

# **WATERWORKS ADVISORY COMMITTEE MEETING**

Sydnor Hydro, Inc., 2111 Magnolia St, Richmond, Virginia 23223

**Tuesday, December 18, 2018**

**8:30 – 2:30 PM**

## **AGENDA**

<b>Subject</b>	<b>Time</b>
Meet and Greet with Stakeholders	8:30 – 9:00 AM
Call to Order: Adoption of minutes from the 10/18 meeting	9:00 – 9:10 AM
Public Comment Period/Board of Health Update	9:10 – 9:25 AM
A Year in Review: Discuss 2018 goals and what we accomplished	9:25 – 9:45 AM
ODW Metrics	9:45 – 10:15 AM
2019 Priorities	10:15 – 10:45 AM
<b>BREAK</b>	<b>BREAK</b>
VCU Performance Management Group	11:00 – 11:40 AM
Working Lunch. Continue Discussion of 2019 Priorities	11:40 – 12:30 PM
HJ 94 Report Update	12:30 – 1:00 PM
Updating by-laws and committee membership	1:00 – 1:20 PM
General Assembly planning	1:20 – 1:30 PM
WIIN and AWIA updates (Lead testing in schools and childcare centers)	1:30 – 2:00 PM
ODW Policies, including Boil Water Advisories	2:00 – 2:30 PM
Adjourn & Schedule Next Meeting	

**Waterworks Advisory Committee (WAC)**  
**Meeting Summary**  
December 18, 2018

FINAL, Approved April 30, 2010

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**Members Present:** Dwayne Roadcap, ODW (Chair); David VanGelder, Operators (vice-chair); Andy Crocker, SERCAP; John Danielson, VWWA; Bailey Davis, DCLS; Jesse Royall, Ignatius Mutoti, VSPE; Geneva Hudgins, VA AWWA; Mark Estes, VRWA, Halifax County Service Authority; Tom Fauber, VA ABPA; Skip Harper, DHCD; Roger Cronin, ACEC

**Guests in Attendance:** Jennifer Coleman, Nelson Daniel, Barry Matthews, Bennett Ragnauth, Aaron Moses, Sherri Sullivan, Dan Horne, Jim Moore, Jeremy Hull, Bryan Wade, Jeff Wells, Steve Pellei (ODW staff)

Teresa O'Quinn, Prince William Co; Paul Saunders (DPOR); Jessica Littlejohn, Hurt & Profitt; Tim Mitchell, City of Lynchburg, VA AWWA

**Meeting Overview** (Dwayne Roadcap)

**Public Comment**

No comments

**Board of Health Update** (Dwayne Roadcap)

ODW presented the proposed amendments to the Waterworks Regulations to the Board at its 12/13/18 meeting. The Board asked about lead in drinking water, why ODW did not propose changes to Section 830, desalination, TNC reduced monitoring, and cross connection control (explain the issue, provide examples). The next steps in the regulatory process are executive branch review, public comment, addressing public comment, and final stage. The Board approved the proposed amendments, allowing VDH to submit them to the Registrar of Regulations as proposed amendments.

**A Year in Review** (Dwayne Roadcap) (see powerpoint)

ODW 2018 priorities are customer service, team development, and accountability through radical transparency.

During the 2018 General Assembly session, several bills affected ODW:

HJ94 – Did not pass; however, ODW agreed to do the recommended study.

HB771 (SWIFT) – Did not pass. Bill created an oversight committee and monitoring laboratory. One hurdle was that it had a fiscal impact (VDH needs staff to monitor data). ODW expects a new bill in 2019.

HB979 – Did not pass. Proposed to change the lead action level. Lead remains a concern.

HB1035 – Passed (EVGMA – if there are competing projects for state revolving loan funds, preference for the project that does not withdraw groundwater in the EVGMA).

HB1578 – Did not pass. Requires lead testing in schools. (*listed as HB1574 on powerpoint*)

HB192 – Passed. Regulates rainwater use, gray water reuse. Stakeholder meeting held on 12/17; discussed overview of process and objectives to develop regulations.

HB297 – Passed. Requires a comment period for guidance documents – agencies will have to complete and submit a form on Town Hall and public notice guidance for 30-day public comment period.

HB1234 – Did not pass. Proposed to change definition of “human consumption” to “domestic use” in the Waterworks Regulations. ODW agreed to reduced monitoring under the RTCR. Discussed need for ODW to develop guidance to implement this change. One bigger issue may be the need to regulate facilities that are not currently regulated (e.g. churches, gas stations, and convenience stores in rural areas that have their own water supplies). An unknown number of these serve 25 or more people at least 60 days per year. ODW plans to work with VDACS, and possibly other agencies, that already permit these businesses. ODW is working to strike a balance between identifying unregulated facilities, being able to manage existing waterworks with staff resources, satisfying primacy requirements, and not creating a regulatory burden.

Customer service – ODW is filling vacancies (enforcement, training, field directors, other staff). Still need deputy director.

Team Development – aligning employee work profiles so that roles and priorities are consistent, working on auto-dialer to help improve sample compliance (targeting small waterworks). New website team.

Accountability – created metrics and dashboard. Working on QA/QC and delegation (one example is having field directors sign operation permits instead of the office director); continuing to work on reducing health violations in community systems; increasing the number of systems that participate in WARN through VA AWWA; etc (see powerpoint).

Looking at developing capability of GIS-enabled systems to report boil water notices/advisories (BWA) electronically. The system would push notices to field offices, VDEM, others instead of having waterworks report notices to the field offices, which then have to manually type and distribute notices w/in VDH (local health departments) and to other agencies.

#### **ODW Metrics** (Aaron Moses) (see powerpoint)

ODW is using metrics to track performance and accountability. Metrics show trends in field offices but note issues, such as the difficulty in assigning metrics to some activities (slide 10). One proposal is for the WAC to form a subcommittee on metrics that provide input. Question – has ODW tried to correlate data with system size, type? Yes, data tends to show smaller systems have the most violations – concern with small, privately-owned community systems, particularly in the western part of the state. EPA wants state to focus on health-based violations, but a problem is that list is always changing as violations appear and drop off the ETT list.

Metrics regarding length of time for permit processing do not capture complexity, or time for ODW to get a response to a request for information from applicant. Metrics do not show what is normal or expected for performance. ODW is using the metrics to establish a baseline since we do not have long-term data.

Mark Estes, Ignatius Mutoti, Andy Crocker, and Bailey Davis volunteered to serve on a WAC subcommittee for metrics

**2019 Priorities** (Dwayne Roadcap) (see powerpoint)

ODW intends to implement the recommendations in the VCU Performance Management Group (PMG) report.

For self-reporting of BWA, waterworks will use a web-based form, which will reduce the burden on ODW staff and improve distribution and speed of notification to consumers and state agencies.

SDWIS Prime and compliance management data portal (CMDP) will officially be rolled out by EPA in 2019. ODW systems need to be compatible with EPA's. ODW data has been/is being populated in SDWIS Prime. ODW will need to be operating in SDWIS Prime within 1 year of official roll-out by EPA. CMDP roll-out will follow SDWIS Prime and will have labs input sample result data electronically into the SDWIS system – goal is to have labs input data instead of ODW data personnel having to input data. One concern raised with CMDP is whether ODW will have the opportunity to do QC of data before it is fully entered. ODW staff are working on this issue. Also have to address requirement for labs to submit data electronically. Recommendation that WAC be involved in this process, particularly w/ concerns about waterworks being able to see data before it is submitted. WAC members expressed a need for direct reporting, as long as there is a method for correcting errors, and a need to go after those that violate or abuse the system. ODW's focus is on SDWIS Prime for now.

**VCU Performance Management Group** (VCU PMG) (Gina Barber provided an overview of the process and objectives; Mike Foreman discussed the results)

Comments about external stakeholder feedback – stakeholders have a good working relationship with ODW. ODW is a good collaborator, educator, partner, and stakeholders have seen improvement in communication and transparency. ODW has room for growth – hire deputy office director, make more visits to rural locations, high work volume leaving little time for strategic thinking, faster response to emergencies. Recommendations divided into categories – work process, communication, training and hiring needs, and staffing issues. Executive leadership team – office director, deputy director, chief operating officer (to oversee central and field office operations on a day-to-day basis). Question about staff retention – recommendations about addressing this with salary compression, training, and career opportunities will help retain staff. Temporary employees are a way to hire staff in addition to FTEs – ODW does this for some administrative positions because there is a limit on number of days per week that temporary employees may work. To re-establish the East Central Field Office, as recommended in the report, ODW will need 4 or 5 additional FTEs.

VDH executive leadership, in coordination with the office director, will decide if and how much ODW will implement recommendations in the report.

