

EPA Drinking Water News

Patti Kay Wisniewski

US EPA Region 3

SE PA AWWA/WWOAP

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Free Onsite Cybersecurity Assessment and Technical Assistance

Cybersecurity is a broad term that refers to the security of computer network infrastructure and data. A cyber attack is an attempt to undermine or compromise the function of a computer network or system, or an attempt to track the online movements of individuals without their permission.

What is the onsite assessment and technical assistance?

With the U.S. Environmental Protection Agency, Horsley Witten Group (HWG) is offering free, confidential, onsite cybersecurity assessments and technical assistance to interested water and wastewater utilities. The assessment consists of a questionnaire completed on-site with HWG staff, and the technical assistance consists of developing a cyber action plan based on the results of your utility's assessment focused on best practices to prepare for, respond to, and recover from a cyber incident. Adoption of these practices can reduce the likelihood that a cyber attack will be successful and allow the utility to recover from any cyber attacks faster and at a lower cost.

What are the expected outcomes?

All individual utility information gathered during the assessment will be protected and remain confidential. Trends in the anonymized, aggregated data will be shared with other utilities and agencies so that lessons learned from the assessments may benefit all.

Participating utilities can expect to receive a straightforward overview of their vulnerabilities and suggested best practices to reduce risks to their business enterprise, SCADA, and communications systems. Additionally, the utility will develop their cyber action plan with HWG and work to implement any recommended best practices.

What does the utility need to prepare before the onsite assessment and technical assistance?

The assessment will require input from management, IT, operations/control staff and engineers as appropriate. The utility will also need to compile and provide any existing system documentation/diagrams, policies, and procedures.

Is there any follow-up?

Yes, HWG will contact the utility on two separate occasions after the development of the cyber action plan to gauge progress and see if additional assistance is required.

To register your utility, please visit:

[https://horsleywitten.com/
cybersecurityutilities](https://horsleywitten.com/cybersecurityutilities)

For more information, contact:

Gemma Kite at 508-833-6600

EPA New or Revised Regulations

➤ PFOS & PFOA MCLs

P **March 29, 2023**

F Fall 2023

E **Fall 2026**

➤ Revised CCR Rule

P **April 5, 2023**

F by March 15, 2024

E **April 2025 ?**

➤ LCR Revisions

P November 13, 2019

F **June 2021**

E **October 16, 2024**

➤ LCR Improvements

P **November 2023 (at OMB)**

F by October 2024

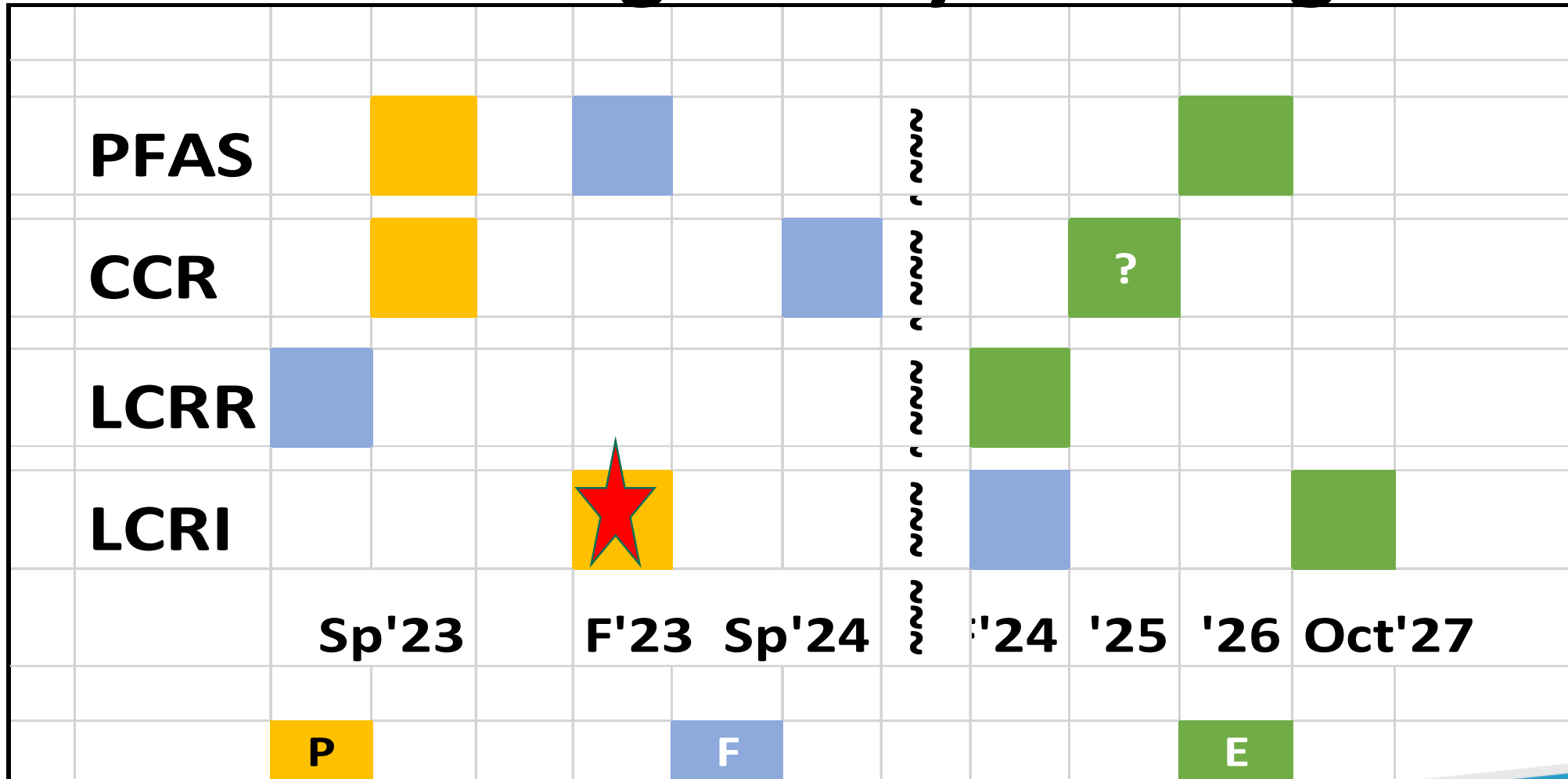
E **October 2027**

P = Proposed

F = Final

E = Effective

Timeline for Regulatory Promulgation



PFAS Proposed to be Regulated

- In March 2021, EPA issued a final regulatory determination to regulate perfluorooctanoic acid (**PFOA**) and perfluorooctane sulfonic acid (**PFOS**)
- In the *April 2023 Proposal*, EPA is issuing a preliminary regulatory determination to regulate perfluorohexane sulfonic acid (**PFHxS**), hexafluoropropylene oxide dimer acid (**HFPO-DA**) and its ammonium salt (also known as a **GenX** chemicals), perfluorononanoic acid (**PFNA**), and perfluorobutane sulfonic acid (**PFBS**), and **mixtures of these PFAS as contaminants**

EPA's Proposed Action for the PFAS NPDWR

Compound	Proposed MCLG	Proposed MCL (enforceable levels)
PFOA	0 ppt*	4.0 ppt*
PFOS	0 ppt*	4.0 ppt*
PFNA		
PFHxS	1.0 (unitless)	1.0 (unitless)
PFBS	Hazard Index	Hazard Index
HFPO-DA (commonly referred to as GenX Chemicals)		

The Hazard Index is a tool used to evaluate potential health risks from exposure to chemical mixtures.

*ppt = parts per trillion (also expressed as ng/L)

How do I calculate the Hazard Index?

The Hazard Index (HI) is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the highest level determined not to have risk of health effects.

Step 1. Divide the measured concentration of Gen X by the health-based value of 10 ppt

Step 2. Divide the measured concentration of PFBS by the health-based value of 2000 ppt

Step 3. Divide the measured concentration of PFNA by the health-based value of 10 ppt

Step 4. Divide the measured concentration of PFHxS by the health-based value of 9 ppt

Step 5. Add the ratios from steps 1, 2, 3 and 4 together

Equation

$$\text{Hazard Index} = \left(\frac{[\text{GenX}_{\text{water}}]}{[10 \text{ ppt}]} \right) + \left(\frac{[\text{PFBS}_{\text{water}}]}{[2000 \text{ ppt}]} \right) + \left(\frac{[\text{PFNA}_{\text{water}}]}{[10 \text{ ppt}]} \right) + \left(\frac{[\text{PFHxS}_{\text{water}}]}{[9.0 \text{ ppt}]} \right)$$

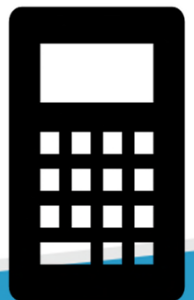
How do I calculate the Hazard Index?

(continued)

Step 6. To determine HI compliance, repeat steps 1-5 for **each sample** collected in the past year and **calculate the average HI** for all the samples taken in the past year.

Step 7. If the **running annual average HI greater than 1.0**, it is a violation of the proposed HI MCL

EPA is creating a calculator tool to assist with making these determinations.





Q: How does the EPA's proposed PFAS rule affect required monitoring under PA DEP's PFAS MCL Rule?

