WATERWORKS ADVISORY COMMITTEE MEETING AGENDA

All-Virtual Public Meeting

June 11, 2025; 10:00 AM to 1:00 PM

Subject	Time (Estimated)
• Welcome and establish quorum – Dwayne Roadcap	10:00 – 10:05 AM
Waterworks Advisory Committee Administrative Matters • Introduction and review of agenda items – Chair David Van Gelder • Review and adoption of minutes from March meeting – Grant Kronenberg	10:05 – 10:10 AM
ODW Staffing Update • Status update – Dwayne Roadcap	10:10 – 10:20 AM
ODW Finances Update • Federal funding update – Dwayne Roadcap • Updated budget summary document review and discussion – Grant Kronenberg and Jane Nunn	10:20 – 10:50 AM
Implementation of § 32.1-174.5 (Two-Hour Reporting Requirement) • Overview – Dwayne Roadcap • Statutory language review – Grant Kronenberg • Notifying the Office of Drinking Water – Jessica Coughlin • New Monthly Operating Report form – Aaron Moses • Training and outreach – Jarrett Talley • Regulatory amendments – Jane Nunn • Draft guidance document review and discussion – Grant Kronenberg	10:50 AM – 12:25 PM

ODW Strategic Plan • ODW Five-Year Strategic Plan update – Jarrett Talley	12:25 – 12:30 PM
PFAS Update • PFAS update – Bailey Davis	12:30 – 12:40 PM
Compliance and Enforcement Update • Serious Violators and Enforcement Actions Update – Grant Kronenberg	12:40 –12:45 PM
Plan Review and Data Management Update • Status update – Aaron Moses	12:45 – 12:50 PM
Public Comment Period	12:50 – 12:55 PM
Other Business • Reappointment to WAC • Planned upcoming meeting dates	12:55 – 1:00 PM

The method by which the Waterworks Advisory Committee chooses to meet shall not be changed unless the Waterworks Advisory Committee provides a new meeting notice in accordance with Code of Virginia § 2.2-3707.

Information and Protocol for Joining the Meeting Electronically

Access to the meeting can be achieved via computer, phone or mobile device with the meeting link below:

If accessing via a mobile device, you will need to download the WebEx Meet app prior to joining the meeting.
https://vdhoep.webex.com/vdhoep/j.php?MTID=m58c1d9932073cf3d809969b59d8d9377

When joining the meeting, please use the meeting number and password below:
Meeting number (access code): 2870 130 5442
Meeting Password: bP4FJ2gtwJ9

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 have problems logging in or if there is any interruption in transmission, please call Fiora Deborous at 804-837-9835.

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.

DRAFT

Waterworks Advisory Committee Meeting Minutes

Twin Hickory Area Library
5001 Twin Hickory Road
Glen Allen, Virginia 23059
Monday, March 24, 2025, 10:00 a.m.

Members Present: David Van Gelder (Chair), Water Operator; Chris Pomeroy, Virginia Municipal Drinking Water Association; Michelle Caruthers, VWEA; Geneva Hudgins, VA AWWA; Benjamin Barber, Virginia Health Catalyst; Joey Hiner, VA SERCAP; Tom Fauber, VA ABPA; W. Weedon Cloe, III, DEQ; Russ Navratil, VA AWWA; Shane Wyatt, DCLS; Ignatius Mutoti, VSPE; Tom Fauber, VA ABPA; Mark Estes, VRWA

Members Absent: Jesse L. Royall, Jr., Sydnor Hydro; Caleb Taylor, VML; Skip Harper, Virginia Plumbing and Mechanical Inspectors Association; Andrea Wortzel, Troutman Pepper Locke

Stakeholders and Public: Sarah Ramsey, Sam Storeman, Kassie Smith, Ryan Maslyn, Ashley Pierce, Victoria Smith, Tanya Pettus, John Kingsbury, Ivy Ozmon, Chris Gill, TJ Gordon, Charlie Paullin, Katelyn Jordan, Mignonne Wint, Taylor Valencia

Virginia Department of Health (VDH) Staff: Dwayne Roadcap, Grant Kronenberg, Jane Nunn, Julie Floyd, Robert Edelman, Ray Weiland, Bailey Davis, Fiora DeBorous, Daniel Horne, Jeremy Hull, James Reynolds, Jessica Coughlin, Dan Horne, Mark Wise, Steve Kvech, Aaron Moses, Barry Matthews

Introductory Remarks

The Waterworks Advisory Committee (WAC) met in-person at Twin Hickory Area Library in Henrico County on Tuesday, March 24, 2025, at 10:00 a.m. The meeting was also available via WebEx. In addition to the WAC members in attendance, Office of Drinking Water (ODW) staff, stakeholders, and the public also joined via WebEx. WAC Chair David Van Gelder presided over the meeting.

Dwayne Roadcap, ODW Director, called the meeting to order at 10:03 a.m. Mr. Roadcap introduced new WAC member W. Weedon Cloe, III. Mr. Cloe provided some brief remarks about his appointment.

Mr. Roadcap addressed the stakeholders in attendance and thanked them for their continued dedication to promoting the public health of all Virginians. Mr. Roadcap passed the floor to Grant Kronenberg, ODW Director of Compliance, Enforcement and Policy.

Review and Adopt Minutes of December 2024 WAC Meeting

Mr. Kronenberg presented the draft December WAC meeting minutes for review. Mr. David Van Gelder, WAC Chair, moved to approve the minutes, the motion was seconded, and the WAC members in attendance unanimously approved the minutes as written.

Legislative Updates

Mr. Roadcap provided an update on the 2025 General Assembly (GA) Session. Mr. Roadcap advised the group of funding in the amount $1.8 million allocated to the Office of Drinking Water in the proposed Commonwealth budget. Mr. Roadcap discussed funding made available via a one-time grant for FY 2025 totaling $25 million for localities to upgrade or replace drinking water infrastructure, priority will be given to Greene County and the Town of Bowling Green.

Mr. Roadcap reviewed updates to legislation and discussed the requirements of Waterworks operators or owners to notify ODW within six hours of any significant event that could affect a waterworks' reliability or water quality.

ODW Staffing Update

Mr. Roadcap discussed current staffing levels, advising the group that ODW currently has a 15% vacancy rate which aligns with other Commonwealth agencies. Mr. Roadcap advised that ODW continues to recruit for open positions.

Ms. Jane Nunn, ODW Policy and Program Coordinator, mentioned that if the EPA implements changes to the Lead and Copper Rule Revisions and Lead and Copper Rule Improvements there is potential for a shift in staffing needs.

ODW Finances Update

Mr. Roadcap and Mr. Kronenberg reviewed the Fact Sheet Regarding ODW's FY 27 Expected Finances, which can be found in the meeting packet.

Mr. Roadcap advised that the 2024 EPA grant funding had not yet been released. Mr. Roadcap discussed the federal government's recently passed Continuing Resolution (CR). Mr. Roadcap stated that Drinking Water State Revolving Funds were approved under the CR, and the CR does not contain earmarks for specific funding, which is a potential positive for ODW.

Mr. Kronenberg and Ms. Nunn reviewed the ODW fact sheet regarding ODW's operations budget and the associated chart listing possible funding scenarios, which were included in the meeting packet. Ms. Nunn advised the WAC that the funding scenarios sheet includes all funding sources currently received by ODW. Ms. Nunn advised there has not been an increase in the statutory cap on operation fees per waterworks since 1994. Mr. Kronenberg and Ms. Nunn advised the group that legislative action would be needed to change the statutory cap on operation fees per waterworks or the $3 connection fee cap.

WAC members agreed that additional WAC Finances Subcommittee meetings will not be scheduled at this time. Mr. Chris Pomeroy and Ms. Geneva Hudgins suggested a clearer one-page briefing sheet with an intermediate table and finance chart, listing "what if" scenarios separately.

Source Water Manual Update

Mr. Bob Edelman, ODW Director of the Division of Technical Services, discussed updates to the Source Water Manual, the Harmful Algal Bloom (HAB) taskforce and Cyanotoxins/Anatoxin in the Commonwealth's source water. The slides are included in the meeting packet attached to the notice.

Mr. Edelman noted that the proposed cyanotoxin advisory levels are policy and not a regulation. VDH is proposing to add advisory levels for Anatoxin-a and Saxitoxins in drinking water. The proposed advisory levels are consistent with levels established by other states. The levels shown in VDH's HAB Toolkit table are out of date. In response to a question about the likely impact of the proposed advisory levels, VDH reviewed data from investigations by the HAB taskforce, which primarily involved recreational water. The data review revealed that Microcystins were detected above the proposed advisory level in two drinking water sources, Flannagan Lake and the Shenandoa River. Anatoxin-a was detected above the proposed advisory level in the North Fork Shenandoah River. Other cyanotoxins were not detected above the proposed advisory levels in Virginia drinking water sources.

Ms. Michelle Caruthers stated that only three states are stricter than Virignia's health advisory level for Anatoxin-a of 0.4 µg/L, and she raised whether Virginia is going above and beyond what other states are doing. Dr. Ignatius Mutoti questioned the reason for higher levels of HABs and cyanotoxins. Mr. Roadcap advised that some of the reasons could include shallow waterways, farming, drought conditions, temperature, and periods of low water flow. Mr. Edelman added that VDH's review of the HAB taskforce data did not attempt to determine the underlying reasons for the increase in HABs.

Mr. Mark Estes questioned what HAB thresholds would trigger a Do Not Use advisory. Mr. Edelman advised that the current policy and proposed policy call for Do Not Drink advisories.

Mr. Roadcap discussed the time lag involved with when the sampling occurs and when the testing results are received.

Mr. Edelman stated that VDH wishes to move forward within finalizing and implementing the proposed HAB policy. Ms. Caruthers asked whether the advisory level numbers have been run by Winchester. Mr. Edelman stated that Winchester is aware of the proposed levels, but ODW can reach out to Winchester and see if there is any feedback.

PFAS/LCRR Study Update

Mr. Bailey Davis, ODW Director of Field Operations, provided an overview of the PFAS and LCRR study provided by a third-party consultant. Mr. Davis discussed the PFAS Compliance cost including Capital Expenditures (CapEx) ranging between $643M – $904 to be incurred by the 2029 compliance date. Mr. Davis also provided Operational Expenditures (OpEx) ranging between $72M and $88M, advising OpEx costs will continue indefinitely. Mr. Davis advised that a significant amount of CapEx and OpEx expenditures are directly related to the Fairfax

County's water system's estimate of treatment costs. Slides and reported data can be found in the meeting packet attached this notice.

Mr. Davis informed the group of current activities that are underway for PFAS rule implementation and that required testing is ongoing and funds are available for systems that need assistance.

Development of Amendments to the Waterworks Regulations

Ms. Jane Nunn presented an update on the draft proposed amendments to the Waterworks Regulations.

