

VDH ODW Regulatory Advisory Panel Meeting

August 28, 2014 9:30 a.m. – 3:30 p.m.
The English Inn, Charlottesville, Virginia

Meeting Summary Sept. 5, 2014

Executive Summary

This Regulatory Advisory Panel (RAP) has been tasked by the Virginia Department of Health (VDH) Office of Drinking Water (ODW) with advising the agency on its amendments to the Waterworks Regulations (12VAC5-590). The RAP's goals are to improve content and readability, clarify the regulations, and address modern practices already in use by providers within Virginia. The group met for the second time on August 28, 2014, to review changes to Part I made by ODW in response to suggestions received during and after the first meeting and to offer members' recommendations for Part II of the regulations. During the second meeting, participants reviewed Part II up to Article IV, including suggesting certain language changes and requesting clarification from VDH on certain sections. The next RAP meeting will take place Thursday, September 25th from 9:30 a.m. to 3:30 p.m. at the English Inn in Charlottesville.

Welcome/Introductions

Thirty-five people met at the English Inn for the second RAP meeting. A list of the meeting participants can be found at the end of this summary. The meeting was second in a series intended to gather recommendations from the panel concerning amendments to the state's *Waterworks Regulations* (12VAC5-590) with hopes of improving readability, incorporating references to new techniques already in use by providers throughout the state, and receiving diverse stakeholder input in preparation for the agency's filing of Notice of Intended Regulatory Action (NOIRA) and subsequent public comment period.

The remaining schedule for the RAP meetings is as follows:

- Thursday, September 25th *Waterworks Regulations* Part II and Part III
- Thursday, October 16th *Waterworks Regulations* Part II, Article IV and Wrap-Up

Frank Dukes and Kelly Wilder from the Institute of Environmental Negotiation (IEN) at the University of Virginia facilitated the meeting. Opening the meeting, the facilitators welcomed participants and introduced John Aulbach, Director of the Office of Drinking Water. Mr. Aulbach expressed his satisfaction with the process thus far. He welcomed participants and emphasized that ODW is truly listening and incorporating RAP suggestions.

Frank then stated that breakout space was available if needed for small-group discussion, encouraged each member to candidly share concerns, and reviewed the consensus testing process. When prompted, group members will be asked to raise their fingers depending on their level of agreement. Three fingers means in complete agreement, two fingers means willing to support but with some remaining minor questions or concerns, and one finger signifies opposition or a need for further explanation. A single member with one finger up prevents consensus. If members display twos, there may be more discussion to understand what is preventing those members from more fully supporting the particular idea.

Frank then asked the group to select a process for approving written meeting summaries. The group concluded that after ODW posts the draft summary on Town Hall, RAP members will have ten days to offer revisions before the meeting is posted as final.

Kelly then outlined the agenda for the day: reviewing changes to Part I, introduction to Part II by ODW staff, and review of Part II. She emphasized that VDH was available as a resource for technical questions and clarifications. Kelly also expressed that since Part II represents such a large part of the regulations and time was limited, small workgroups could be formed to offer suggested language, either during this meeting or after.

Review and Further Editing of Part I Revisions

The RAP then reviewed the changes made to Part I by ODW since first meeting and made further edits. The changes to Part I are as follows:

- **Section 10 Definitions**
 - “Commissioner”- The definition will not change, as permission for designee is already contained in the Code of Virginia.
 - “Consecutive Waterworks” – No change was proposed for the definition and will retain the use of "some or all of its finished water" in the definition. Although this phrase used in the definition is federal, RAP members are concerned about clarity and conflict with other sections, particularly in relation to interconnections between municipalities. John Aulbach agreed that this item needs to be discussed further with EPA and ODW's definition may change as a result. Concerned RAP members can provide ODW with examples when the proposed definition is not accurate or clear that could be used in future discussions with EPA about this definition.
 - “Consumer Water Supply System” – ODW concluded that use of the term “pipes” is appropriate. This item was identified for further discussion, as well, particularly in reference to conflicts with Part III of the regulations. One RAP

member added that the exclusion of premise plumbing is unclear in this definition.

