TRIBAL DRINKING WATER SECTION UPDATE

APRIL 20, 2023

AGENDA

- Introduction
- BIL Tribal Consultation Summary
- Voluntary PFAS Sampling Program and Proposed Regulation
- Drinking Water Emerging Contaminants Funding
- Service Line Inventories
- Lead Service Line Inventory and Replacement Funding

BIL TRIBAL CONSULTATION SUMMARY

- 90 Day Tribal Consultation ended on March 21st
- Input for funding methodology for new BIL Funding Programs
- Offered Leader-to-Leader Consultation and held Informational, Coordination, and Consultation Webinars
- Final Criteria for EC funding and Guidance for LSL Funding coming soon.

VOLUNTARY PFAS SAMPLING PROGRAM

- EPA is offering sampling for 25 PFAS compounds at entry point and raw water sources
- No cost to Tribal water systems: sample analysis, supplies, and shipping
- Repeat sampling if detections
- Opportunity to meet initial regulatory sampling requirements
- RCAC provides sample collection training to the water system operator
- If interested, reach out to your drinking water program manager

PFAS PROPOSED REGULATION

- Published March 29, 2023
- Comment period open until May 30, 2023
- https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas

Individual MCLs (PFOA, PFOS) + Hazard Index

Compound	MCLG (ppt)	MCL (ppt)
PFOA	0	4
PFOS	0	4
PFNA	1 (unitless)	1 (unitless)
GenX Chemicals		
PFHxS		
PFBS		

PROPOSED MCLS

- PFOA – 4.0 ppt
- PFOS – 4.0 ppt
- Hazard Index MCL 1.0 (unitless)
  - PFNA, HFPO-DA (Gen-x), PFHxS, PFBS
  - Assumes additive health effects
  - Based off sum of component hazard quotients in relation to detected levels
- Hazard quotients denominator
  - PFNA – 10.0 ppt
  - HFPO-DA – 10.0 ppt
  - PFHxS – 9.0 ppt
  - PFBS – 2000.0 ppt

Hypothetical Compliance Scenario

Compound	Health-Based Water Concentration (ppt)	System 1 Observed Concentration (ppt)	System 1 Hazard Quotient	System 2 Observed Concentration (ppt)	System 2 Hazard Quotient	System 3 Observed Concentration (ppt)	System 3 Hazard Quotient
PFHxS	9	14	1.5	5	0.5	8	0.8
PFNA	10	20	2	0	0	0	0
GenX Chemicals	10	0	0	4	0.4	9	0.9
PFBS	2000	0	0	0	0	170	0.1
Hazard Index			**3.5**		**0.9**		**1.82**

Group MCLG = Group MCL = Hazard Index < 1

$$HI\ MCL = \left(\frac{[GenX_{water}]}{[10\ n\,g/L]}\right) + \left(\frac{[PFBS_{water}]}{[2000\ n\,g/L]}\right) + \left(\frac{[PFNA_{water}]}{[10\ n\,g/L]}\right) + \left(\frac{[PFHxS_{water}]}{[9\ n\,g/L]}\right)$$

ORIGIN OF VALUES

- PFOS/PFOA – 4.0 ppt
  - minimum quantitation level that, with 95 percent confidence, can be achieved by capable analysts at 75 percent or more of laboratories using specified analytical method
- June 2022 Health Advisory
  - HFPO-DA – 10.0 ppt
  - PFBS – 2000.0 ppt
- 2021 ATSDR Minimal Risk Levels
  - PFNA – 10.0 ppt
  - PFHxS – 9.0 ppt

SUMMARY OF PFAS SAMPLING RESULTS

- Sampling results received for 55 water systems
- 6 systems had detections
  - Only 1 detection at an entry point (below proposed standard)
  - Confirmation sampling if offered for all detects

BACKGROUND: *Drinking Water Tribal Set-Aside Emerging Contaminants Funding and Emerging Contaminants (EC) in Small or Disadvantaged Communities (SDC) Grant*

Funding eligibilities for both programs:

- Projects that address any contaminant listed in any of EPA's Contaminant Candidate Lists are also eligible.
- Focus on addressing per- and polyfluoroalkyl substances (PFAS) in drinking water.
  - PFAS are a group of manufactured chemicals that have been used in industry and consumer products since the 1940s because of their useful properties. Exposure to PFAS May be Harmful to Human Health and there is ongoing research to understand more.
  - PFAS information here
- Must serve a Public Water System