Ms. Nunn discussed proposed amendments related to qualifying for the remote monitoring credit. Ms. Nunn noted that Chris Pomeroy was a big help in developing the language as ODW attempted to address concerns of big and small systems. Ms. Nunn noted that the proposed language creates a new concept of a "cybersecurity plan." It was discussed that what ODW is looking for is not an AWIA-level deep assessment, but an assessment that is more general. A waterworks would also need to develop a written strategy based on the findings of the assessment and develop an incident response plan. In response to a question from Ms. Caruthers, Ms. Nunn stated that a cybersecurity plan needs to be reviewed and updated annually. Ms. Nunn noted this is only to receive the remote monitoring credit.

Ms. Nunn also discussed amending the Waterworks Regulations to eliminate references to specific forms so the regulations do not have to be amended whenever ODW wants to use a new form.

Ms. Nunn discussed regulatory amendments in light of the federal PFAS regulations and the Consumer Confidence Report Rule Revisions (CCR3). Ms. Nunn stated that the amendments to the Waterworks Regulations are very lengthy and she can provide a copy if the WAC members want to see it. Ms. Nunn said that the amendments will mirror the federal regulations so the exempt process can be used and ODW is planning to do a combined primacy package. Ms. Nunn stated that ODW is waiting to receive the CCR3 primacy package from EPA. EPA does not know when it will have that ready, but Ms. Nunn noted there is plenty of time for the April 2027 deadline.

The WAC members present provided feedback on the draft proposals. The slides and redlined changes presented by Ms. Nunn can be found with the WAC meeting packet attached to this posting.

LCRR/LCRI Update

Mr. Edelman provided an update on activities related to the Lead and Copper Rule Revisions (LCRR) and Lead and Copper Rule Improvements (LCRI).

Mr. Edelman reviewed the initial lead service line inventory statistics. He stated there are just over 700,000 unknown lines. He expects that for some systems those unknown lines will be lead

lines such that there will be thousands or tens of thousands of lead lines. Virginia has done well on its inventory response, as 94% of systems have provided an inventory. EPA will likely send a warning letter to systems that have not submitted an inventory.

Mr. Edelman stated that the next big deadline is November 1, 2027, which is the date by which lead connectors need to be identified. Systems need to prepare a service line replacement plan if they have lead lines, galvanized requiring replacement lines, or unknown lines. Mr. Edelman recommended systems replace the lines now rather than waiting for 2027.

Mr. Edelman noted that preparing for lead sampling in schools and childcare centers will be a significant effort for larger systems. He also noted the need to develop a tap sample pool and locations based on new tiers in LCRI. Mr. Edelman stated that systems will have to sample a tap if requested, so systems will have to figure out how to comply with that requirement.

Mr. Roadcap stated ODW expects less lead service line replacement funding based on the number of lead service lines reported to EPA, relative to other states. Mr. Roadcap noted that is both good and bad – fewer lead service lines but less money.

Ms. Hudgins asked whether any large utilities have not provided a lead service line inventory. Mr. Edelman said those that have not provided an inventory generally serve under 5,000 people.

Mr. Pomeroy asked whether there is a galvanized requiring replacement standard being recommend by drinking water administrators. Mr. Edelman responded that he is not aware of a proposal, but there is a conversation with states saying there is a need for guidance from EPA on the definition of galvanized requiring replacement.

Compliance and Enforcement Update

Mr. Kronenberg gave an overview of compliance and enforcement over the last quarter. Mr. Kronenberg advised that six "serious violators" were identified under the EPA's Enforcement Targeting Tool (ETT). Of those six systems, proposed consent orders were sent to three systems that are related to one another, one system has entered into a consent order, one system remains under a consent order and ODW is looking at a superseding consent order, and one system has returned to compliance but has outstanding state violations that are causing ODW to consider a consent order. ODW issued 20 warning letters from the January ETT report. Slides related to the compliance and enforcement update can be found in the meeting packet.

Mr. Kronenberg reviewed the draft State Violation Scoring System (SVSS). Mr. Kronenberg discussed that the SVSS is intended to provide a state-only violations metric like the ETT and Enforcement Targeting Tool Assistant (ETTA) provide for federal violations. Mr. Kronenberg stated that the SVSS will help guide ODW decisions on compliance and enforcement for state-only violations. Mr. Kronenberg discussed some of the specific point assignments within the SVSS.

Mr. Kronenberg fielded questions from the WAC about how the SVSS will be used by ODW. Mr. Kronenberg discussed the usual compliance and enforcement process, which begins with

issuing a Notice of Alleged Violation setting forth some timeline for compliance; if compliance is not achieved then a warning letter may follow; the warning letter gives the waterworks the current calendar quarter to return to compliance or else additional enforcement action may be taken. If a waterworks does not communicate with ODW after receipt of a warning letter or does not take action to address the outstanding violations, then formal enforcement is the next step.

Plan Review and Data Management Update

Mr. Aaron Moses, ODW Field Services Engineer, stated that ODW is meeting its goal of issuing construction permits in less than 30 days. Mr. Moses noted that the ODW Division of Technical Services will begin reviewing general permits next. Mr. Moses discussed the implementation of software products that will be used to aid in project tracking and reporting. ODW expects to implement Project Tracker in late 2025, SWIFT Submittals MOR in 2026, and DW SFTIES in 2027. Mr. Moses stated that ODW is working on a system to automate simple reminders and generation of monitoring and reporting violations.

Public Comment

Ms. Sarah Ramsey, a citizen of the Commonwealth, discussed her concerns on water fluoridation. Ms. Ramsey reviewed and cited legislative codes addressing the oversight of VDH. Ms. Ramsey requested the reconsideration of fluoride usage.

Mr. Sam Storeman, a citizen of the Commonwealth, addressed his concerns with water fluoridation. Mr. Storeman advised that fluoridated water has no health benefits and concurred with Ms. Ramsey's comments.

Mr. Benjamin Barber, WAC member, discussed the positive effects of fluoride in the public drinking water supply.

Mr. Van Gelder thanked Ms. Ramsey, Mr. Storeman and Mr. Barber for their comments. Mr. Van Gelder questioned if any other members of the public would like to comment and no additional comments were made.

Other Business

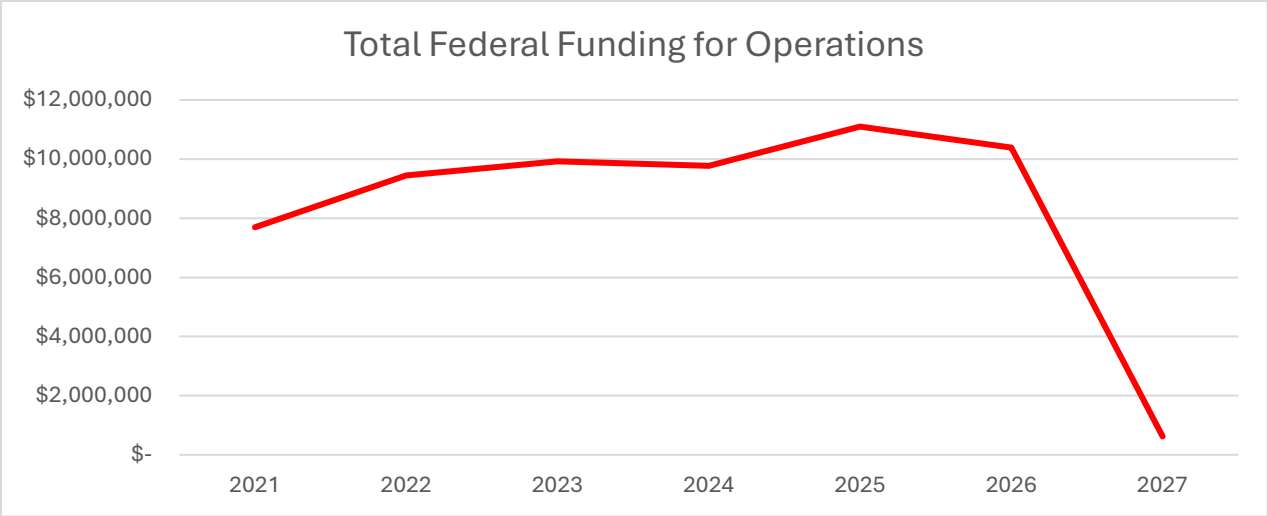
The next meeting of the WAC is scheduled for June 11, 2025, at 10:00 a.m.

Mr. Van Gelder adjourned the meeting at 1:07 p.m.

Fact Sheet Regarding Office of Drinking Water's (ODW) FY27 Expected Finances

Current Situation

- The chart below shows past and expected federal funding for VDH ODW operations through FY27.



- ODW operations (121 FTEs, 6 field offices) are supported by about $10 million in Drinking Water State Revolving Fund (DWSRF), Public Water System Supervision (PWSS), and Bipartisan Infrastructure Law (BIL) federal funds.
  - BIL funding stops after FY26.
- The Continuing Resolution for FY25 removed congressionally directed spending, resulting in an increase in DWSRF funding for FY25. The future of federal funding remains unknown, however. Congressionally directed spending may return. Additionally, the proposed FY26 budget for EPA reduces Virginia's DWSRF funding to $2,007,000 and eliminates $2,000,000 in PWSS funding. BIL funding remains unchanged.
- Virginia's allocated BIL funding match is $6,464,800 for FY26, which ends when BIL funding stops.
- Three reports recommend significant increases to ODW's funding and staff.[1]
  - Reports issued before new federal rules (PFAS, CCR3) and state laws (new operator alternatives) in 2024.
  - New statute (§ 32.1-174.5) requires additional staff hours, but ODW will absorb these costs.
- The FY26 state budget includes an additional $1,803,598, which will be used for up to 15 new FTEs.
- FY26 waterworks operation fee revenue is estimated to be $4,800,000.

If the Fiscal Year 2027 Cliff Happens

- Up to 48 of ODW's 121 FTEs would need another funding source.
- Reduced ability or inability to:
  - Monitor waterworks compliance with SDWA;
  - Enforce waterworks compliance with federal and state law;
  - Assist at training events and conferences that ODW historically been involved in; and
  - Review the technical, managerial, and financial capacity of waterworks to receive infrastructure improvement funds.
- Reduced ability or inability to pay for:
  - Travel expenses;
  - ODW's staff training;

[1] A 2022 VDH-DPB report found ODW understaffed by 20 to 25 FTEs over the next three years. A 2023 Cadmus Group report for EPA found ODW needs approximately 65 (12 for LCRR) more FTEs and over $26 million in yearly funding. A 2024 analysis by the Assoc. of State Drinking Water Administrators concluded ODW likely needs 36 more FTEs to implement the Lead and Copper Rule Improvements.