**Adoption of Minutes** Motion to adopt the minutes from the 10/18 meeting. Motion approved.

**HJ 94 Report** (Dwayne Roadcap)

VDH leaders are reviewing the report.

Three primary findings – (1) Virginia's drinking water program is vital and protects public health; (2) Virginia regulations adequately protect public health, but more could be done (regs focus on water quality, not ongoing waterworks operation and maintenance - one idea is to require asset management and capital improvement plans); and (3) Virginia's drinking water program needs more resources (as shown in the VCU PMG report).

With emergency response, ODW is re-writing its plan, and will do away with hazardous response plans and instead focus on threat response, rated 1 to 4. Terrorism will be highest, “1,” other threats such as water main breaks, will be lower, based on the threat to public health (“2” to “4”). The threat can be scaled to the area impacted and allows VDH/ODW to better know how to allocate resources. Also moving to be able to submit BWA’s online and using ARC-GIS to monitor data in the field and in the emergency response center. ODW is working with other state agencies on other threats, including cybersecurity. Suggestion that ODW work with rural development for requirements for small, rural systems – ODW is waiting for more guidance from EPA as they develop federal requirements.

One comment about AMPs – would ODW approve or not? WAC members expressed concern about the slippery slope of a community investing in an AMP and ODW value judging the result – saying funding isn’t sufficient, dictating how a locality or utility should spend its resources or how much should be spent. WAC members discussed challenges of developing fiscal planning documents, particularly for smaller or disadvantaged systems, along with efforts to emphasize the importance of planning, assistance with planning, developing a plan. Andy Crocker suggested required AMP training for board members. ODW Capacity Development group is working on similar training through the PDCs.

#### **Updating By-laws and Committee Membership** (Dwayne Roadcap)

Would the WAC members want bylaws? Guidance document would be good. What would the group like in bylaws? Meeting dates, times, locations, business process, primary objectives. Discussed requirement that members must send replacement if not present and the chair would send member a letter if more than three meetings are missed. Staff will prepare a working document for the WAC to consider at an upcoming meeting. In the past, the WAC would vary meeting locations around the state. There are other facilities in the Richmond area, including one in the Innsbrook area, that DHCD uses without charge. VA AWWA is also aware of facilities around the state. One suggestion was to hold WAC meetings at the field offices periodically.

#### **General Assembly Planning** (Dwayne Roadcap)

ODW will make a concerted effort to contact WAC members regarding legislation that comes up this year to get stakeholder input. As part of VDH’s assessment of legislation, we need to assess the impact of the bill. ODW wants to provide stakeholders with awareness of proposed legislation and get a sense of the impact on stakeholders. We expect to see legislation regarding lead in drinking water, possibly following up on HB1234 (2018), and SWIFT.

#### **WIIN and AWIA Updates** (Dan Horne) (see powerpoint)

Testing for Lead in Drinking Water in Schools with implementation of SB 1359 (2017). ODW worked with schools and school associations to come up with guidelines and recommendations for a testing plan, to include what to sample, when, who should collect the sample, and implementation of EPA’s 3T’s program. Also found out more about what testing had already been done and the results (in many cases, districts had done testing, but not shared any results). Since passage of SB 1359, some districts have taken significant steps, one example – Chesterfield Co. tested over 3,000 taps and located several areas with actionable lead levels. Note that Chesterfield did their testing without involving VDH, ODW.

Recent news – EPA revised 3Ts program, and announced funding for testing under the WIIN act – authorizes \$20M each year for 3 years for lead testing. Only fy2019 is funded, subject to allocation criteria. States must prioritize and target high risk areas/schools. VDH has been identified as lead agency with ODW being responsible for moving program forward in VA.

America's Water Infrastructure Act of 2018 – Signed Oct 23, 2108. Provided additional support to states for lead issues, plus additional, broad-ranging requirements – many of which ODW will need guidance to implement.

ODW expects to be the lead agency/office and to work with others to identify school systems that need sampling and would be good candidates for grant funding. Some concern about funding being done as a reimbursement. Concern that schools are not required to notify VDH/ODW about testing – for this grant, schools will have to report results. Main downside will be resources required to administer the program compared to the amount of grant funds that will come into Virginia. Only 4% allowed to fund administration of the grant.

**ODW Policies, including Boil Water Advisories** (Dwayne Roadcap, Jeff Wells) (see handout)

ODW did not update policies during 2018 and wants this to be a priority in 2019 – combining working memos into chapters of a manual. ODW is looking at about 9 manuals and wants to funnel policy issues through the WAC prior to putting guidance out for public comment as required by 2018 amendments to the APA (HB 297).

BWAs in response to a water line break. Past VDH policy has been to issue a BWA if there is a line break. ODW is considering revising the policy to create 4 categories of breaks and responses to each. Want to avoid loss of confidence in the waterworks by the consumers, and want the consumers to treat advisories seriously. (see handout)

Request that WAC members review and provide feedback on draft, including comments about whether or not this table is enough (self-explanatory), or needs more training, information. Comments – definitely a step in the right direction; for small systems, provide more guidance; for type 3, utility should have written procedures for dealing with breaks and follow the procedure using best professional judgment.

**New business**

ODW will send a doodle poll for future meetings – e.g., third Thursday of odd numbered months

Time to review permit fees? Comment that the fees are currently maxed out (by statute) and ODW doesn't see any additional revenue coming from state or federal sources. WAC members go to constituents to discuss increasing cap on fees, adding permit fees for smaller systems. Would like to discuss this at a future meeting. Concern that TNCs are a heavy workload, but are not contributing fees.

Adjourn: 2:35 pm

Waterworks Advisory Committee (WAC)  
Meeting Summary (Approved 12/18/18)  
October 30, 2018

**Members Present:** Dwayne Roadcap, VDH (chair); David Van Gelder, Hanover Public Utilities (vice-chair); Skip Harper, DHCD; Mark Estes, VRWA; Jesse Royall, Sydnor Hydro; Roger Cronin, ACEC; Jay Armstrong, DCLS; Jutta Schneider, DEQ; Tim Mitchell, VA AWWA; Andy Crocker, SERCAP

**Guests in Attendance:** Louis Martinez, Newport News Waterworks; Whitney Katchmark, Hampton Roads Planning District Commission; Robb Bohannon, Hunton Andrews Kurth, Director of Government Affairs; Chris Harbin, City of Norfolk; Gregory Prelewicz, Fairfax Water; Laura Bauer, Virginia American Water Company; Kelly Ryan, Virginia American Water Company; Tom Fauber, VA ABPA; Steven Edgemon, Fairfax Water; Ryan Green, DEQ; Bryan Wade, VDH; Nelson Daniel, VDH; Robert D. Edelman, VDH; Jeff Wells, VDH; Jeremy Hull, VDH; Steven Pelli, VDH; Christopher Gill, Christian & Barton (City of Norfolk); Ross Phillips, City of Richmond; Rosemary H. Green, City of Richmond; Scott Morris, Chesterfield County; George Hayes, Chesterfield County; Barry Matthews, VDH; Kristen Lentz, City of Norfolk Utilities; Jennifer Tolley, DHCD, Ron Harris, NNWW; Harry M. Johnson, Hunton Andrews Kurth (Fairfax Water); Bennett Ragnauth, VDH; Dan Horne, VDH; Theresa O'Quinn, Prince William County Service Authority; Sherri Sullivan, VDH; Parham Jaber, MD, VDH; Andrea Wortzel, Troutman Sanders (Mission H2O); Paul Nyffeler, AquaLaw PLC

**VCU Performance Management Group** 9:00 – 10:20 AM

The VCU Performance Management Group is completing a review of the Office of Drinking Water's (ODW) organization structure, how ODW delivers services to customers, and how ODW can improve, including efficiency. The VCU Performance Management Group interviewed the WAC to get their input for the review.

**Call to Order: Introduction**– Dwayne Roadcap

Dan Horne announced on October 30, 1912, the federal government established the very first national drinking water regulation that banned the use of the common cup aboard interstate train carriers. (Common Drinking Cups 1912)

Dwayne Roadcap introduced Dr. Parham Jaber, MD, MPH. Members of the WAC and guests introduced themselves.

Dwayne reviewed the rules for participation.

No changes were made to the agenda.

**Adoption of minutes from the 9/5/18 meeting** – Dwayne Roadcap

Roger Cronin moved to approve the minutes; Jesse Royall seconded and the motion was approved unanimously.

**Public Comment Period**

No one came forward to make public comments.

**Emergency Preparedness and Response: Hurricane Michael** – Bryan Wade

ODW and VDH are in charge of Emergency Support Function Area 3 (ESF-3, Public Works & Engineering) at the State Emergency Operations Center. The US Army Corps of Engineers (USACE) is in charge of ESF-3 at the Federal Level.

