Waterworks Advisory Committee (WAC) Meeting Minutes

In person and by WebEx

9:00 am, Wednesday, September 22, 2021

Members Participation: Dwayne Roadcap (ODW), Chair; David Van Gelder, Water Operator; Steve Herzog, PE, VWEA; Geneva Hudgins, VA AWWA; Skip Harper, Virginia Plumbing & Mechanical Inspectors Association; Jesse Royall, PE, Sydnor; Ignatius Mutoti, PE, VSPC; Bailey Davis, DCLS; Hannah Somers (for Scott Kudlas), DEQ; Mark Estes, HCSA; Roger Cronin, ACEC; Eric Lasalle, Smithfiield Foods (NTNC)

Guests Participating: Laura Bauer, Virginia American Water; Chloe VanZandt, VA Health Catalyst; Callie Guy, Christian & Barton, LLP; Tom Fauber, VA ABPA; Amanda Waters, Aqua Law; Jessica Edwards-Brandt, Loudoun Water; Yann LeGuoellec, Newport News Waterworks; John Kingsbury, Fairfax Water; Ghan Young, Newport News

ODW Staff: Robert Edelman, Holly Brown, Tony Singh, James Reynolds, Jeremy Hull, Barry Matthews. Nelson Daniel, Mark Perry, Jeff Wells, Brian Blankenship, Dan Horne, Kelly Ward

1. Meeting Overview

The Waterworks Advisory Committee (WAC) met in person at the Madison Building on Wednesday, September 22, 2021. Members of the WAC and the public could also join the meeting by electronic communication means (WebEx) due to the ongoing coronavirus pandemic. Office of Drinking Water (ODW) Director Dwayne Roadcap called the meeting to order at 9:00 a.m. and reviewed the agenda. Members did not request and changes or additions to the agenda.

Dwayne said that the membership of the committee will continue as-is until the Commissioner re-appoints members and adds new members to be consistent with the requirements in the amendments to the Waterworks Regulations (12VAC5-590-45, effective June 23, 2021).

WAC members agreed to adopt the minutes from July 21, 2021 meeting. A copy follows the minutes from this meeting and will be marked as "final" on Town Hall.

Dwayne shared news that Jennifer Coleman died in early September due to a hiking accident in Glacier National Park. Jenn was the director of ODW's Compliance and Enforcement Division and, among other things, had established new enforcement processes and procedures. Her death is a huge loss to ODW and we will miss her both personally and professionally. Nelson Daniel will be the acting director for the Compliance and Enforcement Division.

2. Drinking Water Program

a. Virginia PFAS Workgroup, Study of the Occurrence of PFAS in Drinking Water in Virginia

Division of Technical Services Director Bob Edelman gave an overview of the results from the per- and polyfluoroalkyl substances (PFAS) sampling study ODW carried out from May through July, 2021. ODW, in conjunction with the Virginia PFAS Workgroup, conducted the study to fulfil the requirements of 2020 Acts of Assembly Chapter 611 (House Bill 586) which required the Department of Health to convene a

work group to study the occurrence of PFAS in the Commonwealth's public drinking water. Bob's presentation follows the meeting minutes.

Highlights include:

- 45 waterworks participated in the voluntary study; they provided a total of 63 samples (either from the entry point to the distribution system or from the untreated source water ("raw water"). Additional information about the sample study design and results will be available on the ODW web page (https://www.vdh.virginia.gov/drinking-water/pfas/).
- The laboratory that analyzed water samples used a U.S. Environmental Protection Agency (EPA) method for finished water samples that tested for 25 different PFAS. They used a Department of Defense method for raw water samples. It tested for the same 25 different PFAS.
- PFAS, if present in a sample, were below the practical quantification limit (PQL) – the minimum concentration of an analyte that can be measured with high confidence (99%) – at 48 of the 63 sample locations. The fact that laboratory analysis did not detect any PFAS above the PQL in the 48 samples does not mean PFAS are present. The PQL in most cases was 3.5 parts per trillion (ppt).
- PFAS was found above the PQL at 15 of 63 sample locations.
- The highest concentration of any compound was 57 ppt of GenX (July 2021). A prior sample from the same location (taken in May 2021 as part of the study) was 51 ppt.
- The levels of individual PFAS found in the samples did not exceed any of the regulatory limits other states established for drinking water.

Bob noted the sample study was limited in scale and scope. However, the General Assembly appropriated $60,000 for ODW to do additional sampling in fiscal year 2022; ODW also has funding from EPA to study emerging contaminants. ODW expects to develop a plan for the next phase of sampling in the coming months. In addition, the U.S. Geological Survey plans to sample groundwater (that is used for drinking water) for PFAS at approximately 30 locations in Virginia and the Department of Environmental Quality (DEQ) is exploring options to require PFAS sampling at publicly-owned treatment works and other possible sources of PFAS contamination such as unlined landfills.

ODW's Policy and Program Director, Nelson Daniel provided an overview of the work ODW is doing to prepare and submit reports required by HB586 (ODW staff are drafting the report, which is due to the Governor and General Assembly by December 1, 2021) and 2020 Acts of Assembly Chapter 1097 (HB1257, requiring the Board of Health to establish maximum contaminant levels for two PFAS, 1,4-dioxane, and chromium-6). The report for HB1257 is due on October 1, 2021. ODW staff submitted the report to VDH leadership in August. Both reports will be available on the Legislative Information System website (https://rga.lis.virginia.gov/).

The Virginia PFAS workgroup will meet on October 8 in the Upper Basement of the Madison Building to provide feedback on the draft HB586 report before staff submit it to VDH leadership for review and approval. Workgroup members and the public that cannot attend in-person can join the meeting using WebEx. Information about joining the meeting will be on Town Hall.

b. American Rescue Plan Act of 2021

Dwayne provided an overview of the funding from the American Rescue Plan Act (ARPA) that will come to the drinking water program in Virginia. In total, Virginia received $4.3 billion in funding for the General Assembly and Governor to allocate (local governments received additional funding directly). The state budget directs $100 million to the drinking water program to support equal access to drinking water at small and disadvantaged community waterworks.

Dwayne noted that the budget also says the "funds shall be limited in their use to qualifying municipal and private drinking water projects and shall not be used for improvements to the department's internal systems, staffing, or processes." In other words, ODW cannot use any of the funds for things such as a database to track projects or pay employee salaries that will be overseeing funding, permitting, etc. for the projects. No other programs or use of the $4.3 billion has this type of restriction.

Financial and Construction Assistance Program Director Kelly Ward described the work she and other ODW staff are doing to identify and prioritize a group of 60 projects for funding. The group considered recommendations from ODW's field directors, the Drinking Water State Revolving Fund (DWSRF) Needs Assessment, and DWSRF projects that needed more principle forgiveness (because ARPA funds can supplement DWSRF funds). To date, ODW has identified projects totaling $92 million at small and disadvantaged community waterworks across the state. ODW does not plan to commit the full $100 million at this point to allow some funds for increasing materials costs, project budget increases, and other changes.

Training, Capacity Development, and Outreach Director Barry Matthews told WAC Members that, to be able to administer these funds, ODW will need 11 additional positions over the next 5-6 years at cost of approximately $600,000 per year. Because ODW cannot use any funds for administration, ODW will need to procure services from non-agency personnel to administer and oversee a significant portion of the projects. Planning District Commissions (PDCs) have capacity and ability to do project management. ODW is looking enter into memoranda of understanding with specific PDCs. ODW also plans to issue a Request for Proposals (RFP) for engineering consulting services to cover localities where PDCs do not have capacity. ODW is planning to use some of the ARPA funds (approximately $1.1 million) for cybersecurity and leak detection services, engaging both the Virginia Rural Water Association and SERCAP as sub recipients.