- “Director” – This term is no longer used in the regulations. “Commissioner” is used instead.
 - “Effective storage” – ODW expanded the definition to distinguish between effective storage of atmospheric storage tanks and effective storage of pressure storage tanks. After concern about the pressure storage tank definition, the definition was amended to “means one-third of the nominal pressure vessel storage capacity.”
 - “Licensed Operator and Licensee” – The definitions were deleted since they are not used in the regulations.
 - “Operate” and “Operator” – The definitions were revised to match DPOR regulations. Some RAP members expressed dissatisfaction with the definition, but ODW emphasized that DPOR definition must be used. No further action was taken.
 - “Pure water” – The definition will remain since it is defined in the Code of Virginia, but use of “pure water” in the regulations will be replaced with “potable water” except pure water will remain in the definition of “waterworks” and “wholesale waterworks”, since these two terms are from the Code of Virginia.
 - “Terminal Reservoir” – The definition is retained due to concerns about source water protection in Part II. The term is no longer used in Part III. Additional suggestions may be needed during Part II.
- **Section 45** Waterworks Advisory Committee – This section was modified substantially based on NowComment online commenting and feedback during the first meeting. It is no longer mandated that ODW staff serve as the vice chair of the committee. RAP members further agreed to strike “at the discretion of” to be consistent with the intent that the Commissioner shall form the Committee, and added a quarterly minimum for meetings, which will allow for more if needed.
 - **Section 50, Subsections A and B** Applications of Regulation– Subsections were modified based on feedback from first meeting. At this second meeting, RAP decided to delete the first sentence as unnecessary. There was RAP concern about waterworks for construction during the period between the regulation review process and adoption of the new regulations. ODW will create a separate guidance document for this interim period.
 - **Section 115** Administrative Proceedings – This section was added in lieu of former sections 160-180.

- **Section 140** – Definitions for exemptions and variances were “greyed-out” to remove from discussion. These are primarily federal and out of the purview of the RAP. ODW will address these issues with EPA separately.
- **Section 190 Subsection B**, Permits– The section was simplified in order not to conflict with the Code of Virginia. The revision simply references the code itself, rather than repeating it.
- **Section 200** – Procedures for obtaining a construction permit – This section was modified to encourage communication between engineers and field offices. Many RAP members suggested removing the project dollar value determination suggested by one RAP member, and expanding the conference requirement to state “may range from notification to a meeting at the discretion of ODW.” ODW will revise subsection A to require notification and a preliminary engineering conference required at the discretion of appropriate ODW field office.
- **Section 210, Subsection B** – The section was revised to reflect electronic submission and changing technology
- **Section 220, Subsection A** – This section was reworded to be more specific
- **Section 220, Subsection D (2)** – This section was edited to reflect correct titles for service providers.

Kelly then tested consensus for the changes on Part I including noted follow-up actions. Three RAP members held up two fingers, signifying willingness to support but with some continuing questions or concerns. The other RAP members held three fingers in complete agreement. Kelly then turned the meeting over to Susan Douglas, Director of Technical Services from the Office of Drinking Water, to provide an overview of changes made to Part II during ODW staff review.

Overview of Part II

Susan began by explaining that although Part II is the longest and most difficult section of the regulations, most of the language is federal. ODW primarily re-organized and added subsections. The following list outlines the significant changes to Part II made during ODW staff review:

- **Article I** – Drinking water quality standard previously listed later in the regulations have been moved forward.
 - **Section 360** – Language edited to emphasize waterworks owner responsibility

- **Article II** – Almost entirely federal, but has been re-organized
 - **Sections 371-381** – Edited to substitute “E. Coli” in place of “fecal coliform” to make way for revised total coliform rule
 - **Section 395** – Edited to include additional itemized requirements for GUDI wells
 - **Section 430** – Edited to include more detail about GUDI determination (Determination varies by state, but is required by federal law. ODW staff is proposing further requirements and Susan added that this may be a good breakout discussion subject.)