Program 1 **Drinking Water Tribal Set Aside Emerging Contaminants**	**Program 2** **Emerging Contaminants (EC) in Small or Disadvantaged Communities (SDC) Grant**
DWTSA Program	Section 1459A Assistance for Small and Disadvantaged Communities Program
	For water systems with population < 10,000

EMERGING CONTAMINANTS RANKING CRITERIA

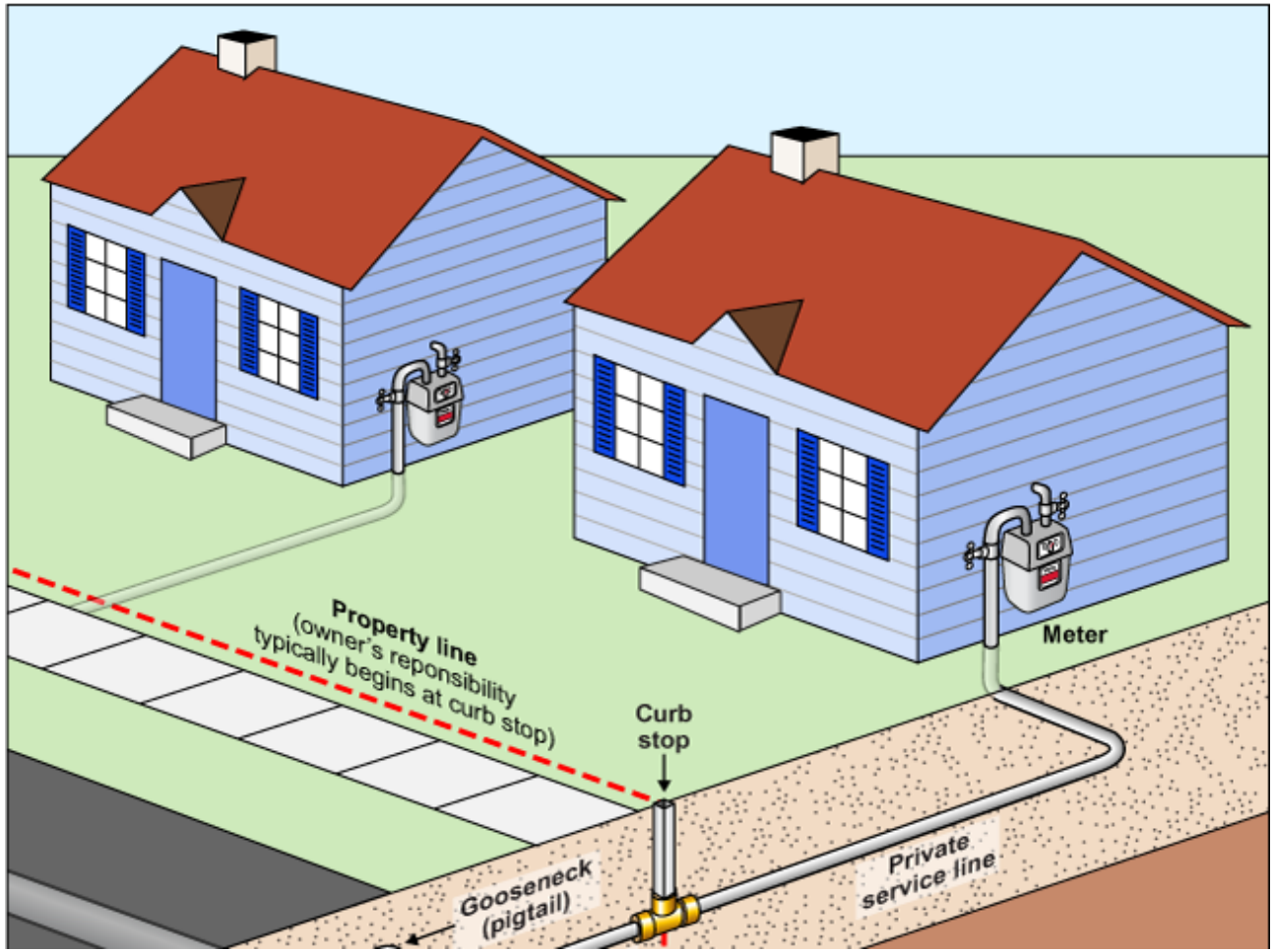
Higher Priority	Category 1	Systems exceeding a Maximum Contaminant Level (MCL)/Regulatory Standard or health advisory level for any PFAS compound. 1A: Exceeding an MCL 1B: Exceeding a health advisory level
	Category 2	Systems where any other emerging contaminant (excluding PFAS) exceeds a health advisory level. 2A: Twice the advisory and above 2B: 1.5 times the advisory and above 2C: Above the advisory
	Category 3	Systems where PFAS results are approaching an MCL/Regulatory Standard or health advisory level.
	Category 4	Systems where any other emerging contaminant (excluding PFAS) results are approaching a health advisory level.
	Category 5	Systems with detections where the emerging contaminant level constitutes a health risk not covered in categories 1-4. 5A: Any PFAS contaminant on the Contaminant Candidate List (CCL) 5B: Any other emerging contaminant on the most current CCL 5C: Any other emerging contaminant not on the current CCL.
	Category 6	Systems where the emerging contaminant level causes a technical, cosmetic, or aesthetic issue.
Lower Priority	Category 7	Systems where the emerging contaminant level is much lower than the MCL/Regulatory Standard or health advisory level. 7A: Any PFAS contaminant on the CCL 7B: Any other emerging contaminant on the most current CCL 7C: Any other emerging contaminant not on the current CCL.