The USACE has introduced the Emergency Power Facility Assessment Tool (EPFAT). This is an online database intended to collect emergency generator engineering data. Bryan encouraged owners of waterworks to use EPFAT to document emergency power requirements for pumping and water treatment plant facilities in this database. In the event of loss of power, the USACE can more quickly supply emergency generators from their inventory.

Bryan described a new situational awareness viewer using ARCGIS online. This shows flood zones, intakes, water treatment plants, wells, and superimposes weather radar and other weather information. This tool can show areas of weather impact and help to identify waterworks and healthcare facilities that may be affected. This viewer also has inundation mapping from dams and can help to assess potential impacts from dam breaks.

Bryan explained that these tools would allow ODW to be more proactive rather than reactive. During the preparation for/response to Hurricane Florence, ODW was able to add federal data to our tools. Next steps are to upload generator data and to collect information from water utilities such as distributions system maps and the locations of remote water towers.

Bryan presented a vision to have waterworks communicate boil water notices directly to ESF-3, rather than through the ODW's field offices. This will remove some burden from the field offices and help disseminate information. Bryan pointed out that some waterworks issued boil water notices without notifying ODW.

#### **Upcoming General Assembly Session** – Dwayne Roadcap

Session starts January 9, 2019. Possible significant topics affecting the drinking water industry include:

- HJ 94 for Delegate Lopez – Report on the Commonwealth's drinking water infrastructure and oversight of the drinking water – VDH is scheduled to finalize the report in December. Some bills may develop from this topic.
- Lead in Schools - EPA just updated their 3Ts guidance document. The revised document no longer has the 20 ppb action level, so expect VDH to work with schools to discuss how to use the guidance. VDH will reach out to the Board of Education to see if collaboration is possible.
- Follow-up on the Revised Total Coliform Rule (RTCR) – This topic is important to Delegate Hugo. The draft text of the *Waterworks Regulations* updates the RTCR to allow reduced bacteriological sampling for qualified transient noncommunity waterworks. This may be a topic of legislation.

#### **Status of VDH Review of the Proposed Amendments to the Waterworks - Bob Edelman**

- See PowerPoint slides for recap of history of RAC and WAC involvement.
- In summary, the following has happened since last meeting: entry into the Regulatory Information System (RIS), development of the agency background document and detail of changes (Form TH-02), Memo from Office of Attorney General and submittal to commissioner's office. VDH submitted the RIS version of the proposed amendments to the *Regulations* to the Registrar's Office for concurrent review.
- Next steps:
  - November 9 – Deputy Commissioner approval to send to the board of health
  - November 13 – Submit Action Package for Board of Health
  - December 13 – Board of Health Meeting



## Revision to Cross Connection Control Program Sections 600 and 610 – Bob Edelman

ODW received the following comment about Section 600:

**Is there a way to allow community waterworks to substitute public education for inspection of high-hazard devices in homes or residences? This would be approved on a case-by-case basis by the department.**

As drafted, annual assessments and operational tests are required for homeowners with high hazard devices.

### Section 600: New Proposal Concepts

- Homes and commercial facilities with no known high hazards can be addressed with public education.
- For all other homes, the department may approve public education as part of the CCCP.
  - Waterworks owner records of testing and inventory not required for above facilities.

VDH Staff took the draft of 12VAC5-590-600 - CCCP responsibilities and modified as follows (new text is red):

D. 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.

WAC members recommended the following change to the last sentence:

**For residential consumers with lawn sprinkler or irrigation systems, the department may approve a public education program provided by the owner as part of the CCCP.**

### Section 610: New Proposal Concepts

- Section in question is the containment policy
- List of facilities that need a backflow assembly or method
- Mention of operational testing and inventory recordkeeping is not appropriate here.
- Consistency with previous change.
- Remove operational testing and inventory recordkeeping requirements.

VDH Staff took the draft 12VAC5-590-610 C. Containment of backflow and modified as follows (new text is red):

C. A backflow prevention assembly or backflow elimination method shall be installed where the following conditions exist: ...

5. There are fire protection systems, lawn sprinkler systems, or irrigation systems.; ~~These systems may have the required approved backflow prevention assembly installed at their downstream connection or takeoff point, but under this scenario the owner shall ensure that the operational testing required by these regulations are completed (see 12VAC5-590-600 C) and the inventory and recordkeeping as required for a containment device (see 12VAC5-590-600 G);~~

Purpose of the language marked for deletion is to prevent the need to install containment in some situations, such as where a containment device is installed on a lawn irrigation system connected to the home internal plumbing. **Several WAC members did not support the suggested change.**

### **Surface water sources: Report from 10/18/18 Subcommittee meeting - Andrea Wortzel**

See the Mission H20 PowerPoint slides for the complete presentation. Major points are:

- A conceptual agreement on wording for Section 830 was reached in the September 5, 2018 WAC meeting.
- VDH and Mission H20 agreed that the language presented was conceptual and would continue to develop the language.
- Separately VDH and Mission H20 worked on regulatory language to flesh out the conceptual agreement.
- At the October 18, 2018 Subcommittee meeting, Mission H20 presented their proposal.
- At the same meeting, VDH presented a proposal that differed from the conceptual agreement. Mission H20 feels the VDH proposal is unsatisfactory.

Mission H20 recommends VDH retain the language presented in the September 5, 2018 proposal or use the Mission H20 version.

Many of the stakeholders present at the meeting provided comments about the proposed changes to section 830 and their preferred way to amend the section. Most expressed concerns about requirements that could have an impact on surface water withdrawals established prior to July 1, 1989 and supported the proposed language that Mission H20 presented at the October 2018 Subcommittee meeting. The WAC and stakeholders also discussed the role of VDH and DEQ in the process to permit a waterworks.

Tim Mitchell: Motion to move forward with the proposal from Mission H20. Mark Estes from VRWA seconded. Vote: 6 Yes; 2 No.

Dwayne Roadcap: This may not be a workable alternative. Hypothetically, if the Mission H20 proposal is not workable, can VDH move forward with the revisions to the *Waterworks Regulations* and leave Section 830 as-is, unchanged?

Following some discussion, Jesse Royall provided an amendment to the earlier motion: if VDH staff feels the Mission H20 option is not viable, leave Section 830 as-is and move forward with rest of the regulatory action. Vote: 7 Yes; 0 No; 1 Abstain.

Next steps - VDH will continue with conversations with the Commissioner's office. The Commissioner's office decides whether to put the proposed regulatory action on the Board of Health agenda. Assuming VDH moves forward, and the Commissioner is in support, proceed with a 30-day review by the Board of Health, followed by a Board of Health meeting. The Board has a public comment period during each meeting. The Board will vote in the meeting. A vote in support of the regulatory action allows VDH to submit the proposed amendments for Executive Branch review. Following executive branch review, if approved, the proposed amendments will be published in the Virginia Register for a 60-day public comment period. At the close of the public comment period, VDH will have 180 days to respond to the comments. The agency may or may not make changes to the regulations based on public comments. The regulations then go back to the Commissioner's office and Board of Health for approval in their final form. If approved by the Board of Health, they go to the Executive Branch for review, then a 30-day public comment period. The proposed amendments become final following the 30-day public comment period (subject to some conditions related to changes with substantial impact between the proposed and final changes and the number of comments received).

VDH will notify the WAC of the final form of section 830 before submitting the proposed amendments to the Board of Health members for review prior to the December 13 meeting. The WAC can schedule the next meeting in November or December. In the mid-January through March period during General Assembly, it will be difficult to meet.

The next meeting does not need to be a full meeting – it could be a conference call.

Dwayne pointed out that we are able to schedule a conference call with 3 days advance notice.

The WAC decided to set up a conference call for a meeting in January, but did not establish a time/date.

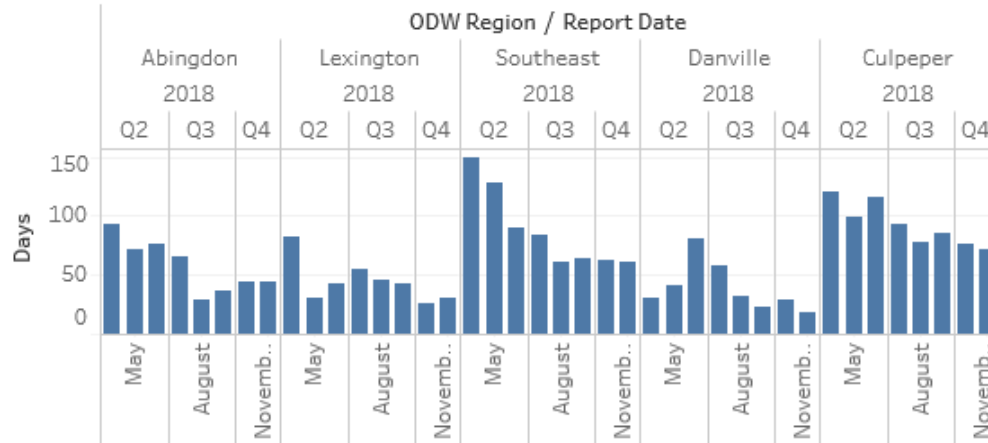
The WAC adjourned the meeting by consensus at 2:17 pm.

