Lead and Copper Rule Revision – Stakeholder Meeting

June 10, 2020

NJ Department of Environmental Protection

Division of Water Supply & Geoscience

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Lead in Drinking Water

Lead is not normally found in drinking water at the source. Typically, lead gets into your drinking water from the service lines, plumbing and fixtures that contain lead. As a result of corrosion, lead and other metals from the pipes slowly dissolve into the water. Many factors affect the amount of lead that leaches into the water, including lead content of pipes, fixtures, and solder, along with water temperature, pH and hardness. Lead is associated with adverse health impacts even at low levels, particularly in infants and children.

Additional information is available at the following links:

CONSUMER
(You are served by a community water system/are on “city water”)

SCHOOLS

PUBLIC WATER SYSTEM
(Community or Non-transient non-community)

EPA Lead and Copper Rule Implementation Info

Agenda

Division Presentation & Discussion on Rule Draft Concepts

9:15 A.M. – 10:45 A.M.

- Corrosion Control and Source Water Treatment
- Water Quality Parameters and Sequential Monitoring

11:00 A.M. – 12:30 P.M.

- Lead Service Line Inventory and Replacement

1:30 P.M. – 3:00 P.M.

- Tap Monitoring and Public Education

Ground Rules

- Begin and end on time
- Please mute yourself…*6
- *6 also unmutes you
- Adhere to the agenda
- Be respectful and listen
- Not discussing EPA's proposal

- Etiquette for Questions
  - Use the chat bar – include slide #
  - You will be called upon to speak
  - One minute total speaking time

Your attendance and feedback is valuable!

Common Acronyms

ALE – Action Level Exceedance

CCT – Corrosion Control Treatment

CCTR – Corrosion Control Treatment Recommendation

DS – Distribution System

LCR – Lead and Copper Rule

LSL – Lead Service Line

LSLR – Lead Service Line Replacement

PE – Public Education

POU – Point of Use

ppb – parts per billion

SoWT – Source Water Treatment

WQP – Water Quality Parameter

9:30 A.M. – 10:00 A.M.

Corrosion Control and Source Water Treatment

Presenter: Laura Scatena

DEP Technical Panel: Kat Burkhard, Felicia Fieo, Linda Ofori

Corrosion Control Treatment (CCT) Steps

Steps for CCT	Current Federal Rule	Preliminary/Tentative
1. System recommends CCT	6 months	90 Days
2., 3. System completes study, if required	18 Months	12 Months
4. State designates CCT	6 Months	90 Days
5. System installs CCT	24 Months	12 Months
6. System completes follow-up sampling, 12 months after CCT installation	36 Months	24 Months
7. System submits optimal WQP recommendation after completion of Step 6	N/A	30 Days
8. State designates optimal water quality parameters	6 Months	90 Days
9. System operates within levels set and continues monitoring	ongoing	ongoing

Source Water Requirements

Source Water Treatment Steps	Current Federal Rule	Preliminary/ Tentative
1. System monitoring and treatment recommendations	6 months	3 months
2. State determination regarding SoWT	6 months	90 days
3. System installation	24 months	12 months
4. System follow up lead and copper tap water monitoring	36 months	24 months
5. State review of SoWT installation and set maximum permissible levels	6 months	3 months
6. System operates within levels set and continues monitoring	ongoing	ongoing

Change in Source/Treatment Requirements

- What changes to a system might require a reevaluation to ensure CCT remains optimized or is optimized?

- Other scenarios where a system should return to the CCT steps if it had already been optimized?

Consecutive Systems

- Improved coordination between wholesalers and bulk purchasers
- Potential notification requirements
- Wholesaler requirements for changing treatment?

Recommendations and Approvals

- Should all submissions that are required for CCT and source water treatment steps be certified and submitted by the water system owner or licensed operator?
  - Thoughts on allowing the use of a third party.

- Thoughts on the overall process for recommendations and approvals?

Group Discussion and Comments

10:00 A.M. – 10:30 A.M.