One other objective of the projects is to encourage waterworks to fluoridate their drinking water (if they don't already), incorporate fluoridation into projects, and build more confidence and trust in tap water.

WAC members asked:

- What is the timeframe to use the ARPA funds?
    - ODW's current understanding is that we must spend or obligate the funds in the next four years.
    - ODW is trying to figure out how to anticipate shortages of engineering services and materials because ARPA funds will be supporting projects all over the country, and include water and wastewater – driving up demand for engineering services, materials, etc. The GA and/or federal government could reflect on the timing of spending and spending requirements.
- What classifies a waterworks as small? disadvantaged?
    - "Small" means the waterworks serves fewer than 10,000 consumers

- "Disadvantaged" is not specifically defined at the federal level, so ODW considers a waterworks to be serving a disadvantaged community if rates for drinking water exceed 1% of the median household income for the community.

c. Budget Update

Dwayne gave an update on the budget and problems that ODW is facing. He anticipates a $1.2 million budget deficit in state fiscal year 2022 (July 1, 2021 through June 30, 2022), which may mean ODW cannot make payroll starting in April or May 2022.

Reasons:

- State raises (including the 5% raise that went into effect on July 1, 2021) increase only ODW's general fund income stream. The state does not allocate additional funds for salaries supported by federal set asides from the DWSRF grant. This negatively impacted ODW's budget by approximately $175,000.00
- As discussed in prior WAC meetings, early in the coronavirus pandemic, the General Assembly unallotted $484,000 from ODW's fiscal year 2021 budget which had been added to provide the full required match for EPA's DWSRF grant. The General Assembly did not return (or fund) the amount in fiscal year 2022, meaning ODW had to come up with the funds to make the full match two years in a row.
- The General Assembly also unallotted $250,000 from the fiscal year 2021 budget (funding for required upgrades to databases). The General Assembly did not return (or fund) the amount in fiscal year 2022, meaning ODW had to come up with additional funds to support database costs two years in a row.
- Operation Fees are capped at $160,000 and $3.00 per connection. This fee has seen fixed for 30 years. As a result, fee income has been flat while operating costs have risen with inflation over that period.

What ODW is doing to address the budget shortfall:

- To the extent possible, ODW has shifted positions from the budget sources that are short to set-asides that are allowed under the DWSRF grant. The set asides can only be used for certain types of work within ODW, so not all positions are eligible to shift to the DWSRF set asides.
- ODW is seeking to amend the Waterworks Operation Fee regulation (12VAC5-600).
  - This is part of the solution, but it will not address the problem in the short-term.
  - ODW submitted the Notice of Intended Regulatory Action (NOIRA) for the fee regulation to the Commissioner for approval. This is the first step in the process to amend the regulation. Based on ODW's experience with the recent amendments to the Waterworks Regulations, the rulemaking process for the fee regulation could take 2 to 3 years.
  - Because the fee cap is in statute and the per-connection fee is specified in the budget, absent the General Assembly making a change to either, the amendments to the fee regulation may be limited to waterworks that aren't paying fees (such a transient noncommunity waterworks) and waterworks paying fees that fall below the $160,000 per year cap.
- ODW is considering other options to operate with reduced staff:
  - Holding 12 positions vacant;

    - Reorganizing the process to conduct plan review by moving some or all of the plan review function from the field offices to the central office, and reducing the time and type of plan review ODW is doing – this change would, to some degree, rely on the expertise of the PE who signs plans to certify they are in compliance with the Waterworks Regulations; and
    - Decreasing the inspection frequency – to match the federal requirements.
- ODW has submitted budget requests for the upcoming General Assembly session – these are being considered and may or may not be approved:
    - Increase ODW's general fund support to fill the budget shortfall of $1.2 million;
    - Return the unallotted funding from the last 2 fiscal years (roughly $1.4 million in total);
    - Provide funding for the Office of State Inspector General's recommendation to perform quality assurance/quality control sampling at waterworks ($1.5 million/yr);
    - Provide another position ("full-time equivalent" or FTE) for the DWSRF program; and
    - Provide funding for a Data Management System.

WAC members asked:

- How does the centralized plan review help with budget?
    - It reduces the number of FTEs associated with plan reviews. Central plan review could be more limited, less robust, but would also be more consistent; ODW understands this may lead to discovering some consequences after construction.
- Why isn't ODW renewing the lease to the Danville Field Office?
    - The current lease at the Danville Field Office is month-to-month. The objective is to reduce rent costs and only rent the space staff need. With increased teleworking, the central office reduced its footprint by one-half. Similar reductions may be possible in the field offices since they also have staff teleworking. Danville could be the first test case since the lease is up for renewal.
    - Staff are also moving to one phone (desk or mobile, not both) and one computer (desktop, laptop, or tablet).
    - The objective is to prioritize people over space.
- How will ODW meet the training and travel needs?
    - More training will be in-house and travel will be limited
- When will the NOIA for the amendments to the fee regulation be published
    - Once the Commissioner approves the NOIRA, it goes through Executive Branch review, which includes the Department of Planning and Budget, Secretary of Health and Human Resources, and Governor.
    - There will be a 30-day public comment period following publication of the NOIRA.
    - Nelson told WAC members that the draft NOIRA has been updated to indicate that proposed amendments to the regulation will also include adjusting the schedule for charges and payment of fees. This is the only substantive change to the objectives of the regulatory action that Nelson presented to WAC members at the July 2021 meeting.

3. <u>U.S. Environmental Protection Agency Actions that Impact the Drinking Water Program</u>

a. Drinking Water Contaminant Candidate List 5 – Draft (CCL5)

Nelson shared brief comments about CCL5, saying EPA published its draft CCL5 in the Federal Register on July 19, 2021, opening a 60-day public comment period.

https://www.federalregister.gov/documents/2021/07/19/2021-15121/drinking-water-contaminant-candidate-list-5-draft ODW did not submit comments, but did answer technical questions about CCL5 for Virginia's Office of the Attorney General. The Attorney General signed a public comment letter with other states' attorneys general, supporting EPA's proposal to include PFAS as a class of chemicals in CCL5, rather than considering them individually. The attorneys general also urged EPA to gather information to consider setting drinking water standards for PFAS as a class, in part because PFAS contamination in the environment is generally made up of mixtures of PFAS. ODW has a copy of the letter if any members are interested in reading it.

b. Fifth Unregulated Contaminant Monitoring Rule (UCMR5)

The proposed UCMR5 was published in the Federal Register on March 11, 2021. The final rule is scheduled for publication in late 2021/early 2022 with monitoring beginning in 2023 and continuing through 2025. As proposed, 29 PFAS are included (all PFAS for which a drinking water method has been validated – those within the scope of Methods 533 and 537.1) and all waterworks serving 3,300 or more consumers will sample. 800 randomly selected small waterworks (approximately 25 in Virginia) will also participate in the monitoring program.

Someone commented that EPA asked for comments about monitoring for legionella following publication of the proposed UCMR5. ODW does not know if or what will be included in the final rule re legionella when EPA publishes it.