# Field Office Performance Metrics

Aaron Moses  
Field Services Engineer  
December 18, 2018

# Plan Processing Metrics - Tableau Page

Average Time In ODW



Report Date

(All)

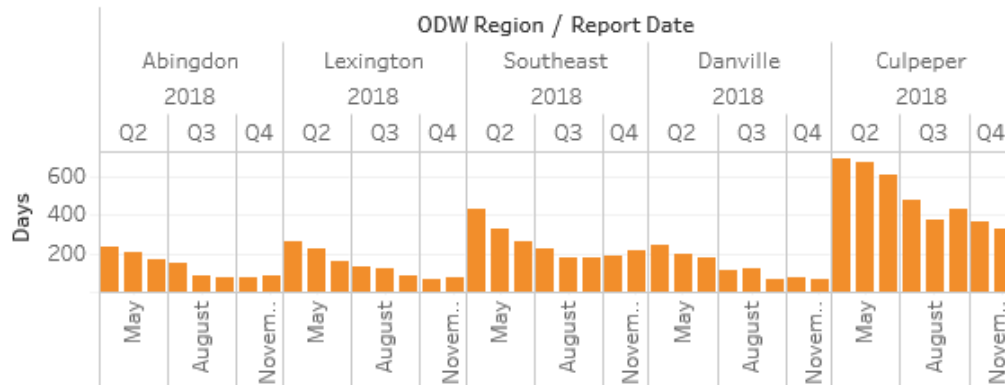
Status

- Approved/Disapproved
- Current Pipeline

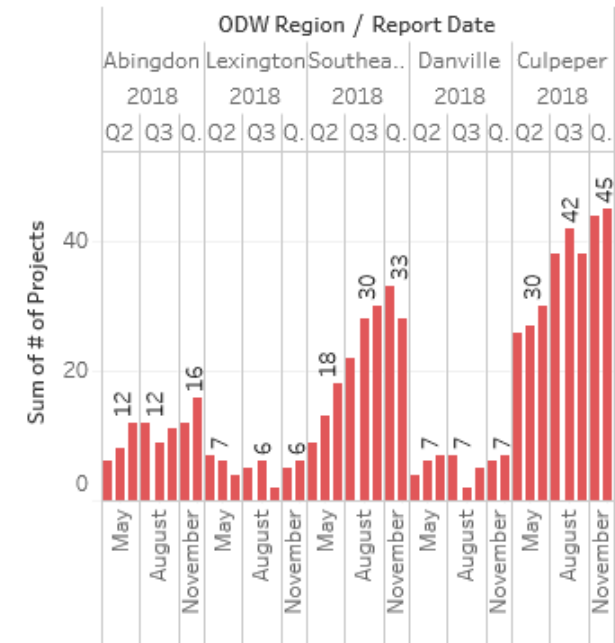
ODW Region

(All)

