

# WATERWORKS ADVISORY COMMITTEE MEETING

via Webex

Hosted by the Office of Drinking Water, 109 Governor Street, Richmond, VA 23219

**Wednesday, July 15, 2020**

**8:45 AM – 12:00 PM**

## AGENDA

Subject	Time
Connect to Webex/Instructions <a href="https://vdhoep.webex.com/vdhoep/j.php?MTID=ma23e7f9f15ae2f7ca96a5bcac8711725">https://vdhoep.webex.com/vdhoep/j.php?MTID=ma23e7f9f15ae2f7ca96a5bcac8711725</a> Meeting number (access code): 132 217 3892 Meeting Password: KPfePnt2a35 Join via telephone by calling <a href="tel:1-844-992-4726">1-844-992-4726</a>	8:45 – 9:00 AM
Call to Order Meeting Overview Adoption of Minutes from the 2/19/20 and 4/15/20 Meeting	9:00 – 9:15 AM
WW Regulations	9:15 – 11:00 AM
Break	
Public Comment Period	11:05-11:15 AM
ODW Updates/Other Business	11:15-12:00 PM

**Virginia Department of Health  
Waterworks Advisory Committee Meeting  
July 15, 2020 from 8:45 – 12:00 p.m.  
Information and Protocol for WebEx Meeting**

You can access the meeting on your computer, phone or mobile device with the meeting link below:  
<https://vdhoep.webex.com/vdhoep/j.php?MTID=ma23e7f9f15ae2f7ca96a5bcac8711725>

If accessing via a mobile device, you will need to download the Webex Meet app prior to joining the meeting.

When joining the meeting, please use the meeting number and password below:

Meeting number (access code): 132 217 3892  
Meeting Password: KPfePnt2a35

You can use your computer audio or join via telephone by calling [1-844-992-4726](tel:1-844-992-4726) United States Toll Free.

A copy of the draft agenda is located on Town Hall.

Because this meeting is scheduled in different platforms, we will be requesting that you adhere to the proper protocol:

Please log into the meeting at least 10 minutes before the meeting begins. (If you are having problems, please call Kris Latino@8048647372 and she will assist you)

Please sign into the meeting and identify yourself so we can verify that you are attending the meeting.

After you have identified yourself, please mute your phone to reduce any unwanted noise.

## Waterworks Advisory Committee (WAC) Meeting Summary

Webinar – Polycom Websuite  
9:00 am, Wednesday, July 15, 2020

FINAL (approved 9/16/20)

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**Members Participating:** Tony Singh substituted for Dwayne Roadcap (ODW), Chair; David F. Van Gelder, Water Operator; Mark Estes, VRWA; Geneva Hudgins, VA AWWA; Jesse L. Royall, Jr, PE, Syndor; Steven Herzog, PE, VWEA; Andy Crocker, SERCAP; Bailey Davis, DCLS, Skip Harper, DHCD; Joseph Grist, DEQ;

**Guests Participating:** ODW staff – Robert Edelman, Christine Latino, Nelson Daniel, Dan Horne, Mark Perry, Barry Matthews, James Reynolds, Brian Blankenship, Jeff Wells, James Reynolds; VDH staff – Alex Jansson

Russ Navratil, AWWA; Tom Fauber, VA ABPA; Laura Bauer, VA American Water Company; Paul Nyffeler, Aqua Law; Katrina Cooke, AWSLabs; Steve Edgemon, Fairfax Water; Brian Hildebrand, DHDC; Katie Krueger, HRPDC; Theresa O’Quinn, Prince William County Service; Michelle Ashworth, AquaLaw

### **Meeting Overview and Agenda**

The Waterworks Advisory Committee (WAC) met remotely on Wednesday, July 15, 2020, using Webex. Before the meeting started, Policy and Program Director Nelson Daniel identified meeting participants and provided information to them about meeting using an electronic format.

Deputy Director Tony Singh started the meeting at 9:00 am by providing an overview of the agenda and introducing Holly Brown, ODW’s new Emergency Services Coordinator. Holly started on June 10 and was previously with the Virginia Department of Agriculture and Consumer Affairs.

WAC members agreed to adopt the minutes from the February 19, 2020 and April 15, 2020 meeting as final. Copies of the final versions of the minutes are included as an attachment to these minutes.

At the request of a committee member, staff will include the summary of the telesurvey procedures that the Abingdon Field Office developed with the materials from this meeting. The telesurvey procedures were also included with the materials from the April 2020 meeting.

### **Waterworks Regulations**

Division of Technical Services Director, Bob Edelman provided a description of the modifications staff made to sections 12VAC5-590-580 through -630 (cross connection control) and 12VAC5-590-1170 (hydrants) of the Proposed Amendments based on comments received during the 60-day public comment period. Bob’s presentation follows the meeting minutes.

ODW formed two workgroups to resolve issues with the Proposed Amendments for cross connection control and hydrants. The cross connection workgroup met once in person in March and two more times by teleconference. The hydrant workgroup met by teleconference once. The modifications summarized below reflect the consensus of each workgroup.

## 1. CROSS CONNECTION CONTROL, 12VAC5-590-580 through -630.

To address the 30 comments ODW received about cross connection control, the final amendments will establish a performance-based approach for waterworks. Specifically:

- Owners will be required to review their cross connection control program (CCCP) at least every 5 years and update it as necessary (12VAC5-590-600 A).
- The CCCP cannot be in conflict with the Uniform Statewide Building Code (USBC) and applicable building code regulations (12VAC5-590-600 B).
- The CCCP has to ensure testing, maintenance, and repairs (12VAC5-590-600 C).
- The amendments cite the building code regulations, 13VAC5-63-530, which require testing of backflow prevention assemblies after initial installation, immediately after repairs or relocation, and annually thereafter and allow the CCCP to include an optional public education program (12VAC5-590-600 E).
- Owners are required to maintain an inventory and records of backflow prevention devices and assemblies, but, for single-family residences, may determine whether or not to maintain an inventory and/or records (12VAC5-590-600 H).

WAC members discussed some of the modifications, but supported ODW going forward with them as presented. ODW staff will change the date in 12VAC5-590-630 D to allow more time between the effective date of the amendments and the date by which persons testing and repairing backflow prevention assemblies have to be certified by the Department of Professional and Occupational Regulation.

## 2. HYDRANTS, 12VAC5-590-1170

ODW received 10 comments about hydrants. The final amendments will include requirements in Part III for dry barrel hydrants and yard hydrants. The amendments will not require owners to plug weep holes in dry barrel hydrants they install after the effective date of the amendments, but if the location is subject to high groundwater, flooding, surface water ponding, and contaminant or pollutant spills, owners should consider an alternative location or drain design. In addition, owners must install hydrants that comply with ANSI/AWWA standards.

Subsection B, yard hydrants, is limited to those hydrants that are part of a waterworks. All others fall under the USBC. Waterworks that install yard hydrants in areas subject to high groundwater, flooding, contamination or pollutant spills, or in areas where surface water ponds, will have to use yard hydrants that meet ASSE standards, have drain ports that are piped to daylight, or be contained by a backflow prevention assembly suitable for a high hazard.

WAC members had questions/comments regarding:

- 1.) Dry barrel hydrants,
- 2.) The purpose of changing the regulations,
- 3.) The importance of using the regulations to support industry standards,
- 4.) The use of “shall” verses “should” and the agency’s ability to enforce the modifications,
- 5.) The potential for cross connection and contamination from weep holes,
- 6.) The worry that the updated language is less restrictive than current USBC requirements,

- 7.) Concerns about cost involved meeting ASSE standards for yard hydrants and identifying hydrants as a hazard and having to address them in cross connection plans, and
- 8.) The instillation of backflow protection to comply with plumbing code or the utilization of “do not drink” signs

After discussing the questions/comments, WAC members supported ODW going forward with the modifications in 12VAC5-590-1170 as presented.

