draft proposed regulation language concluded. Mary Roland withdrew her first motion.

Public Comments

Charles Hertz, Aqua America

- Be careful what terminology is used describing a disinfectant residual number (detectable vs quantifiable mean different things).
- Aqua does have some individual measurement data to share to anyone interested.
- Appreciates the recommendation for the nitrification control plan language.
- Under the Subchapter J (BVRB) revisions, it appears that quarterly DBP samples have to be taken on the 90th day (instead of within a 1-week window as allowed for other systems).

There were no other public comments.

E. Lee Koch made a motion to adjourn; James Steele seconded. The motion carried and the meeting ended at 1:20 pm.