

VDH ODW Workgroup 3 Meeting

October 10, 2014 8:30 a.m. – 10 a.m.

Web Conference and Teleconference

Meeting Summary DRAFT Oct. 21, 2014

RAP Members Present

Roger Cronin—American Council of Engineering Companies of VA
Skip Harper—Virginia Department of Housing and Community Development
Jamie Bain Hedges —Public Utility, Class 1, Fairfax
Jesse L. Royall, Jr. —Private Utility, Class 4-6, Sydnor Hydro Inc.
Steve Herzog—Public Utility, Class 1, Hanover Co.
Michael Vergakis—Public Utility, Class 3-6, James City

ODW Staff Present

Angie McGarvey - Meeting Leader
Hugh Eggborn - ODW Field Director for Culpepper Field Office.

Other Participants

Steve Motley - City of Virginia Beach

Welcome/Introductions

Nine people met via web conference and teleconference services for the Workgroup 3 meeting. This workgroup was established to propose amendments to Sections 55, 360, and 580-630. This workgroup's focus is on cross connection control and backflow prevention programs.

Angie McGarvey, from the Virginia Department of Health Office of Drinking Water, was the meeting organizer and discussion leader. The agenda was shown to the participants at the start of the meeting. The goal of the meeting was to revise the Sections listed in the above paragraph to something that most members can "live with" understanding that there will be compromise by all members and the regulations must be worded appropriately to apply to all waterworks across the state.

ODW used the web conference service to show live on-line changes during the meeting. ODW received one member's specific comments ahead of the meeting and had already incorporated the changes into the online version, where appropriate.

For each section, ODW stepped through all of our changes, addressing comments along the way.

ODW stated that -

1. Goal - Produce a proposed text that everyone can "live with". Understanding that there will be compromises by all members.

2. Electronic file edits - I started fresh with Article 4 - there were too many colors/cross-outs to be readable. I'll be using MSWord with "track changes" enabled today so everyone (using the web conference service) can view online changes in real time.

3. New abbreviation for USBC added to Section 10.

4. Section 55 – This section is new and discusses the relationship of the waterworks regulations to the Virginia Uniform statewide building code. DHCD and ODW met several times to get this section just right. Subsection A states that this chapter governs the waterworks facilities to the service connection (refer to section 10 for the definition). ODW iterated that the definition has been in place for many years and was based on a memo of understanding between VDH and VDHCD.

"Service connection" means the point of delivery of water to a consumer's water supply system, fire protection system, or irrigation system and to all temporary or emergency water service connections as follows:

1. If a meter is installed, the service connection is the downstream side of the meter;
2. If a meter is not installed, the service connection is the point of connection to the waterworks; and
3. When the waterworks owner is also the building owner, the service connection is the entry point to the building.

Panel member – The definition in some of the parts of Article 4 can create a problem. The way it is defined we are responsible up to the downstream side of the meter. When we have inside meter sets, we are not taking responsibility for service connections from the main to the meter.

ODW - That may be a Housing & Community Development issue also. From ODW standpoint, we don't have any requirements that pertain to or impact that service line even when there is a meter from where you tap into the street main all the way into the building. I know a lot of work went into developing that definition. ODW's regulations do not have any requirements that specify anything about that service line. ODW asked for member to provide suggested revisions to address concerns.

ODW - In contrast, Subsection B states that the USBC governs the construction of buildings, structures and buildings equipment, including the water service piping from the service connection to a building or structure. The exceptions for when the waterworks regulations apply after the service connection are listed in items 1 and 2. Waterworks regulations govern water treatment, storage, pumping facilities, and water piping that are part of a waterworks and

housed in any building or structure; and (2) backflow prevention assemblies and elimination methods, or both, installed for containment and located downstream from the service connection, including where located in any building or structure.

Panel member – commented on acronym USBC, it should reference Virginia USBC. ODW agreed to add it in the acronym description line.