July 2023

A: On January 14, 2023, the PFAS MCL Rule was published in the Pennsylvania Bulletin. This action established enforceable standards in Pennsylvania for PFOA and PFOS, including MCLs, monitoring and reporting requirements, analytical requirements, and approved treatment technologies. For more details on the rule provisions, please visit the PFAS MCL Rule website. On March 29, 2023, the Environmental Protection Agency (EPA) published its proposed Per- and Polyfluoroalkyl Substances National Primary Drinking Water Regulation in the Federal Register. It is important to note that this is a proposed rule that was published for public comment; it is NOT a final regulation..



Q: How does the EPA's proposed PFAS rule affect required monitoring under PA DEP's PFAS MCL Rule?

July 2023

A: (continued) Even once a final rulemaking is published in the Federal Register, state primacy agencies (including PA DEP) will have **3 years** to establish or revise state regulations as necessary, in order to ensure that state regulations are at least as stringent as Federal regulations. **In the meantime, the PA PFAS MCL Rule that was published in January 2023 remains in effect, including the MCLs, monitoring requirements, and all additional provisions.**

Lead and Copper Rule Revisions (LCRR) and Improvements (LCRI)

EPA's Guidance for Developing and Maintaining a Service Line Inventory has been released; there is a template, [Use PADEP's resources](#)

****LCRR has CCR and PN (Tier 1 for ALEs) requirements -Oct.24, 2024**

Planned LCR Improvements to be **proposed in late 2023, rule with OMB**

Planned LCR Improvements to be **finalized by October 2024**

Which is when LCRR will take effect for compliance purposes



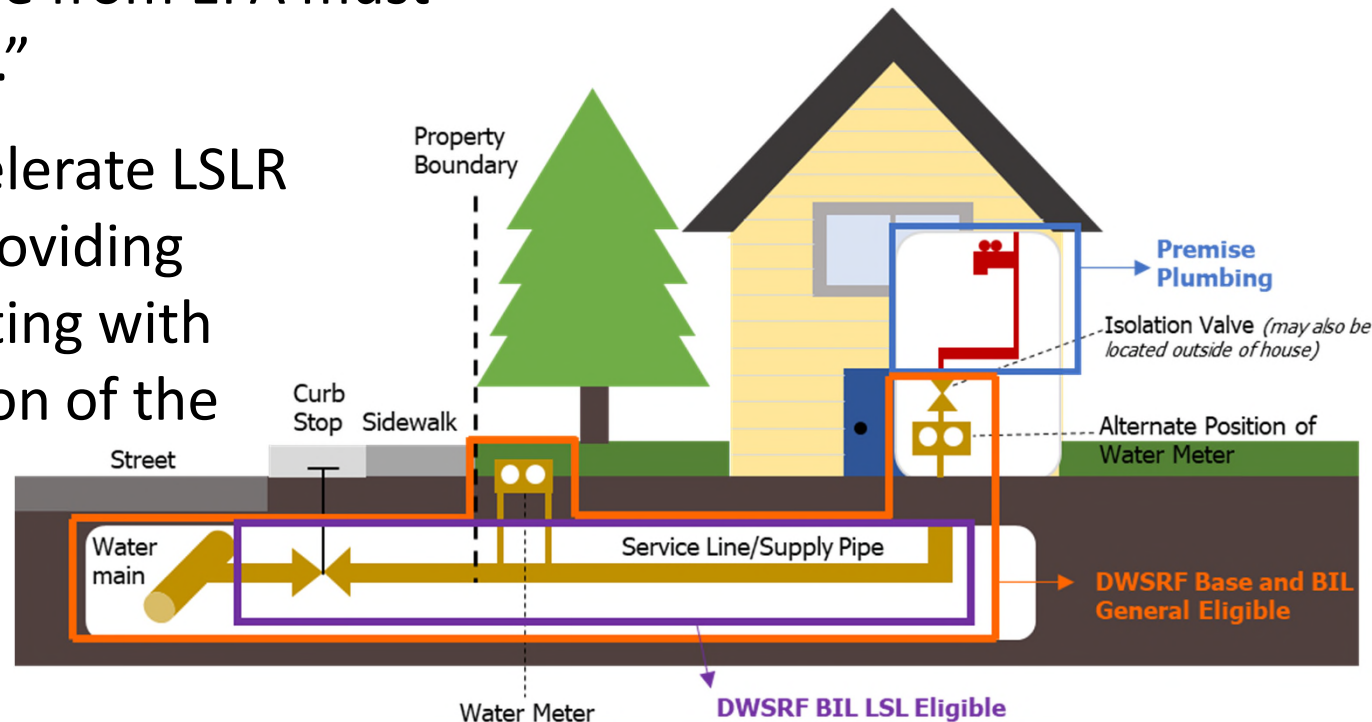
Lead Service Line Replacement Accelerators Technical Assistance Pilot

Partnering with States to Accelerate LSLR



Initiative Overview

- The Bipartisan Infrastructure Law (BIL) provides \$15 billion for LSLR over 5 years.
- 49% of the funds that states receive from EPA must be provided as “additional subsidy.”
- This TA initiative is working to accelerate LSLR in underserved communities by providing technical assistance and collaborating with states to improve the administration of the BIL LSLR funds.