### 3. WELL ABANDONMENT, 12VAC5-590-475 B 8, and CONSTRUCTION, 12VAC5-590-840 G 5 – COMMENTS FROM the DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ)

DEQ staff asked ODW to modify 12VAC5-590-475 to require use of bentonite because cement’s drying properties (heat of hydration) can damage PVC in unconsolidated formations.

For grouting a new well, DEQ asked ODW to modify 12VAC5-590-840 by changing “low-strength cement and sand mix” to “engineered low permeability/high solids bentonite and sand mix”

WAC members discussed DEQ’s recommendation against using low strength cement and expressed concerns related to mixing the product in the field. A WAC member periodically uses low strength cement delivered by a mixing truck and has had good results. Jesse Royall will contact Scott Kudlas at DEQ to discuss the agency’s recommendation. There is less concern about low permeability/high solids bentonite (it is higher cost product). Staff will also follow up with DEQ before finalizing these sections.

### 4. SODIUM MONITORING, 12VAC5-590-340 and -372 D 6

Bob also discussed a change the U.S. Environmental Protection Agency requested – including requirements for monitoring the sodium concentration at the entry point. Sodium levels have been included in metals reports from DCLS and other labs, so it has not been an issue even though it is not in the current version of the Waterworks Regulations. EPA wants sodium monitoring included in the amendments since it is part of the National Primary Drinking Water Regulations.

### 5. NEXT STEPS

The next steps in the regulatory process include presenting the final amendments to the Board of Health for approval, submitting them for Executive Branch review, and posting them for a 30-day public comment period. Staff expect this process to take at least 6 months after the Board approves the final amendments, pushing the effective date to the second half of 2021 at the earliest.

WAC members made and seconded a motion to support ODW moving forward with the final amendments to the Waterworks Regulations, pending revisions for the licensing date (12VAC5-590-630 D) and grouting requirements. Following discussion and an opportunity for public comment, all WAC members indicated their support for the motion.

### **ODW Updates**

#### 1. General Assembly update:

Tony discussed legislation that passed during the 2020 General Assembly session:

Lead bills – HB797, SB292 (lead testing in schools); HB799, SB293 (lead testing in child day programs). Local school boards and child day programs are required to submit lead testing plans and results to VDH. ODW will begin work to develop a database to handle materials. Money to develop the database and implement some testing will come from WIIN grant (which will provide dollars for testing) and the GA budget. Timing will depend in part on coronavirus and school availability. The bills do not specify when testing must begin or be completed.

PFAS bills – HB586, HB1257. ODW is required to form a workgroup to evaluate occurrence of PFAS in drinking water and develop maximum contaminant levels for specific PFAS. Plans are for the workgroup to consist of roughly 15-20 members. If you are interesting in participating, please contact either Tony Singh (Tony.Singh@vdh.virginia.gov) or Kris Latino (Christine.Latino@vdh.virginia.gov). The General Assembly did not provide funds in the budget to cover the costs of sampling/analysis or workgroup expenses. ODW has asked the U.S. Environmental Protection Agency to provide funds for PFAS sampling.

Nelson provided a budget update: the General Assembly amended the state budget in April, un-allotting funds for ODW's electronic records/database updates and part of the required Drinking Water State Revolving Fund (DWSRF) match. ODW will revise its budget and expenditures to cover the DWSRF match for the 2021 fiscal year and has renegotiated its contract with the company providing database support to account for the un-allotted funds.

## 2. Consumer Notification of Lead Results:

Bob talked about the letter field offices sent to community and nontransient noncommunity waterworks regarding the requirement to provide lead sampling results to the consumers whose taps are used as sample collection points within thirty days of the date the waterworks receives the results. ODW staff posted templates for the letters on the ODW website [here](#), under "Information for Waterworks Owners" – Lead Consumer Notices.

## 3. Compliance Monitoring Data Portal:

Bob talked about the deadline for labs to complete the conversion to electronic data transmissions by September 1, 2020. ODW does not expect all labs in the state to meet the deadline and will provide flexibility for those that are actively transitioning. Bob's presentation on CMDP and the Permit Manual follows the meeting minutes.

## 4. Permit Manual

ODW staff are completing a draft update to the Permit Manual (Working Memo 784) and plan to share the draft with WAC members before posting it on Town Hall for public comment. Staff expect to complete the draft in August. (Va. Code § 2.2-4002.1 (effective July 1, 2018) requires state agencies to provide 30 days for public comment on guidance documents before they become effective.)

## 5. Waterworks Updates

ODW staff and WAC members did not have any comments or updates on waterworks.

### **Other Business**

The September WAC meeting had been scheduled for September 16, 2020. At the February WAC meeting, members agreed to change the date to September 23 to avoid a conflict with Water Jam. Water Jam will be virtual this year because of the coronavirus pandemic. Therefore, the WAC meeting will be on its original date of September 16, 2020. Staff expect the meeting will be by electronic format due to ongoing public health restrictions related to the coronavirus.

Tony concluded the meeting at 11:55 am.

WAC Meeting  
July 15, 2020  
Attachments  
and  
PowerPoint  
Presentations

## Waterworks Advisory Committee (WAC) Meeting Summary

Perimeter Center, Conference Center, TR 1, 9960 Mayland Drive, Henrico, VA 23233  
Wednesday, February 19, 2020

Final

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**Members Present:** Dwayne Roadcap (ODW), Chair; Jesse L. Royall, PE, Sydnor; Bailey Davis, DCLS; Skip Harper, DHCD; David F. Van Gelder, Water Operator; Andy Crocker; SERCAP; Ignatius Mutoti, VSPE; Mark Estes, VRWA; Roger Cronin, ACEC

**Guest in Attendance:** ODW staff – Robert Edelman, Christine Latino, Nelson Daniel, Dan Horne, Jeremy Hull, Tony Singh, James Reynolds, Aaron Moses, Mark Perry, Bennett K. Ragnauth

Russ Navratil, AWWA; Tom Fauber, VA ABPA; Steven Edgemon, Fairfax Water; Laura Bauer, VA American Water Company; Kelly Ryan, VA American Water Company; Ryan Green, DEQ; Katie Krueger, HRPDC; Bryant Mountjoy, Cardno; J.P. Verheul, AWS Labs

### **Meeting Overview and Agenda**

Nelson Daniel, ODW's Policy and Program Director, led the meeting. Dwayne Roadcap joined the group during the discussion about the proposed amendments to the Waterworks Regulations. Nelson called the meeting to order and provided an overview of the meeting agenda.

### **Adoption of Minutes from December 11, 2019 Meeting**

WAC members voted unanimously to approve and adopt the draft minutes from the December 11, 2019 meeting. ODW will post the minutes as final on Town Hall.

### **Public Comments Period**

No Public comments

### **ODW Updates**

**General Assembly:** Nelson provided a brief description of the bills that are still active at the General Assembly and an overview of their status. ODW is lead on seven bills:

**SB392** and **HB797** propose to amend Va. Code § 22.1-135.1 (lead testing in schools) to require local school boards to provide plans to test drinking water for lead and test results to the Department of Health (VDH). In addition, the bills state that plans shall be consistent with guidance published by the U.S. Environmental Protection Agency (EPA) (i.e., the 3Ts for Lead in Drinking Water in Schools and Child Care Facilities) and that each local school board shall notify parents if testing results indicate lead contamination exceeds 10 parts per billion (PPB). There is a fiscal impact for VDH to implement the requirements in the bills which has been addressed with budget amendments including \$195,000 to establish a database and funding for 1.5 full time equivalent (FTE) positions. Both bills have passed through their respective chambers and are under consideration in the other chamber.

