VDH ODW Regulatory Advisory Panel Meeting October 16, 2014 Charlottesville, Virginia

Meeting Summary Oct.28, 2014

Facilitated by the Institute for Environmental Negotiation

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 RAP met for the fourth time October 16th, 2014, to review changes to Parts I, II and III based on recommendations from the first three meetings as well as workgroups formed after the second meeting. RAP members also reviewed a draft Waterworks Operation Permit. At the close of the meeting, members and ODW staff assessed that a fifth meeting would be necessary and scheduled it for Friday, November 21' from 9:30 p.m. to 3:30 p.m., at the Virginia Housing Center in Innsbrook, Richmond, VA.

Welcome/Introductions

Susan Douglas of ODW welcomed everyone to the meeting. Facilitator Frank Dukes of the Institute for Environmental Negotiation, University of Virginia, encouraged members to focus on priorities. He let attendees know that while they would be following the time schedule closely this meeting, all important issues need to be raised here. He also asked members to think about issues for which there is no consensus to consider the following:

- 1) This may not be sufficiently important to warrant additional work;
- 2) RAP members may suggest additional language;
- 3) ODW may return with new language;
- 4) A workgroup can address the issue.

Angie McGarvey of ODW noted that they have worked hard to address concerns from last meeting. She reported that the workgroups have been very productive, and thanked members for their hard work between meetings.

In response to a question by a member about Article II Section 840, ODW noted that there will be a new workgroup to address groundwater capacity.

Review of Part II

Angie provided the RAP with updates on work from Workgroup 1 (section 475 and 476) and Workgroup 2 (Section 460). Members discussed concerns and tested for consensus on the items below.

Section 460: Classification of waterworks and operator attendance.

ODW had added edits to this section since the last workgroup call, and presented the additional language to the RAP for comments and discussion. RAP members indicated that it had been considerably improved. It was clarified that there would be opportunity to reduce or to increase operator attendance depending upon the conditions outlined in the draft language. One member stated continuing concerns with the costs of more frequent inspections.

<u>Subsection A, Item 4</u>: There was a suggestion to remove "caustic soda feed" from the list of chemical tests that classify a waterworks as Class 4. ODW will consider this suggestion.

<u>Subsection D</u>: "Operational history" was added as potential criteria for consideration under subsection D, items 1 and 2, and "operator" was replaced by "operating staff" in subsection D, item 2F.

The consensus test for section 460, with the caustic soda feed" issue remaining under consideration, reflected one 1, two 2s and the rest 3s. Concern remains with 3 days per week visits required for Class 4 waterworks.

Section 475: Temporary inactivation of wells

<u>Subsection A, Item 3</u>: Members were concerned about Item 3, which stipulated that water levels during temporary inactivation would be measured and recorded monthly. Some members pointed out the difficulty of measuring some inactive wells. Others did not think that all inactive wells merited monthly frequency of monitoring and were concerned about an unnecessary expense.

One member of the workgroup explained the rationale having to do with the desire to ensure that people did not lose an out-of-service well, as has been occurring. Also, water levels data could be helpful when the well comes back online. Another argument is that sometimes people forget to do things if they are on a quarterly rather than monthly basis.

A group of RAP members discussed this during lunch and offered the following change to replace the text of A. 3.

3. The wellhead shall be visually inspected and documented to verify adequate sanitary integrity on a quarterly basis. Water levels should also be monitored and documented on a quarterly basis.

The consensus test for this change reflected one 2 and all other 3s.

<u>Subsection B, Item 4 Salvaged Materials</u>: There was discussion about whether this point should be removed from the regulations. Some members felt that it was unnecessary. Others felt that it should be left in to encourage salvaging as well as letting people know that it is allowed. After discussion, it was agreed that it should be retained.

The consensus test for retaining this item reflected one 2 and all other 3s.

<u>Subsection B, Item 10</u>: One member asked if the type of documentation should be specified. It was decided that the type of documentation would be left open. Another member asked if owners would still be required to document the location when the well changed ownership. Susan responded that once it changed ownership the original owners would no longer be required to document it.

The consensus test for retaining Subsection B, Item 10, reflected one 2 and all other 3s.

Section 476: Reactivation of Wells

<u>Subsection B</u>: A member requested clarification about how far from a well it was necessary to discharge purged water, pointing out that this might be difficult in some areas and expensive if this would require hauling water away. It was explained that this language is intended to ensure that, during the test pumping period, water that is discharged does not recharge and enter the test water, and the appropriate distance would not be hard to achieve.