Average Total Time in Pipeline

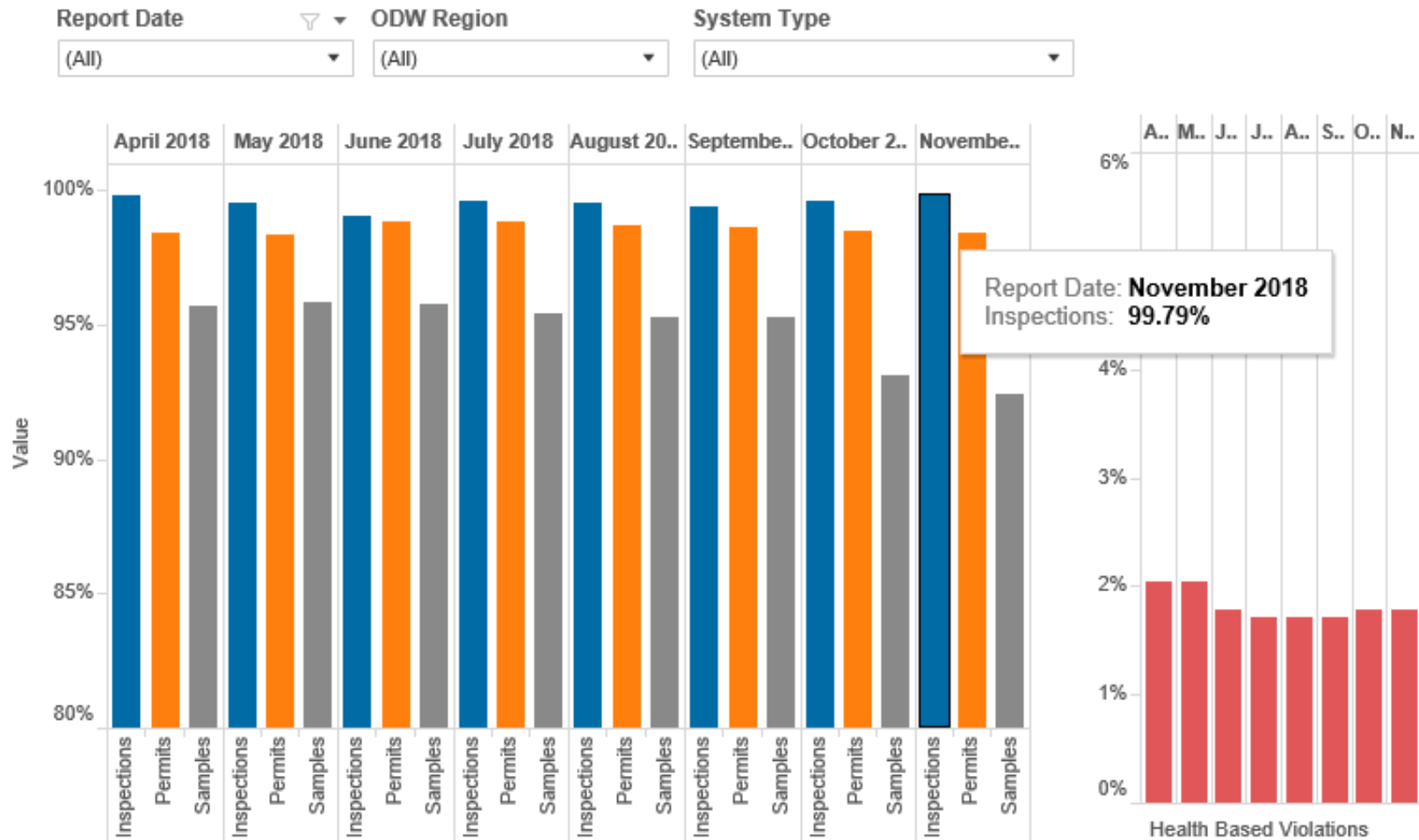


Total # of Projects

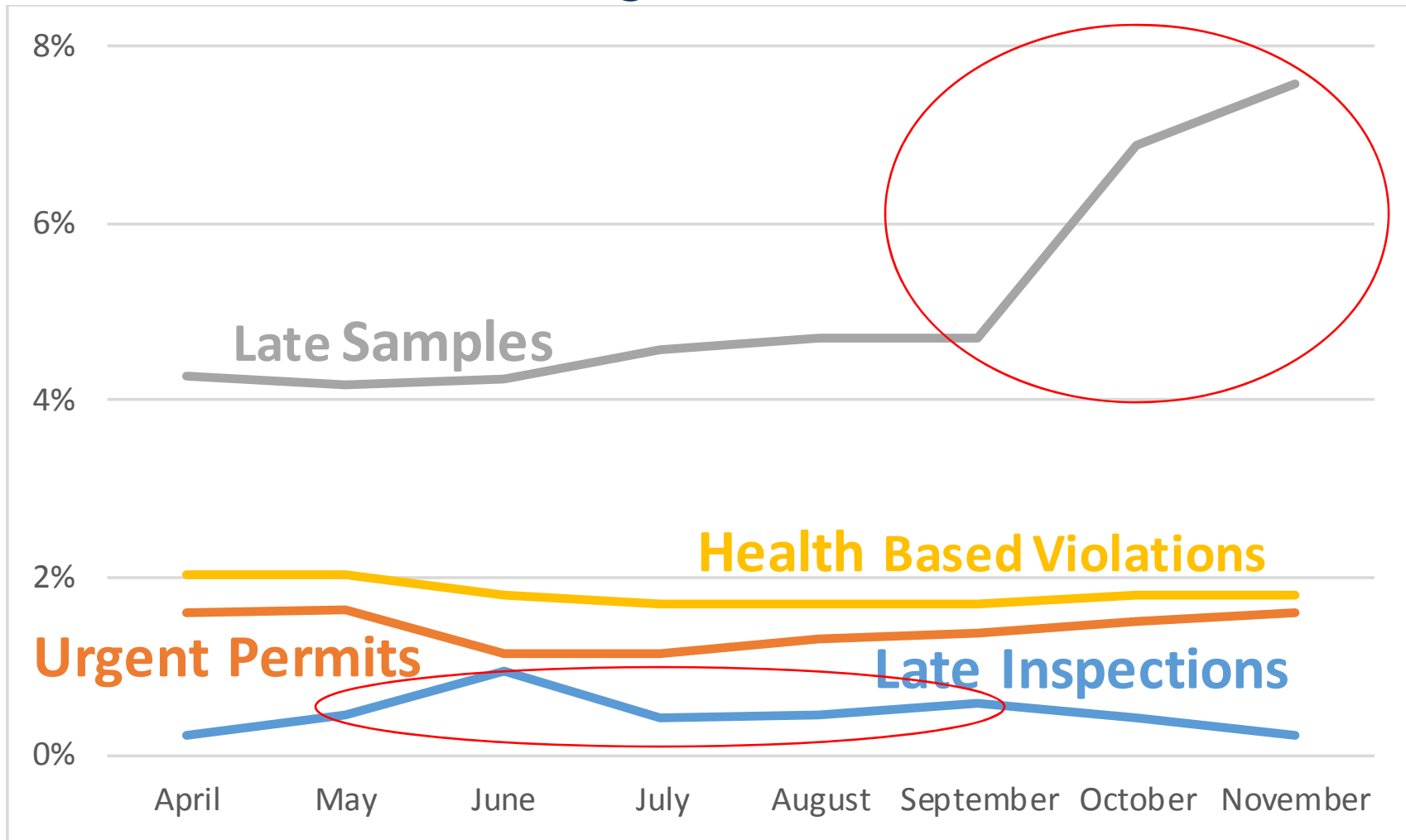


# Other FO Metrics - Tableau Page

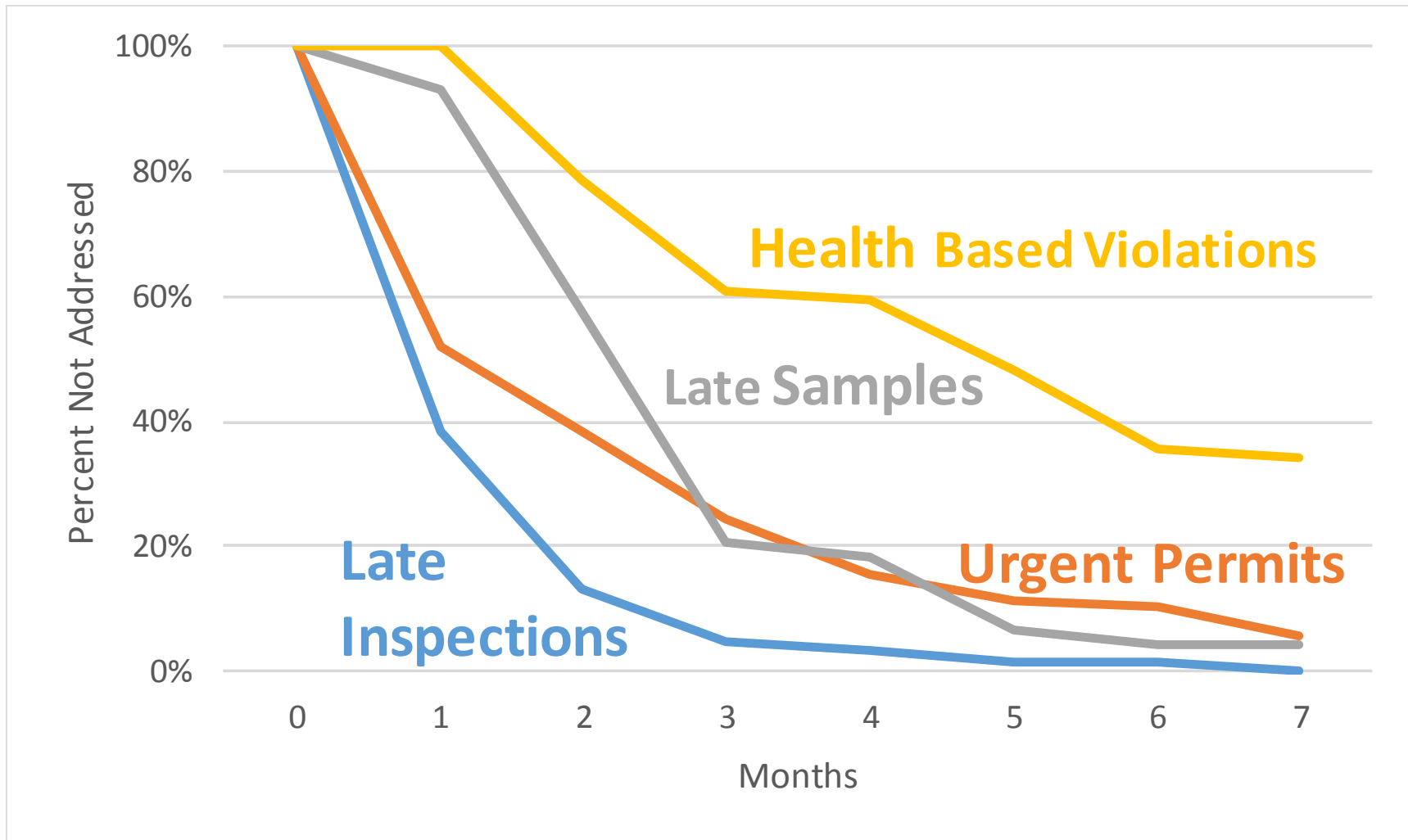
## Office of Drinking Water Performance Scorecard



