Lead and Copper Rule

Lehigh County Authority Program

March 14, 2016

What is the Purpose of the Lead and Copper Rule?

> To protect public health, primarily by reducing water corrosivity, the Lead & Copper Rule (LCR) was first published in the Federal Register June 7, 1992. This rule can trigger treatment technique requirements when lead and/or copper results exceed action levels

What are action levels?

- ➤ Action levels (AL) the amount required to trigger treatment or other actions
 - > ALs are not MCLs (maximum contaminant level) no violations if exceeded
- > AL for copper: 1.3 ppm
- > AL for lead: 15 ppb
- > LCA's water is below the action levels

Why is Corrosion Control Effective?

Corrosive water can dissolve pipe metals, treatment minimizes this effect

Why are samples taken during the summer months?

- > Regulations dictate monitoring frequencies
 - > Standard monitoring every 6-months
 - > Reduced monitoring 3-yr. June-Sept.

Why do you only sample every 3-years?

- ➤ All LCA systems have achieved reduced monitoring by having results consistently below the Action Levels for both lead and copper
- To maintain compliance with the LCR, in addition to 3-yr. monitoring for lead and copper, the Allentown system samples for water quality parameters (pH & alkalinity) bi-weekly

How were Sampling Sites Originally Selected?

- The lead and copper rule defines how water systems must select sample sites
- Initially, material surveys are conducted to determine plumbing used in the home
- Tier designations are assigned; sample pool is created of worst case scenario sites

Tiers

- ➤ Tier 1: Single family structure with lead pipes, lead service line, or copper pipes w/lead solder after 1982, but before 1/6/1991
- ➤ Tier 2: Same as Tier 1 but for buildings and multiple family residences
- ➤ Tier 3: Structures constructed as single family residence currently used as either a residence or business containing copper pipes w/lead solder installed before 1983

Tier 1 Sites

- ➤ All lead and copper samples from the Allentown and Central Divisions are collected from Tier 1 sites
 - > Allentown's Tier 1 sites have lead service lines
 - Central Division Tier 1 sites have copper pipe with lead solder installed after 1982—there are no lead service lines in this division

How are Sampling Sites Selected for each three Year Cycle?

- Previous sample sites from the sample pool are contacted for updates
- > Determine if sample site is still viable
- > Obtain home owners acceptance
- If necessary, replace previously used sites with sites from the sample pool

How are Samples Taken?

- Water system must rely on customers to collect samples
- > Water system provides sampling instructions
- > Instructions per PA DEP Guidance
- Water system provides bottles marked to 1-L from certified laboratory
- > 2016 will include pictures with instructions
- > Water system picks up samples

IMPORTANT - PLEASE READ

Directions for sampling for Lead and Copper

Dear Homeowner:

The U.S. Environmental Protection Agency's Lead and Copper Rule under the Safe Drinking Water Act has specific sample collection requirements that must be followed when sampling for Lead/Copper or the sample will be rejected. Please read these important instructions before sampling to ensure the sample you collect meet the requirements of the Lead and Copper Rule.

- 1. Samples must be collected as a "First Draw" sample, after a minimum of six (6) hours of no water use in your home. In most situations, this is the first draw in the morning after the water stood motionless in the plumbing systems and no water was used during the night.
- A kitchen or bathroom cold-water faucet is to be used for sampling. Place the open one Liter container provided by the lab below the faucet, carefully open the cold water tapremember to collect the very 1st drop of water!!!! Fill the sample bottle all the way to the top without losing any water, turn off the tap, replace the cap and tighten securely.
 - Please call the laboratory (610-437-7645) to arrange for a pick-up of your sample or you can drop the water sample off at the water filtration plant lab (1300 Martin Luther King Jr. Dr.).
- 3. Results from this monitoring will be provided to the participating homeowners when the reports are received.

Please complete the information below and return with your water sample Please try to sample with in the same week you receive the containers

Sample Date:	Sample Time:
Sample Location:	Kitchen or Bathroom (Circle one)
Approximate No. of	hours since water was last used before sampling:
I have read and follo Signature:	owed the directions:

SampleInstructions

Are results shared with program participants?

> Yes

From the first round of testing in 1992, LCA customers participating in the lead & copper program received letters with test results—in 2012 it became a requirement with specified health effects language

FYI

- > 2016 will be the first time the Allentown water system's lead and copper monitoring program is administered by LCA
- All LCA systems are on reduced monitoring, including Allentown, meaning the levels of lead and copper are consistently below the action levels

Questions?