More information about UCMR5 is available on EPA's website: https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule

c. Consumer Confidence Reports (CCRs) (to comply with section 2008 of America's Water Infrastructure Act of 2018 (AWIA))

Southeast Virginia Field Office Director Dan Horne provided an overview of recent meetings that have focused on providing recommendations to EPA on updating CCRs to comply with the requirements in AWIA.

AWIA requires changes to the content, form, manner, and frequency of CCRs:

- Community waterworks serving more than 10,000 consumers must deliver CCRs biannually.
- Waterworks must increase the readability, clarity, understandability, accuracy of information and risk communication of CCRs.
- Waterworks may use electronic delivery.
- Community waterworks must include additional information on corrosion control efforts, and any lead action level exceedances that required corrective action.

EPA has not taken action to amend requirements for CCRs, so a court order has forced action. EPA tasked the National Drinking Water advisory Committee (NDWAC) with providing specific recommendations to implement the AWIA requirements. NDWAC formed a workgroup that started meetings in August 2021 (meetings will continue through September 2021) to develop recommendations. ODW staff member Renee Hall in not a member of the workgroup, but has been listening to the meetings and to keep ODW informed. The working group will present a summary of

recommended action in October-December to NDWAC. The NDWAC will make recommendations to EPA. Topics discussed by the working group have included:

- More information in CCRs
- Reduce the reading level
- Requirement for a larger font, brail, recorded versions
- How often to issue
- Languages other than English, requirement to translate.
- Electronic distribution, use of social media.

Representatives from the Association of State Drinking Water Administrators (ASDWA) are also listening to the NDWAC workgroup meetings so that ASDWA can provide comments to NDWAC and EPA on the CCR revisions.

4. Public Comment

Dwayne invited members of the public to speak if they wished. No one offered comments.

5. Other Business / Conclude Meeting

Dwayne said that ODW has offered up a legislative proposal to create a fund to help struggling waterworks in small or disadvantaged communities consolidate with or larger, more financially stable waterworks. The legislative proposal builds on the idea of "Water as a Human Right," which the General Assembly recognized with a joint resolution during the 2021 Session. ODW would use the fund to help the receiving waterworks cover operation and maintenance costs associated with acquiring the smaller waterworks – assistance that is not available under the DWSRF. The idea came out of ODW's enforcement program. VDH leadership supported the proposal and forwarded it to the Secretary of Health and Human Services and Governor's Office for further consideration. ODW also submitted a budget request to support the fund.

The next WAC meeting will be on Wednesday, December 15, 2021. It is scheduled to be in-person at the Perimeter Center (Short Pump area). ODW will let the WAC and public know if WebEx is also an option for those who do not attend in-person.

Next year's meetings are tentatively scheduled for February 16, 2022, April 20, 2022; July 20, 2022; September 28, 2022 (moved down one week for Water Jam), December 14, 2022 (moved up one week to accommodate the holidays)

Dwayne concluded the meeting at 11:14 a.m.

WATERWORKS ADVISORY COMMITTEE MEETING

WebEx, Office of Drinking Water, 109 Governor Street 6th Floor, Richmond, VA 23219

Wednesday, September 22, 2021
8:30 AM – 11:00 PM

DRAFT AGENDA

Subject	Time
Connect to Webex Instructions on Using Webex Protocol for Webex meeting and the chat feature	8:30 – 9:00 AM
Call to Order Meeting Overview Adoption of Minutes from the 7/21/21 meeting	9:00 – 9:05 AM
Drinking Water Program	9:05 – 10:30 AM
EPA drinking water program updates	10:30 – 10:50 AM
Public Comment Period	10:50 – 10:55 AM
Other Business - Upcoming 2021 meeting dates: Deceber 15, 2021 (Parameter Center) Conclude meeting	11:00AM

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=m2a18da057d5c138f88e11609d1277be6

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): 2632 783 5925
Meeting Password: vdPhGtaA822

You can use your computer audio or join via telephone by calling 1-844-992-4726 United States Toll Free.

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 Minutes

Webinar – WebEx
9:00 am, Wednesday, July 21, 2021

Final (adopted September 22, 2021)

Members Participating: Dwayne Roadcap (ODW), Chair; David F. Van Gelder, Water Operator; Steven Herzog, PE, VWEA; Russ Navratil, VA AWWA & Henrico County; Skip Harper, Virginia Plumbing & Mechanical Inspectors Association; Jesse L. Royall, PE, Sydnor; Geneva Hudgins, VA AWWA; Mark Estes, VRWA; James (Jay) Dillon, SERCAP

Guests Participating: Chris Pomeroy, Virginia Municipal Drinking Water Association; Brian McGurk substitute for Joe Grist, DEQ; Yann Le Gouellec, Newport News; Tom Fauber, VA ABPA; Laura Bauer, Virginia American Water; Christopher Gill, City of Norfolk; M. Ashworth; Jay Armstrong, Division of Consolidated Laboratory Services; John Kingsbury, Fairfax Water

Office of Drinking Water (ODW) staff: Tony Singh, Robert Edelman, Christine Latino, Nelson Daniel, Dan Horne, Jeremy Hull, James Reynolds, Brian Blankenship, Jeff Wells, Barry Matthews, Jennifer Coleman, Mark Perry

1. Meeting Overview

The Waterworks Advisory Committee (WAC) met in person at the Madison Building, Richmond, VA and by electronic communication means (WebEx) due to the ongoing public health emergency. ODW Director Dwayne Roadcap started the meeting at 9:00 a.m. and requested all meeting attendees who were joining by WebEx enter their name and affiliation in the chat box.

Since the WAC members present at the Madison Building did not establish a quorum, the WAC did not vote to adopt the minutes from the April 21, 2021 meeting.

Dwayne provided an overview of the meeting agenda.

2. Drinking Water Program

a. Waterworks Regulations

The amendments to the Waterworks Regulations became effective on June 23, 2021. Policy and Program Director Nelson Daniel thanked members of the WAC and public that worked with ODW staff on the long process to adopt the amendments. Nelson noted that ODW amended every section of the Regulations except Section 830 and only received one comment during the final notice period. The amended Regulations are on the Legislative Information System website, Town Hall, and the ODW website.

Training, Capacity Development, and Outreach Director Barry Matthews and Division of Technical Services Director Bob Edelman are developing training on the amendments for waterworks owners and operators. They are in the process of refining the content and logistics for the training and plan to work with the VA AWWA to promote training opportunities, which they anticipate will be offered starting in

August or September. If anyone has any suggests or ideas for training, please contact Barry (Barry.Matthews@vdh.virginia.gov) or Bob (Robert.Edelman@vdh.virginia.gov).

b. PFAS

Deputy Director Tony Singh updated members on ODW's efforts related to per- and polyfluoroalkyl substances (PFAS) in drinking water. Last fall, ODW formed a workgroup to study the occurrence of PFAS in drinking water and major sources of supply, as required by House Bill 586 (2020). ODW staff, in conjunction with the workgroup, designed a sampling study and identified 50 waterworks to sample. Only 38 of the 50 waterworks agreed to participate in the study, so ODW asked 7 additional waterworks to provide samples. To date, ODW has received provisional results from 42 of the 45 waterworks that participated in the sampling study. ODW staff are currently performing quality assurance/quality control (QA/QC) review of the provisional results. The review should be completed by mid-August. Tony plans to provide an overview of the provisional results next week during the PFAS Workgroup meeting on July 27, 2021 (from 1:00 p.m. to 3:30 p.m.) and expects ODW will release the full data set to the public once QA/QC review is complete.