- Waterworks operator training;
- Operator Certification Training Program[2];
- ODW's Capacity Development program and failure to meet the conditions of the Virginia Capacity Development Strategy[3];
- Receivership fund program;
- Waterworks technical assistance;
- Basics of Financial Management for Small Systems (SERCAP);
- Auto-dialer services;
- Source Water Protection program (TetraTech, CHA);
- VA-WARN Website Database Hosting (AWWA);
- Distance Learning Website (Mountain Empire Community College);
- Small Systems Operator Training (EPA);
- LSL Technical Assistance (TruePani);
- Engineering Consultants - Small Scope Engineering (H&P, T&L);
- Cross Connection Control (AWWA);
- Security Training - Physical and Cyber (Virginia Tech);
- Course on Contaminants of Concern (Virginia Tech);
- Administrative Services (Virginia Tech);
- Operator Subsidy Short School (Virginia Tech);
- Distribution System Operator Courses (Virginia Tech);
- Management, Methods and Money; Concepts in Capacity Development (Virginia Tech);
- Establishing a Successful & Sustainable Waterworks (Virginia Tech);
- Hands-On Training - Full Scale Water Plant (Virginia Tech);
- Applied Math and Basic Science (Virginia Tech);
- Groundwater Course for Very Small Systems (Virginia Tech);
- Groundwater Math Course (Virginia Tech);
- Water Operations Math Course (Virginia Tech);
- Professional Development Seminars Continuing Education (Virginia Tech);
- Virginia Optimization Program;
- Special Sampling - Non-Compliance; and
- Technical Assistance Planning and Design Grants.

To Maintain the Status Quo

- If DWSRF and PWSS funding remains consistent with FY24 levels, avoid the fiscal cliff by redirecting the $6,464,800 line item for BIL funding match to ODW's General Fund.

Additional Needs

- Need about $10 million to fund an estimated 41 new FTEs and other increased operational costs identified in the three reports.

Potential Funding Sources

- Seek additional state funding and/or federal funding if available.
- Increase operation fees. Some options are:
  - Remove the $160,000 statutory cap – generates approximately $1.8 million more in fees.
  - Remove cap and increase per connection fee from $3 to $6 – generates about $8.5 million more in fees.

[2] Can be viewed by EPA as "backsliding" and could result in an additional 20% reduction in DWSRF funding.
[3] Can be viewed by EPA as "backsliding" and could result in an additional 20% reduction in DWSRF funding.

ODW's $19.6 Million Annual Operating Budget under Various Financial Scenarios, State FY 2026

Operations Fee Cap	Operations Fee Connection Fee	Operations Fee FY26 Estimated Revenue	Current General Fund Allocation State FY26	General Fund Allocation FY26 for New Positions	PWSS Funding Fed FY25	PWSS Funding Fed FY26*	DWSRF Set-Aside Amount Fed FY25[1]	DWSRF Set-Aside Amount Fed FY26[2]*	BIL Set-Aside Amount Fed FY25 and FY26[3]	DWSRF State Match Amount FY25	DWSRF State Match Amount FY26	BIL State Match Amount FY26	Operating Budget State FY27: DWSRF, no BIL or PWSS; no FY26 DWSRF or BIL state match allocation by GA to ODW operations	Operating Budget State FY27: DWSRF, no BIL, no PWSS; with FY26 BIL State Match allocated by GA to ODW operations	Operating Budget State FY27: no BIL, no DWSRF, no PWSS; with FY26 DWSRF & BIL State Matches allocated by GA to ODW operations
$160,000.00	$3	$4,800,000.00	$ 3,600,000.00	$1,803,598.00	$ 2,000,000.00	$ 0.00	$4,796,940.00	$622,170.00	$9,000,000.00	$3,094,800.00	$401,400.00	$6,464,800	($8,774,232.00)	($2,309,432.00)	($2,530,202.00)

Numbers in red are funds needed to maintain the status quo but will not give ODW the capacity to hire additional staff and address other operational costs.
* Amounts based on the President's proposed FY26 budget and is subject to change

New funds allocated by the General Assembly for up to 15 new positions in response to a VDH budget request for additional staff; increases ODW's Operating Budget
President's proposed FY26 budget eliminates PWSS funding (reduces to $0)

[1]Federal FY25 DWSRF Funding is $15,474,000; estimated set-asides available for ODW operations; no earmarks subtracted from funding; 20% state match required.
[2]Federal FY26 DWSRF funding in President's proposed budget is $2,007,000; estimated set-asides available for ODW operations; 20% state match required.
[3]Federal FY25 BIL funding is $35,159,000; estimated set-asides available for ODW operations; 20% state match required; expected to remain at this level for FY26.

CHAPTER 672

An Act to amend the Code of Virginia by adding a section numbered 32.1-174.5, relating to Department of Health Office of Drinking Water; waterworks; mandatory reporting; monthly operation report.

[H 2749]

Approved April 2, 2025

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding a section numbered 32.1-174.5 as follows:

§ 32.1-174.5. Mandatory reporting of contaminant releases and equipment failures and malfunctions.

A. As used in this section:

"Contaminant release" means an unplanned or uncontrolled release by a waterworks of a chemical contaminant or petroleum or synthetic oil into the water that is treated by or distributed from the waterworks to customers. "Contaminant release" includes any such release at treatment facilities and raw or finished water pump stations.

"Critical equipment failure or malfunction" means any equipment failure or malfunction that has significant potential for serious adverse effects on human health as a result of short-term exposure or to cause a widespread disruption of water service.

"Equipment failure" means an unplanned condition when the equipment cannot perform or is unable to perform as designed because of a problem with such equipment. "Equipment failure" does not mean a planned (i) removal from service, (ii) repair, or (iii) maintenance.

"Equipment malfunction" means an unplanned condition during which the equipment cannot perform or is unable to perform as designed due to a problem originating from outside the waterworks rather than a problem associated or originating with the equipment itself, including an issue with third-party provided gas or electric power feeds or a cyberattack.

"Monthly operating report" means the report submitted by a waterworks to the Office at least once each month that describes the waterworks' operational status and compliance with applicable laws, regulations, and policies, as directed by the Department.

"Noncritical equipment failure or malfunction" means an equipment failure or malfunction that is not a critical equipment failure or malfunction, regardless of whether such anomaly is noticeable to customers of the waterworks.

"Office" means the Department's Office of Drinking Water.

B. The owner of a waterworks shall report any critical equipment failure or malfunction or contaminant release to the Office as soon as practicable but no more than two hours after discovery.

C. Any owner of a waterworks that is required to submit a monthly operating report to the Office shall include any noncritical equipment failure or malfunction that could adversely affect water quality, public health, or service continuity that occurred during the applicable reporting month and was not resolved by the reporting deadline. For the purposes of this subsection, any noncritical equipment failure or malfunction that is effectively addressed by equipment repair or replacement, alternative equipment use, alternative system operation, or such other response shall be considered resolved.

New Reporting Statute – § 32.1-174.5

Waterworks Advisory Committee

June 11, 2025

VDH VIRGINIA DEPARTMENT OF HEALTH
Protecting You and Your Environment

Overview of Statute

- Va. Code § 32.1-174.5 –
  - Owner must report a "critical equipment failure or malfunction or contaminant release" to ODW "as soon as practicable but no more than two hours after discovery."
  - Owner must include in the monthly operating report unresolved noncritical equipment failures or malfunctions that could adversely affect water quality, public health, or service continuity.

Overview of Statute

- Defined terms:
  - Contaminant release
  - Critical equipment failure or malfunction
  - Equipment failure
  - Equipment malfunction
  - Monthly operating report
  - Noncritical equipment failure or malfunction

Overview of Statute

- Undefined terms/phrases:
  - "Significant potential for serious adverse effects on human health as a result of short-term exposure"
  - "Widespread disruption of water service"
  - "Discovery"

- Explanation and examples of triggering events:
  - Contaminant release
  - Equipment failure
  - Equipment malfunction

Overview of Statute

- Report a two-hour event to ODW.
- Report certain noncritical equipment failures or malfunctions via the monthly operating report.
- Compliance/enforcement
  - Typical expected corrective actions
  - Consider repeat violators
  - Underlying event and compliance/enforcement

Notifying ODW

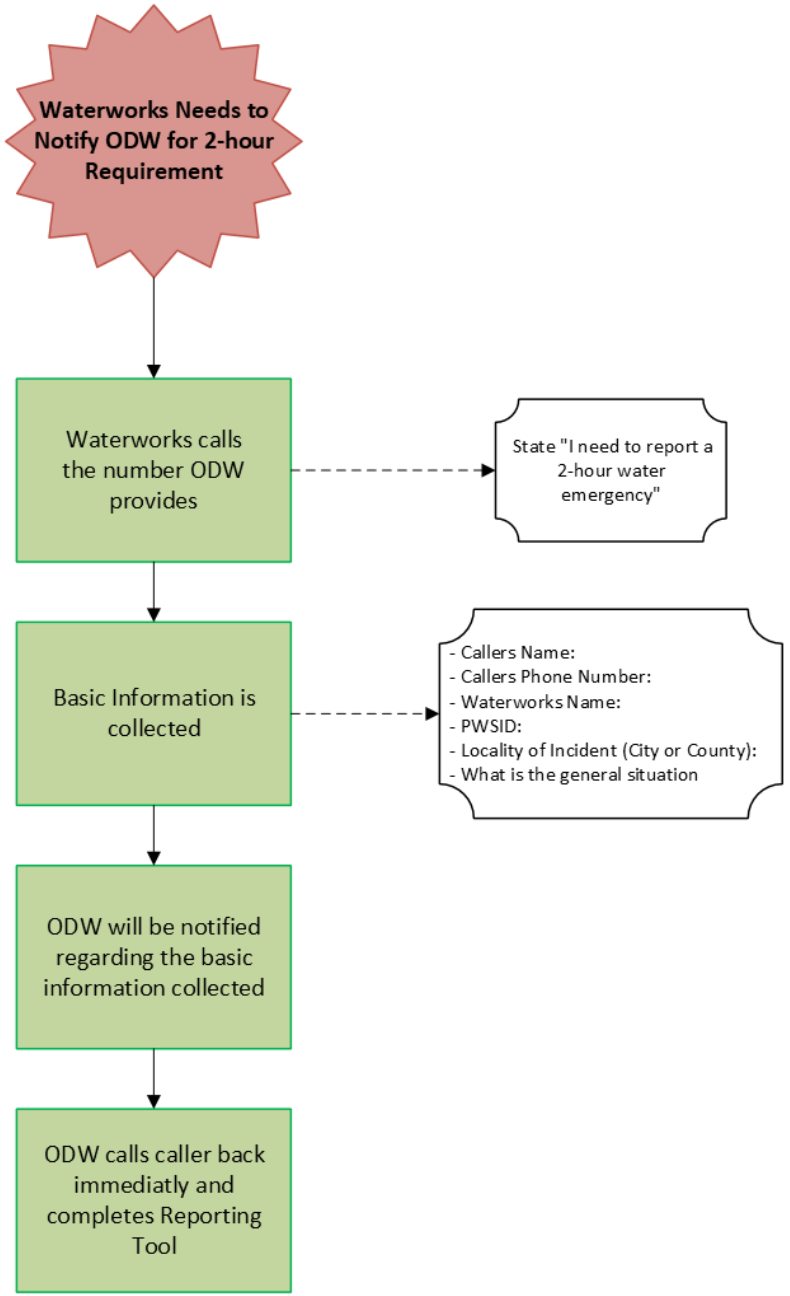
- ✓ The waterworks has decided that it needs to make a 2-hour notification.