- **Article III** – includes both federal and state regulations
 - **Section 460** – Waterworks classification edited and minimum operator attendance now specified
 - **Section 475** – Section added to provide regulations for well abandonment
 - **Section 510** – Section edited to describe acceptable operating practices
 - **Section 520** – Section edited to provide more detail in reference to waterworks capacity and expansion
 - **Section 530** – Reporting forms and content previously located in appendices moved forward

- **Article IV** – revised substantially and edited to incorporate content previously located in appendix 5
 - **Section 590** – Cross connections language edited for clarity and flexibility to serve human health, now addresses rainwater harvest and reuse
 - **Section 600** – edited to detail responsibilities of cross connection control program
 - **Section 610** – containment policy refined
 - **Section 630** – new table included for backflow prevention assemblies and devices

With that, Susan paused for any general clarifying questions. There were none.

Discussion Part II—Article I

RAP members then reviewed the regulations chronologically, with special attention to the edits listed in Susan’s presentation.

Section 360 - Responsibilities of the owners

In 360A, RAP members suggested “delivered to consumers” be changed to “customer connection point.”

RAP members also expressed concern with language in 360C. This section must reflect the Memorandum of Understanding between the Virginia Department of Housing and Community Development (DHCD) and VDH. RAP members stated that the language does not reflect indoor meters in commercial buildings and should be re-worded to specify the point of demarcation. ODW reminded the RAP that this section must also address non-community systems.

It was decided that a subcommittee be formed to propose new language consistent with the MOU between VDH and DHCD while addressing the consumer water supply definition. The subcommittee members are Skip Harper, Jesse Royall, and Jamie Bain Hedges. ODW liaison is Hugh Eggborn.

Discussion—Part II, Article II

Section 381 - Bacteriological compliance

RAP members expressed concerns with 381.G.3 and 381.G.6 in reference to trigger levels used for GUDI determination. Jim Moore of VDH responded to questions by explaining the G.3 requires GUDI re-evaluation if coliform is exceeded and G.6 states that GUDI will no longer be solely based on total coliform density. This explanation satisfied the RAPs concerns. RAP members supported the changes fully with three members indicating some continuing concern. Members added that they'd like to revisit this section in Part III.

Section 395 - Surface water and GUDI source, polymer, and recyle treatment techniques

RAP members expressed concern with clarity in section 395.A.3, which addressed interim period between GUDI determination and action, during which time consumers still need water. Language was changed to delete “if” and add “unless.” RAP members supported the changes with no reservations.

Section 430 - Determination of surface water influence of groundwater sources.

RAP members expressed concern with 430.B.1. Jim Moore of ODW answered questions clarifying that ODW is attempting to avoid references to labs and re-emphasized that GUDI determination is no longer based solely on total coliform density. Language was changed to add “evaluation of” before “source history, construction, and location.”

RAP members also identified the language in 430.B.2.a(1) as needing rewording, particularly clarifying what multiple significant rainfall events includes. ODW stated that they would revise the wording.

RAP members supported the changes with no reservations.

Discussion—Part II, Article III

Section 450 - Facility and personnel management

No comments provided on Section 450.

Section 460 Classification of waterworks and operator attendance

Subsection B. RAP members asked for clarification in reference to operator and other employee transitions. ODW stated that their intent was to be notified when a sole operator is no longer employed, thus leaving a waterworks without a licensed operator, so that ODW could provide technical assistance or, if necessary, a notice of a violation. ODW emphasized that two operating staff are required for safety reasons for Class 1 waterworks .

The language was changed to state “if a waterworks should find itself without a required licensed operator” and ODW pledged to follow-up and refine this language.

Table 460.1. RAP members found Table 460.1 to be unclear and suggested that the waterworks class column clearly state “class 1” rather than simply “1.” The use of the term “plants” in this column is confusing because it is undefined. Possibly eliminating redundant language now contained in DPOR regulations was suggested. RAP members also expressed concern at operator attendance requirements, stating that they are unrealistic, were more frequent than necessary, and added to the burden placed on owners, and that many waterworks are not operating in accordance with current requirements at this time.