ODW is required to report on the results of the study to the Governor and General Assembly by December 1, 2021. The workgroup will work with ODW staff to produce the report. Separately, ODW is also required to submit a report on the Board of Health's efforts to establish maximum contaminant limits (MCLs) for two PFAS and two other compounds, 1,4-dioxane and Chromium-VI.

Chris Pomeroy asked about the requirements to establish the MCLs for PFAS and how the state's process would adhere to EPA's process to establish limits under the Safe Drinking Water Act (SDWA). Dwayne answered that ODW will follow the requirements in Virginia's Administrative Process Act (VAPA), beginning with the issuance of a Notice of Intended Regulatory Action. Nelson noted ODW and the Board will have to take the requirements in the enabling legislation and VAPA into account in setting the MCLs. Chris felt that following the SDWA procedures could lead to conflicts with the timeline suggested by the amendments to the law that requires the Board to establish MCLs for PFAS and expressed concern that VDH's process would be truncated in comparison to EPA's process. He felt this might lead to a different result than EPA's process.

c. Lead and Drinking Water:

Tony provided an update on ODW's program to support testing for lead in drinking water at public schools and child day programs. ODW received grants from EPA under sections (§) 2107 and 2105 of the Water Infrastructure Improvements for the Nation (WIIN) Act to pay for lead testing (WIIN § 2107) and remediation (WIIN § 2105) – with a focus on schools and child day programs in small and disadvantaged communities. ODW has not made grant funds available yet because many facilities shut down or significantly reduced operations during the coronavirus pandemic. With students returning to schools this fall, ODW intends start its program and reach out to 600-800 schools and child day programs beginning in October. Working with the Department of Consolidated Laboratory Services and Virginia Tech, ODW expects to use grant funds to analyze 30,000 to 40,000 samples. ODW will target schools and child day programs that serve children age 6 or below who are also on a state or federally subsidized school lunch plan. If test results indicate lead sources within a school or child day program, ODW can use funds from the WIIN § 2105 grant to pay for remediation of the lead source.

ODW also received funding from the General Assembly to hire three new employees to assist with the lead testing program and review/manage lead testing plans and results required by recent amendments to state law (associated with SB 392, 393 and HB 797, 799 from 2020). Dwayne pointed out the difficulty of having to hold positions open because of ODW's budget issues and being able to hire 3 new positions that are not focused on drinking water at waterworks.

d. Office of State Inspector General (OSIG) Audit of the Drinking Water Program

Dwayne provide information about the recently completed OSIG audit and Report on the Drinking Water Program. (see https://www.osig.virginia.gov/media/governorvirginiagov/office-of-the-state-inspector-general/pdf/performance-audits/2021-PA-005-OSIG_ODW-Audit-Report_Final_6.24.21.pdf).

In late June, ODW leadership met with OSIG for an audit de-brief. OSIG gave several recommendations for program improvements and provided three commendations: (1) reorganization creating compliance specialist in each field office; (2) having performance metrics; and (3) updating the Enforcement Manual. The recommendations focused on many things related to compliance and enforcement, including adding more metrics, such as ODW monitoring time for waterworks to return to compliance, and continuing to revise the Enforcement Manual to ensure more consistency among field offices.

WAC members expressed concerns about field offices having some autonomy to address specific conditions in their areas. Dwayne talked about improving consistency through the development of manuals instead of having lots of working memos so that staff have the same answer to the same question in each field office. He also discussed horizontal communication and not setting limits on the ability of field directors to make decisions.

WAC members commented that manuals are good, but the regulated community wants decisions made at field office level – improves efficiency, reaction time. They are concerned about having field staff reluctant to make decisions because of too much central office oversight. Dwayne mentioned ODW's guidance on main breaks as example of a standardized procedure that gives flexibility to waterworks and field offices to make decisions. Having field directors sign operation permits is another example of moving decision making from the central office to the field offices.

Responding to a question about field director meetings, Southeast Virginia Field Office Director Dan Horne said that meeting generally cover metrics, current policies, and technical issues that may be of interest or need discussion, including interaction with ODW divisions.

Dwayne invited members to provide feedback as they encounter issues.

Enforcement Director Jenn Coleman commented on need to balance consistency with legal and regulatory requirements. She noted that the OSIG report recommends more centralized compliance and enforcement program and said that ODW is trying to balance this with more decision-making in the field offices – empowering compliance specialists to make more decisions about returning waterworks to compliance. She also wants to ensure ODW follows a consistent approach to compliance/enforcement statewide – similar noncompliance treated in the same manner statewide.

e. Annual Compliance Report

Jenn provided an overview of the Annual Compliance Report for the committee. EPA requires ODW to file the report each year. It contains information about all of the violations recorded in the Safe Drinking

Water Information System (SDWIS) database for the specified calendar year. Historically ODW compiled and provided raw data. This year ODW added analytics and trends with the data. The 2020 report and prior year's reports are available on the ODW website at:

https://www.vdh.virginia.gov/drinking-water/office-of-drinking-water/virginia-annual-pws-compliance-report/

Jenn noted that Virginia trends are better than Region 3 and national trends – fewer violations, fewer waterworks out of compliance. She also recognized the success of most waterworks in their efforts to maintain drinking water quality. If members have questions regarding the report or would like to provide feedback, please contact Jennifer Coleman at: Jennifer.Coleman@vdh.virgnia.gov.

3. U.S. Environmental Protection Agency Actions that Impact the Drinking Water Program

a. Contaminant Candidate List (CCL) 5 (Draft)

Dan Horne gave a presentation on EPA's recently released draft of CCL5. EPA proposes to include 66 individual chemicals, plus three chemical groups, and 12 microbials. The disinfection byproducts group (DBPs) includes 23 unregulated DBPs - 4 HAAs, 2 haloacetonitriles, 3 halonitromethanes, 6 iodinated THMs, 6 nitrosamines, and 2 "others." The PFAS includes "anything besides PFOA and PFOS," because those are already on the path to regulation. The cyanotoxins "include but are not limited to" microcystin, cylindrospermopsin, anatoxin, and saxitoxin. The 12 microbials include 3 viruses, 8 bacteria, and 1 protozoan. Most of these, if not all, have been on CCLs before. Prime among them are Legionella pneumonia and Naegleria fowleria.

The draft CCL was published in the Federal Register on July 19, 2021. The 60-day public comment period closes on September 17, 2021. See: https://www.federalregister.gov/documents/2021/07/19/2021-15121/drinking-water-contaminant-candidate-list-5-draft

A member asked about limits for manganese, since it is on the proposed CCL. Dan responded by email following the meeting:

> Health Canada set a Maximum Acceptable Concentration (MAC) for manganese in May 2019, of 0.12 mg/L. The MAC is applied at both the entry point and in the distribution system. The MAC was set on the basis of protecting infants against neurological effects (lowering of IQ, increase in hyperactivity, and lessened memory and motor function. Health Canada also set an Aesthetic Objective Level of 0.02 mg/L, measured at the entry point to the distribution system. (Note: the Health Canada standards are only guidelines - it's up to the Provincial authorities to set the enforceable standards.)
>
> EPA set out current SMCL of 0.05 mg/L based on the understanding that (1) manganese is an essential nutrient, and (b) exceeding the SMCL would cause water so badly colored or with such a metallic taste that people would not voluntarily drink it (self-limiting or self-protective exposure). Recent research shows that's not correct.