The consensus test for accepting Section 476 reflected one 2 and all other 3s.

Section 511: Maintenance of waterworks integrity

Angie updated the group that this language conforms with AWWA Standard C654, so the text remains as is.

Section 520: Waterworks capacity

<u>Subsection A</u>: The word "action" was replaced by "written" to read as "the owner shall prepare a written plan to address capacity needs for review and approval by the commissioner."

Review of Operation Permits:

Susan presented the sections covering operation permits, Sections 10, 260, and 520. Changes to 520 are noted above and there were no edits to Sections 10 or 260.

The consensus test on all changes to these sections reflected one 1, two 2s, and the rest 3s. Concern raised about with design and effective storage that was resolved after discussing Section 640. The Operation Permit is being revised by the ODW now to include Operation Permit Conditions with a revised Waterworks Capacity evaluation. When ODW is satisfied with the revisions, it will be brought to the Waterworks Advisory Committee for their review.

Section 530: Reporting

There were no new edits in this section since the previous meeting, but it was opened up for feedback. One member noted that there is a table for classified and a list for unclassified requirements, and these two should be in a consistent format. ODW will follow up with this to ensure consistency.

The consensus test for Section 530 reflected two 2s and the rest 3s.

Section 550: Recordkeeping

One member was concerned that there was a high requirement for recordkeeping over a long period and that perhaps this is unnecessary. Angle and Susan clarified that electronic recordkeeping is encouraged.

When tested for consensus, one member abstained but reported being OK, and the rest were in complete agreement with 3s.

Section 560: Safety

One member proposed eliminating this section entirely, seeing it as not within the purview of these regulations. The group decided to strike the section and just include one sentence for reference. ODW will develop a one-sentence draft about the importance of safety and waterworks.

Members were in complete agreement about striking this section and including a single sentence alternative.

Section 565: Source Water Protection

<u>Subsection B</u>: There was much discussion about this section. Concern was expressed over the lack of differentiation between large and small reservoirs as well as jurisdictional issues of who may allow or prevent certain activities on a reservoir. Some reservoirs have allowed certain types of recreation for years and it would be difficult to regulate that. One member, however, encouraged the group to be thinking about the future and acknowledging that gas engines and body contact swimming right next to an intake pipe is not good practice. After meeting during lunch, a group presented the following language:

"Any waterworks with a drinking water reservoir may establish a buffer around the intake to limit such uses as body contact recreation and boats powered by engines, pursuant to a plan acceptable to the waterworks and the commissioner."

When consensus was tested for this change, there were two 2s and all other 3s.

Review of Part III

Section 640: General design considerations

<u>Subsection C</u>: One member was concerned about maintaining 20 psig under all conditions. Angie reminded RAP members that all of these changes were made and agreed on at the last meeting. Frank noted that while this is the case, the RAP meetings are the place to raise issues that may otherwise come up during public comment period in order to address them early. The RAP removed "under all conditions" from the first sentence.

Subsections B and G were also discussed, but no changes were made. Concern was expressed over how compliance would be determined and enforced with hydraulic modeling. Modeling is a valuable tool to waterworks but requires validation that it is reflecting accurate results.

The consensus test for section 640 reflected one 2, the rest 3s.

Section 680: Treatment process selection

RAP members reviewed the edited language and no changes were suggested.

Section 730: Alternate power source

<u>Subsection A:</u> RAP members discussed the necessity of requiring standby power versus requiring having a plan for the event of a power failure. Members agreed that generators should not be singled out as the only standby power option, as there might be other methods that waterworks can provide for alternative power. One member suggested stating that waterworks should have a plan for operating when the power goes out, while another member wanted stronger language because sometimes plans are not enough. They were reminded that this is in the design section, and therefore it could be recommended for waterworks to provide alternative power sources in their design; however, ODW does not have the power to require standby power alternatives.

The original sentence was deleted and the group added the following sentence: A. An emergency management plan for extended power outages shall be developed for each community waterworks as specified in 12VAC5-590-505.

<u>Subsection B</u>: Following the work on Subsection A, RAP members added "alternate" and "sources" so that Subsection B reads:

B. Owners should provide alternative power sources at all waterworks in order to maintain a minimum level of service during an electrical power outage.

Some RAP members wanted to change the provision of alternative power to "shall" rather than "should." Some saw this connected to the size of the waterworks. Susan explained that they do not have the power to require standby power and can only require a plan.