- ✓ Waterworks will call the number ODW provides
  - ✓ This is still being worked on with MOA/MOU
  - ✓ We will provide a number BEFORE the 7/1/25 date
  - ✓ This contact will be the official time contact was made was this reporting option

- ✓ The call taker will collect basic information
  - ✓ (callers name, phone number, waterworks name, PWSID, locality and general situation)

Notifying ODW

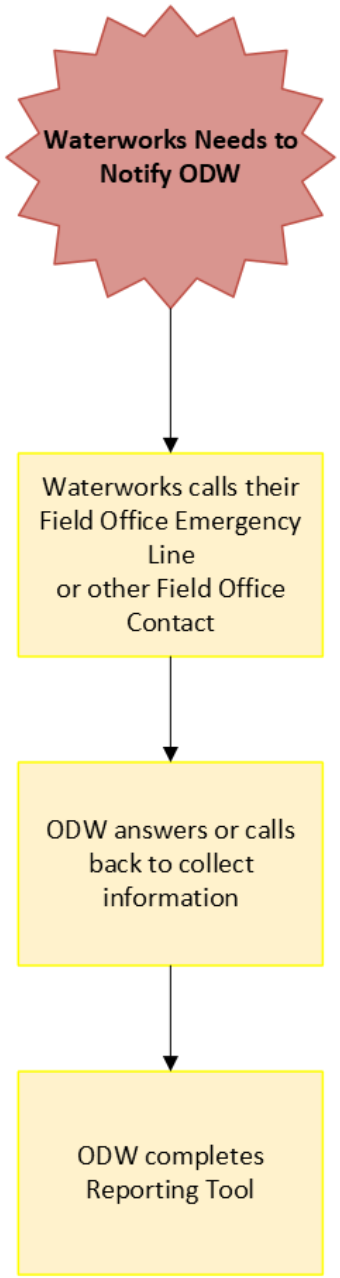
- ✓ ODW point of contact will be notified
- ✓ ODW will call the caller back within 15 minutes to gather some additional information
  - ✓ What is going on, who is impacted, any help needed, etc.
- ✓ Please remain in contact with ODW as the situation evolves (improvements and setbacks)

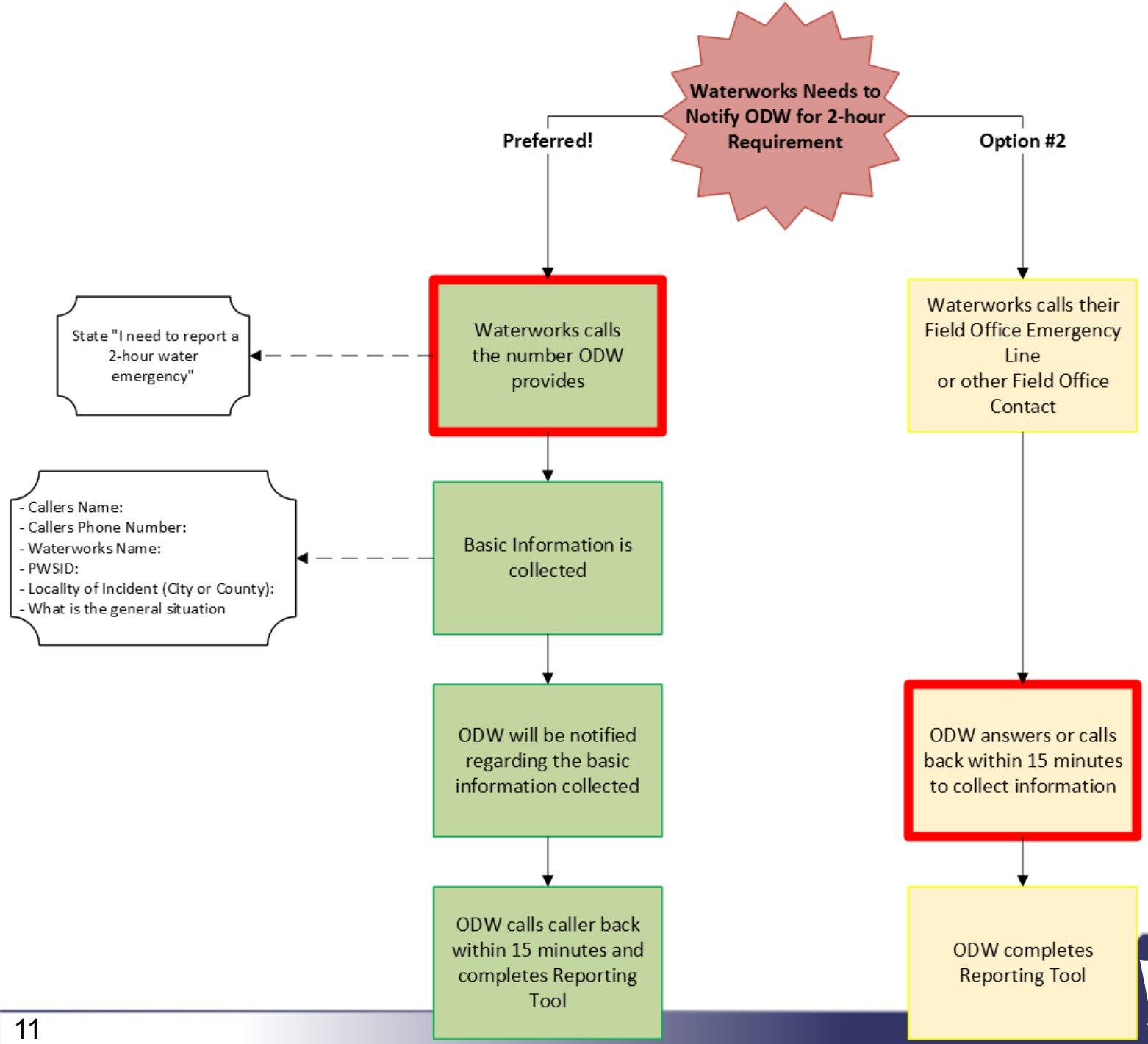


Notifying ODW

- ✓ Alternatively, the utility can call their ODW field office, district engineer, or engineering field director like they do presently.

- ✓ The reporting obligation is NOT met until actual contact is made
  - ✓ Cannot just leave a voicemail, text or email for ODW employee





New Monthly Operating Report Form

- Automated reminder email with link on 1st of each month
- The form is a survey style REDcap form
- Captures:
  - Basic information (9-11 fields)
  - MOR document (any format)
  - Optional additional documents (any format)
- Process developed to support efficient processing and review by ODW staff

MOR Submital Form

Please use this form to submit your Monthly Operating Report. If you are responsible for more than one waterworks, a separate form will need to be completed for each waterworks. You must submit this report by the 10th day of the month following the month of the report to comply with the Virginia Waterworks Regulations.

Contact Information

First Name
* must provide value

Last Name
* must provide value

E-mail

Waterworks Information

PWSID
This is the 7 digit identifier for your waterworks. If you do not know your PWSID, please contact your local ODW field office, or you can look up your PWSID here: https://vadwv.gecsws.com/
* must provide value

Month described by the report
* must provide value

Year described by the report

Did a critical equipment failure or malfunction, or contaminant release occur during the previous month?

- ○ Yes
- ○ No

reset

Did any noncritical waterworks equipment failure or malfunction that could adversely affect water quality, public health, or service continuity occur during the month of the report?

* must provide value

- ○ Yes
- ○ No

reset

Average daily water production for the reported month in gallons per day (gpd)

***If your waterworks has a metering variance (does not meter water production), enter 0 (zero)**

* must provide value

Upload Monthly Operating Report

* must provide value

Upload file

Upload additional document 1 (Optional)

Upload file

Upload additional document 2 (Optional)

Upload file

Upload additional document 3 (Optional)

Upload file

Upload additional document 4 (Optional)

Upload file

VIRGINIA DEPARTMENT OF HEALTH *Environment*

Training and Outreach

- Webinar
  - June 17, 2025 – 10 AM
  - Email/phone calls from ODW FO
  - Email from ODW Training Coordinator
  - Will be recorded and posted to ODW Webpage

- 2 Hour Reporting Requirement – Drinking Water
  (https://www.vdh.virginia.gov/drinking-water/2-hour-reporting-requirement/)

Regulatory Amendments

12VAC5-590-10, Definitions

"Contaminant release," "critical equipment failure or malfunction," "equipment failure," "equipment malfunction," "monthly operating report," "noncritical equipment failure or malfunction," and "office" are in the new statute, and they have been added to the regulations unchanged.

12VAC5-590-570, Operational reporting requirements

Regulatory Amendments

12VAC5-590-570, Operational reporting requirements

New subdivision added to subsection A:

6. An owner of a waterworks that is required to submit a monthly operating report to the office shall include any noncritical equipment failure or malfunction that could adversely affect water quality, public health, or service continuity that occurred during the applicable reporting month and was not resolved by the reporting deadline. For the purposes of this subsection, any noncritical equipment failure or malfunction that is effectively addressed by equipment repair or replacement, alternative equipment use, alternative system operation, or such other response shall be considered resolved.

This MOR language is the same as in the statute.

Regulatory Amendments

Replace subsection B with language from the statute:

Current language:

B. The owner shall report the following incidents within 24 hours to the department:

1. Water pressure below the 20 psi minimum required in the distribution system, including zero or negative pressure. Examples of these events include treatment plant or pump station shutdowns due to equipment failure, power outages, emptying of storage tanks, and draining of the distribution system during fire flow events.
2. Flooding of clearwells.
3. Flooding of groundwater wells.
4. Any other situation that occurs with the waterworks that presents or may present an imminent and substantial threat to public health.

Amended language:

B. The owner of a waterworks shall report any critical equipment failure or malfunction or contaminant release to the Office as soon as practicable but no more than two hours after discovery.

Regulatory Amendments

Other sections of the regulations have 24-hour notification/reporting requirements, but these seem to be unrelated to a “critical equipment failure or malfunction” or “contaminant release” as defined in the statute.

12VAC5-590-430 B 3 d – “If any MPA result indicated the presence of Giardia lamblia or Cryptosporidium..”