Category 1-4 regulatory standards and health advisories refer to levels published by EPA.

HOW TO APPLY FOR INFRASTRUCTURE FUNDING TO ADDRESS EMERGING CONTAMINANTS:

- Additional guidance will be sent out fall of 2023
- Emerging Contaminants funding will utilize the existing DWTSA solicitation process (DWTSA Website)
  - Proposals are due in November
  - Draft Ranking Letters are sent in January/February
  - Final Ranking Letters are sent in Spring
  - Awards are made by end of fiscal year (Oct 1)

SERVICE LINE INVENTORIES



WHAT IS A SERVICE LINE?

THE LINE FROM THE MAIN TO THE BUILDING FOUNDATION, REGARDLESS OF OWNERSHIP

DEADLINE

- Initial inventory is due to EPA by October 16, 2024
- Depending on make up of inventory, updates are due at end of each tap sampling monitoring period (but no more frequently than annual)

INVENTORY CATEGORIES

- Every service line needs to be identified as one of the following:
  - **Lead** - service line is made of lead.
  - **Galvanized Requiring Replacement (GRR)** - a galvanized service line is or was at any time downstream of a lead service line or is currently downstream of a "Lead Status Unknown" service line. If the water system is unable to demonstrate that the galvanized service line was never downstream of a lead service line, it must presume there was an upstream lead service line.
  - **Non-lead** - service line is determined through an evidence-based record, method, or technique not to be lead or GRR
  - **Lead Status Unknown** - service line material is not known to be lead, galvanized requiring replacement, or a non-lead service line, such as where there is no documented evidence supporting material classification.

INVENTORY FORM

Public Water System Service Line Inventory Form

Complete?	Yes
Approval date:	

System Name:		PWSID:	
Submission Date:			
Person Filling Out Inventory:		Email:	
Total Number of Service Lines:		(active and inactive)	
Ownership of Service Lines:			
If Ownership mixed, where is split?		If Other, Explain:	
All Service Lines Originally Install After 1989?			
If "yes", documentation source:		If 'Yes', no further responses required	

Type	Total
Non-Lead	0
Lead	0
GRR	0
Unknown	0
Pb Connectors	0

Service Line Material
P - Plastic
C - Copper
UNK - Unknown
UNK-NOLG - Unknown - Unlikely to contain lead or galvanized
UNK-LG - Unknown - May contain lead and/or galvanized
G - Galvanized
Lead
DI - Ductile Iron
CI-L - Lined Cast Iron
CI-U - Unlined Cast Iron

Use at least one of these two columns

All Blue Columns are Required

Street Address (separate entry for each service connection)	Site ID (other unique identifier)	Lead Connector Currently Present? (e.g., Gooseneck, Pigtail, Other)	Current Public Service Line Material (PWS Owned) (if 2 different materials fill out both columns)		Was Public Service Line Material Ever Previously Lead?	Public Side Verification Source	Current Customer Service Line Material (if 2 different materials fill out both columns)		Customer Side Verification Source	Year Service Line Installed/Year Structure Built (enter oldest possible year if exact year not known)	How many Service Lines does this Row Represent?
			Material 1	Material 2			Material 1	Material 2			
											1

INVENTORY FORM

Building Plumbing Material
G-Galvanized
C - Copper w/non-lead solder
CLS - Copper with lead solder
O - does not contain Pb solder-Cu-galvanized
UNK - Unknown

INSTRUCTIONS:

If all Service Lines were originally installed after 1989, respond yes to that question and answer documentatoin quesetion then stop

If not, please complete all Blue Columns for each service connection.