Water Quality Parameters and Sequential Monitoring

Presenter: Laura Scatena

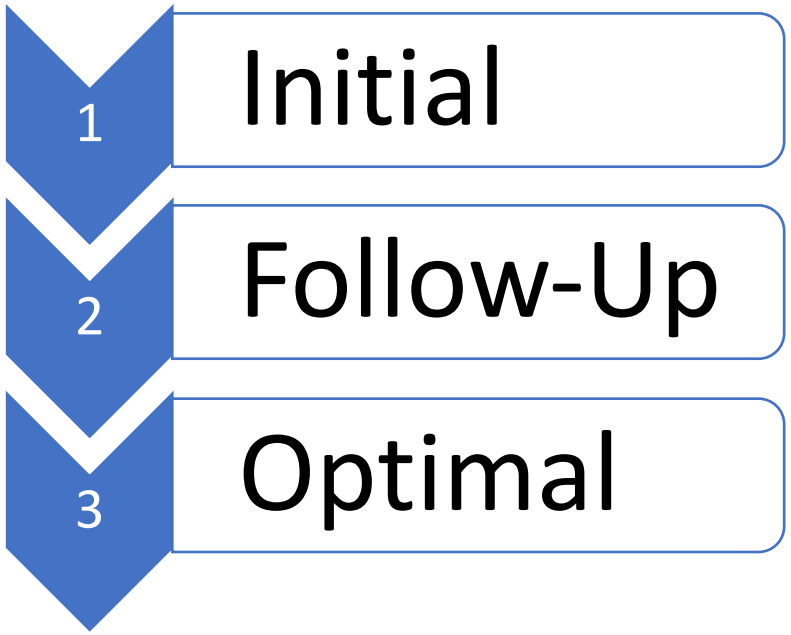
DEP Technical Panel: Kat Burkhard, Felicia Fieo, Linda Ofori

Water Quality Parameter (WQP) Monitoring

Objectives

- Determine water corrosivity
- Identify appropriate corrosion control treatment
- Determine whether corrosion control treatment is being properly maintained

Schedule Types



Number of WQP DS Sites - Comparison

Current Federal Rule

System Size (Number of People Served)	Number of Sites for WQPs
>100,000	25
10,001 to 100,000	10
3,301 to 10,000	3
501 to 3,301	2
101 to 500	1
≤100	1

Preliminary/Tentative

System Size (Number of People Served)	Number of Sites for WQPs
>1,000,000	As designated by the state
500,001 to 1,000,000	50
100,001 to 500,000	40
75,000 to 100,000	30
50,001 to 75,000	25
10,001 to 50,000	20
3,301 to 10,000	15
501 to 3,300	10
101 to 500	5
≤100	2

Initial WQP Monitoring Comparison with the Current Federal Rule

Parameters	"Additional" Preliminary/Tentative	Location	Sampling Frequency
pH, alkalinity, orthophosphate or silica, calcium, conductivity, temperature	Iron, manganese, aluminum, chloride, sulfate, hardness	Taps and at entry point(s) to DS	Within 6 months from the beginning of the monitoring period that incurred an ALE

Follow-Up WQP Requirements Comparison with the Current Federal Rule

Parameters	Location	Sampling Frequency	Preliminary/Tentative
pH, alkalinity; and/or orthophosphate, silica, and/or calcium	Taps/DS	Every 6 month	Monthly Reported quarterly
pH, alkalinity (dosage rate and concentration if alkalinity adjusted as part of corrosion control), inhibitor (dosage rate and inhibitor residual, if applicable)	Entry point(s) to DS	No less frequently than every two weeks	No less frequently than every week Reported quarterly

Preliminary/tentative - Additional parameters to both DS and EPTDS

- Calcium, conductivity, temperature, iron, manganese, aluminum, chloride, sulfate, water hardness, ammonia

Optimal WQP Requirements
Current Federal Rule

Parameters	Location	Sampling Frequency
pH, alkalinity; and/or orthophosphate, silica, and/or calcium	Taps/DS	Every 6 months
pH, alkalinity (dosage rate and concentration if alkalinity adjusted as part of corrosion control), inhibitor (dosage rate and inhibitor residual, if applicable)	Entry point(s) to DS	No less frequently than every two weeks

Sampling by Approved Persons

- Who should be considered an approved person?
- What training should be required of an approved person?
- Should there be certification for approved person training?
- Who would be responsible for the approved person (e.g., the licensed operator)?

Consecutive Systems

- Should wholesalers be required to monitor WQP on their side of the interconnection?

- When a wholesaler is going to have a significant change in treatment/source:
  - What, if any, monitoring requirements should there be for a wholesaler?
  - What about the buyer?

Sequential Monitoring

- When should sequential monitoring be required?
- Minimum number of sites required?
- In addition to total lead/particulate & soluble lead/total copper, what other parameters should be sampled?
- Protocol?

Pipe Scale Analysis

- When should pipe scale monitoring be required?
- Minimum number of sites required?
- Should a system be required to conduct pipe scale at some of the sequential sampling sites?

Group Discussion and Comments

Additional Questions and Comments

Next Steps

1. Division email: watersupply@dep.nj.gov, subject line, “LCR Stakeholder” by July 10, 2020

2. Proposal

3. Public hearing: 60-day comment period

4. Adoption

15 MINUTE BREAK

11:00 A.M. – 12:30 P.M.