Dan's presentation follows the minutes.

b. Lead and Copper Rule Revisions

Robert Edelman provided an update on EPA's activities to revise the Lead and Copper Rule. On June 10, EPA signed a final rule to extend the effective date of the LCR Revisions to December 16, 2021 and extend the compliance date to October 26, 2024. The extension gives EPA more time to review the rule issued in January and conduct listening sessions to get stakeholder input.

Bottom line, ODW doesn't have a clear idea of what EPA is thinking, and EPA is entering a period of silence while it deliberates what to do. Bob provided recommendations for what waterworks could/should be doing – focus, lead service line inventory while we are waiting on the final rule.

Bob's presentation follows the minutes.

4. <u>Waterworks Operation Fee Regulation</u>

Nelson discussed the next step in the process of amend the Waterworks Operation Fee regulation, 12VAC5-600, submitting a Notice of Intended Regulatory Action (NOIRA). The objective is to ensure the NOIRA encompasses all possible changes ODW is contemplating in the regulatory action. Subsequent changes can narrow the focus, but ODW cannot add additional topics that are not properly noticed in the NOIRA. Based on comments and feedback the draft NOIRA states amendments to the regulation will include:

1. Amending 12VAC5-600-10 as needed to define terms used in the chapter.
2. Amending 12VAC5-600-20 to expand the purpose of the regulation to include TNCs, wholesale waterworks, fair distribution of the costs of the drinking water program among all beneficiaries, and considerations of equity and environmental justice as they relate to fees waterworks pay.
3. Amending 12VAC5-600-50 to establish a minimum annual fee for all community waterworks.
4. Amending 12VAC5-600-60 to increase the nontransient noncommunity waterworks fee.
5. Adding a section that establishes an operation fee for transient noncommunity waterworks.
6. Adding a section that establishes an operation fee for wholesale waterworks.
7. Amending section 12VAC5-600-90 to distinguish between wholesale waterworks and community waterworks that have service connections (which serve as the basis for their operation fees) and also sell or deliver water to another waterworks.
8. Make other amendments as necessary to consider equity and environmental justice issues as they relate to the fees waterworks pay.

Members suggested including an owner of a private waterworks and an advocacy group representing churches in the stakeholder workgroup that ODW plans to form to develop proposed amendments to the regulations. Nelson invited members to contact him if they have suggestions for additional amendments to include in the NOIRA.

Nelson's presentation follows the minutes.

5. <u>Waterworks Advisory Committee under 12VAC5-590-45</u>

The amendments to the Waterworks Regulations changed the Waterworks Advisory Committee by deleting 12VAC5-590-40 5. and inserting 12VAC5-590-45. The new section follows:

12VAC5-590-45. Waterworks Advisory Committee.

A. A Waterworks Advisory Committee (WAC) shall be formed by the commissioner to review and make recommendations regarding the regulatory, policy, and legislative aspects of the department's authorities. WAC members shall consist of industry professionals employed outside the department with longstanding expertise or vested interest in waterworks operations and represent a diverse group of stakeholders. Members shall be experts in the fields of water treatment technologies, public health, water quality, economics, environmental science, public utilities, community development, or industry regulations. A minimum of nine persons shall be appointed to the committee by the commissioner.

B. The WAC will convene at least quarterly.

C. WAC meetings will be considered public meetings. Notice of scheduled meetings will be posted on the Virginia Regulatory Town Hall at least three working days before the date of the meeting. Meeting minutes will be posted to the Virginia Regulatory Town Hall within 10 working days after the meeting.

D. Each member of the WAC shall hold office for a term of three years, except that:

1. With approval by the commissioner, members are eligible for reappointment to consecutive terms.

2. Each member of the WAC serves at the pleasure of the commissioner.

E. The commissioner shall appoint the chair of the WAC.

F. The WAC shall have a member of the department serve as secretary.

Previously, the Commissioner appointed 13 persons for a period of 3 years to the Waterworks Advisory Committee. The new regulations specify that the Commissioner appoint a minimum of nine persons that will convene quarterly and will serve a period of 3 years. Nelson has asked the committee for their thoughts and opinions regarding the new membership and asked if the current members still wished to serve.

Members offered several suggestions:

- Dwayne – based on amended regulation, the Commissioner should appoint new members. However, many of the new members should be the people that have consistently attended WAC meetings and shown interest in and engagement in the drinking water program.
- Members thought that any membership over 20 would be too many. A couple of people suggested 13 members.
- Consider staggering terms.
- Keep ex-officio members on committee.

Tom Fauber, Skip Harper, Chris Pomeroy, Mark Estes, and Russ Navitril expressed interest in being part of the WAC going forward and representing their respective organizations.

Nelson's presentation on the amendments and implications for the WAC follows the minutes.

6. <u>Public Comment Period</u>

No one offered comments during the public comment period.

7. Other Business, Conclude Meeting

The next WAC meetings will be on Wednesday, September 22 (4th Wed), and December 15, 2021. ODW staff will let members know about the format (in-person, in-person with access via WebEx, or WebEx) and location for upcoming meetings, which may be impacted by current public health considerations associated with the coronavirus.

Dwayne concluded the meeting at 11:35 a.m.