# FO Metrics - Progress

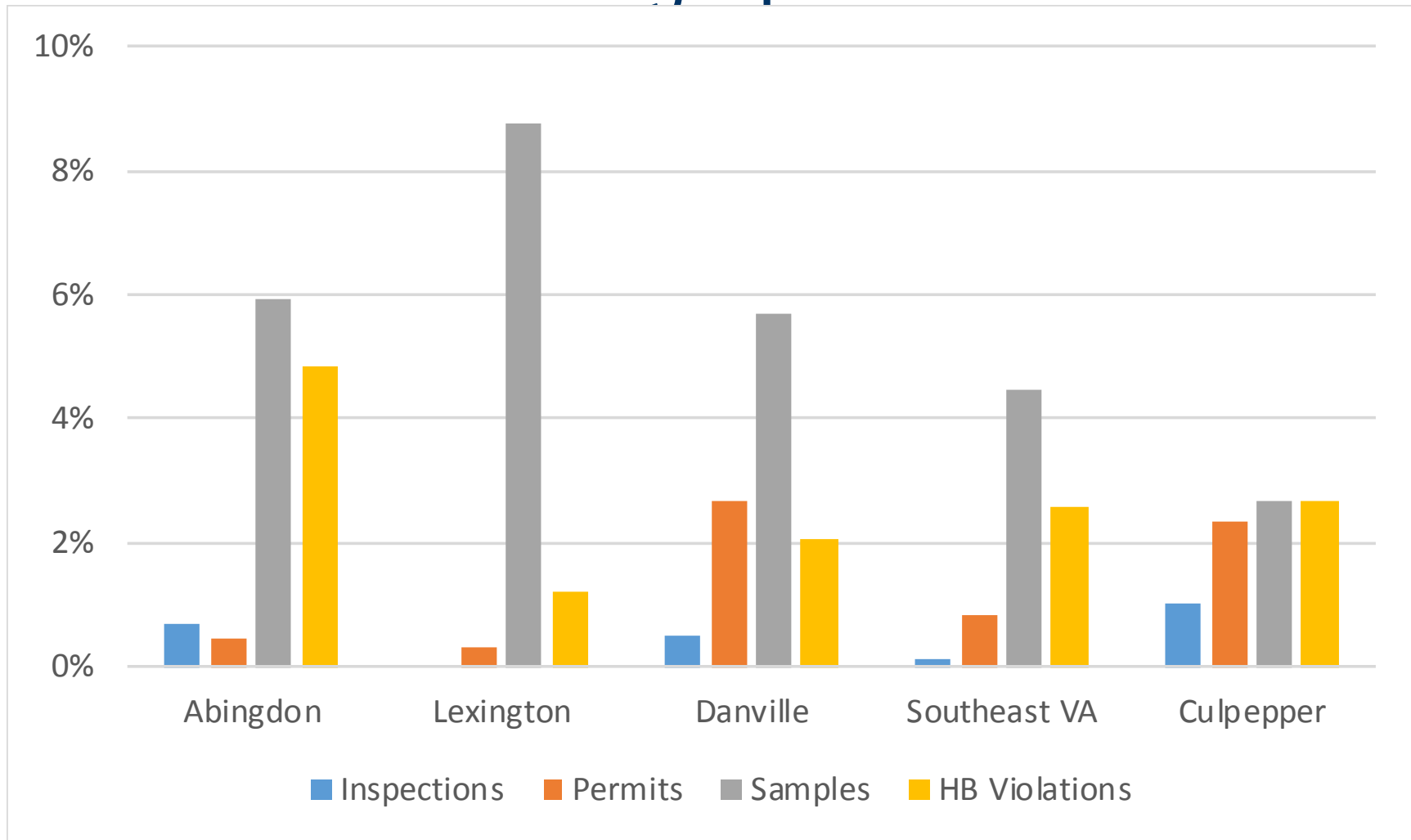


# FO Metrics - Time to Correct





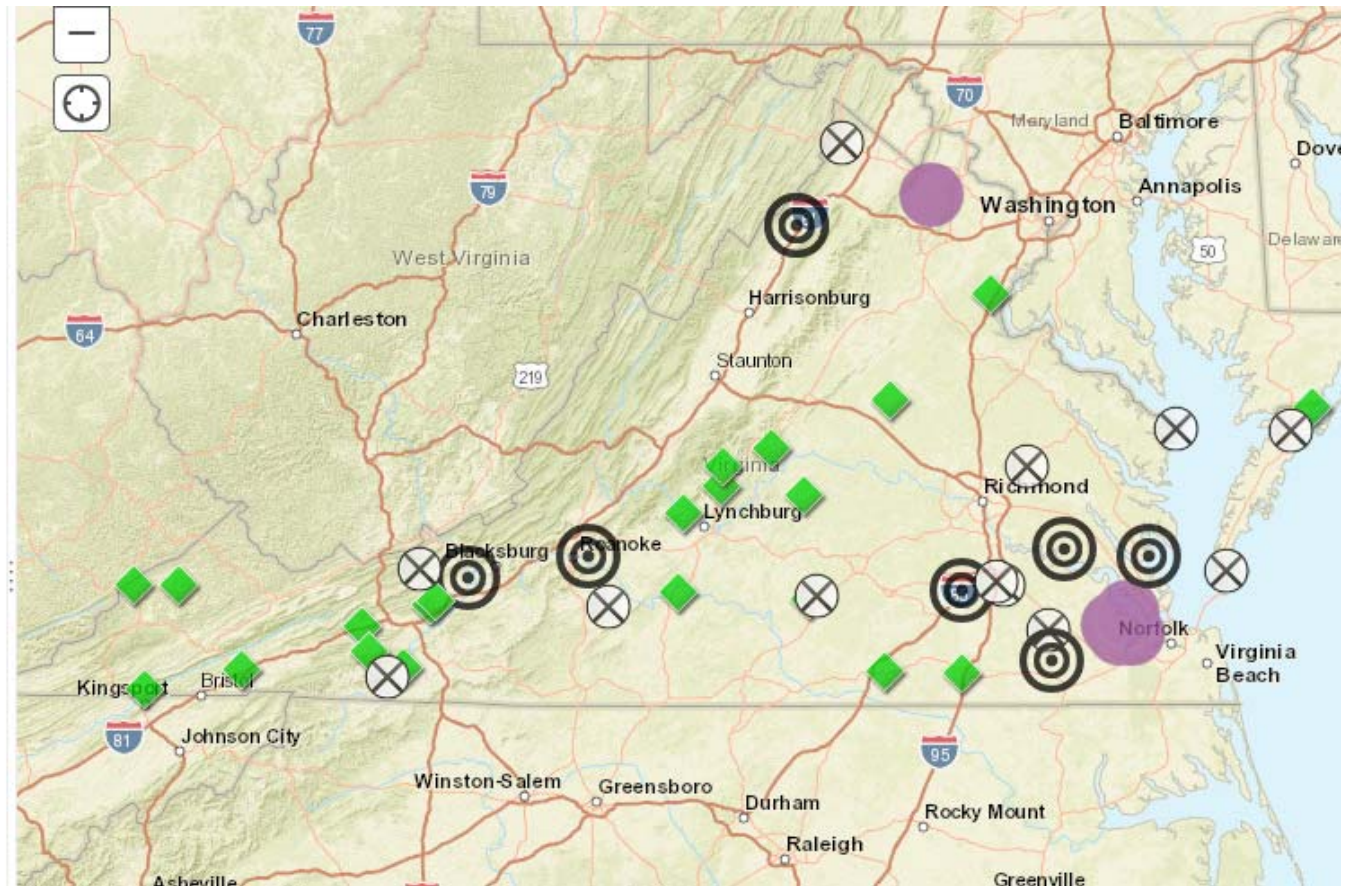
# FO Metrics - Geographic Distribution



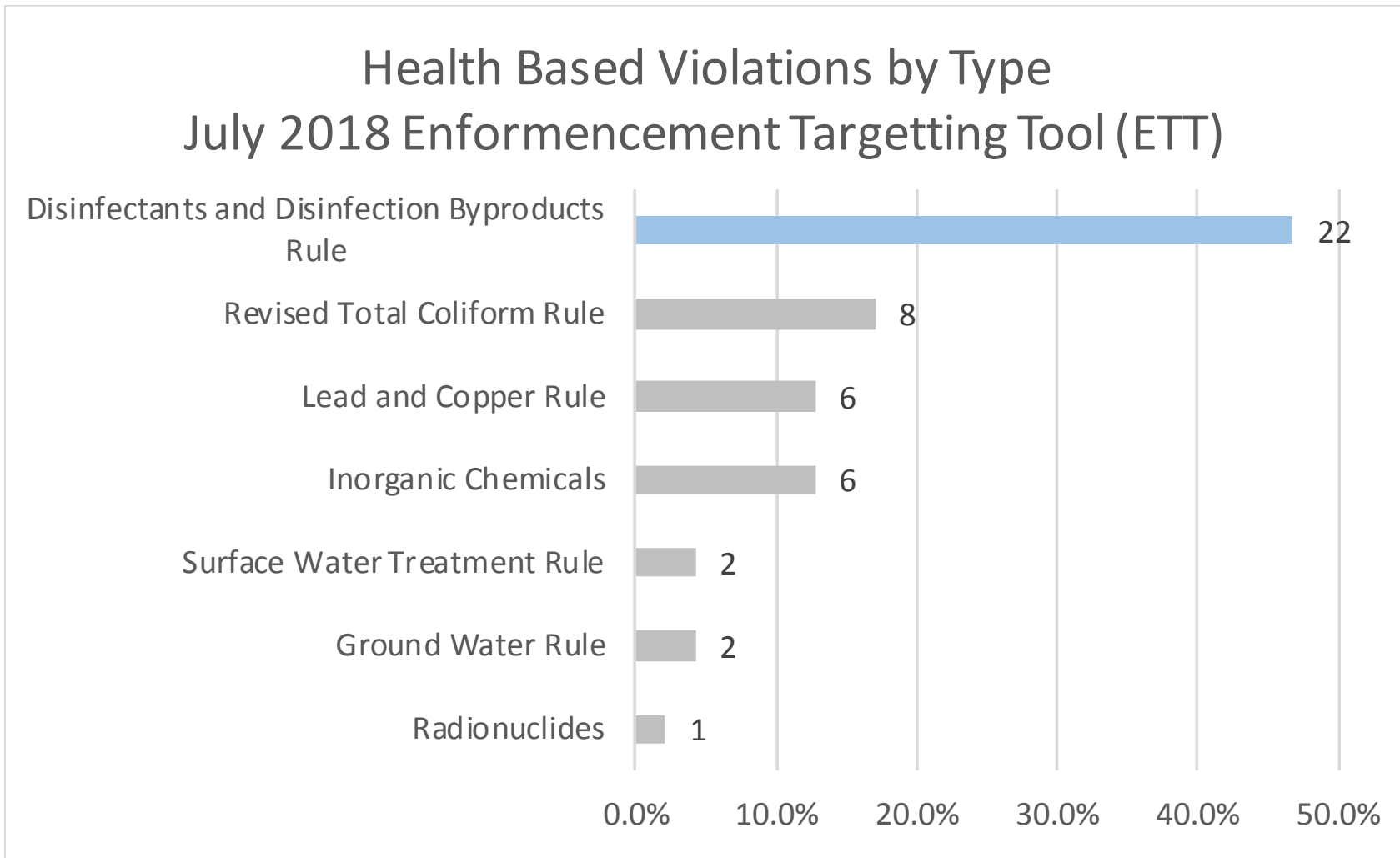
# FO Metrics - Geographic Distribution

## Health Based Violations - Categories

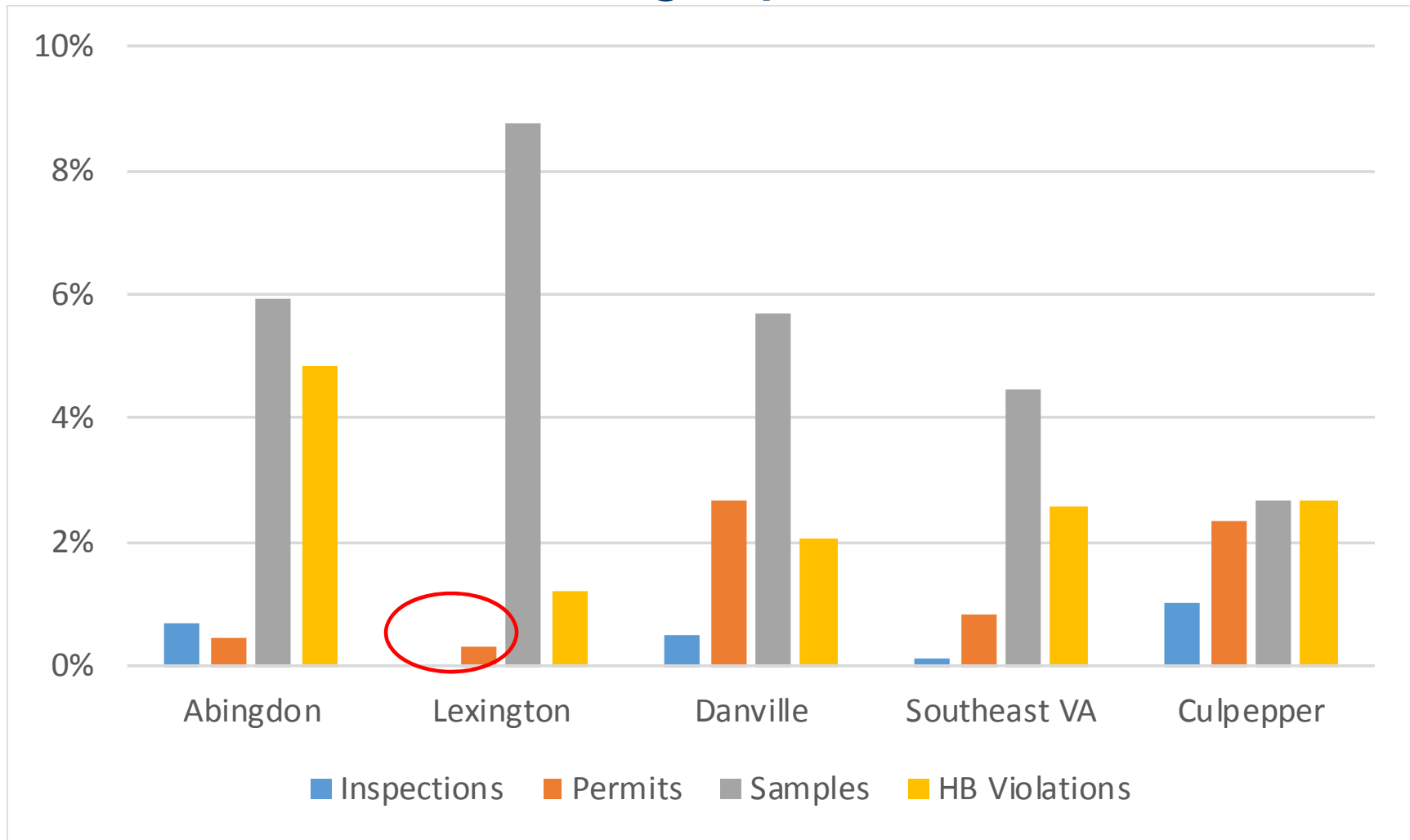
-  HAA5 (DBP)
-  TTHM (DBP)
-  HAA5 & TTHM (DBP)
-  Fluoride (Source Water)
-  Gross Alpha, Excl Radon... (Source Water)
-  Level 1 Assessment (RTCR)
-  E. Coli (RTCR)
-  Startup procedures TT (RTCR)
-  No Operator (Operations)
-  Failure to address Deficiency (Operations)
-  Monitoring (Operations)
-  Public Education (Operations)



# Health Based Violations



# FO Metrics - Geographic Distribution



# FO Metrics - Next Steps

Issue:

- FO activities difficult to measure
- Data availability factor in metric selection
- Metrics prioritize activities
- Priority activities without metrics may suffer

# FO Metrics - Next Steps

- Form workgroup including field directors
- Develop list of priority activities considering:
  - Mission: “ ...safe and adequate supply of drinking water.”
  - Focus Areas: Customer Service, Teamwork, and Accountability
  - Regulatory responsibility
- Develop metrics or other means of ensuring focus and accountability

# WAC Subcommittee on Metrics

- Potential WAC Subcommittee on Metrics
- Provide input:
  - ODW performance metrics and goals
  - Waterworks performance metrics and goals
  - Potential routine customer service survey

# Questions?

Aaron Moses, PE

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# A YEAR IN REVIEW: 2018

Dwayne Roadcap  
Office of Drinking Water  
December 18, 2018

# 2018 Priorities

## **Customer Service, Team Development, and Accountability through “Radical Transparency”**

### Agency Mission:

To protect the health and promote the well-being of all people in Virginia.

### Agency Vision:

Become the healthiest state in the nation.

### Agency Core Values:

Our culture values service, equity and making data driven decisions.

# 2018 General Assembly Session

- HJ94 - State of ODW and addressing lead
- HB771 - SWIFT
- HB979 - Change Lead Action Level
- HB1035 - Revise DWSRF procedures for EVGMA

# 2018 General Assembly Session

- HB1574 - Lead testing in schools
- HB192 - Rainwater in commercial facilities
- HB297 - Comment period for guidance documents
- HB1234 - Change definitions: human consumption

# HB1035

The Program Design Manual (dated 1-26-18) states:

- VDH reserves the right to give precedence to water projects that do not involve withdrawal of groundwater from the coastal plain aquifer over those projects that do withdraw groundwater in the EVGMA.
- VDH will only apply this evaluation to any equally ranked projects when both are located in the EVGMA.