The consensus test for the addition to subsection B reflected seven 2s, the rest 3s, meaning that it was acceptable but not strongly supported.

A consensus test for changing "should" to "shall" in B. had a result of nine 1s, meaning that it was not supported.

Section 760: Laboratory Facilities

<u>Subsection B</u>: Members advised removing "adequate storage room" and "laboratory sink" as unnecessary and too prescriptive.

The consensus test reflected all 3s in agreement to these changes.

Section 820: New water source selection and sampling

<u>Subsection A</u>: Members replaced "wastewaters" with "point " to read:

"Preference shall be given to the best available sources of supply which <u>that</u> present minimal risks of contamination from wastewaters-point and <u>nonpoint pollution sources</u>, which <u>that</u> contain a minimum of impurities that may be hazardous to health, <u>and that give the greatest</u> <u>chance of ensuring a supply of potable water</u>."

<u>Subsection B</u>: There were suggestions to strike B. One staff from ODW was concerned that wastewater facilities may incur problems, and therefore it is good practice to keep intakes at least 5 miles away from discharges to ensure public health. Some RAP members argued that this prescription would preclude taking advantage of future technologies that may reduce or eliminate such risk. Another member noted that their treated wastewater is of higher quality than the waters of the Potomac.

Consensus was tested, first for A's new language and sriking B. The result included three 1s, meaning no consensus. Then an option for including A's new language and including B was tested and there were six 1s, again meaning no consensus. ODW will pursue proposed text with the Attorney General's office.

Section 830: Surface water sources

<u>Subsection A</u>: Members deleted "a reasonable surplus" from item 1. It was suggested to make sure that language should reflect "source water" rather than "water supply" as they seem to be used interchangeably at times. ODW will use a consistent term.

Consensus test on section 830 reflected one 2 and the rest 3s.

Section 840: Groundwater sources

<u>Subsection A</u>: Members replaced "licensed Virginia contractors who are qualified to perform the work" with "a certified water well systems provider." They also deleted "potable water" from the last sentence.

<u>Subsection D</u>: In item 5, members removed "all weather" and added "an access easement" to read:

If the well lot does not adjoin a public road, an access road shall be provided and an access easement recorded as part of the well lot.

<u>Subsection E</u>: Item 2. Added "geothermal well" to the list of potential contamination sources.

<u>Subsection E</u>: Item 4. Members reworked this item, so that it reads:

4. A minimum separation distance of 50 feet shall be maintained between a fuel storage tank and a well; however, a lesser separation distance may be allowed if:

a. The stored fuel is propane or natural gas.

b. Liquid fuel

1. Tank is located above grade;

2. The tank is double-walled with an inner wall leak detection alarm or is singlewalled with full capacity containment system of proper material; and

3. The liquid fuel line is located above grade or enclosed in a protective casing if below grade, and the liquid fuel tank is provided with a paved and curbed parking pad at the tank filling location.

ODW will consider including the SPCC requirement.

<u>Subsection H</u>: Members inserted the word "potable" and removed "approved by the commissioner." They asked about a prevention plan that was required with one of the variances.

<u>Subsection I</u>: Due to the number of comments received on this subsection, ODW will convene a workgroup to work on capacity determination and well testing. Members of Workgroup 4 are Vincent Day, Jesse Royall, Michael Vergakis, Cliff Parker, Ignatius Mutoti, possibly John O'Dell, and a representative from DEQ.

Everyone was in agreement for 840, subsection I aside, displaying all 3s.

Section 845: Wells located within a Groundwater Withdrawal Management Area (GWMA) <u>Subsection B</u>: Members discussed how there used to be cases where one would screen multiple aquifers. It was hard to isolate one zone. Now they are standardized so that you can only screen one. Because of this progression in the field and outdated language, members suggested striking B. It was decided that this topic will be added to Workgroup 4.

<u>Subsection D</u>: Members had the question "Can one agency be the lead interface for waterworks" rather than having to negotiate between ODW and DEQ. They would like the

process to be simplified so that waterworks only have to go through one agency for the approval of yield and drawdown test results. Again, this topic will be added to Workgroup 4.

Section 850: Appropriate treatment

Because membranes should be included automatically, one member suggested removing the list and replacing it with "conventional filtration technologies." After review, the group decided to remove section B entirely.

Section 860: Chemical application

<u>Subsection D</u>: The group removed "to the satisfaction of the commissioner."