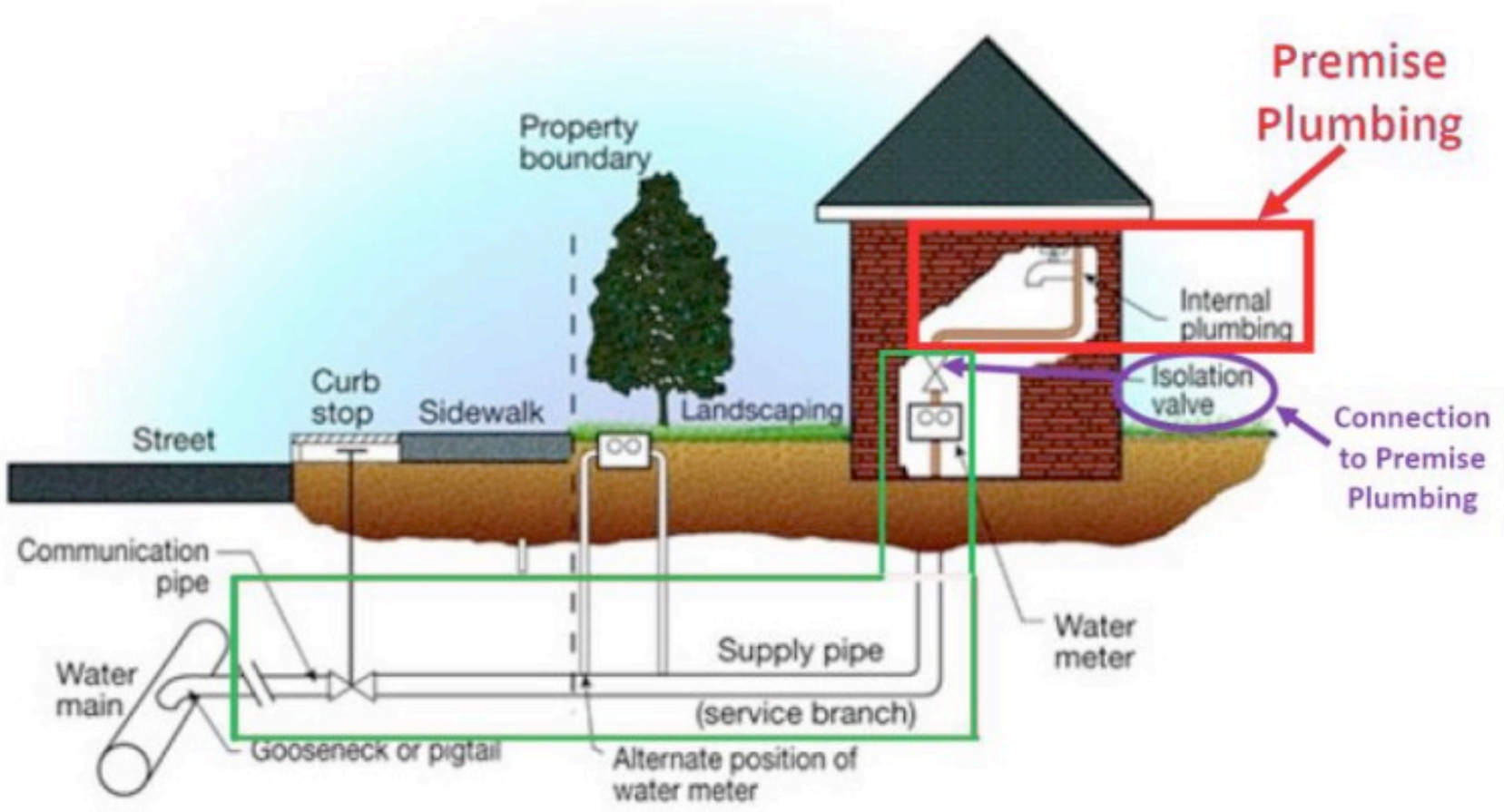
Lead Service Line Inventory & Replacement

Presenter: Megan English

DEP Technical Panel: Kat Burkhard, Linda Doughty, Kristin Tedesco

Lead Service Line (LSL) Definition

- What constitutes a LSL?



Materials Evaluation

- Which documents, materials, and steps should be used to develop a materials evaluation?

- How should notification to the State work once a water system hits zero LSLs?
  - How should newly discovered LSLs be handled if a system is currently submitting 0s?
  - How soon after confirming it is a LSL should the State be notified?

- Should the water system be required to replace their portion of the LSL upon notification that a property owner replaced their portion of the LSL?