**SB393** and **HB799** propose to add Va. Code § 63.2-1705.1 and require child day programs to test drinking water sources for lead. If the level of lead exceeds 15 ppb, the program is required to remediate the source, or switch to bottled water. Like SB392/HB797, child day programs are required to

provide test plans and results to VDH. There is a fiscal impact for VDH to implement requirements in the bills which has been addressed with budget amendments – using the same database as the school lead testing bills and funding for 1.5 FTEs. Both bills have passed through their respective chambers and are under consideration in the other chamber.

Budget amendment **304 #3s** (allowing the Board of Health to increase the waterworks operation fee cap to create a grant fund for the lead testing program) did not get included in the Senate’s recommended budget amendments, effectively stopping the proposal.

**HB586** and **HB1257** (related to PFOS, PFOA, and other specified PFAS compounds) passed the House and are under consideration in the Senate. HB586 would have VDH study PFAS compounds in Virginia, with the goal of quantifying sources, occurrence, and risk and establishing maximum contaminant levels (MCLs). HB1257 would have the Board of Health establish MCLs. As amended, VDH would complete the study required by HB586, then promulgate MCLs (the effective date of HB1257 is July 1, 2022. HB586 has a fiscal impact if VDH does any testing: without any funding, VDH can convene a workgroup and complete a literature review; with modest funding (\$20,000), VDH could sample from a limited number of waterworks; with full funding (\$900,000), VDH would collect samples across the state to quantify occurrence. The House did not include funding for HB586 in its budget proposal.

**HJ92** requires ODW to complete a study of the sustainability of the public drinking water program, program needs, asset management, and infrastructure and report its findings to the General Assembly before the 2021 session. The bill passed the House and is under consideration in the Senate. It is similar to legislation Delegate Lopez introduced in 2017 and 2018. ODW has done preliminary work based on the 2018 bill and would build on that to complete HJ92 if it passes the Senate.

ODW is watching the following bills:

**SB410** would require school divisions to develop water management plans to prevent Legionnaire’s disease. The bill does not include language requiring VDH or ODW to do anything. Instead, the responsibility is on the school divisions. However, VDH expects a fiscal impact when school divisions ask for help in developing water management plans, reviewing sample results, communicating results, etc.

**SB845** requires schools to test for mold and remediate as needed. VDH’s Office of Environmental Health Services (OEHS) is watching the bill and expects schools will reach out to VDH for assistance.

**HJ40** study harmful algae blooms in Lake Anna – Left in Appropriations

**SB299** requiring bottle filling stations in public schools – stricken at the request of the patron

**Office of Environmental Health Services:** ODW staff frequently work with OEHS staff on enforcement cases, drinking water issues related to private wells, and other environmental issues. The OEHS director, Allen Knapp, retired in December and Dwayne has been serving as the acting office director. Julie Henderson, who is the director of OEHS’s Division of Food and Environmental Services, has been named as the new office director, effective February 25.

### **Waterworks Operation Fee Regulations**

ODW is forming a stakeholder group to assess the current fee structure and determine if it is appropriate to serve its intended purpose going forward. ODW intends to provide transparency, capture input, recommend policies, and ultimately suggest implementation procedures to maximize the

effectiveness of the Operation Fee Regulations. More information is in the attached PowerPoint presentation.

Stakeholder Meeting Dates:

Monday, April 6, 1-4 p.m., VDH Main Floor Conference Room  
Tuesday, April 28, 1-4 p.m., VDH Main Floor Conference Room  
Tuesday, May 26, 1-4 p.m., VDH Main Floor Conference Room

#### **WIIN Grant for testing for lead in water at schools and day care centers**

Dr. Tony Singh provided an update: VDH has received \$737,000 from EPA to implement the program in Virginia. VDH may use 4% for overhead, the remainder must be used to develop test plans and pay for testing. The grant does not cover remediation. Staff are developing the scope of work and expect to involve several state agencies and universities in the program. A kickoff meeting is planned for the first week of March and testing is planned in three phases: Phase 1, Fall 2020; Phase 2, Spring 2021; Phase 3, Fall 2021. Schools will use the 3Ts guidance to develop sampling plans. The grant funding is limited to child day programs serving children under 7 years of age and public schools.

#### **Field Office Rebalancing**

The Richmond Field Office (RFO) is a fully functional field office. On February 20, RFO staff will move from the Madison Building, across 14<sup>th</sup> Street, to the Monroe Building so that the Department of General Services can renovate the HVAC systems in the basement of the Madison Building. The office recently hired three inspectors and they are undergoing training. The effort to redistribute workload between field offices is proceeding. ODW is in the process of communicating the changes to the affected waterworks. ODW is sending out notices this week with April 1, 2020 as the transition date. ODW is not making changes to public water system identification numbers (PWSIDs).

#### **Lab Reporting**

On December 27, 2019, ODW emailed all labs of the new requirement to submit test results electronically through the Compliance Monitoring Data Portal (CMDP). ODW and our contractor have followed up with phone calls to all 160 laboratories offering assistance on using the CMDP. ODW has set a deadline of September 1, 2020 for laboratories to report via CMDP.

A WAC member expressed concern about ODW's ability to enforce the electronic submission requirement with non-compliant labs. Another member requested ODW share the list of labs that are using CMDP with the WAC.

#### **EPA Updates**

##### **Lead and Copper Rule Revisions (LCRR)**

Bob Edelman, Director, Division of Technical Services provided a briefing on the comments ODW submitted to EPA on the proposed LCRR. Refer to the PowerPoint.

Timeline: The public comment period ended February 12, 2020. EPA must review and respond to comments. EPA's goal is to issue the final rule in 2020; however, this may be challenging due to the large number of comments. Three years after the final rule is published in the Federal Register, community waterworks (CWS) and nontransient noncommunity waterworks (NTNC) must comply.

ODW Activity: ODW's Lead & Copper Rule committee prepared and submitted a 17-page comment letter to EPA to address specific questions from EPA and document specific Virginia comments and concerns. ODW is worked with the Association of State Drinking Water Administrators (ASDWA) on their comment letter to EPA. ASDWA's comments extended to 42 pages and represent the combined views of the state drinking water programs and may be different from individual states.

### **Proposed Amendments to the Waterworks Regulations – Review of Public Comments**

Bob Edelman, Director, Division of Technical Services, provided a briefing on specific comments ODW received during the public comment period for the proposed amendments to the Waterworks Regulations. The PowerPoint presentation that follows the meeting minutes provides a summary of each comment and ODW's response. Changes are indicated in red text and, except as noted below, are explained in the text of the slide.

Public comments that ODW received via Town Hall are available at:

<https://townhall.virginia.gov/L/viewstage.cfm?stageid=8497>

ODW also received comments from Fairfax Water, Loudoun Water, and EPA Region 3. They are included in the attachments that follow the meeting minutes.

The majority of the comments from EPA Region 3 were technical in nature and correct typos, incorrect cross references, or other omissions resulting from re-codifying several sections in Part 2 of the Regulations. ODW will make changes recommended by EPA as noted in the PowerPoint.