Panel Member - In Section 55, subsection C, item 2 question was raised if the Waterworks Regulations should be governing the assemblies. That member believes that ODW Waterworks Regulations should only be governing the backflow prevention, elimination methods and programs. The assemblies and devices should be regulated by the USBC.

ODW – the word "containment" is very important for understanding ODW's limitations in governing assemblies. Containment specifically pertains to a device, not the internal protection that falls under the authority of the USBC, but is a containment devices that falls outside the authority of the USBC.

Panel member – I suggest that every backflow device is a containment device.

ODW - Standard cross connection control practice has been isolation pertains to internal protection and containment pertains to service line protection where a single "containment" device protects the waterworks. The isolation devices or internal protection devices under the USBC is for the protection of the occupants of the building.

5. Section 360. Responsibilities of the owner.

1. No proposed changes from the RAP version in Subsections A and B. It describes the responsibilities of owners in a very general manner across the board from water supply, treatment, transmission, storage and distribution. Basically all of the items described in Part II for operations and Part III for design of new systems.
2. We did add a new section C that clearly states it is the property owner responsibility up to the service connection to the waterworks as specified in Section 55.

Panel member - voiced concern that "responsibility up to the service connection" implies that the waterworks is going to maintain and manage the service line which is not the case. Waterworks are not responsible for service lines. ODW asked for member to provide suggested revisions to address concerns.

6. Section 580. General Requirements. This section describes general requirements of the program that are not specific enough for one of the sections or are simple one sentence requirements (example is subsection C (previously E - now is C - show correction) that states waterworks shall maintain a minimum working pressures (20 PSI) at all service connections.

7. Section 600. Describes the Cross Connection Control program. This section calls out 8 requirements of a cross connection control program:

- (1) At least one trained individual in charge of the program.
- (2) On-going identification and evaluation of cross connection hazards through annual assessments of every consumer's water supply system. ODW removed the word "all" in the first sentence that used to read, "the owner shall, to the extent of their jurisdiction, provide continuing identification and evaluation of ALL cross connections hazards having potential for impairing the quality of the water."
- (3) In lieu of annual assessments, a public education program can be provided for residential (or residential like) connections. ODW removed the word CONTINUOUS public education program. ODW removed the detailed specifics about records to maintain for public education program leaving those the details here up to the waterworks but remember 10 years retention still applies.
- (4) Requires actions to be taken to ensure that waterworks are adequately protected at all time from cross connections and backflow. Requires discontinue or refusal of water services to situations that put the waterworks at risk of adequate protection
- (5) Owners shall have operational tests made at least annually of backflow prevention assemblies installed at the service connection or installed downstream of service connection but prior to any unprotected takeoffs or POU isolation protection in lieu of installing backflow prevention assembly or methods at the service connection.
- (6) Inventory of backflow devices
- (7) Maintain records for 10 years.
- (8) Report to ODW ASAP and submit written report by 10th of month following backflow occurrence.

Panel member said he had specific comments on this section but in the interest of time, he would email them to ODW for consideration.

8. Section 610. Containment of backflow. This section describes the where and when of backflow management.

Panel member – Comment on Subsection A and B. B is the norm and A is the exception and the regulation text should recognize this reality. Subsection B is helpful because it makes it very clear. ODW said they would make a stab at combining A and B.

Panel member –Fire protection and frost hydrants were moved into Subsection D from the old Subsection E of the regulations. When member reads this requirement, it says that every residential irrigation system would fall under the Waterworks Regulations? It could even pull in the residential irrigation systems if they are off the back of houses.

ODW - Residential waterworks would probably not qualify when they are off the back of the house because the water meter is the point of demarcation.

Panel member - Residential lawn irrigation should fall under the building code, not the Waterworks Regulations. Items 5 and 6 listed in Subsection D are covered under the building code. Further on in Subsection G, it states that lawn sprinkler systems, irrigation systems, or fire protection systems connected directly to the waterworks with a separate service connection fall under the Waterworks Regulations. For fire protection, this is a conflict because the plumbing code already tells the building owners what types of devices to use on a fire main.