Completing Green Columns is optional.

After completion, submit electronically as MS Excel file.

All Green Columns are Optional

Comments	Alternative Location Identifier	Building Type	Current Building Plumbing Material 1	Current Building Plumbing Material 2	Current Building Plumbing Material Install Date	LCR Sample Site? (mark X if yes)

ANTICIPATED APPROACH

- Review available information from As-builts (and/or similar documents), age of home information and/or physical verification
  - As-builts need to cover entire life of line
  - Physical verifications need to cover at least 3 sections of pipe (18-inch each) on both public and private side
- Develop supporting documentation (for both knowns and unknowns)
  - If meters present, conduct 3-point inspection
    - Both sides of meter and where pipe enters building
    - Collect historical knowledge
- Determine the data gaps (i.e., the unknowns)

Lead Ban

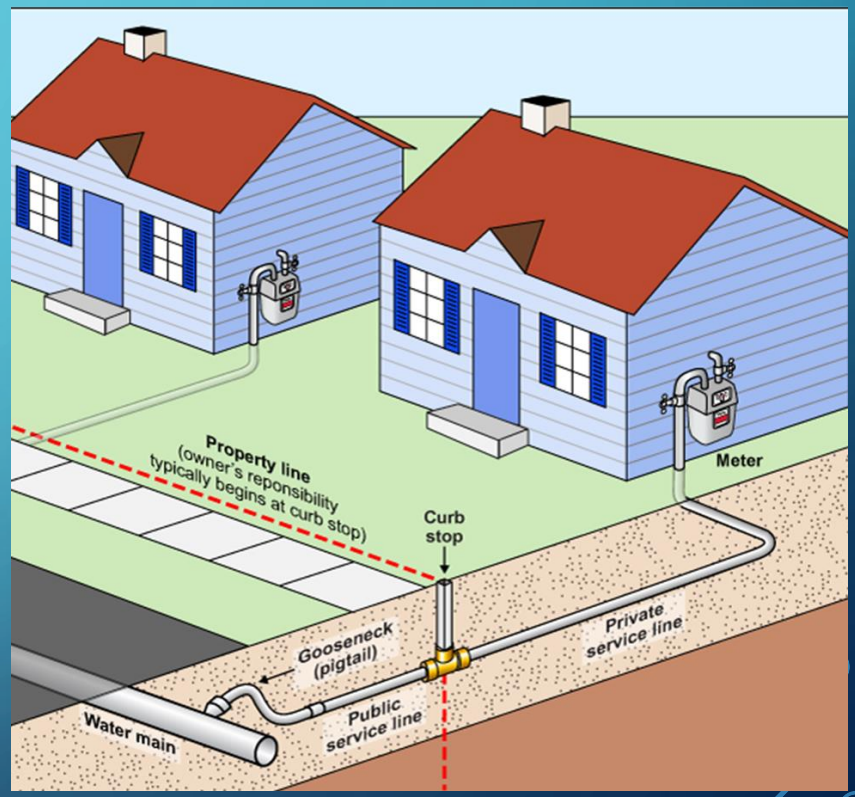
- First lead ban effective date
  - CA -1986
  - Arizona – 1987
  - Nevada – 1989
- Any system or portion of system built after 1989 may use bulk identification
  - Individual entries on inventory form may not be needed

CHARACTERIZING UNKNOWNS

- 2 statistical approaches
- Analyze 20% of unknowns
  - Potholing
    - 3 holes per/line revealing at least 18-inches of line each
    - Covers both public and private side
  - Evaluate known and unknown lines looking for similarities
    - Similar age of buildings
    - Same builder (e.g., HUD)
    - 3-point inspection
- If this approach necessary, system must submit SLI form with unknowns first
- If future work shows assumptions incorrect, reevaluation needed

BACKGROUND: BIL FUNDING DWTSA LEAD SERVICE LINE (LSL) REPLACEMENT

- BIL funding to investigate and remove lead service lines.
- Projects must be otherwise DWTSA eligible and be a lead service line replacement project or associated activity directly connected to the identification, planning, design, or replacement of lead service lines.
- Additionally, replacement of lead goosenecks, pigtails, and connectors may be funded as part of a lead service line replacement or as a standalone replacement.