Comments about specific slides/sections with proposed amendments follow:

**12VAC5-590-340. Compliance standards:** Sodium is not included in Table 340.1, Inorganic Chemicals. Although there is no PMCL established for sodium, community water systems are required to monitor in accordance with 40 CFR §141.41 Special monitoring for sodium. Sodium is being included under the current *Waterworks Regulations* 12VAC5-590-440 Table 2.2 – Inorganic Chemicals. EPA recommends ODW add sodium to Table 340.1 and provide language regarding the special monitoring requirements. ODW will follow EPA's recommendation.

**12VAC5-590-370. Monitoring requirements:** ODW will add missing information regarding monitoring and reporting violations to be consistent with the requirements in the National Primary Drinking Water Regulations. See 40 CFR 141.860 (c); 40 CFR 141.860 (d) and the PowerPoint.

**12VAC5-590-373 C 1 a. Organic chemicals monitoring:** See 40 CFR 141.24 (f)(5) - ODW no longer considers grandfathered data for reduced monitoring of VOC and SOC beyond January 1993.

**12VAC5-590-373 C 3:** ODW recognizes that some clarification is needed as posited by EPA. To achieve this, ODW believes that a simpler approach would be to revise the subdivision title to reflect increased monitoring for results that are >PMCL only. Thus, for 12VAC5-590-373 C 3, "Return to compliance" becomes "Returning to annual monitoring after PMCL exceedance".

**12VAC5-590-373 E 3 b (4):** ODW will add the missing information on watershed protection for surface water systems (40 CFR 141,24(f)(8)(ii)(E)). Watershed protection is included in the current *Waterworks Regulations* under 590-370 B 2 f (4).

**12VAC5-590-373 E 4 a (1):** The proposed language does not include an update on vulnerability assessment as a VOC waiver condition (40 CFR§141.24(f)(9)). ODW will restore the relevant language from 12VAC5-590-370 B 2 g (1) in the current *Waterworks Regulations*.

**12VAC5-590-373 F 4 b:** The proposed language does not include the criteria for remaining on reduced monitoring for waterworks with annual or less frequent monitoring. ODW will restore the relevant language from 12VAC5-590-370 B 3 e (1) (c) in the current *Waterworks Regulations*.

**12VAC5-590-1140. Installation and testing of water mains:** In response to the comment about using the most current standard, in promulgating regulations, the Registrar requires agencies to specify the year for standards – cannot say “future versions” or “most recent version”. Note that agencies can use another regulatory process to update regulations over a shorter period of time, assuming the regulated community supports the revision (see Va. Code § 2.2-4012.1. Fast-track rulemaking process). ODW will update references to the most current standard.

**12VAC5-590-1170. Hydrants:** Staff explained that the proposed language would codify ODW’s practice and policy for the last 20 years. Several people objected to the mention of plugging fire hydrant drains. The group discussed current industry practice is to not plug the drain because some muddy water or contamination in the base of a fire hydrant is not a concern, in comparison to the problem of a frozen fire hydrant causing problems with firefighting.

The group discussed a possibility of using performance requirements – goal is to prevent backflow, cross contamination. Have the engineer/designer say design meets the performance requirement. This could lead to issues during ODW review of the plans.

There is a conflict between the fire protection – to meet firefighting needs (concern about water in hydrant freezing) – and health risk from backflow or cross contamination. Waterworks owners, others have not heard about any risk, contamination from backflow through a fire hydrant.

Several members of the group questioned ODW’s proposed revision: “Under conditions where there is no high groundwater, surface flooding or ponding or contaminant or pollutant spills, fire hydrant drains shall drain to the ground surface or to dry wells provided exclusively for this purpose. In all other situations, fire hydrant drains shall either be drained in a manner that will avoid contamination of the hydrant or be plugged.”

WAC members and others in attendance stated their willingness to form a work group to come up with design standards – David Van Gelder, Steve Edgemon, Jeremy Hull, and Bob Edelman agreed to consider the issue and develop a recommendation for the next WAC meeting in April. Steve Edgemon will provide some information on weep holes in fire hydrants before the next meeting.

**12VAC5-590-600. Cross connection control program responsibilities:** Generally, ODW and stakeholders need to work through issues related to:

- cost for annual recordkeeping and testing (education is less costly, less protective);
- irrigation systems should be classified as high hazard;
- scope of public education program, if allowed;
- cross connection control program approval by VDH; and
- waterworks responsibilities/authority beyond the service connection or point of demarcation.

Historically, line of separation between waterworks authority (point of demarcation) and the local building department (code official) is the water meter. Beyond the meter, the Uniform Statewide Building Code (USBC), which includes the Plumbing Code, is the source of regulatory authority. The USBC requires the property owner to annually test backflow prevention assemblies, but does not have specific requirements for the property to report the results of the test and doesn't give authority to waterworks or ODW to enforce requirements on private property, beyond the service connection. 12VAC5-590-55

The group discussed the possibility that the USBC and Waterworks Regulations say the same thing or at least be consistent. The USBC requires testing of assemblies, which means that an education program could not replace testing. If the USBC doesn't require reporting, perhaps education can replace reporting.

One member stated that his waterworks is requiring homeowners to complete annual testing on testable devices and submit the test reports to the waterworks and there are no issues.

A member pointed out that a building must meet the building code when it is constructed or modified. If the building code changes, there is no requirement to update the building to meet the new requirements.

The group discussed containment devices and associated standards. One member advocated for relying on the USC to approve devices. Another member pointed out that this was in the Waterworks Regulations and was removed.

The WAC discussed and agreed to form a subgroup that will work together to recommend a way forward for addressing concerns about cross connection control. The following persons expressed interest in participating: Tom Fauber, Roger Cronin, Steve Herzog, Skip Harper, and Jeremy Hull. Bob Edelman of ODW will coordinate this subgroup.

#### **Other Business**

- The September meeting has been moved to September 23, 2020 due to Water Jam.
- Bailey Davis will be sending an email to WAC members and ODW regarding PFAS meeting in May.

## Waterworks Advisory Committee (WAC) Meeting Summary

Webinar – Polycom Websuite  
9:00 am, Wednesday, April 15, 2020

Final

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**Members Participating:** Dwayne Roadcap (ODW), Chair; David F. Van Gelder, Water Operator; Ignatius Mutoti, VSPE; Mark Estes, VRWA; Eric Lassalle, NTNC; Geneva Hudgins, VA AWWA;

**Guests Participating:** ODW staff – Robert Edelman, Christine Latino, Nelson Daniel, Dan Horne, Jeremy Hull, Tony Singh, James Reynolds, Brian Blankenship, Jeff Wells, Jennifer Coleman, Daniel Botdorf, Kim Allen

Russ Navratil, AWWA; Tom Fauber, VA ABPA; Laura Bauer, VA American Water Company; Kelly Ryan, VA American Water Company; Katie Krueger, HRPDC; Paul Nyffeler, Aqua Law; Christine Van Zandt, Virginia Health Catalyst; Ike Eisenhardt, Virginia WARN; Katrina Cooke, AWS Labs; Whitney Katchmark, HRPDC

### **Meeting Overview and Agenda**

Nelson Daniel, ODW's Policy and Program Director, provided an overview of the meeting (draft agenda follows the meeting notes) and discussed the requirements for holding a public meeting by electronic communication means without having a quorum physically gathered in one location. WAC members who participated in the meeting acknowledged the requirements and agreed to abide by them. See ODW's statement of requirements and justification following the meeting summary.

Dwayne Roadcap led the meeting.