Many suggested that new requirements would cause costs to rise and discourage owners from adding treatment processes if operator visitation would increase. Additionally, remote monitoring and control technologies should to be taken into account.

It was decided that a subcommittee be formed to propose new language for this section and Table 460.1 to ensure that operator attendance does not become a disincentive for treatment and that these are achievable requirements for classified waterworks . The subcommittee members are Jesse Royall, David Van Gelder, Beate Wright, Jerry Higgins, Michael Vergakis, and Elmer Handy. The ODW lead is Hugh Eggborn.

Section 470 - Waterworks appearance

RAP members were concerned about the subjective nature of “appearance and state of cleanliness.” They accepted the importance of being able to access waterworks, offering examples where access was difficult due to overgrown weeds. The section title was changed, adding “and accessibility” following Waterworks appearance, and language edited to now read simply “The waterworks shall be maintained in a clean and orderly condition.”

Section 475 - Well abandonment

“Well driller” was replaced with “water well systems provider” for consistency. In section 475B, “abandonment” was replaced with “removal from service,” since abandonment suggests that end of service is indefinite. Also recommended was elimination of the phrase “temporary abandonment”, and including a new section on “inactivation” of wells. It was also suggested that more be added for bringing wells back into service (“reactivation”), such as additional testing, etc.

RAP members suggested comparing this section with the Virginia Private Well Association guidelines. Additionally, RAP members would like to see the removal of “consolidated rock” phrase, increase the flexibility in types of fillings.

A subcommittee was formed to propose new language for this section. The subcommittee members are John O’Dell, Vincent Day, Jesse Royall, and Scott Kudlas. The ODW liaison is Susan Douglas.

Section 480 - Operational control testing and monitoring

At the recommendation that water will never be completely free of odor and taste, the word “objectionable” was added to this section. Additionally, “operational control tests and frequency of those tests shall be determined by the commissioner for each waterworks on an individual basis” was identified as unnecessary and was removed in subsection A.

In an effort to make testing by operating staff possible, “may be performed by...acceptable to the commissioner” was deleted in 480B in favor of articulating that testing “shall use” EPA approved analytical methods.

To include clarity for secondary contaminants procedures, reference to CFR part 143 was added to subsection B.

In section 480E1, ODW justified UV language by sharing that it is from the EPA's UV Guidance Manual and must be kept; however, ODW will review the last sentence about calibration frequency.

Finally, in section 480E2, ODW justified language by expressing intent to make way for disinfection credits. No language was changed.

Section 505 - Emergency management plan for extended power outages

Language was changed to address typo. "For" was removed.

Section 510 - Acceptable operating practices

RAP members requested that ODW clarify "nonconventional filtration." ODW will follow-up and edit this section to clarify "nonconventional".

RAP members disagreed about psi requirements. Some expressed that they have entire systems built around 20 psi that cannot be addressed without spending millions of dollars. Language about the minimum recommended working pressure of 40 psi was deleted, while PART III will add that designing for 40 psi is desired.

All of Section 510C was removed. It was suggested that Section 510 C3 be relocated and rewritten to clarify that the owner has the authority to restrict use.

Section 511 - Maintenance of waterworks integrity

ODW staff agreed to make Section 511B2 language consistent for reactivated wells.

Section 515 - Use of chemicals, components, materials, and products

At the RAP suggestion to recognize certifications outside of NSF, ODW emphasized that there is a mechanism for this option in the regulations.

Section 515E language was changed to reflect ODW intent that owners not use chemicals whose quality is in doubt.

Section 520 - Waterworks capacity and expansion

A few RAP members suggested including language in reference to booster pumps and changing subsection A to reflect a three-month running average rather than any single event. ODW

agreed to examine this question, with an eye towards consistency with the three-month period mentioned in Section 520B.

In Section 520B, “shall not” rather than “may” was changed. In 520D “or otherwise approved by the commissioner” was added for clarity.