PFAS Sample Study Summary

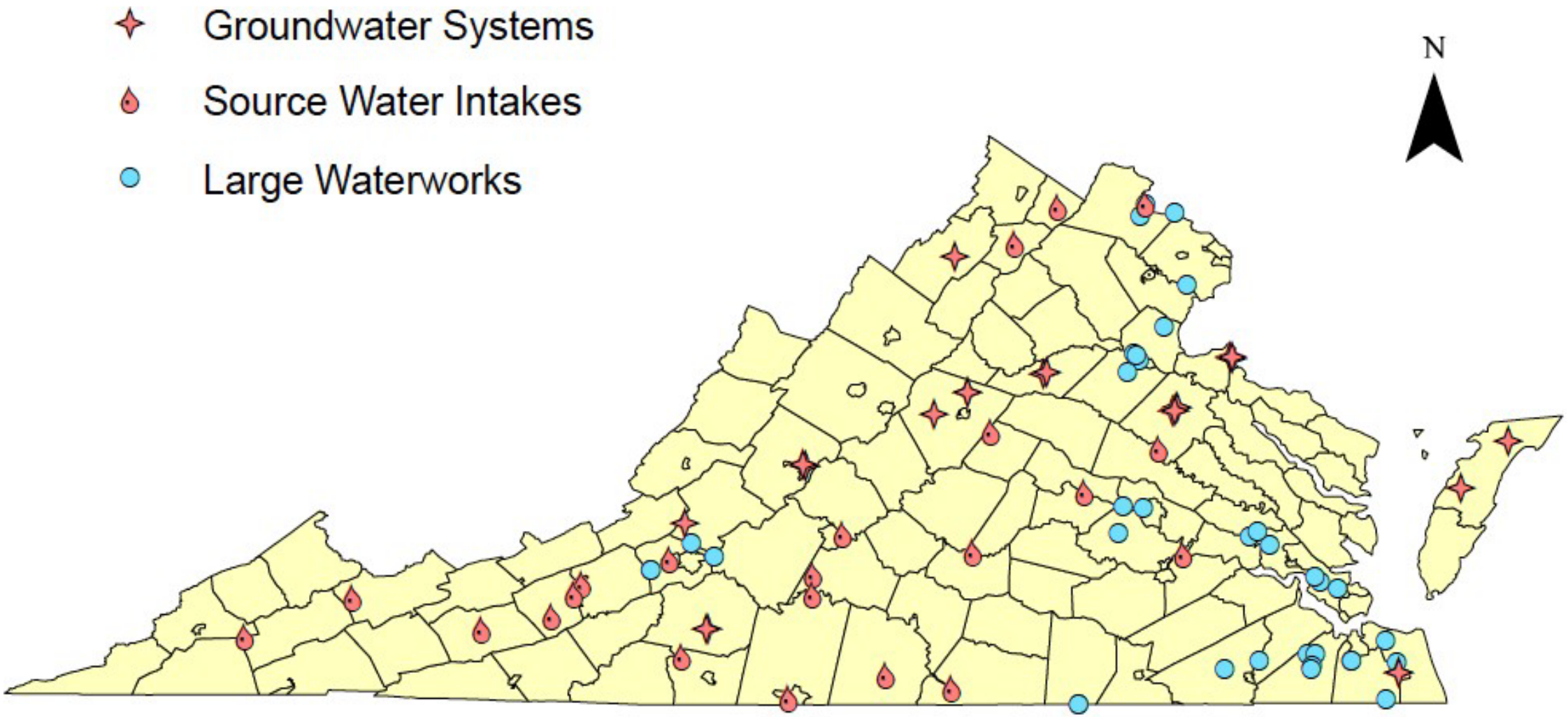
WAC Meeting
September 22, 2021

Robert D. Edelman, PE
Virginia Department of Health

Sampling Plan: Hybrid Approach

	# Samples	# Systems	Population
17 Large Waterworks	31	17	4,541,619
GW – Potential High & Medium Risk	19	11	15,453
Major Water Sources	22	22	
Total	72	50	4,557,072

Planned Sampling Locations



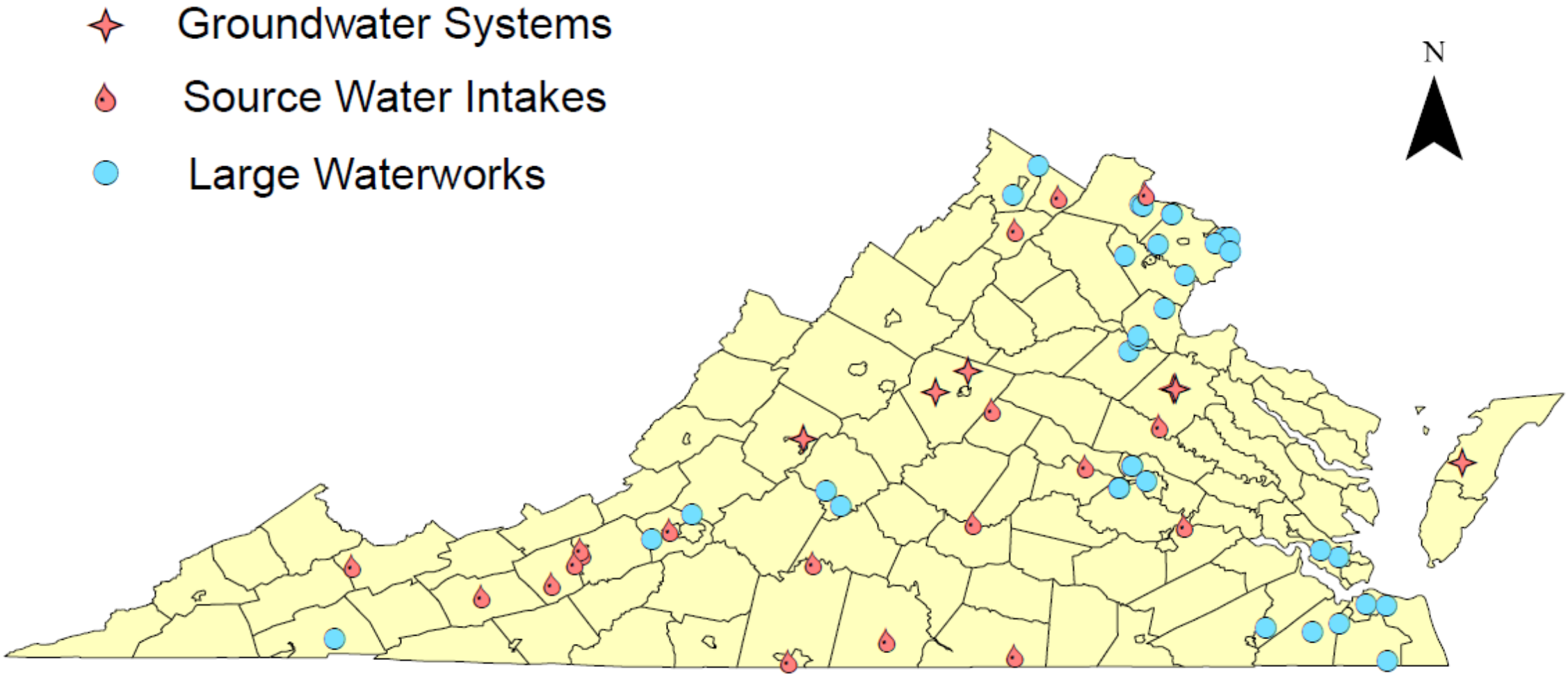
Sampling Program

- 50 waterworks identified
- 38 agreed to participate in the study
- 7 more agreed to participate
- 45 waterworks participated
- 63 sample locations

Sampling Program

- Replacement Systems:
  - Large systems – Finished Water
    - Selected systems not already covered by other phases
  - Ground Water near airports and unlined landfills
    - Offered to sample entire list – no new candidates
  - Intakes downstream of potential PFAS sources
    - Selected additional systems

Resulting Sample Locations



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QA/QC Checks

4 Samples with data irregularities:

- FRB detects PFAS, water sample does not detect PFAS
- Both FRB and water sample detect PFAS
- Dilution necessary on FRB
- PFOS detected in water sample at WTP#2, not detected at WTP #1

- Resampled and reanalyzed four locations with data irregularities
- This addressed data irregularities

Results Summary

- Practical Quantification Limit (PQL) is the minimum concentration of an analyte that can be measured with high confidence (99%)
- “Detection” means above the practical quantification limit (PQL), typically 3.5 ppt
- PFAS below the PQL at 48 of 63 sample locations (76%)
- PFAS found at above the PQL at 15 of 63 sample locations
- 5 waterworks had one or more analyte above 10 ppt
- 54 ppt of hexafluoropropylene oxide-dimer acid (HPFO-DA) (GenX)
- All other detections ≤ 20 ppt

Results Summary

- Six PFAS compounds in HB586
  - Five found above the PQL: PFOA, PFOS, Perfluorobutyrate (PFBA), Perfluoroheptanoic acid (PFHpA) Perfluorohexane sulfonate (PFHxS)
  - Perfluorononanoic acid (PFNA) was not detected in any samples at a concentration above the PQL.
- Four additional PFAS not listed in HB586 were measured above the PQL:
  - HPFO-DA (GenX), PFHxA (perfluorohexanoic acid, PFPeA (perfluoropentanoic acid) PFBS (perfluorobutanesulfonic acid)