### **Overview of ODW activities during COVID-19**

Dwayne reviewed ODW's priorities during the COVID-19 emergency, focusing on ODW being proactive in reaching out to waterworks to identify issues, provide customer service, and continuing to provide technical assistance and regulatory compliance oversight. A statement of ODW's priorities follows the meeting summary.

Field offices are contacting community waterworks, generally on a weekly basis, to monitor conditions, operator status, chemical supplies.

Dwayne also provided an overview of ODW teleworking and modified procedures.

### **Program guidance and other information on the ODW Website**

Brian Blankenship, provided an overview of the enhanced remote surveillance procedures ODW has adopted in place of conducting scheduled sanitary surveys during the COVID-19 emergency. He discussed implementation of the program in the Abingdon Field Office and emphasized that ODW will still need to complete site visits to satisfy the full requirements of 12VAC5-590-350 and the National Primary Drinking Water Regulations. Brian's comments are summarized in a document following the meeting summary.

Dwayne, Nelson, and Jennifer Coleman discussed EPA's guidance on enforcement discretion, noting compliance is expected, if there are compliance issue due to COVID-19, EPA and ODW expect waterworks to communicate and document issues and take actions to return to compliance as soon as possible. EPA and the states will document violations, but use enforcement discretion based on the circumstances. EPA's enforcement guidance memo is available on the ODW website (see below).

Dwayne provided an overview of the information that is available on the ODW website, including EPA enforcement guidance, checklists, FAQs, compliance monitoring information, possible funding sources, resources for designating essential employees, and training opportunities. See:

<http://www.vdh.virginia.gov/drinking-water/>

and

<http://www.vdh.virginia.gov/drinking-water/2020/04/07/odw-covid-19-resources/>

### **VA WARN**

Ike Eisenhart gave a presentation on the Virginia Water/Wastewater Agency Response Network (VA WARN). VA WARN and VA AWWA are hosting weekly webinars to provide updates to waterworks and water treatment plants during the COVID-19 emergency. Ike talked about the information they present in the webinars, information resources, and best practices they have identified. The presentation follows the meeting summary.

### **Feedback from Stakeholders**

Dwayne opened the webinar for comments, questions, and/or feedback from participants related to the information provided or other issues related to the COVID-19 emergency. Hearing none, he concluded the meeting at 10:05 am.

# Proposed Amendments to the Waterworks Regulations

Robert D. Edelman, PE  
Nelson Daniel

July 15, 2020



# Goals & Objectives

- Amend out-of-date regulations – last comprehensive revisions in 1993.
- Improve readability, increase clarity.
- Incorporate new technologies.
- Update/clarify the permitting process.
- Codify requirements now implemented by policy.
- Update defined terms.

# Amendment Process...

- 2014 - Formation of the Regulatory Advisory Panel (RAP): 5 meetings & 4 Workgroups
  - Recommendations → action plan & strategy forward
- 2015-2016 Paused to add RTCR
- October 2017 Notice of Intended Regulatory Action
- 2018 - Continuation of review/deliberation by Waterworks Advisory Committee (WAC) & ODW
- December 2018 - Board of Health approval
- Dec 2018–Oct 2019 – Executive Branch review
- Nov 2019-Jan 2020 – Public comment
- 2020 - Revisions to address public comments, prepare final amendments
- February 19, 2020 – WAC Meeting

# Comments Summary

Town Hall	33 submittals	51 comments
Others: Waterworks	2 submittals	25 comments
EPA Region 3	2 submittals	39 comments
Public Hearing	1 transcript	1 comment
Total	38	116 comments

# Comments by Section of WW Regs

- Sections mentioned = 49
- Sections changed = 26

## 10 - Definitions and units of measurement

- 5 commenters
- 20 definitions could change

# Top Comment Topics

600 - Cross-connection control program responsibilities

– 20 commenters

610 - Containment of backflow

– 4 commenters

630 - Backflow prevention assemblies, devices, and backflow elimination methods for containment

– 6 commenters

1170 – Hydrants

– 10 commenters

# February 19, 2020 WAC Meeting

Many non-technical changes

- Corrections to typos, incorrect references
- Corrections to inadvertent deletions or changes
- Other conflicts or omissions

Includes 39 comments from the US EPA

- Federal Requirements
- Definitions
- Do not change requirements for state or waterworks:
  - No significant impact

# Responses to EPA 39 Comments

Sent May 15, 2020

- Definitions - match definitions in 40 CFR §141
- Corrections
  - Typos, references
  - Inadvertent omissions
- Sodium monitoring per 40 CFR §141.41
- Multiple comments on Section 373 Organic chemicals monitoring
  - Rearranged and presented this section
- Corrected references to laboratory methods
- Corrected references to laboratory certification

## Remaining Topics

- Cross Connection Control - Subcommittee
- Hydrants - Subcommittee
- Sodium Monitoring
- DEQ Comments

# Way Forward

- Obtain input from WAC subgroups
- Consider comments, input from WAC
- Draft final amendments to WWR
- Present final amendment to WAC
- Present final amendments to the Board of Health
- Executive Branch review
- Publication in Virginia Register
- 30-day public comment period

# Cross Connection Subgroup Process

March 4, 2020 - Meeting at Sydnor Hydro

- ODW gathered specific recommendations

March 18, 2020 - Virtual Meeting

- ODW proposed a performance-based approach

April 3, 2020 - Emailed proposed Language

- Minor comments received
- Another meeting “not necessary”

May 6, 2020 - Emailed proposed Language

- Very minor comments received

# Cross Connection Control Changes Summary

## Performance based approach to cross connection control

- The owner shall review the CCCP at least every 5 years and update it as necessary.
- The CCCP shall not be in conflict with the USBC...
- The CCCP shall ensure testing, maintenance, and repairs...
- 13VAC5-63-530 requires testing after initial installation, immediately after repairs or relocation, and annually thereafter.
- The CCCP may include a public education program
  - Optional, does not satisfy any requirements
- The owner shall maintain an inventory and records...
  - For single family residences, the owner may determine whether or not
- The department recommends the owner follow best practices...

# Cross Connection Control Changes

Not reviewing minor changes to language:

- Typos, punctuation, repeated words
- Definitions
- Change passive to active voice

Not showing text previously deleted by proposed amendments

## 12VAC5-590-580. General requirements for cross-connection control and backflow prevention.

A. Every owner shall establish and enforce cross-connection control program (CCCP) in accordance with [12VAC5-590-360](#). The goal of the CCCP is to prevent the intrusion of contamination into the distribution system via cross-connections and backflow. The owner shall document the CCCP activities in a cross-connection control plan and submit the written document to the department for review and approval.

# 12VAC5-590-580. General requirements for cross-connection control and backflow prevention.

- B. No owner shall install or allow ~~to be installed~~ a service connection to any premises where cross-connections to a waterworks or a ~~consumer~~ ~~consumer's~~ water system exist, unless the ~~owner and department ensure the cross-connections are adequately safeguarded to the satisfaction of the owner and the department.~~
- C. No owner shall install, maintain, or allow ~~to be installed~~ any connection whereby water from an auxiliary water system may enter a waterworks or ~~consumer~~ ~~consumer's~~ water system, unless the ~~owner and department approve the auxiliary water system, the method of connection, and use of such system shall have been approved by the owner and the department~~

## 12VAC5-590-600. Cross-connection control program responsibilities.

- A. The owner shall establish and ~~implement~~ ~~operate~~ a CCCP consistent with the extent of the distribution system and the ~~type of~~ consumers served by the waterworks. The owner shall review the CCCP and written cross-connection control plan not less than every five years and update it as necessary to satisfy the requirements of this chapter. The owner shall submit updates to the department to obtain approval. The department may review the plan upon request. This program shall include at least one designated individual assigned by the owner. Requirements for this position shall include training and experience in cross-connection control programs.