12VAC5-590-461 B – “If a classified waterworks or water treatment plant is without the required operator…”

12VAC5-590-530 D – “Turbidity reporting. For a waterworks required to filter for pathogen and turbidity removal…”

12VAC5-590-530 H – “The owner shall report a Tier 1 violation or situation, as described in 12VAC5-590-540 A 1…”

12VAC5-590-531 G – “The owner shall report the following incidents… 1) a waterborne disease outbreak that is potentially attributable to that waterworks; 2) chlorine residual of below 0.2 mg/L in the water entering the distribution system…”

VDH Office of Drinking Water
Policy on Mandatory Reporting of Contaminant Releases and Equipment Failures and Malfunctions
Guidance Document ODW-2025-02

I. Background

The Code of Virginia § 32.1-174.5 (Code) requires the owner of a waterworks (Owner) to notify the Virginia Department of Health (VDH), Office of Drinking Water (ODW) as soon as practicable, and within no more than two hours of discovery, of a critical equipment failure, critical equipment malfunction, or contaminant release. Code § 32.1-174.5 also requires an Owner of a waterworks that is required to submit a monthly operating report (MOR) to ODW to include in such report any noncritical equipment failure or noncritical equipment malfunction "that could adversely affect water quality, public health, or service continuity that occurred during the applicable reporting month and was not resolved by the reporting deadline."

The statute creates only a requirement to report certain events to ODW, either within two hours of discovery or in an MOR depending on the facts of the situations.

II. Purpose

This Policy on Mandatory Reporting of Contaminant Releases and Equipment Failures and Malfunctions (Policy) establishes how ODW will apply and enforce Code § 32.1-174.5.

III. VDH's Application of Defined Terms

A. Overview

Code § 32.1-174.5.A defines the following terms: contaminant release, critical equipment failure or malfunction, equipment failure, equipment malfunction, monthly operating report, and noncritical equipment failure or malfunction.

The two-hour reporting requirement applies to any "contaminant release."

If an "equipment failure" or "equipment malfunction" is a "critical equipment failure or malfunction" then the Owner is required to report the event to ODW within two hours of discovery. If an "equipment failure" or "equipment malfunction" is not a "critical equipment failure or malfunction" then it is a "noncritical equipment failure or malfunction." A noncritical equipment failure or malfunction may need to be reported in an MOR. Consequently, it is necessary to address what is an "equipment failure" and what is an "equipment malfunction" before addressing what is a "critical equipment failure or malfunction."

B. Equipment Failure or Equipment Malfunction

i. Equipment Failure

"'Equipment failure' means an unplanned condition when the equipment cannot perform or is unable to perform as designed because of a problem with such equipment. 'Equipment failure' does not mean a planned (i) removal from service, (ii) repair, or (iii) maintenance." Code § 32.1-174.5.A.

VDH considers "equipment" to include mechanical, electrical, and control devices integral to the production or provision of pure water.

Some examples of "equipment failure" are:

Mechanical:

- Intake structure failure
- Pump failure
- Pipe break
- Chemical feed system failure (disinfectant, oxidizer, coagulant)
- Well collapse
- Tank rupture
- Mixer failure
- Blower failure
- Treatment unit failure

Electrical:

- Transformer failure
- Switch failure
- Fuse failure
- Motor failure
- UV system failure
- Power supply (internal to waterworks) failure
- Generator failure

Control:

- Programmable Logic Controller (PLC) failure
- Supervisory Control and Data Acquisition (SCADA) failure
- Computer or software failure
- Control panel failure
- Sensor or instrument failure

ii. Equipment malfunction

"'Equipment malfunction' means an unplanned condition during which the equipment cannot perform or is unable to perform as designed due to a problem originating from outside the

waterworks rather than a problem associated or originating with the equipment itself, including an issue with third-party provided gas or electric power feeds or a cyberattack." Code § 32.1-174.5.A.

Some examples of an "equipment malfunction" are:

- Loss of commercial power
- Loss of SCADA communications
- Cyberattack
- Natural, man-made including terrorism, and technological disasters that impact the functionality of the equipment
- No chemical due to supply chain issues or a delivery failure
- A lack of resources that results in equipment not being able to perform at all or as designed, such as imminent depletion of chemical inventories or disruption in the supply of components for repair/replacement

C. Critical Equipment Failure or Malfunction

An "equipment failure" or an "equipment malfunction" does not trigger the two-hour reporting requirement unless it is a "critical equipment failure or malfunction."

"'Critical equipment failure or malfunction' means any equipment failure or malfunction that has significant potential for serious adverse effects on human health as a result of short-term exposure or to cause a widespread disruption of water service." Code § 32.1-174.5.A.

If there is an "equipment failure" or "equipment malfunction" as set forth above, it becomes a "critical equipment failure or malfunction" if the equipment failure or equipment malfunction creates a significant potential for serious adverse effects on human health as a result of short-term exposure or there is a widespread disruption of water service. Certain failures may be "critical" if they were to actually persist for an extended period but are "noncritical" when they are limited in time. One example is a circumstance that a waterworks operator would consider a brief operational "blip." Another is an event that is resolved before the two-hour reporting deadline such that the event never actually becomes critical (e.g., a power supply failure that is restored). Waterworks personnel should exercise sound judgment in determining whether the two-hour reporting requirement applies to any particular event.

i. Significant Potential for Serious Adverse Effects on Human Health as a Result of Short-Term Exposure

A "significant potential for serious adverse effects on human health as a result of short-term exposure" means it is reasonably foreseeable that the equipment failure or equipment malfunction may result in an acute or immediate serious health impact from exposure to the water. Some examples of circumstances that may result from a critical equipment failure or malfunction and that would pose a significant potential for serious adverse effects on human health as a result of short-term exposure are:

- Groundwater under the direct influence of surface water (GUDI) and surface water sources with inadequate filtration or disinfection treatment.
- Groundwater source with inadequate 4-log inactivation of virus treatment.
- Known or potential contamination from a water line break.
- Failure of nitrate removal treatment for a water source with more than 10 mg/L of nitrate.
- Backflow of contaminants due to a cross connection.
- Failure or significant interruption in any key water treatment process for surface water or GUDI treatment. These include pumping, coagulation, flocculation, sedimentation, filtration, and disinfection.
- A single exceedance of the maximum allowable turbidity limit of one NTU (conventional, membrane, bag and cartridge filtration technologies) or five NTU (slow sand or diatomaceous earth filtration technologies) at the combined filter effluent (CFE) tape. (See 12VAC5-590-530.D of the Waterworks Regulations for the requirement for reporting such events to VDH regardless of whether it is caused by a critical equipment failure or malfunction)
- Entry point chlorine disinfectant level of less than 0.2 mg/L for more than four hours. (See 12VAC5-590-531.G.2 of the Waterworks Regulations for the requirement to report to VDH regardless of whether it is caused by a critical equipment failure or malfunction)
- Flooding of clearwells or groundwater wells with nonpotable water.
- Failure to maintain the minimum entry point disinfectant residual for more than four hours for a groundwater system required to provide 4-log treatment of viruses. (See 12VAC5-590-421.C.1 of the Waterworks Regulations)
- A waterborne disease outbreak that is potentially attributable to the waterworks. (See 12VAC5-590-531.G.1 of the Waterworks Regulations for the requirement to report to VDH waterborne outbreaks potentially attributable to a waterworks regardless of whether it is caused by a critical equipment failure or malfunction)

ii. Widespread Disruption of Water Service

A "widespread disruption of water service" is a loss of water service affecting any one of the following: an entire pressure zone, the greater of 50 or more service connections or 50% or more of the waterworks' service connections, or a congregate care living facility (for example, a hospital, long-term care facility, correctional center, or prison). A "loss of water service" means zero flow or nearly zero flow at the customer's tap caused by zero or low pressure in the water distribution system.

A "significant potential… to cause a widespread disruption of water service," means it is reasonably foreseeable that the equipment failure or equipment malfunction may result in a loss of service that qualifies as a "widespread disruption of water service," as defined above.

"Significant potential" does not mean a situation where the waterworks effectively addresses an identified equipment failure or equipment malfunction by timely repair or replacement, alternative equipment use, alternative system operation, or other similar response

that avoids the potential for any serious adverse effect on human health or widespread disruption of water service.

D. Contaminant Release

Unlike an "equipment failure" or an "equipment malfunction," which only fall within the two-hour reporting requirement if it is a "critical equipment failure or malfunction," any "contaminant release" is subject to the two-hour reporting requirement.

"'Contaminant release' means an unplanned or uncontrolled release by a waterworks of a chemical contaminant or petroleum or synthetic oil into the water that is treated by or distributed from the waterworks to customers. 'Contaminant release' includes any such release at treatment facilities and raw or finished water pump stations." Code § 32.1-174.5.A.

A "chemical contaminant" is any objectionable or hazardous substance. The substance does not have to be a regulated chemical or cause harm to qualify as a "chemical contaminant." Simply being "objectionable," such as producing an unusual or unpleasant taste or odor, is sufficient to qualify as a "chemical contaminant." Whether a chemical contaminant is "objectionable" is somewhat subjective and waterworks personnel will need to apply their professional judgment to determine whether the standard is met under the totality of the circumstances.

"Chemical contaminant" also includes materials that become hazardous or objectionable due to their use or a change in their composition. For instance, if food grade mineral oil is burned and becomes an objectionable substance that is the subject of an unplanned or uncontrolled release into the water, the burned food grade mineral oil is a "chemical contaminant."

A "contaminant release" includes release of a chemical contaminant, petroleum, or synthetic oil by the waterworks that occurs inside a water treatment plant or pump station or in the distribution system, such as a backflow event. A "contaminant release" also occurs when a chemical contaminant is in the source water and passes through the treatment in the finished water, even if some of the contaminant is removed during the treatment process.

IV. Discovery and Reporting

"The owner of a waterworks shall report any critical equipment failure or malfunction or contaminant release to the Office [of Drinking Water] as soon as practicable but no more than two hours after discovery." Code § 32.1-174.5.B.

A. Discovery

Discovery of the reportable event occurs when waterworks personnel identify a "contaminant release" or "critical equipment failure of malfunction." Waterworks personnel should use diligence and sound judgment when determining whether a reportable event has occurred. If waterworks personnel are uncertain whether an equipment failure or equipment malfunction is a "critical equipment failure or malfunction" or if an event is a "contaminant

release" requiring two-hour reporting under the statute, waterworks personnel are encouraged to err on the side of reporting the event.

B. Reporting to ODW Within Two Hours

An Owner is required to "report any critical equipment failure or malfunction or contaminant release" to ODW "as soon as practicable but no more than two hours after discovery." Code § 32.1-174.5.B.

An Owner satisfies the statute's reporting obligation by contacting ODW's preferred telephone number for receipt of two-hour reports, calling the relevant ODW field office emergency line or speaking with a field office contact. waterworks personnel contacting the local ODW field office by telephone and speaking with someone to report the incident, including providing the caller's name, telephone number, the name of the waterworks, the Public Water System Identification number for the waterworks, and the location of the incident being reported. ODW staff, either during that call or during a follow-up call shortly thereafter, will ask the caller to identify the nature of the critical equipment failure or malfunction or contaminant release, any known impacts on the quality or reliability of the system's drinking water, and whether a routine water advisory has been issued or is needed. Leaving a voicemail or sending an email or text message to ODW staff does not meet the statute's reporting obligations.