Annual LSL Replacement Percentages

Current Federal Rule	Initial Number of LSL X 0.07 = 7% of LSL to Replace
	Resuming LSLR $\frac{\text{Remaining LSL}}{\text{Remaining Years}}$ = Number LSLR per year

Partial Replacements and Customers

- How to encourage or mandate customer participation?
  - What obstacles may water systems face?
- Under what conditions should a partial be allowed?

Partial Replacements and Customers

- Would a sleeve/liner inserted into a LSL count as a full replacement? Partial?

- What additional long-term monitoring should be required to ensure that the sleeve/liner is still effective at reducing lead levels?

Filter Distribution & Sampling

- Should point-of-use (POU) filters be required to be distributed immediately following LSLR? Hurdles?

- If yes, what would be the requirements of the program?
  - Records/documentation/tracking
  - Number of replacement cartridges
  - Operation and maintenance
  - Distribution – partial, full, or both types of LSLR

Filter Distribution & Sampling

- What testing should be done after lead service line replacement?
  - Different for partial vs. full?
  - In what time frame following LSLR, and how frequently?

Financing LSLR

- What factors are considered when replacing LSLs?

- What steps (if any) can a water system take to limit the cost to the homeowner? (i.e., paying in full for the homeowner portion, subsidizing the homeowner portion, etc.)

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60 MINUTE BREAK

1:30 P.M. – 3:00 P.M.
Tap Monitoring and Public Education

Presenter: Laura Scatena

DEP Technical Panel: Kat Burkhard, Felicia Fieo, Kristin Hansen, Trish Ingelido

Tap Monitoring – Current Requirements
Current Federal Rule

System Size – Number of People Served	Number of Sites – Standard Monitoring	Number of Sites – Reduced Monitoring
>100,000	100	50
10,001 to 100,000	60	30
3,301 to 10,000	40	20
501 to 3,300	20	10
101 to 500	10	5
≤ 100	5	5

Tap Monitoring – Comparison with the Current Federal Rule

Tiers	Community – Current Federal Rule	Non-Transient – Current Federal Rule	Preliminary/Tentative
Tier 1	Single-family structures that: • Contain copper pipes with lead solder installed after 1982 or contain lead pipes; • And/or are served by a LSL.	Buildings that: • Contain copper pipes with lead solder installed after 1982 or contain lead pipes; and/or • Are served by a LSL.	A single-family or multi-family residence that is served by a lead service line and/or contains lead pipes.
Tier 2	Buildings, including multiple-family residences that contain copper pipes with lead solder installed after 1982 or contain lead pipes; and/or are served be a LSL.	Buildings that contain copper pipes with lead solder installed before 1983.	A non-residential building that is served by a lead service line and/or contains lead pipes.
Tier 3	Single family structures that contain copper pipes with lead solder installed before 1983.	N/A	A single-family or multi-family residence that contains copper piping with lead solder.
Tier 4	N/A	N/A	A non-residential building that contains copper pipping with lead solder.
"Non-tiered"	Representative sites throughout the DS.	Representative sites throughout the DS.	A single-family residence or non-residential building that is not a Tier 1, 2, 3, or 4 sampling site

Tap Monitoring in Schools and Child Care Facilities

- Should water systems target schools/childcares in their sampling or have a separate requirement to do so?

- Other State Departments already require sampling in schools/childcare facilities - how should these be handled so requirements do not overlap?

Sample Invalidation

- Should we narrow/clarify the scope of criteria for which a sample can be invalidated?

Current Criteria

1. The lab establishes that improper sample analysis caused erroneous results.
2. The state determines that the sample was taken from a site that did not meet selection criteria.
3. The sample container was damaged in transit.
4. There is substantial reason to believe that the sample was tampered with.

Public Education (PE)

- What do you believe is the most effective PE notification channels?
  - Community versus Non-Community water systems

- How should outreach be handled?
  - How many distinct platforms?
  - How many times should a message be repeated before being retired?

- Should the content of PE language be changed?
  - How easy is it to understand?

Public Education/Notification

- How soon after a water system learns of an ALE should they have to notify their customers?
  - Should different delivery requirements have different notification timeframes?
- A water system learns of results over 15 ppb for a specific sample site, how soon should they have to notify the customer?
- Should time for notification be shortened for any lead result? Over 15 ppb only?
- Should be any PE/notification for copper ALEs/individual exceedances?

Public Education/Notification

- What sort of ways should the water system notify their populations?
  - Should there be a separate notification for being served by a LSL?

- What should additional public education information look like? Does annual notification make sense and/or should there be triggers, e.g., new customers?

- Should some entities, such as pediatricians' offices and schools, receive information more frequently?
  - ALE versus non ALE

Group Discussion and Comments

Additional Questions and Comments

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