## 12VAC5-590-600. Cross-connection control program responsibilities.

- B. The CCCP shall not be in conflict with the USBC and applicable building code regulations, including 13VAC5-63-10 et seq. or subsequent regulations promulgated by the Board of Housing and Community Development.
- C. The CCCP owner shall ensure ~~establish appropriate policies to~~ complete assessments of every consumer's water system and shall determine both the degree of hazard and the appropriateness of existing safeguards ~~to prevent contamination from cross-connections and backflow.~~

## 12VAC5-590-600. Cross-connection control program responsibilities.

- D. The CCCP shall ensure testing, maintenance, and repairs of all backflow prevention assemblies, backflow elimination methods, and backflow prevention devices required and installed pursuant to 12VAC5-590-610.
- E. 13VAC5-63-530, which incorporates the International Property Maintenance Code into the USBC, requires testing of RPZ assemblies, double check valve assemblies, double check detector backflow assemblies, and pressure vacuum breaker assemblies after initial installation, immediately after repairs or relocation, and annually thereafter. The ~~owner~~ CCCP shall establish procedures for completing and monitoring operational tests, or other evaluation procedures as appropriate, at least annually, and after installation, relocation, or repairs, for testable backflow prevention assemblies, devices, and methods that provide containment.

## 12VAC5-590-600. Cross-connection control program responsibilities.

The CCCP may include ~~instead of annual operational tests (12VAC5-590-600-C) and the related records and inventory of backflow prevention assemblies, backflow elimination methods, and backflow prevention devices (12VAC5-590-600-G), the owner may provide~~ a public education program to: ~~residential and commercial consumers whose premise plumbing is not complex and where there are no known or suspected high hazards as identified in Table 630.1. For all other residential consumers, the department may approve a public education program provided by the owner as part of the CCCP.~~

# 12VAC5-590-600. Cross-connection control program responsibilities.

The CCCP may include a public education program to:

1. ~~The public education program shall be designed to~~ Prompt consumer self-assessments, increase the awareness of cross-connections, and inform the consumer of the public health hazards of backflow.
2. The public education program, ~~if provided as part of the CCCP~~, shall ~~include-describe~~, at a minimum, the following:
  - a. Causes of backflow;
  - b. Hazards and health effects of cross-connections and backflow;
  - c. Resources available to identify actual or potential cross-connections;
  - d. Safeguards to use to eliminate or ~~control reduce~~ the hazards at the point of use; and
  - e. Sources for additional information.

## 12VAC5-590-600. Cross-connection control program responsibilities.

- F. The ~~owner shall~~ CCCP shall provide a method to discontinue or refuse water service to the consumer to ensure that the waterworks is adequately protected from cross-connections and backflow if any of the following conditions occur:
1. The consumer does not install, test and maintain a required backflow prevention assembly or backflow elimination method ~~is not installed, tested, and maintained~~ in accordance with the applicable sections of this chapter;
  2. The consumer allows a required backflow prevention assembly or backflow elimination method to become inoperable or the consumer removes or bypasses it; ~~has been removed or bypassed;~~ or
  3. The owner knows an unprotected or inadequately protected cross-connection ~~is known to exist~~s on the premises and ~~the owner has~~ determined~~s~~ that there is inadequate backflow prevention at the service connection.

## 12VAC5-590-600. Cross-connection control program responsibilities.

H. The owner shall maintain an inventory and records of testing, repairs, and maintenance of all backflow prevention assemblies, backflow elimination methods, and backflow prevention devices required and installed under 12VAC5-590-610 C. In the case of single-family residences subject to 12VAC5-590-610 C 5, the owner may determine whether or not to maintain an inventory and/or records. The department recommends the owner follow best practices identified in the AWWA Manual of Water Supply Practices M14 and the EPA Cross-Connection Control Manual.

## 12VAC5-590-610. Containment of backflow.

B. Where the consumer's water system is not intricate or complex and where actual or potential cross-connection hazards can be eliminated or ~~controlled, instead of containment, the owner may allow consumers to use reduced,~~ point-of-use isolation protection by application of appropriate backflow prevention assemblies, backflow prevention devices, or backflow elimination methods complying with the USBC ~~may be used instead of containment.~~

## 12VAC5-590-610. Containment of backflow.

- E. A backflow prevention assembly or backflow elimination method shall be installed at a consumer's water system serving the following types of facilities, including:
21. Multistory office and commercial buildings or both with four or more stories, including residential buildings classified by the USBC as commercial; and Highrise buildings (four or more stories);
  22. Others specified by the purveyor owner or the division department when reasonable cause can be shown for a potential backflow or cross connection cross-connection hazard. Multiuse commercial, office or warehouse facilities; and

# 12VAC5-590-630. Backflow prevention assemblies, devices, and backflow elimination methods for containment

Table 630.1.

Determination of Degree of Hazard.

<u>Cross connections that meet or may meet the following conditions shall be rated at the corresponding degree of hazard.</u>	
<u>High Hazard</u>	<u>Low Hazard</u>
<u>Examples: lawn irrigation systems, fire sprinkler systems with chemical additives or antifreeze, sewage, used water, nonpotable water, auxiliary water systems, and mixtures of water and other liquids, gases, or other <del>toxic or hazardous</del> chemicals.</u>	<u>Examples: food residuals, <del>coffee machines, non-carbonated beverage dispensers, and residential fire sprinkler systems constructed of materials designed for potable water flow. nontoxic chemicals, and nonhazardous chemicals.</del></u>

# 12VAC5-590-1170. Hydrants

## Comment

A: Fire hydrant drains should not be plugged.

## Revised Proposal

1. To avoid cross-connection and contamination, dry barrel fire hydrants:
    - a. Should be located in areas that are not subject to high groundwater, flooding, surface water ponding, and contaminant or pollutant spills. When this is not practical, consideration shall be given to:
      - (1) Piping the drain port to daylight with screening on the end of the pipe; or
      - (2) Plugging the drain port and marking the hydrant for seasonal dewatering.
    - b. Shall comply with the ANSI/AWWA C502-14 standard, to include drain ports that are physically isolated from the drinking water system by the hydrant stem valve; and
    - c. Shall be drained to the ground surface or to a dry well provided exclusively for this purpose.
- Fire hydrant drains shall not be connected to sanitary sewers or storm drains.

# 12VAC5-590-1170 B Yard Hydrants

## B. Yard hydrants.

1. Shall have a hose connection vacuum breaker, meeting ASSE 1011 or 1052, if the hydrant has hose threads and is not already protected with an integral vacuum breaker.
2. To avoid cross-connection and contamination, yard hydrants installed in areas subject to high groundwater, flooding, contaminant or pollutant spills, or in areas where surface water ponds shall:
  - a. Meet ASSE 1057, Performance Requirements for Freeze Resistant Sanitary Yard Hydrants with Backflow Protection; or
  - b. Have hydrant drain ports that are piped to daylight with screening on the end of the pipe; or
  - c. Be contained from the rest of the distribution system by a backflow prevention assembly suitable for a high hazard.
3. Frost-proof yard hydrants with weep holes draining below grade are allowed provided they are not installed in areas subject to high groundwater, to flooding, to contaminant or pollutant spills, or in areas where surface water ponds.