In addition to reporting to ODW as required by the statute, ODW recommends that a wholesale waterworks notify their consecutive waterworks of a critical equipment failure or malfunction or contaminant release if the consecutive waterworks has the potential to be affected given the nature and location of the event. Consecutive waterworks that are informed by a wholesale waterworks of a critical equipment failure or malfunction or contaminant release should notify ODW of the event so ODW is aware that the consecutive waterworks has been informed of the situation. This guidance does not modify any duties of a wholesale waterworks to provide certain notifications to consecutive waterworks as required by the Waterworks Regulations (see 12VAC5-590-379.B.1.d, 12VAC5-590-540, and 12VAC5-590-545 of the Waterworks Regulations).

V. Monthly Operating Report Requirement

"'Noncritical equipment failure or malfunction' means an equipment failure or malfunction that is not a critical equipment failure or malfunction, regardless of whether such anomaly is noticeable to customers of the waterworks." Code § 32.1-174.5.A.

If a waterworks that is required to submit an MOR experiences a noncritical equipment failure or malfunction, then the Owner must report the event in the applicable reporting month's MOR if the "noncritical equipment failure or malfunction…could adversely affect water quality, public health, or service continuity…and [the noncritical equipment failure or malfunction] was not resolved by the reporting deadline." Code § 32.1-174.5.C. If the "noncritical equipment failure or malfunction…is effectively addressed by equipment repair or replacement, alternative equipment use, alternative systems operation, or such other response," then the noncritical equipment failure or malfunction "shall be considered resolved." Code § 32.1-174.5.C.

12VAC5-590-570.A.2 of the Waterworks Regulations states, in part, "A classified waterworks using conventional filtration shall report using the [MOR] form approved by [VDH]." In order to support timely responses to noncritical equipment failures and malfunctions, ODW has developed a web-based form to serve as the approved form for submission of MORs. ODW will place a link to this form on the ODW webpage, and will email it monthly to the administrative and designated operator contact of each waterworks required to submit an MOR.

VI. Compliance and Enforcement

If an Owner fails to timely notify ODW of a reportable event pursuant to Code § 32.1-174.5, then ODW can issue a Notice of Alleged Violation (NOAV) for failing to comply with the statute.

A. Failure to Timely Report a Critical Equipment Failure or Malfunction or Contaminant Release

An NOAV due to an Owner's failure to timely report a critical equipment failure or malfunction or contaminant release will include requested corrective actions based upon the specific events surrounding the failure to timely report the incident. The requested corrective actions may vary depending on the nature of the event, how late waterworks staff reported the event, and if it was reported at all. Corrective actions for failure to timely report an incident within two hours of discovery as required could include:

- Develop a Standard Operating Procedure (SOP) for identifying, evaluating, internally communicating, and reporting to ODW critical equipment failures or malfunctions and contaminant releases, and train staff on the SOP. The SOP should identify a waterworks employee who is responsible for reporting the event to ODW and make clear how ODW is to be notified of the reportable event. The SOP should be easily accessible to all waterworks staff.
- Annually review and update the SOP.
- Annually train staff regarding the SOP.
- Attend training regarding identifying possible urgent events such as critical equipment failures or malfunctions or contaminant releases.

Repeated failure to comply with the two-hour reporting requirement may result in ODW elevating the repeated noncompliance to formal enforcement.

ODW's compliance and enforcement efforts related to a violation of Code § 32.1-174.5 as set forth above do not account for any associated violations of the Waterworks Regulations, such as violations that led to the critical equipment failure or malfunction or contaminant release occurring. Surrounding events may cause ODW to pursue formal enforcement in response to a single event that includes noncompliance with the two-hour reporting requirement to protect the public health. This Policy is not intended to imply that ODW is limited, other than by the Code and the Waterworks Regulations, in the actions it may take in response to a violation.

B. Failure to Disclose a Noncritical Equipment Failure or Malfunction in the MOR

An NOAV due to an Owner's failure to disclose a noncritical equipment failure or malfunction in the appropriate MOR could include a corrective action to provide an updated MOR within a certain number of days. Repeated failures to report an unresolved noncritical equipment failure or malfunction in the appropriate MOR may result in additional requested corrective actions and in ODW's pursuit of formal enforcement.

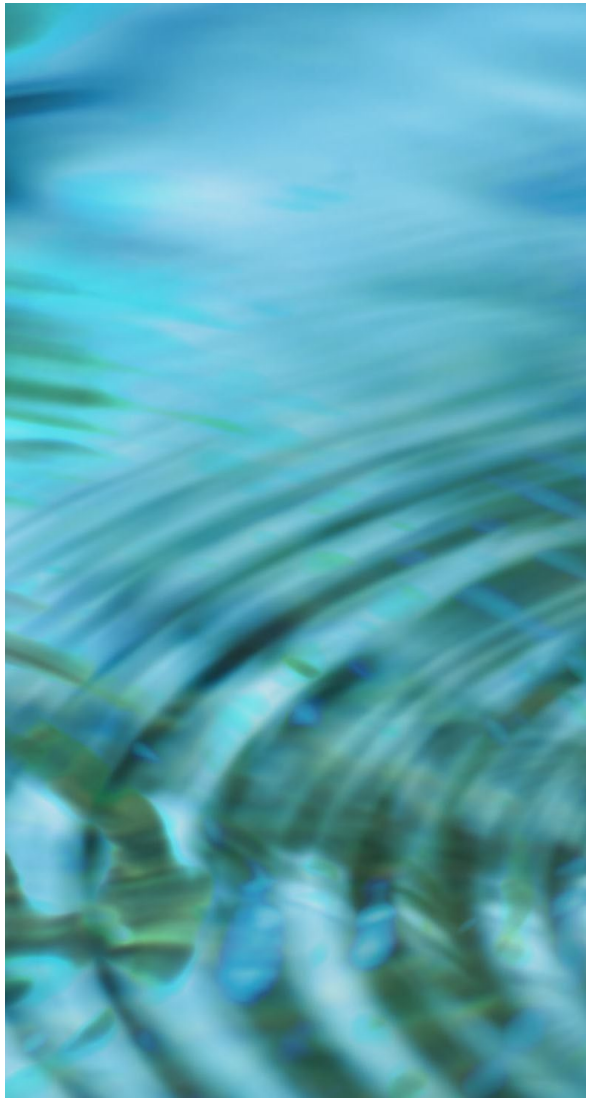
C. Failure to Complete Requested Corrective Actions

ODW will treat an Owner's failure to complete corrective actions identified in an NOAV within the designated timeframe the same as any other instance of failure to take requested actions set forth in an NOAV, including pursuing formal enforcement as needed to achieve compliance and protect public health.

Draft ODW 5-Year Strategic Plan

Quarterly WAC Meeting
June 11, 2025

Methodology



1. Re-visit ODW Mission
2. Individual SWOT analyses
3. Discuss SWOTs – identify recurrent themes
4. Draft ODW 5-year Strategic Plan
5. Compare with Agency Strategic Plan.
6. Share plan with staff and stakeholders; ***solicit feedback***.
7. Revisit Draft Plan- discuss feedback
8. Finalize plan, establish performance measures, form task teams
9. Routinely evaluate performance, refine plan and processes

ODW Mission

Protect public health by ensuring a trusted, safe, and reliable drinking water supply in Virginia.

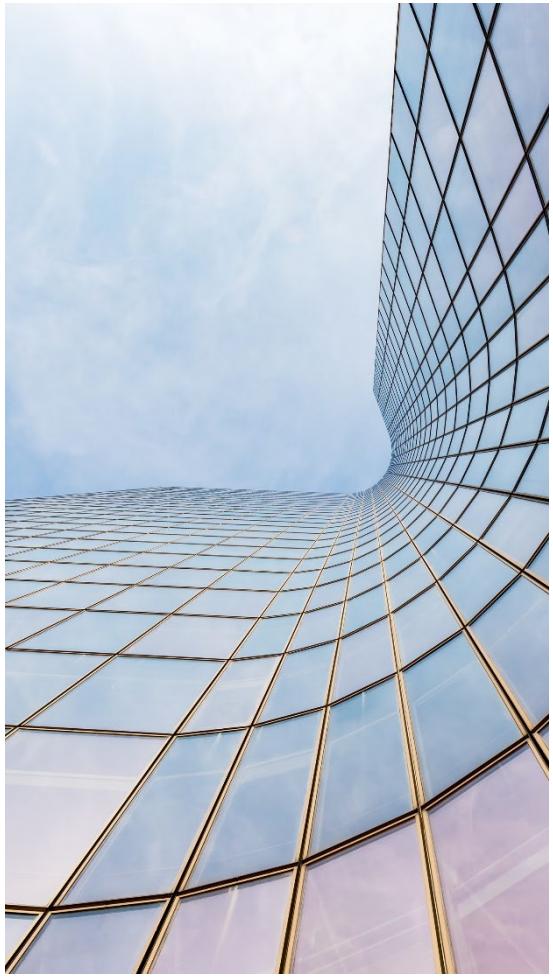
Overview : *Draft* ODW 5-Year Plan

1. Maintain a Competent and Valued Workforce

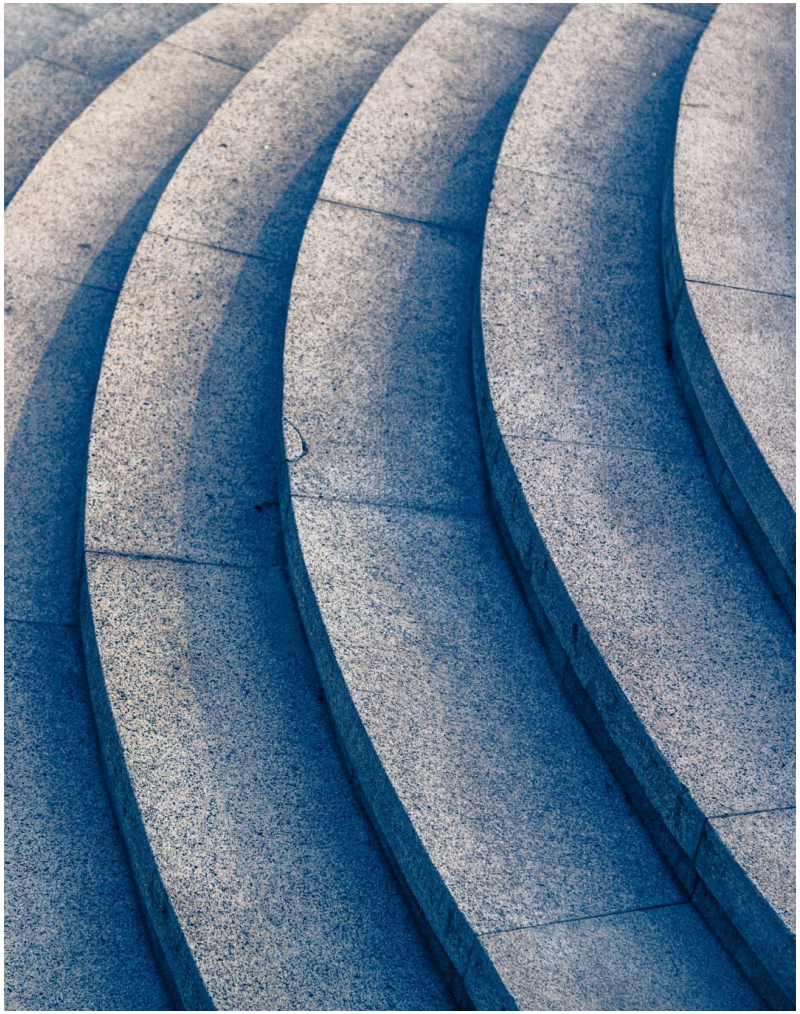
2. Provide Internal Systems that support consistent application of the Waterworks Regulations.