ELIGIBLE PROJECTS: DWTSA LEAD SERVICE LINE (LSL) REPLACEMENT

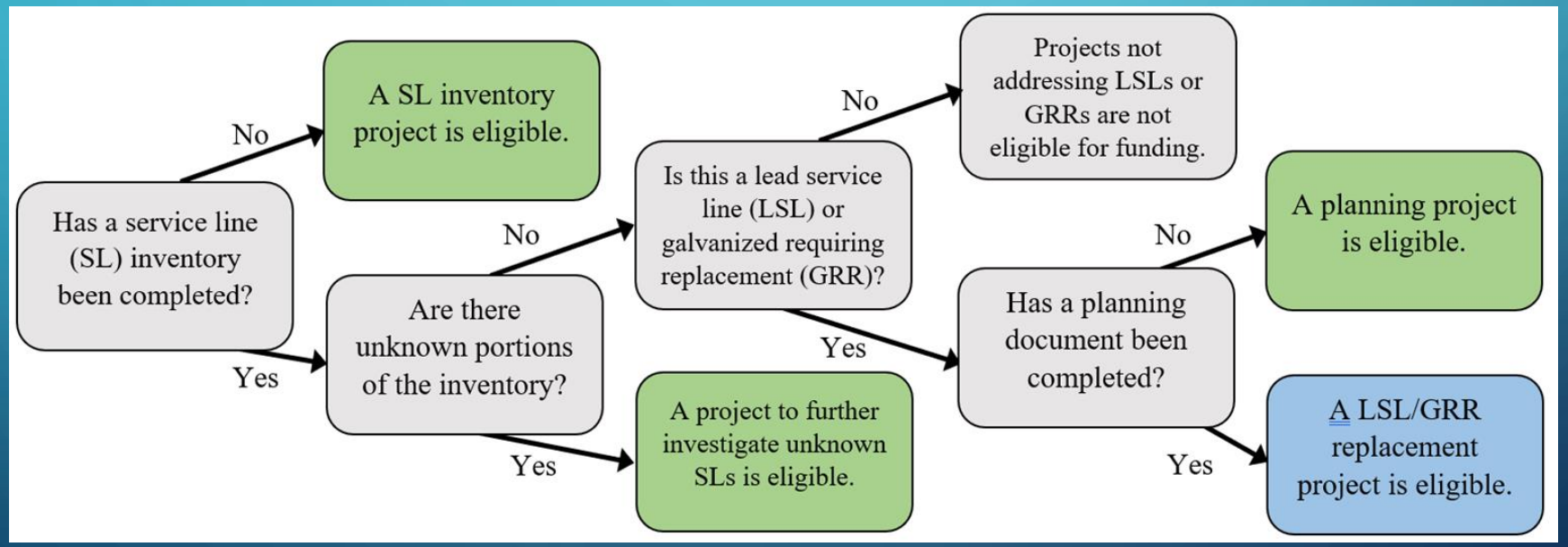
Eligible projects include:

Service Line Inventory Project – Investigatory Work	Lead Service Line Replacement Project
Developing and completing service line inventories, including locating and mapping lead service lines, and investigating unknown service lines	Replacement of lead service lines, including the replacement of lead-containing goosenecks, pigtails, connectors, and galvanized service lines that are currently or ever were downstream of a lead service line or service line of unknown material.
Providing technical assistance to small water systems undertaking service line inventories	Providing technical assistance to small water systems undertaking construction projects
	Preparing planning documents for construction projects

DWIG-TSA LEAD SERVICE LINE (LSL) REPLACEMENT FUNDING METHODOLOGY:

Region 9 anticipates that there will be sufficient funding to complete service line inventories and lead service line replacement projects for all eligible water systems.

The Region developed a funding flow chart and guidelines to streamline the administrative processes:



Possible requirements for a planning document prior to construction: the description of the construction mechanism, timeline for completion, detailed cost estimate, and documentation that the required rights-of-way permissions have been secured.

HOW TO OBTAIN ASSISTANCE UNDER DWTSA LSL PROGRAM:

Service Line Inventory

- Receive Technical Assistance through Contract Services (current contract through RCAC)

Investigation

- Submit a proposal to EPA
- Receive assistance to conduct further investigation

Lead Service Line Replacement Planning

- Submit a proposal to EPA
- Receive assistance to develop planning documents

Lead Service Line Replacement

- Submit a proposal to EPA
- Receive funding for construction via grant or interagency agreement

- DWTSA-LSL Guidance will be sent out with the Consultation summaries in May 2023
- Proposals for investigation, LSLR Planning and LSLR Construction projects will be accepted throughout the year and evaluated when they are received

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QUESTIONS?