## 12VAC5-590-1170 C

### Comment

Clarify connection of flushing hydrants to the water supply main and the limitation of pipe diameter.

### New Text:

C. Hydrants and flushing devices not designed for fire protection may be connected to pipe of less than 6 inches in diameter, consistent with 12VAC5-590-1120 A.

# DEQ Comments

## 12VAC5-590-475 B. Permanent abandonment Comments

- Bentonite is appropriate for wells with steel and PVC casings
- Cement is not appropriate for wells with PVC casings

## 12VAC5-590-475 B. Permanent abandonment

- 8. Non-bored steel cased wells constructed in unconsolidated formations shall be completely filled with bentonite, concrete, sand-cement, bentonite-cement, or neat cement grout to within a minimum of five feet from the ground surface by introduction through a pipe initially extending to the bottom of the well. Non-bored PVC cased wells constructed in unconsolidated formations shall be completely filled with bentonite grout to within a minimum of five feet from the ground surface by introduction through a pipe initially extending to the bottom of the well. The pipe shall be raised but remain submerged in grout or concrete as the well is filled. The remaining space shall be filled with clean fill that is mounded a minimum of one foot above the surrounding ground surface.

# DEQ Comments

12VAC5-590-840. Groundwater sources.

G 5 Grouting requirements.

## Comments

- Applies to the annular space below the grout zone.
- DEQ does not recommend “low strength cement and sand mix”
- DEQ recommends “engineered low permeability/high solids bentonite and sand mix”

# 12VAC5-590-840. Groundwater sources.

## G 5 Grouting requirements.

a. Neat cement grout shall consist of Portland cement and water ... Other grout mixes may be approved by the department commissioner where special conditions warrant.

b. Application.

(3) Before grouting wells, suitable fill material such as bentonite, engineered low permeability/high solids bentonite and sand mix, low-strength cement and sand mix, or similar materials that have been approved by the department commissioner shall be added to the annual opening below the grout zone to seal and stabilize these areas. Instead of this requirement, the casing may be grouted for its entire depth.

# 12VAC5-590-340 Compliance standards.

## Comment

Sodium is not in Table 340.1. Although there is no PMCL established for sodium, community water systems are required to monitor in accordance with **40 CFR §141.41 Special monitoring for sodium**. Sodium is included under the current *Waterworks Regulations* 12VAC5-590-440 Table 2.2 - Inorganic Chemicals.

## Response

ODW will add sodium to Table 340.1 and will provide language regarding the special monitoring requirements for sodium in accordance with 40 CFR §141.41.

## 12VAC5-590-340. Compliance standards

### Comment

Sodium is not included in Table 340.1 of SMCLs; formerly as Table 2.2 in current regulations.

### Response

Adding sodium into Table 340.1. Inorganic Chemicals

Sodium No Limits Designated

fMonitoring and reporting in accordance with 40 CFR 141.41 and 12VAC5-590-372 D 6

# Sodium Monitoring

Monitoring and reporting requirements of sodium per 40 CFR §141.41

- Community Waterworks
- Surface water sources - annual
- Groundwater sources - three years
- VDH may require more frequent monitoring
- VDH shall notify local and state health officials of levels
- Include results in the Consumer Confidence Report

# Way Forward

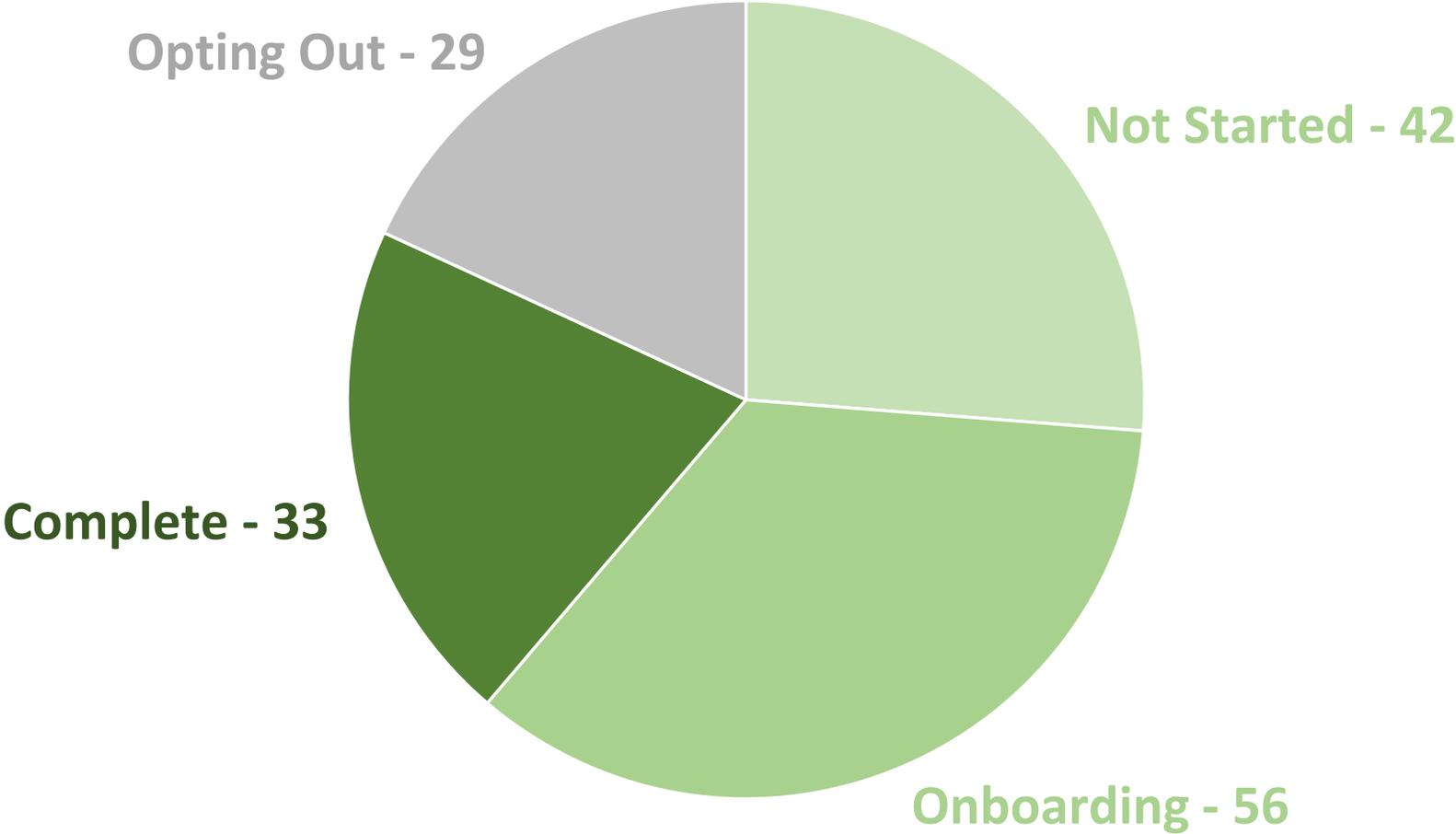
- Present final amendment to WAC
- Present final amendments to the Board of Health
- Executive Branch review
- Publication in Virginia Register
- 30-day public comment period

# Comments and Questions?

# Compliance Monitoring Data Portal (CMDP)

- EPA electronic laboratory result portal
- ODW requirement issued - all compliance results through CMDP after Sept 1, 2020
- Why?
  - Required for future versions of SDWIS
  - Cross-Media Electronic Reporting Rule (CROMERR) compliance
  - Reduce errors – improve customer service to waterworks
  - Reduce ODW staff time
    - Data entry
    - Error resolution

# CMDP Status



# ODW Permit Manual

- Finalizing updates
- Aim to share with WAC in Aug, in advance of Townhall posting
- Changes include:
  - Field office authority to approve permits
  - New change of ownership procedure
  - Added project return procedures
  - Added operation permit “invalidation” procedures (closure or service reduction)
  - Corrections and clarifications

**OFFICE OF DRINKING WATER**  
**ENHANCED REMOTE SURVEILLANCE**  
**“TELESURVEYS”**

**BACKGROUND:**

ODW performs sanitary surveys as a technical assistance and surveillance activity to assist waterworks compliance with 12 VAC 5-590-350 regarding Sanitary Surveys and other elements of the COV Drinking Water Regulations.