3. Be a trusted source of Drinking Water information through effective communication

4. Improve waterworks resilience through targeted technical assistance, funding, and training opportunities.



Next Steps



1. Share plan with stakeholders & solicit feedback.

2. Discuss feedback and incorporate into final plan.

3. Finalize plan, establish performance measures, form task teams

4. Routinely evaluate performance, refine plan and processes

ODW 5 YEAR STRATEGIC PLAN DRAFT

Mission: Protect public health by ensuring a trusted, safe, and reliable drinking water supply in Virginia.

We will accomplish this by:

1. Ensure compliance with the Waterworks Regulations
2. Provide technical assistance and guidance/expertise to waterworks
3. Fund projects that enable sustainable operations of waterworks
4. Review and approve waterworks operations and construction projects
5. Collaborate with federal, state, and local agencies
6. Advocate for Virginia's waterworks, customers, and stakeholders
7. Function effectively and efficiently

ODW's 5-year strategic plan to meet the mission is as follows:

1.0 Maintain a Competent and Valued Workforce

- 1.1 Support the Governor's effort to close hiring actions within 60 days of posting
- 1.2 Address funding & budgeting issues by creating and implementing a Budget Development Manual
- 1.3 Review and implement organizational changes in response to ODW needs
- 1.4 Continue implementing ODW career ladder development
- 1.5 Continue supporting the ODW Recognition Committee

2.0 Provide Internal Systems that support consistent application of the *Waterworks Regulations*

- **2.1 Improve commitment to regulatory consistency through a Quality Management Program across ODW field offices and divisions.**
  - 2.1.1 Update and implement standard onboarding procedures
  - 2.1.2 Establish and communicate a clear set of requirements and goals to work units
  - 2.1.3 Establish processes for internal audits of sanitary surveys, SDWA triggered assessments, Monthly Operation Reports, and Notices of Alleged Violation to ensure consistency across ODW
  - 2.1.4 Ensure staff have the resources and support needed to do their jobs.
- **2.2 Implement effective Cross Training and Mentoring**
  - 2.2.1 Improve staff knowledge and understanding of the Regulations through training on regulations and enforcement for consistency across the state.
  - 2.2.2 Provide regular staff training on best practices to address regulatory issues with waterworks
- **2.3 Utilize the best available technology for consistent records and information sharing**
  - 2.3.1 Ensuring that ODW has the necessary resources to support administrative functions.

3.0 Be a trusted source of Drinking Water information through effective communication

3.1 Enhance Communication

3.1.1 Regularly update organizational charts and contact information internally and on the website.

3.1.2 Implement staff training on professional communication

3.1.3 Improve collaboration and foster professional relationships across ODW and VDH by encouraging cross-locational, cross-divisional, and inter-office communication.

3.1.4 Establish internal time-based goals for responses to customers (Technical Assistance/Training Requests, WBOP/AMP review, Permitting, Plan Review, Data Requests, etc.)

3.1.5 Continue providing a means for staff to share concerns and ask questions, and ensure they will receive a response.

3.2 Improve Branding and Messaging

3.2.1 Establish an ODW monthly report with highlights from the field offices and central office divisions.

3.2.2 Continually update the ODW Website utilizing VDH Branding Guidelines focusing on providing content and material to customers in a way that is easily navigable and understandable.

3.2.3 Develop and deploy an ODW Communications Policy to provide consistent branding across all ODW communications.

4.0 Improve waterworks resilience through targeted technical assistance, funding, and training opportunities.

4.1 Review Technical, Managerial, and Financial questions from Sanitary Surveys on a regular basis to identify systems needing targeted assistance.

4.2 Encourage proactive operations and maintenance of waterworks through the use of Asset Management Plans and Waterworks Business Operations Plans.

4.3 Enhance collaboration between ODW and other state agencies and non-governmental organizations that assist waterworks with technical, managerial, and financial topics.

4.4 Document and report on the importance of infrastructure funding as a means of building waterworks resilience.

WAC Meeting PFAS Updates

June 11, 2025

Bailey Davis
Chief of Field Operations

Office of Drinking Water
Safe Drinking Water for a Healthy Virginia

EPA Announces Actions to Combat PFAS 4/28/25

Strengthening the Science

- Designate an agency lead for PFAS
- Develop improved testing methods to enhance detection and mitigation strategies.
- Identify and address information gaps where certain PFAS compounds cannot be measured or controlled.

Building Partnerships

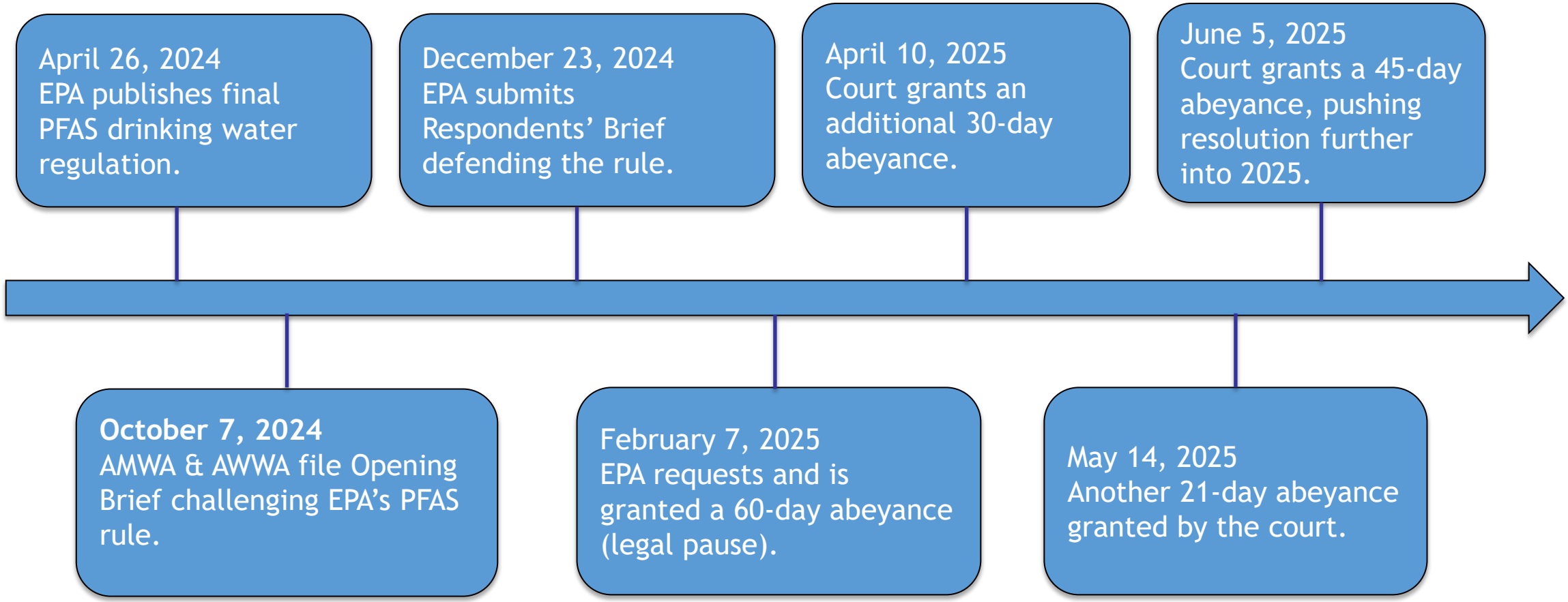
- Advance remediation and cleanup efforts for drinking water supplies impacted by PFAS contamination.

EPA Announces Actions to Combat PFAS 4/28/25

Fulfilling Statutory Obligations & Enhancing Communication

- Develop effluent limitations guidelines (ELGs) for PFAS manufacturers and metal finishers to reduce discharges.
- Address compliance challenges related to NPDW regulations for PFAS.
- Use SDWA authority to investigate and mitigate immediate threats.
- Establish a liability framework ensuring polluters pay while protecting passive receivers.

PFAS Litigation Timeline



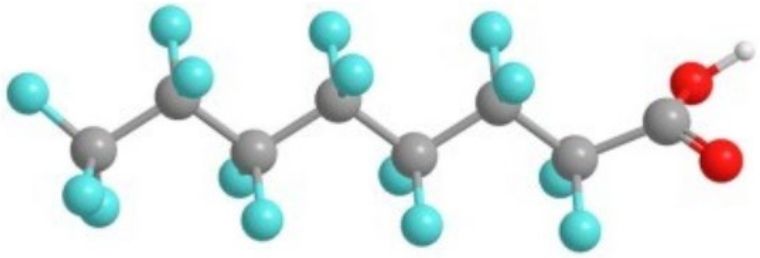
EPA Announces Changes in the PFAS Rule 5/14/25

What has changed or is being added?

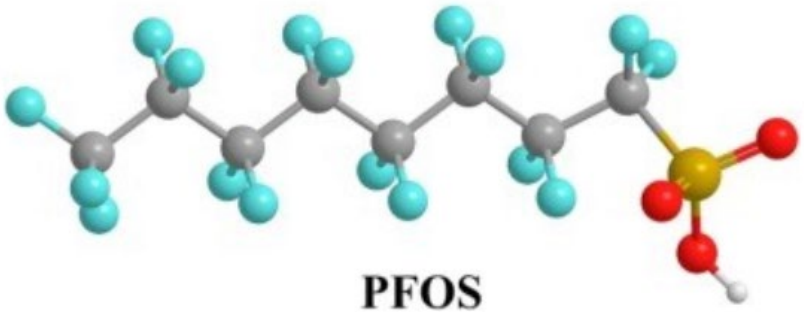
- EPA intends to **rescind** regulations for PFHxS, PFNA, HFPO-DA (Gen-X), and the Hazard Index which includes PFBS
- Extended Compliance Deadline – **From 2029 to 2031**
- Establishment of a federal exemption framework
- EPA will launch PFAS OUTreach initiative (PFAS OUT) to support water systems in small and rural communities
- Polluter accountability measures
- Enhancement of the Water Technical Assistance (WaterTA) program

EPA Announces Changes in the PFAS Rule 5/14/25

What remains the same?