Discussion Wrap-Up

The RAP was unable to begin review of Article 4; that will be done at a later meeting.

No one was present for public comment.

Follow-up tasks are as listed below:

- ODW subcommittee leads will initiate the first discussions about requested language change within ten days.
- After ODW posts the draft summary on Town Hall, RAP members will have ten days to offer revisions before the meeting is posted as final.
- Deadline for online comments on Part II is Wednesday, September 10th.

RAP members expressed the following suggestions for the next meeting:

- Difficulty with NowComment should be addressed, particularly in reference to which web browsers are best. IEN responded that Google Chrome appears to be the most compatible browser.
- Please remove table skirts from the outside of the tables to allow for more comfort.
- RAP members are particularly concerned about Part II, Article IV (cross connections) and would like plenty of time for discussion. ODW emphasized that many of the edits are simply to rearrange content, but some RAP members are concerned that new guidelines will push waterworks that are in slight non-compliance into serious non-compliance. A cross connection subcommittee was formed in preparation for this discussion. The members are Skip Harper, Steve Herzog, Roger Cronin, Jamie Bain Hedges, and Michael Vergakis. The ODW liaison is Hugh Eggborn.
- The subcommittee members for Section 360 are Skip Harper, Jesse Royall, and Jamie Bain Hedges. ODW liaison is Hugh Eggborn.
- The subcommittee members for Section 460 are Jesse Royall, David Van Gelder, Beate Wright, Jerry Higgins, Michael Vergakis, and Elmer Handy. The ODW liaison is Hugh Eggborn.
- The subcommittee members for Section 475 are John O’Dell, Vincent Day, Jesse Royall, and Scott Kudlas. The ODW liaison is Susan Douglas.

IEN facilitators and ODW staff thanked participants and closed the second meeting of the RAP shortly after 3:30 p.m. The next meeting will be held at the English Inn in Charlottesville on September 25th at 9:30 a.m.

RAP Members Present

Jason Clark, P.E.—Engineering Consultant at WW Associates
Roger Cronin, P.E.—American Council of Engineering Companies of VA
Vincent Day, P.G.—VA Section, American Institute of Professional Geologists
Elmer W. Handy—Virginia Rural Water Association
Chris Harbin—Public Utility, Class 1, Norfolk
Jamie Bain Hedges, P.E.—Public Utility, Class 1, Fairfax
Steve Herzog—Virginia Water Environment Association
Jerry Higgins—Virginia AWWA
Eric LaSalle—VA Manufacturers Association
Paula Moore, P.E.—Engineering Consultant at Whitman, Requardt & Associates, LLP
Ignatius Mutoti, P.E.—Virginia Society of Professional Engineers
John O’Dell—VA Water Well Association
Clifton L. Parker, IV, P.E.—Private Utility, Class 2-6, Aqua Virginia Inc.
Jerry Peaks, P.E.—Engineering Consultant at Bowman Consulting
David Raines—Virginia Associate of Counties
Jesse L. Royall, Jr., P.E.—Private Utility, Class 4-6, Sydnor Hydro Inc.
Lauren Sufleta—Private Utility, Class 1-6, Virginia American Water
Caleb Taylor—Virginia Municipal League
David Van Gelder—Public Utility, Class 1, Hanover Co.
Michael Vergakis—Public Utility, Class 3-6, James City
Larry Wallace—Southeast Rural Community Assistance Project
Uwe Weidel, P.E.—VA Water and Wastewater Authority
Beate M. Wright, P.E.—Public Utility, Class 1, Loudoun Water
Grier Mills—VA Dept. of General Services
Jay Armstrong—VA Dept. of General Services
Scott Kudlas—VA DEQ
Tom Fore—Public Utility, Class 2, Town of Amherst
Skip Harper—Virginia Department of Housing and Community Development

ODW Staff Present

John Aulbach
Susan Douglas
Angie McGarvey
Hugh Eggborn
Jim Moore

IEN Facilitation Team

Frank Dukes
Kelly Wilder
Elizabeth Moore
Sarah Burr