Panel Member - Subsection D, items 5 and 6 need deleted or revised. Previously these items were covered in the old Subsection E (now F). ODW will consider comments and needed revisions.

ODW - Subsection E states that owners shall ensure that premises having booster pumps or fire pumps connected directly to the waterworks or indirectly through the service connection shall have the pumps equipped with a pressure sensing device to shut off or regulate the flow from the pumps when the pressure at any service connection drops below a specific pressure. A member commented that it would seem that building officials would have an issue with shutting down fire pumps - public safety issue.

ODW - Subsection F lists the types of facilities where backflow prevention assembly or backflow elimination method is required to be installed at the service connection (again it can be installed prior to first take off per subsection B of this section if it is more practical.)

9. Section 630 – Backflow prevention assemblies, devices, and methods.

ODW - Subsection A provides a discussion of safeguards and types that are acceptable. Removed Table 630.2 – instead reference USBC Table 608.1 of the plumbing code this code is updated more often than the Waterworks Regulations.

ODW - Subsection B - backflow prevention assemblies used for isolation in lieu of contaminant per 610 B (downstream of the service connection but prior to first take-off) must be listed by ASSE.

ODW - Subsection C – Backflow prevention assemblies used for containment shall conform to the latest AWWA standards, hold a current USC approval and be ASSE listed. We are considering removing the gray portion of this sentence dealing with USC approval but want to hear any argument for retaining this requirement.

Several panel members spoke up in support of removing the USC approval requirement. One panel member spoke in strong support to retain the requirement– in his view the USC standards are the only one that are actually field testing the devices. They put the devices in the field for a period of one year. This is where it seems that most of them fail. Since we are only testing backflows once a year, he retains that it would be prudent to make sure that they can actually perform in the field and be tested and proven they can work for a year's period. He likes the addition of the USC standard because it is only organization that's doing a field test. ASSE fairly

recently in the past few years have began to put an additional designation of a 1YT meaning the devices passed the one year test. He recommended leaving the USC approval in the regulations and also adding the ASSE 1YT. Without these standards/approvals there is no proven reliability of the devices.

ODW – that is perhaps the main reason that we have added it to the proposed regulations. We have been promoting USC and have issued working memos in support of USC approvals.

ODW - Subsection D. Existing backflow prevention assemblies, methods, and devices are excluded from this article requirement as long as there is assurance that the assembly, method, or device will protect the waterworks. No concerns from panel members on this subsection.

ODW - Subsection E. basic requirement about the location of the installation and shall not be able to be bypassed.

ODW - Subsection F. may be DPOR certification required for staff doing the testing and repairing.

Panel member – Item F. It looks like the comments have been addressed and “shall” was changed to “may” for the DPOR certification for testers.

ODW – That certification is a voluntary certification as I understand it. We did not want to just limit it to those folks who hold the certification. It’s voluntary and there are a number of courses around the state each year that provide training and certificates for backflow prevention testers and people that do assessments. ODW would like to leave it up to a locality require all the testers to hold that certification from DPOR if that is the localities desire. We are not prohibiting and would like to keep it open to others who have been trained and/or knowledgeable.

ODW – the degree of hazards determined based on category and condition found in Table 630.1. Removed medium hazard – now only high and low. Consistent with USBC.

Panel member – Can ODW check if the definition of service connection is a federal definition? Also the definition for consumer water supply system was tabled and needed to be worked on. Are you planning to bring that back on next Thursday?

ODW - We are not but we can address it as part of this workgroup.

ODW - The service connection definition is strictly based upon discussions and agreements between us and the Dept of Housing & Community Development related to Article 4. ODW will take a look to see if EPA addresses it, either in their discussion or literature. ODW would be surprised if they tried to define it.

Panel member – Agreed to look at the definition for a service connection to and suggest language that would address the panel’s concerns. It may be easier to tweak that definition than do something with it in Article 4. I just wanted to know if there was any flexibility to do that.

ODW – There is flexibility.