Samples with analytes above the PQL

Waterworks Name	Virginia American Water Co. - Alexandria District		Arlington County	Fairfax County Water Authority		Loudoun Water - Central System		Prince William County Service Authority - East
City/County	City of Alexandria		Arlington County	Fairfax County		Loudoun County		Prince William County
Sample Location	From Fairfax Water		From Washington Aqueduct	Griffith WTP	From Washington Aqueduct	Trap Rock WTP	From Fairfax County Water Authority	From Fairfax County Water Authority
Water Type	Finished	Finished	Finished	Finished	Finished	Finished	Finished	Finished
PFOA (ppt)	*	4.2	*	5.5	*	*	4.5	5.5
PFOS (ppt)	*	3.9	*	5.1	*	*	*	4.1
PFBA (ppt)	7.7	9.2	*	7.7	4.3	4	4.6	12
PFHpA (ppt)	*	*	*	4.4	*	*	5.5	4.1
PFHxS (ppt)	*	*	*	*	*	*	*	*
PFNA (ppt)	*	*	*	*	*	*	*	*
HPFO-DA (Gen-x) (ppt)	*	*	*	*	*	*	*	
PFHxA (ppt)	6.8	9.3	3.7	12	4.4	*	*	11
PFPeA (ppt)	7.4	10	4.1	14	4.2	*	*	12
PFBS (ppt)	*	4.2	*	5.6	*	*	*	4.8

"Finished" means treated drinking water entering the distribution system.

"Raw Intake" means untreated water, before treatment.

"WTP" means water treatment plant.

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Samples with analytes above the PQL

Waterworks Name	Stafford County Utilities		City of Newport News		Town of Altavista	Western Virginia Water Authority	Washington County Service Authority
City/County	Stafford County		City of Newport News		Campbell County	Roanoke County	Washington County
Sample Location	Smith Lake WTP	Lake Mooney WTP	Harwoods Mill WTP	Lee Hall WTP	Staunton River + Reed Creek	Spring Hollow WTP	Middle Fork Water Treatment Plant
Water Type	Finished	Finished	Finished	Finished	Raw Intake	Finished	Finished
PFOA (ppt)	*	*	*	*	*	*	*
PFOS (ppt)	6.4	*	7.1	4.4	*	*	5.2
PFBA (ppt)	*	5.9	4.3	4.3	*	*	*
PFHpA (ppt)	*	*	*	*	*	*	*
PFHxS (ppt)	*	*	4.9	*	*	*	*
PFNA (ppt)	*	*	*	*	*	*	*
HPFO-DA (Gen-x) (ppt)	*	*	*	*	4	54	*
PFHxA (ppt)	*	4.2	*	6.1	*	*	*
PFPeA (ppt)	*	5.5	*	4.5	*	*	*
PFBS (ppt)	*	*	*	*	*	*	*

"Finished" means treated drinking water entering the distribution system.

"Raw Intake" means untreated water, before treatment.

"WTP" means water treatment plant.

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Samples with PFAS analytes below the PQL

Water System Name	City/County	Water Type	Sampling Point
Earlysville Forest	Albemarle County	Finished	Combined Wells
Peacock Hill Subdivision	Albemarle County	Finished	Combined Wells
Pungoteague Elementary School	Accomack County	Finished	Well
Town of Bowling Green	Caroline County	Finished	Combined Wells
Mountain View Elementary School	Rockbridge County	Finished	Well
Frederick Water	Frederick County	Finished	James Diehl WTP
Frederick Water	Frederick County	Finished	James T. Anderson WTP
Western Virginia Water Authority	Roanoke County	Finished	Carvins Cove WTP
City of Chesapeake - Northwest River System	City of Chesapeake	Finished	Northwest River WTP
City of Chesapeake - Northwest River System	City of Chesapeake	Finished	Lake Gaston WTP
City of Norfolk	City of Norfolk	Finished	Moores Bridges WTP
City of Norfolk	City of Norfolk	Finished	Kristen M Lentz WTP
City of Portsmouth	City of Portsmouth	Finished	Lake Kilby WTP
City of Virginia Beach	City of Virginia Beach	Finished	From City of Norfolk
Chesterfield County Central Water System	Chesterfield County	Finished	Addison Evans WTP
Chesterfield County Central Water System	Chesterfield County	Finished	From City of Richmond
Chesterfield County Central Water System	Chesterfield County	Finished	From Appomattox River Water Authority

Samples with PFAS analytes below the PQL

Water System Name	City/County	Water Type	Sampling Point
Henrico County Water System	Henrico County	Finished	Henrico WTP
Henrico County Water System	Henrico County	Finished	From City of Richmond
City of Richmond	City of Richmond	Finished	Richmond WTP
City of Lynchburg	City of Lynchburg	Finished	Abert Water Treatment Plan
City of Lynchburg	City of Lynchburg	Finished	College Hill WTP
Fairfax County Water Authority	Fairfax County	Finished	Corbalis WTP
Prince William County Service Authority - West	Prince William County	Finished	City of Manassas WTP
Prince William County Service Authority - West	Prince William County	Finished	Fairfax County Water Authority
Spotsylvania County Utilities	Spotsylvania County	Finished	Ni River WTP
Spotsylvania County Utilities	Spotsylvania County	Finished	Motts Run WTP
NRV Regional Water Authority	Montgomery County	Raw Intake	New River
Radford Army Ammunition Plant	Montgomery County	Raw Intake	New River
Pulaski County Public Service Authority	Pulaski County	Raw Intake	Claytor Lake
Town of Richlands	Tazwell County	Raw Intake	Clinch River
Town of Wytheville	Wythe County	Raw Intake	Reed Creek
City of Radford	City of Radford	Raw Intake	New River
Town of Berryville	Clarke County	Raw Intake	Shenandoah River
Lake Monticello	Fluvanna County	Raw Intake	Rivanna River

Samples with PFAS analytes below the PQL

Water System Name	City/County	Water Type	Sampling Point
Town of Front Royal	Warren County	Raw Intake	South Fork Shenandoah River
City of Salem	City of Salem	Raw Intake	Roanoke River
VA American Water Co., Hopewell District	City of Hopewell	Raw Intake	Appomattox River
James River Correctional Center	Goochland County	Raw Intake	James River
Hanover Suburban Water System	Hanover County	Raw Intake	North Anna River
Roanoke River Service Authority	Mecklenburg County	Raw Intake	Lake Gaston
Town of Farmville	Prince Edward County	Raw Intake	Appomattox River
City of Danville	City of Danville	Raw Intake	Dan River
Halifax County Service Authority - Leigh St Plant	Halifax County	Raw Intake	Dan River
Town of Leesburg	Loudoun County	Raw Intake	Potomac River

- "Finished" means treated drinking water entering the distribution system.
- "Raw Intake" means untreated source water, sampled at a water treatment plant.
- "WTP" means water treatment plant.
- "Well" means water from one well, after treatment, if provided.
- "Combined Wells" means water from two or more wells, after treatment, if provided.
- "From" indicates finished water purchased from a waterworks.