# 2018 Priorities

Customer Service	<ul style="list-style-type: none"><li>• Fill vacancies</li><li>• Start coordinating training with onboarding</li><li>• Offer draft regulations to Board of Health</li><li>• Make Drinking Water Watch available to the public</li><li>• Improve SDWIS and database response times in each field office (“computers are too slow”)</li></ul>
Team Development	<ul style="list-style-type: none"><li>• Align Employee Work Profiles</li><li>• Start using technical manuals (stop using working memos)</li><li>• Pilot “auto-dialer” reminder for small waterworks</li><li>• Create better data story and share information</li></ul>
Accountability	<ul style="list-style-type: none"><li>• Create metrics and dashboard</li><li>• Update and revise QA/QC procedures</li><li>• Reduce number of community systems with health violations each year by 10% each year.</li><li>• Increase WARN participation by 10% each year.</li></ul>

# Customer Service

- More frequent advisory committee meetings
- FCAP started tracking service via emails
- Weekly messages & monthly leadership meetings
- Permit review and approval at field office

# Customer Service

- Hired new training manager, two new field directors, compliance assurance staff, HR generalist, several engineering positions
- Drinking Water Watch available on VDH website
- Proposed Regulations approved by Board of Health
- Improved interface application response times at Culpeper Field Office



# Team Development

- Aligned EWPs
- Continued technical manual transition
- Auto-dialer project almost ready for testing in one field office
- Created new website team
- Held monthly meetings with field directors and ODW leadership team

# Accountability

- Created new metric dashboard
- Started updating QA/QC procedures
- Quarterly meeting with certain waterworks
- After-action reviews, technical assistance
  - Hopewell, Spotsylvania, Petersburg
- Emergency Response
  - 63 BWAs not disaster related
  - 30 BWAs disaster related

# Looking Ahead: 2019

# 2019 Planning & Priorities

- Implement VCU PMG Recommendations
  - Internal Management & oversight
  - Paper-based to electronic
  - More staff
- EPA lead in drinking water at schools WIIN Grant
- Self-reporting of BWA
- Next steps for proposed regulations

# 2019 Planning & Priorities

- SDWIS Prime transition (CMDP)
- Auto-dialer project completion
- Continue technical manual conversion
- Training for sanitary surveys
- Training on regulations

# Testing for Lead in Drinking Water in Schools & Day Cares

**Daniel B. Horne, PE**



**Waterworks Advisory Committee**

**18 Dec 2018**

# Lead in Drinking Water in Schools

This is a **VERY** hot topic in Virginia (and across the Country)!