During Sanitary Surveys, ODW staff perform an on-site evaluation of eight essential elements.

1. Source
2. Treatment
3. Distribution systems
4. Finished water storage
5. Pumps, pumping facilities and controls
6. Monitoring, reporting data verification
7. Waterworks management & operations , and
8. Number and classification of operators required by the COV DWR.

**PURPOSE:**

Effective April 1, 2020 the ODW temporarily suspended routine field work, including sanitary surveys, to address COVID-19 concerns. ODW Director Dwayne Roadcap issued a Memorandum to Waterworks and ODW staff establishing process and procedures during COVID-19.

Enhanced remote surveillance was addressed in the guidance memo.

**PROCESS:**

ODW established Enhanced Remote Surveillance “telesurvey” procedures for Field Office staff.

**Enhanced Remote Surveillance**  
**“Telesurvey”**  
**FIELD OFFICE PROCEDURES**

**1. Telesurvey Preparation**

Complete the “upfront” (Part I) portion of the sanitary survey. Use the example reports provided by the Field Director to compile the reports. Staff must review the most recent sanitary survey for each of the 8 required essential elements and identify the status of all comments and action items from the prior sanitary survey. Review the

correspondence file, monitoring plans, sample records, Consumer Confidence Report (CCR) status, Notices of Alleged Violation (NOAVs), public notification (PN) status, and overall compliance status as normal preparation for a sanitary survey. Based on this review, staff should create a list of discussion topics and talking points.

- a. During your prep work, highlight the key items in Part I of the survey report form to fill in and update so you don't miss anything important
- b. Preparation is key to guiding the survey. With VPN access or time prep in office save/print monitoring plans, bacti history, next chemical samples due, Pb and Cu Basics from R&R.
- c. Use R&R to generate Scheduled Activities report to get lots of useful information such as Compliance schedules, Monitoring plans achieved dates for reference.

**2. Call the waterworks ahead of time and let them know you will be doing a "telesurvey" with them on the day of the scheduled visit.**

- a. Inform them that this is an enhanced remote surveillance activity (telesurvey) keeping with the waterworks routine sanitary survey scheduled frequency to ensure their waterworks continue to receive adequate technical assistance provided during the sanitary survey process. We want to enhance our individual and field office relationships with waterworks. Take this opportunity to do this in your individual ways. .
- b. Also, inform the operator or administrative contact that we will be scheduling an on-site field visit at a later date.
- c. Ask them if they have access to google hangouts meeting or have facetime and if so see if they are willing to participate in this face to face type communication.
- d. If they do not have access or do not wish to communicate in that way then proceed with just a phone call.
- e. Set a specific time for your call, really try to approach this as closely as you can like you do a sanitary survey.
- f. Ask the operator to send a bench sheet and inline reading information prior to the tele survey so you can go over any discrepancies or issues during your discussion. Identify the things you will need during your prep work.

**3. After scheduling the meeting, and before the telesurvey, Email the following to operator:**

- a. A copy of the previous sanitary survey before the meeting for the operator to review so you can discuss previous comments.
- b. A printout of the next due chemical schedule from SDWIS
  - Check files and make sure we have the up to date information before sending the printout.
  - Make sure to send the operator a copy of last year's inspection report so they can see what you are talking about when you discuss previous recommendations or problems identified.
  - Do this in advance to give the operator a chance to review all the comments

- c. A copy of the SWAR, if completed. At a minimum, issue SWAR with the sanitary survey report.

**4. Before conducting the telesurvey:**

- a. Check the status of compliance and let them know if any NOAV's are coming.
- b. Check to see if there are any Public Notices due, and OELs submittals for DBP.s and etc. as noted in the Part I of reports.
- c. If it is a system you are unfamiliar with, go over the description sheet in detail prior to the telesurvey so you are familiar with what you are talking about since you likely can't observe the equipment in operation. This may also help you think of discussion points.
- d. Double check that all SDWIS information is correct and review the file to check for concurrence.
- e. Have all Compliance information together so you can inform the operator of any Notice of Alleged Violations or outstanding Public notices that need to be submitted. .
- f. Have a list prepared for the waterworks of actions to return to compliance.

**5. Conducting the telesurvey:**

- a. Discuss the previous onsite field visit (e.g., comments and concerns, actions required, updates documented in the previous report, sampling schedules, NOAVs, status of any PN requirements, and other compliance schedules). Staff should always ask the operator to substantiate answers to questions provided over the phone. Staff must compare observations and requirements noted in the records from the prior sanitary survey to the information received over the phone and not verified by an onsite, in-person inspection. If available, have the operator email you a picture to verify resolution of previous comments.
- b. Complete as much of Part II as possible. Use photos, videos and perhaps a virtual tour by face time or etc. to see the facilities. Particularly for surface water plants and GUDIS, get bench sheet photos and SCADA screen shots to help answer questions. Use the example docs shared by the Field Director to draft the cover letter and complete the report. Imbed or insert pictures and videos into the report.
- c. Make sure the operator has a copy of all things you will be discussing. Examples are Upcoming sampling, Violations, Public notice, previous comments, Notify actions needed from them such as CCR draft submittal.
- d. Inquire/address any issue the system is having and give technical assistance.
- e. If utilizing, conduct video conferencing (Google hangouts / FaceTime calls) to supplement the telesurvey and share real time views of waterworks (treatment facilities, instrumentation, reports, etc.) then collect photos and review with the operator during the video conference/call.

- 6. Send the operator a follow up email of your conversation and any recommendations, etc. that you need to remind them of. We will be forwarding the Report to the

administrative contact and distributing as with all reports. **All systems will receive the cover letter and report as per the April 1, 2020, Memo for Program Guidance issued by Dwayne, Roadcap, ODW Director.**

7. If necessary to address potential significant deficiencies that were identified during the video conference/call, which cannot be resolved or verified, **then schedule an onsite visit even during the temporary suspension of routine field work period.** Follow procedures to minimize risks to staff and waterworks personnel. Limit in-person interaction as much as possible by maintaining 6-foot separation distance at all times and, to the extent possible, avoid touching surfaces and equipment (i.e., unlocking doors, opening lids, checking equipment and instrumentation). If available, requested, or deemed necessary, staff may need to wear personal protective equipment.
8. Enter the tele survey into SDWIS as an SNSP and check the element boxes you were able to cover.
  - a. In the comments section at the bottom of the SDWIS inspection page list the method used to complete the survey for documentation in addition to designating it as an SNSP.

#### **OUTCOMES:**

1. Continue to provide technical assistance to waterworks.
2. Received very well by waterworks thus far and excellent cooperative effort.
3. Enhance relationships with ODW staff and waterworks.
4. Continue to develop recent hires in their onboarding and learning objectives at AFO.