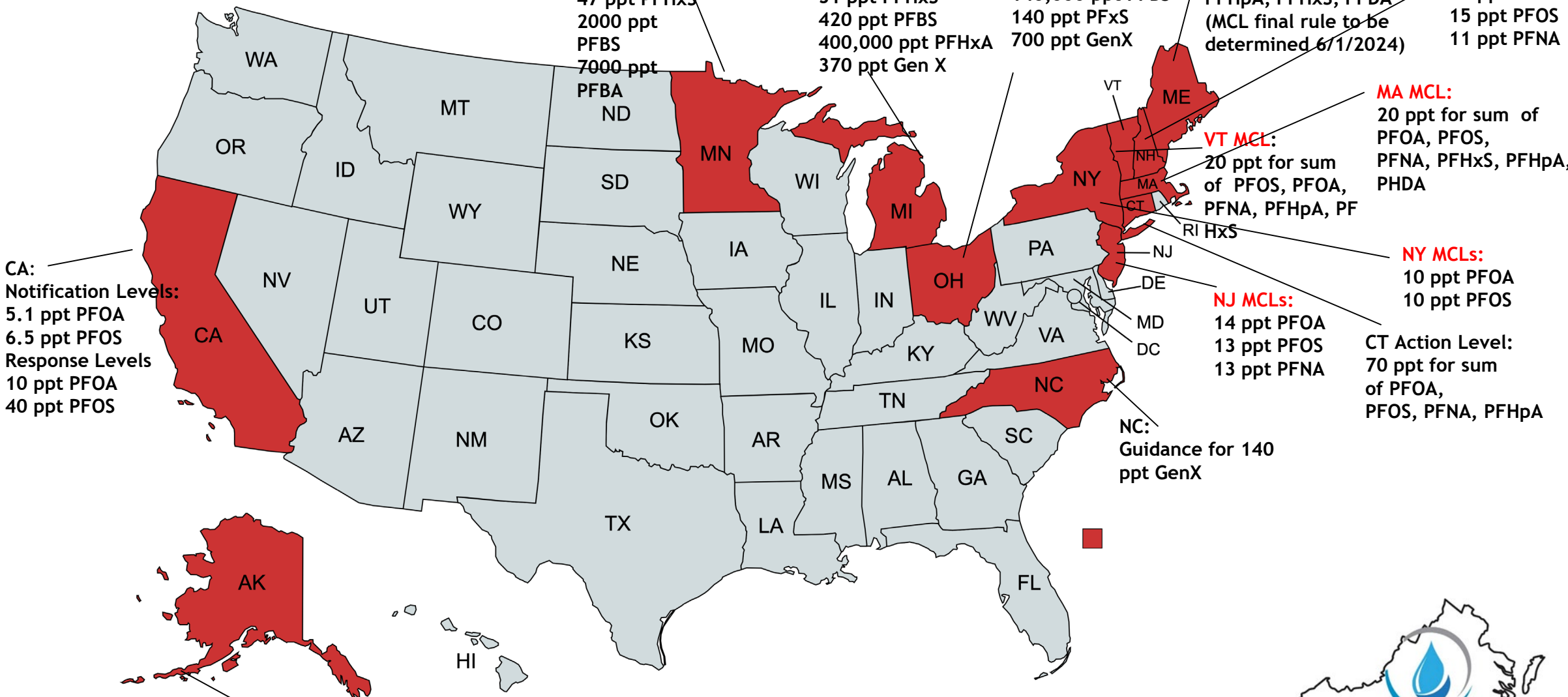
Other observations

- All samples with PFAS above the PQL were from surface water sources
- No wells with PFAS above the PQL
- Only one intake sample had PFAS above the PQL
- ODW and DEQ have not collected samples to identify potential sources of PFAS contamination
- Did not sample both source water and finished water for any waterworks – not able to look at PFAS removal across treatment

Putting things into perspective

Results are reassuringly low:

- No samples exceeded EPA's health advisory of 70 ppt for PFOA and PFOS
- No samples exceeded any of the maximum contaminant levels established by other states (8 to 14 ppt).
- Michigan adopted an MCL for GenX of 370 ppt
- North Carolina adopted a provisional health goal for GenX of 140 ppt



Map Credit: Amanda Waters, Acrisaw

VIRGINIA MUNICIPAL DRINKING WATER ASSOCIATION

Updated 7/27/21

	California	Connecticut	Mass.	Michigan	Minnesota	New Hampshire	New Jersey	New York	Vermont	EPA*	avg
	Notice Level	Action Level	MCL	MCL	Health Advisory	MCL	MCL	MCL	MCL	Health Advisory	
PFOA	5.1	✓	✓	8	35	12	14	10	✓	✓	14.8
PFOS	6.5	✓	✓	16	15	15	13	10	✓	✓	18.2
PFNA		✓	✓	6		11	13		✓		10.0
PFHxS		✓	✓	51	47	18			✓		38.7
PFHpA		✓	✓						✓		
PFDA			✓								
PFBS				420	2 µg/L						
PFHxA				400,000							
Gen X				370							
PFBA					7 µg/L						
SUM		70	20						20	70	

Have any Question, Comment or Suggestion, contact Us

Robert D. Edelman

Robert.Edelman@vdh.virginia.gov

804-864-7490 / 434-466-4012

Tony S. Singh

Tony.Singh@vdh.Virginia.gov

804-864 7517 / 804-310 3927

Waterworks Operation Fee Regulation 12VAC5-600-10 et seq.

Nelson Daniel
Policy and Program Director

Waterworks Advisory Committee Meeting
September 22, 2021

Standard Rulemaking Process

1. Notice of Intended Regulatory Action (NOIRA)
   - Executive Branch Review
   - 30 day public comment period
2. Proposed Amendments
   - Executive Branch Review
   - 60 day public comment period
3. Final Amendments
   - Executive Branch Review
   - 30 day public notice period
4. Adoption

Operation Fee Regs – NOIRA

The public receives notification that a regulatory change is being considered, along with a description of the planned nature and scope of any regulatory changes.

Internal review process, typically approved by the State Health Commissioner

Submit to Town Hall to begin Executive Branch Review

-OAG, DPB, SHHR, Governor

Operation Fee Regs – NOIRA

Content:

- Brief Summary
- Acronyms and Definitions
- Mandate and Impetus
- Legal Basis
- Purpose
- Substance
- Alternatives to Regulation
- Public Participation

NOIRA - Objective

- Draft the TH-01 as broadly as need to encompass all possible changes that the VDH office is contemplating addressing in the regulatory action.

- The subsequent stages can narrow the focus, but VDH cannot add on additional topics to a Standard regulatory action that were not properly noticed in the NOIRA.

NOIRA – Revised Substance #1

Proposed Amendments to the regulation will include:

- Amending 12VAC5-600-50 (Community fee) to establish a minimum annual fee for all community waterworks, adjust the fee for each customer account, and adjust the schedule for charges and payment of fees.

- Amending section 12VAC5-600-60 (NTNC fee) to increase the nontransient noncommunity waterworks fee and the schedule for payment of fees.

NOIRA – Revised Substance #2

Proposed Amendments to the regulation will include:

- Adding a section that establishes an operation fee for transient noncommunity waterworks and schedule for payment of fees for TNC.

- Adding a section that establishes an operation fee and schedule payment of fees for wholesale waterworks.

NOIRA

Next Steps

- Undergoing internal (VDH) review
- Submit to Town Hall, begin Executive Branch Review
- Form stakeholder group
- Hold stakeholder meetings
- Develop proposed amendments

Possible Stakeholders

- Community waterworks > 10,000 (and/or 50,000) persons
- Community waterworks < 10,000 persons
- Community waterworks < 500 persons
- Organization(s) that represent waterworks in Virginia
- Organization that represents localities/local governments
- County or PSA representative
- Privately owned waterworks
- Wholesale (only) waterworks
- NTNC waterworks
- TNC waterworks
- Organization or advocacy group with members that own or operate TNC waterworks (campgrounds or restaurants)
- Organization representing churches

- ODW staff, VDH Shared Business Services (SBS) staff