Why is this pilot unique?

- Federal and state governments interfacing directly with communities to deliver LSLR TA
- Focused exclusively on LSLR technical assistance
- Working simultaneously in different states and communities to increase lessons learned
- Builds long-term capacity within the state programs to expand TA abilities

Initiative Overview

- The LSLR Accelerators pilot was launched January 27, 2023, to address existing barriers and accelerate progress towards lead service line identification and replacement.
 - [Press Release](#)
- Partnership between EPA and 4 state agencies:



CADMUS

Direct TA Process



Deliver Direct TA to Communities

Develop Inventories

Inventory Plan

LSL Inventory

LSL Maps

Community Engagement

Community Engagement Plan

Outreach Materials

Replacement Support

Replacement Plan

Funding Application Support

Construction Management Support

Observed Challenges

- Range of state-specific inventory requirements and processes.
- Desire to improve community engagement
- Raising awareness of the inventory requirements in small water systems
- Confusion as to what constitutes a record that supports LSL inventory



Photo: Accelerator Community Kickoff

Historical Records Review

- Previous Materials Evaluation
- Construction and Plumbing Codes and Records
- Water System Records
- Distribution System Inspections and Records
- Any resource, information, or identification method provided or required by the state

Additional Ideas for Records to Locate-public & private side

- Service card or ticket
- Installation records
- Construction records
- Plumbing Permits
- Utility construction standards and specifications
- Plumbing code; local ordinance
- Field experience
- Purchasing records
- Penn Pilot
- Tax records/tax assessment maps
- Distribution system maps and record drawings
- Capital improvement plans (CIPs) maps
- Community planning documents and maps
- Newspaper accounts
- Billing Software
- Engineering firms
- Water Quality Sampling Results

... and more Technical Assistance from EPA

More TA from EPA to be offered to all PWSs for inventories

*Any PWS can seek TA now through EPA's online request form;
numerous TA providers funded by EPA, so no cost to PWS*

<https://www.epa.gov/water-infrastructure/water-technical-assistance-waterta>


[Click Here to Request Technical Assistance for your Community](https://www.epa.gov/water-infrastructure/water-technical-assistance-waterta)



Cyber Security Assessments

- MUST be covered in your Risk & Resilience Assessment and Emergency Response Plan required under America's Water Infrastructure Act (AWIA)
 - Next round of certifications begins for large CWS **June 2025**
- EPA issued memo requiring states to integrate Cybersecurity Assessments into their sanitary survey program
- **The Eighth Circuit Court of Appeals has stayed the implementation of the interpretive rule pending the outcome of litigation.**
- **EPA rescinded this memo!**

Cyber Security Assessments

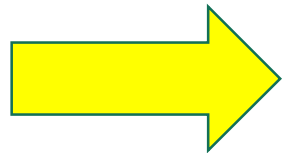
- Memo **not** in effect and therefore states are not required to include cyber in their sanitary surveys or develop an alternate process at this time.
 - EPA encourages all states and PWSs to voluntarily engage in review of PWS cybersecurity during the sanitary survey to ensure utilities are addressing cybersecurity gaps.
 - EPA will continue to provide support to all states and water systems that seek to protect the drinking water from the growing cyber threat.
 - EPA will continue to host Regional Cyber Workshops to support primacy agencies in understanding funding and resources available to build cybersecurity capacity in the water sector.
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Cyber Security Assessments

- EPA continues to provide technical assistance to drinking water and wastewater utilities via the **Cybersecurity Evaluation Program**, which conducts cyber assessments for water systems, and the **Cybersecurity Technical Assistance Program (Q&As)**
- EPA provides Circuit Rider Training, Tabletop Exercises
- EPA continues to work with FBI, CISA, and other federal partners on reported cyber incidents to notify the targeted utility, assess the consequences of the cyber incident, and formulate recommendations for response and future mitigation actions.

AWIA Certification Deadlines

CWS Size	R&R Assessment Certification	ERP Certification
$\geq 100,000$	March 31, 2025	September 30, 2025
50,000 - 99,999	December 31, 2025	June 30, 2026
3,301 - 49,999	June 30, 2026	December 31, 2026



Make this a goal to address in 2024, don't wait

<https://www.epa.gov/waterresilience/awia-section-2013>

Exercise Your Plans - tabletops, facilitated discussions, functional, games,



EPA has tools to assist you

Contact Info:

Patti Kay Wisniewski

Wisniewski.patti-kay@epa.gov

Cell: 215.514.7893

Want more info?

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