PFOA



PFOS

- **PFOS and PFOA MCLS of 4 ppt**
  - Trigger levels of 2ppt
- **Initial monitoring required to be submitted by 4/27/27**
  - Compliance monitoring frequency and schedule
  - Public Notice and CCR reporting requirements

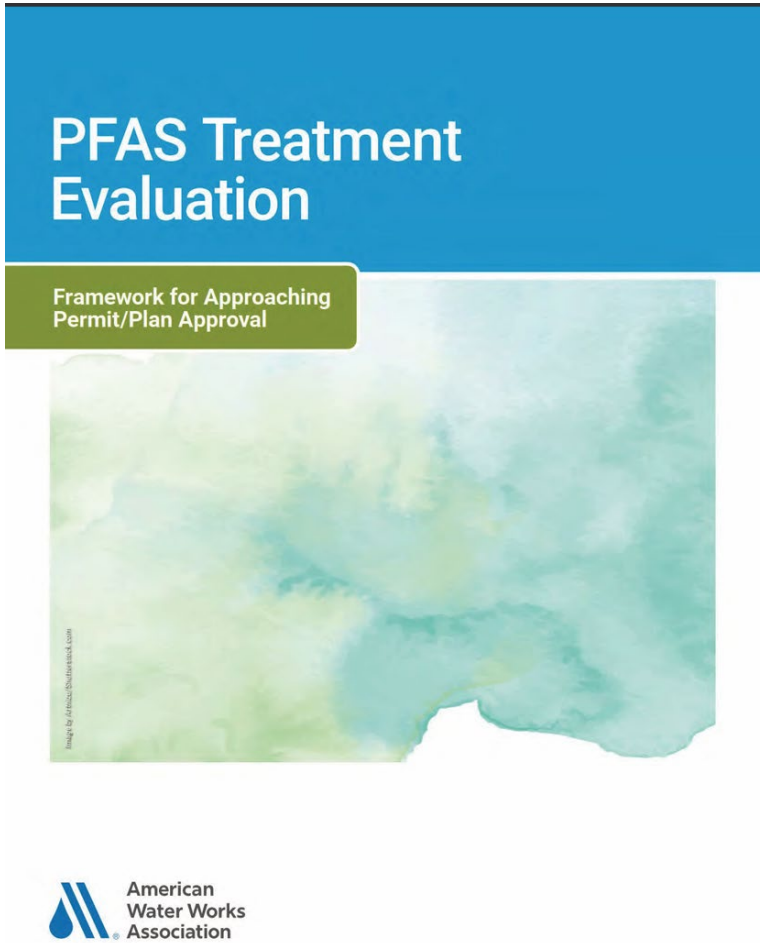
EPA Announces Changes in the PFAS Rule 5/14/2025

- EPA plans to develop rulemaking to enact these changes with a proposed rule this fall and a finalized rule in Spring 2026.
- EPA encourages states seeking primacy for implementing the PFAS drinking water regulation to request additional time from EPA to develop their applications.
  - This will impact VDH ODW's primacy package submission timeline and regulation update plan
  - ODW is exploring options to incorporate the Federal Rule by reference in the Virginia Regulations instead of "quote for quote" additions.

Report on Treatment Evaluation Framework

https://www.asdwa.org/wp-content/uploads/2025/04/PFAS-Treatment-Evaluation-Framework-for-Approaching-Permit-Plan-Approval-L3.pdf

- Developed by AWWA and ASDWA
- This report provides water systems managers, operators, and regulators:
  - A Comprehensive Evaluation Framework for PFAS Treatment
  - Regulatory Compliance and Tight Timelines
  - Operational and Design Considerations
  - Data-Driven Decision Making



Initial Monitoring – Due by April 27, 2027

Surface Water Systems
serving all population sizes

- Quarterly within 12-month period
- Samples collected 2 to 4 months apart.

Groundwater Systems
serving > 10,000 customers

- Quarterly within 12-month period
- Samples collected 2 to 4 months apart.

Groundwater Systems
serving ≤ 10,000 customers

- Twice within 12-month period
- Samples collected 5 to 7 months apart.

States can allow systems to use previously collected monitoring data:

- EPA Methods 533 or 537.1
- As part of UCMR 5
- State monitoring
- Data to be reviewed and approved on a case-by-case basis

VDH has developed guidance for laboratory reporting through CMDP
Guidance will be updated and posted based on recent EPA decision

EPA guidance on previously collected data
Memorandum received November 21, 2024

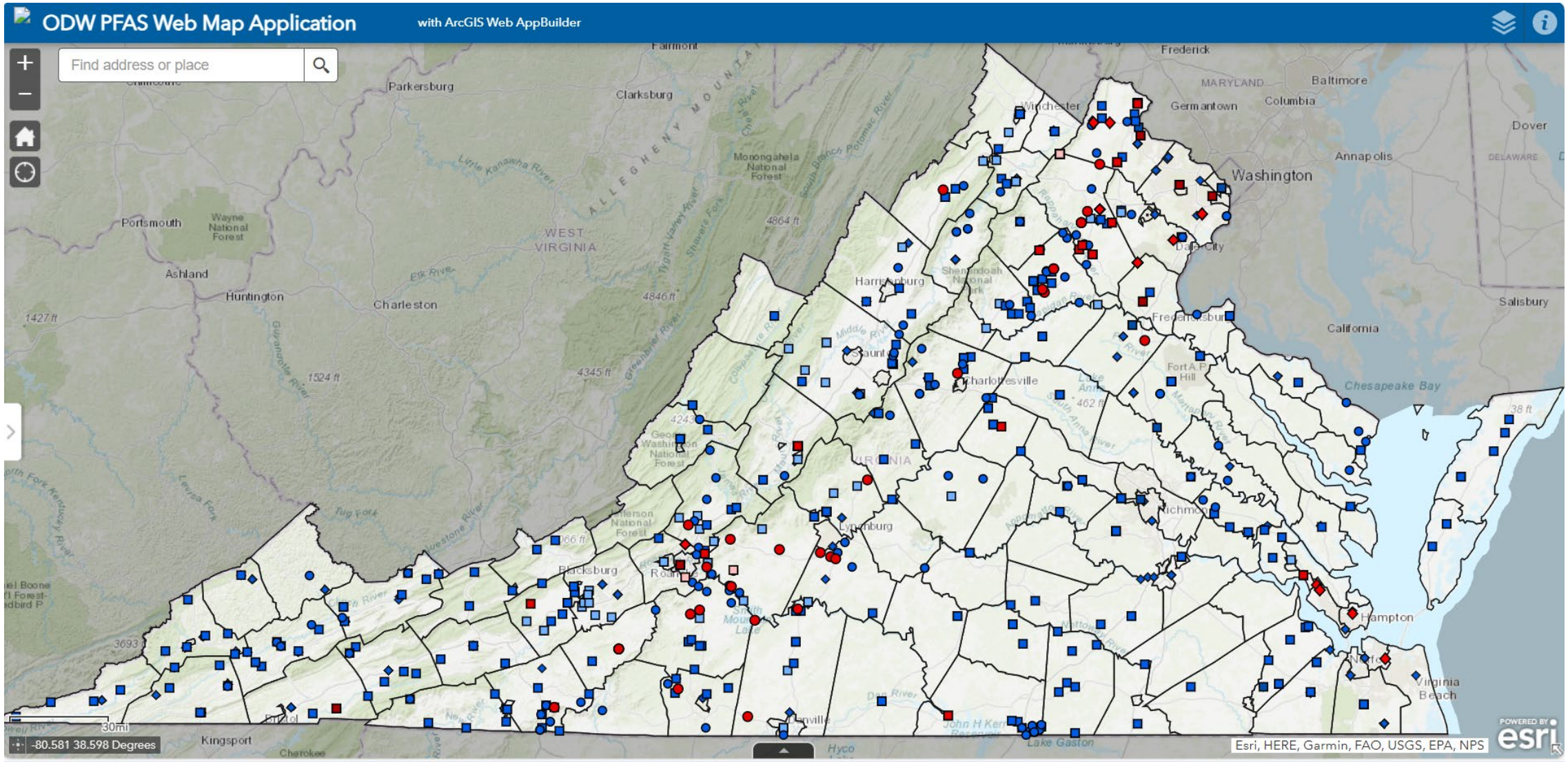
UCMR 5 monitoring data

- UCMR laboratories only report values at or above UCMR 5 MRLs to the EPA
- EPA working with EPA-contracted laboratories to reprocess data for small systems (10,000 or fewer customers)
- Large systems will need to work with laboratories to reprocess data for use for initial monitoring

Data reporting

- ODW encourages waterworks to produce a plan to meet initial monitoring requirements that will allow for repeat data collection if necessary
- ODW will be posting information on submission of initial monitoring data in early 2025.

PFAS Data at www.vdh.virginia.gov/drinking-water/pfas



ODW PFAS Study Summary

Analyte	Criteria parts per trillion (ppt)	Phase 1 2021	Phase 2.1 2022	Phase 2.2 2023	Phase 3 2024-2025	Total**
PFOA	(above 4.0)	4 systems	None	5 systems	22 systems	30 systems
PFOS	(above 4.0)	5 systems	3 systems	9 systems	13 systems	25 systems
GenX	(above 10)*	1 system	1 system	None	None	1 system
PFBS	(above 2000)*	None	None	None	None	None
PFNA	(above 10)*	None	None	None	None	None
PFHxS	(above 10)*	None	None	1 system	3 systems	4 systems
Hazard Index (above 1; see above*)		None	None	1 system	1 system	2 systems
Waterworks to Address PFAS		7	4	9	26	58
Waterworks Sampled		45	48	221	228	476
Population Served		5,226,000	557,000	3,934,000	71,680	5,984,944

** Total includes some systems that were sampled in both Phase 1 and Phase 2; these systems were counted once in the total

Questions?

For up-to-date information go to:
https://www.vdh.virginia.gov/drinking-water/pfas/

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Compliance, Enforcement and Policy (CEP) Update

Waterworks Advisory Committee
June 11, 2025

Grant E. Kronenberg
ODW, Director of the Division of
Compliance, Enforcement & Policy

CEP Update - Statistics

- Second Quarter ETT Report from EPA.
- Six systems considered to be a “serious violator” by EPA on account of their ETT score.
- ETT lags behind current data by three to six months.
- Of the six serious violators, five are back in full compliance. The sixth is currently under a consent order and ODW has sent a proposed superseding consent order to address additional violations.

CEP Update - Statistics

- ETTA Report - “real-time” enforcement data
- Five systems would qualify as a “serious violator”
- Next enforcement step before a consent order is typically a warning letter.
- Two of the five are currently under a consent order. Superseding consent order potential next step.

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