<u>Subsection F</u>: One member argued that this section does not belong there and could be replaced with a more generic statement for safety. The group suggested striking all of F or replacing with a general statement referencing other standards. ODW will follow up on this.

Section 920: Iron and manganese control

<u>Subsection B</u>: Item 1. To be more inclusive of other possibilities beyond the use of chemical oxidation chlorine, members changed the wording of Item 1 to read:

"Oxidation may be by aeration, or by other chemical oxidants such as chlorine, potassium permanganate, or sodium permanganate, or a combination thereof."

<u>Subsection B</u>: Item 6. One member pointed out that the use of manganese greensand might be dated. Members changed the "shall" to "should" in item 6.

<u>Subsection B</u>: Item 9. RAP members felt that specifying an alarm was unnecessary in 9a. The last two sentences were removed. Subsection B 9c(1) last sentence was modified to read, "the backwash rate shall be based on the media".

Section 960: Taste and odor control

One member had concern about the requirements for pilot studies. Others felt that pilot studies are valuable. ODW supports the use of pilot studies to prevent systems from being adapted irresponsibly.

<u>Subsection E</u>: Members had a question about where the 40 mg/L minimum comes from and felt that it needs to be verified for remove. ODW will refine and verify or remove dosage. ODW will also refine Item 1.

Section 1075: Booster pumps to serve individual connections

<u>Subsection B</u>: The group discussed the efficacy of booster pumps in resolving water pressure issues as well as the responsibility for them (homeowner versus waterworks). They decided to remove items 1-3, as booster pumps are not the responsibility of the water works.

Review of Draft Waterworks Permit Application (Form: ODW-001)

Susan and Angie passed around copies of the draft waterworks operation permit. It is no longer necessary to notify the local government with a paper copy. The RAP noticed a typo on the third section: remove the d at the end of "determine." They also suggested adding an email address space.

Everyone was in complete agreement on the changes suggested for the draft of the waterworks operation permit, with all 3s.

Approval Process Overview

At the end of the meeting, Angie presented the group with the approval process and timeline for expectations of the final regulation being in place. They hope to issue the Notice of Intended Regulatory Action (NOIRA) in December or January, with executive review beginning as early as March, and public comment in April or May. However, there is much that could delay this process. The whole process could take anywhere from about 18 months to 2 years.

Wrap-Up and Next Steps

While ODW was hoping that this would be the final meeting, it was evident there was still material to work through, and so a fifth meeting was scheduled. Attendees chose between Friday November 14th and Friday November 21st. The meeting was scheduled for the 21st, and will be held at the Virginia Housing Center in Innsbrook, Richmond, Virginia.

Members were urged to review those sections of Part III that have not yet been reviewed together and to make any wording suggestions via email or NowComment, or writing suggestions on a hard copy and faxing, rather than waiting until the final meeting. They were also urged to offer the rationale for any suggested changes. Meeting time can then be used to discuss substantial concerns and priorities.

Members did not have suggestions for any changes necessary for the next meeting. They did say that they would appreciate having a PDF of the updated regulations reflected changes that have been made so far, so that they can keep track of where they are and what is the most current version for making future corrections.

IEN facilitators and ODW staff thanked participants and closed the meeting at 3:30.

RAP Members Present

Jay Armstrong—VA Dept. of General Services Roger Cronin—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 at Norfolk Department of Utilities Jamie Bain Hedges, P.E.—Public Utility, Class 1, Fairfax Steve Herzog-Virginia Water Environment Association Jerry Higgins-Virginia AWWA Scott Kudlas—VA DEQ Eric LaSalle—VA Manufacturers Association Grier Mills—VA Dept. of General Services Paula Moore, P.E.—Engineering Consultant at Whitman, Requardt & Associates, LLP Ignatius Mutoti, P.E.—Virginia Society of Professional Engineers Craig Nicol—VA DEQ Clifton L. Parker, IV, P.E.—Private Utility, Class 3-6, 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. Andrew Snyder, P.E.—Engineering Consultant at Draper Aden Associates Lauren Sufleta-Private Utility, Class 1-6 at 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 at Southeast RCAP, Inc. Uwe Weidel, P.E.—VA Water and Wastewater Authority Beate M. Wright, P.E.—Public Utility, Class 1, Loudoun Water

<u>Guests Present</u> Rachel Goldberg Bradley Campbell - Aqua Virginia, Inc

ODW Staff Present

Susan Douglas Angie McGarvey Hugh Eggborn Jim Moore

IEN Facilitation Team Frank Dukes Elizabeth Moore Sarah Burr