- State and Federal bills have been introduced to address the testing of lead in drinking water in schools ever since Flint happened (outgrowth of situations in other states)
- SB 1359 (2017 GA session) passed, signed into law

# Not a New Issue!

## Lead Contamination Control Act of 1988

- Pre-dates the Lead & Copper Rule!
- Focused on “identification and resolution of lead problems in schools’ drinking water”
- Major components:
  - Identification of water coolers that are not lead-free
  - Repair or removal of water coolers with lead-lined tanks
- Cooperative effort between VA Dept of Education, VDH, and local School Districts
- **Voluntary** effort – no money provided, nothing **required** of school districts



# SB 1359 (2017)

Found at §22.1-135.1 of *Code of Virginia*

“Each local school board shall develop and implement a plan to test and, if necessary, remediate potable water from sources identified by the U. S. Environmental Protection Agency as high priority for testing, including bubbler-style and cooler-style drinking fountains, cafeteria or kitchen taps, classroom combination sinks and drinking fountains, and sinks known to be or visibly used for consumption. The local school board shall give priority in the testing plan to schools whose school building was constructed, in whole or in part, before 1986.”

# ODW Activities & Recommendations

- ODW partnered with Virginia School Plant Managers Association to hold a discussion at their 2017 Annual Meeting, so that they could develop a consensus approach to testing
- ODW recommends that the testing plans be developed by the school districts in concert with the water provider, the local health department, and ODW
- ODW recommends that the testing plans be developed in accordance with EPA's "3 T's" program (Training, Testing, and ~~Telling~~ Taking Action)

<https://www.epa.gov/dwreginfo/lead-drinking-water-schools-and-childcare-facilities>

# The 3 T's Program

- **Training** school officials to raise awareness of the potential occurrences, causes, and health effects of lead in drinking water; assist school officials in identifying potential areas where elevated lead may occur; and establish a testing plan to identify and prioritize testing sites.
- **Testing** drinking water in schools to identify potential problems and take corrective actions as necessary.
- **Taking Action** – communicating about the results of testing, taking remedial actions (short term, longer term).

# Where to Test?

Basically, any tap where water is (or can be) obtained for drinking or consumption:

- Water fountains (coolers, bubblers, etc.)
- Bottle filling stations
- Taps at sinks in classrooms
- Taps at sinks in nurse rooms
- Taps at sinks in lounge areas
- Kitchen sinks (food preparation)
- Fountains in school yard

# What's Happening So Far in VA?

- A number of school districts have already completed sampling of at least some outlets in each school
  - In some cases, lots of press coverage
- Other school districts are still in the planning stages

# Yep, Press Coverage

Tests show 'actionable' levels of lead in drinking water at seven Chesterfield schools

By JUSTIN MATTINGLY Richmond Times-Dispatch Feb 23, 2018



# (Relatively) Hot Off The Presses!

EPA has:

- Sent a letter (21 Sept) to the 50 Governors announcing a new grant program that covers **testing** for lead in drinking water in **public** schools and (apparently) **all** child care facilities
  - Funded through WIIN Act of 2016
- Issued an updated version of the 3Ts program

# WIIN Act §2107 Funding

- The Act authorizes \$20M per year in each of FY19, FY20, and FY21
- The Act appropriates money only for FY19
- Non-competitive grants to States, territories, DC, and Indian Tribes
- Allocated based on how many apply, AND a formula:
  - Total child population in the state
  - Lead exposure risks (based on blood lead levels found in Head Start children and others)
  - Number of disadvantaged communities



# WIIN Act §2107 Provisions

Money goes to States, to distribute to public schools (LEAs) and child care facilities for:

- Assistance to LEAs/child cares for testing for lead in drinking water (all results must be made public)
- Assistance about reporting results

State plans must prioritize & target high risk schools/child cares:

- 50% of students receive free/reduced cost lunch
- Facilities built before 1988
- Elementary schools/child care serving age 0-6

Sampling only – NOT remediation

# WIIN Act §2107 Grants Timeline

- 11 Jan 2019 – Deadline for States & Territories to submit a Notice of Intent to Participate to EPA HQ
  - 22 Feb 2019 – EPA notifies States & Territories of potential allocations
  - 22 Apr 2019 – Deadline for States & Territories to submit work plans & budget narratives to their EPA Region
  - 22 May 2019 – Deadline for States & Territories to submit their application packages to EPA
  - 1 Aug 2019 – project period for FY 2019-2020 begins
- The Act authorizes \$20M per year for 3 years – the first year has been appropriated

# Current Actions in Response

VDH has prepared a potential response from the Governor to EPA

- Virginia is definitely interested in pursuing the program
- Multi-partner program (VDH-ODW, VDH-OEHS, VDH-OEpi, Department of Education, Virginia School Plant Managers Association, Virginia Association of School Superintendents, Department of Social Services. others)

# Even More Recent Action

## America's Water Infrastructure Act of 2018

- Signed into law by President Trump on 23 Oct
- Omnibus bill that covers many things (WIFIA, Water Resources Development, HABs, Resiliency, CCRs, Security, etc.)
- §2006 authorizes \$25M each in FY2020 and FY2021 for lead testing in schools & educational facilities, via grants to state/local agencies
- §2006 also authorizes \$5M each in FY2020 and FY2021 for replacing water fountains manufactured prior to 1988 (provided via grants)

Many questions yet to be answered

# Resources

VDH-ODW webpage “Drinking Water and Lead” has links to EPA’s 3 T’s webpages plus other information

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

EPA Small Systems webinar from Nov 2017 on “Lead in Schools and Selecting Lead Free Plumbing Products”

<https://www.youtube.com/watch?v=h1ysCPfGs0g&feature=youtu.be>

EPA 2017 webinar series on “Reducing Lead in Drinking Water in Schools and Child Care Facilities Case Studies”

<https://www.epa.gov/dwreginfo/reducing-lead-drinking-water-schools-and-child-care-facilities-case-studies-webinar-series>

# Questions ?



# DRAFT

## ODW GUIDANCE ON MAIN BREAK TYPES AND RESPONSES

<b>Type 1 Break</b>	<b>Type 2 Break</b>	<b>Type 3 Break</b>	<b>Type 4 Break</b>
Positive pressure maintained during break	Positive pressure maintained during break	Loss of pressure at break site/possible local depressurization adjacent to the break	Loss of pressure at break site/widespread depressurization in the system
Pressure maintained during repair	Pressure maintained until controlled shutdown	Partial or uncontrolled shutdown	Catastrophic event/failure
No signs of contamination intrusion	No signs of contamination intrusion	Possible contamination intrusion	Possible/actual contamination intrusion
<b>Procedures</b>	<b>Procedures</b>	<b>Procedures</b>	<b>Procedures</b>
Excavate to below break	Excavate to below break	Uncontrolled shutdown	Catastrophic failure response
Maintain pit water level below break	Maintain pit water level below break	Document possible contamination	Document possible contamination
Repair under pressure	Controlled shutdown	Disinfect repair parts	Shutoff customer services in affected area
Disinfect repair parts	Disinfect repair parts	Conduct scour flush (3 ft/sec for 3 pipe volumes)	Disinfect repair parts
Check residual disinfectant level in distribution system	Conduct low velocity flush (flush 3 pipe volume)	Conduct slug chlorination (CT of 100 mg/L-min <sup>3</sup> )	Conduct scour flush (3 ft/sec for 3 pipe volumes)
No Boil Water Advisory (BWA)	Check residual disinfectant level in distribution system	Check residual disinfectant level in distribution system and ensure it is adequate	Conduct slug chlorination (CT of 100 mg/L-min <sup>3</sup> )
Collect one bacteriological sample downstream	No Boil Water Advisory (BWA)	Instruct customers to flush premise plumbing upon return to service	Instruct customers to flush premise plumbing upon return to service
	Collect one bacteriological sample downstream	<sup>1</sup> BWA - TBD; based on depressurization extent and presence of contamination	Check residual disinfectant level in distribution system and ensure it is adequate
		If no BWA - Collect one set of bacteriological samples bracketing the site (If BWA issued use type 4 procedures)	Issue Boil Water Advisory
			Collect two sets of bacteriological samples 16 hours apart

**Notes:**

1. Factors to consider include: sanitary conditions of repair trench, disinfectant residual levels after repairs are completed, water clarity near site after flushing, others...??

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