



GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Overview of EPD's Regulation of Lead in Drinking Water

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Drinking Water Program

- Permitting Public Drinking Water Systems
 - Public Water Systems
 - 15 connections
 - 25 people
 - Community (1700)
 - Non-Transient Non-Community (174)
 - Transient Non-Community (478)



Drinking Water Program

- Overview
 - ~2300 Public Water Systems Statewide
 - ~105 Surface Water Systems
 - ~2200 Groundwater Systems
 - PWSs serve about 89 percent of the State Population
- Laws & Rules
 - US Safe Drinking Water Act of 1974; 42 U.S.C. §300f
 - Georgia Safe Drinking Water Act of 1977; OCGA 12-5-170
 - Rules for Safe Drinking Water; Chapter 391-3-5
 - Drinking Water Plant Permits



Regulation of Lead in Drinking Water

- Potential Exposure to Lead in Drinking Water
 - The potential for human exposure to lead is primarily due to the corrosion of plumbing materials that contain lead, such as lead solder in household piping.
 - The regulations are designed to protect public health primarily by reducing water corrosivity.
 - The lead is not present in the treated water produced at the treatment facility, but rather comes from reactions within the pipes between the treatment plant and the consumer's faucet.
 - The regulations require significant sampling from the water taps within the homes of consumers.



Regulation of Lead in Drinking Water

- Sampling

- Samples are collected at interior cold water kitchen or bathroom taps inside individual homes within the distribution system and are most often collected by the homeowners based on instructions provided to them by their water system officials.
- The number of samples required is based on the size of the population served (this can be as little as 5 samples for a system serving fewer than 500 people or as high as 100 samples for a system serving more than 100,000) and is initially done on a 6-month basis. The sampling frequency is reduced for systems that demonstrate ongoing compliance.



Regulation of Lead in Drinking Water

- Lead “Action Level”
 - The action level is exceeded when more than 10% of the samples for any compliance period have lead concentrations of more than 15 ug/L (micrograms per liter).
 - Exceeding the action level is a ‘trigger’ for the water system to conduct public education, review sampling protocols and take steps to optimize corrosion control.



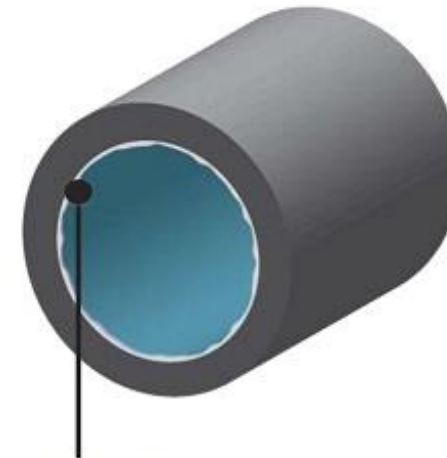
Regulation of Lead in Drinking Water

- Public Notice
 - When the action level is exceeded, the water system must complete public education within 60 days after the end of the compliance period through notices in customer bills, flyers, web notices, etc.
 - The water system must certify and send copies of these notices to EPD.
 - Public education must be repeated periodically until the water system no longer exceeds the action level.

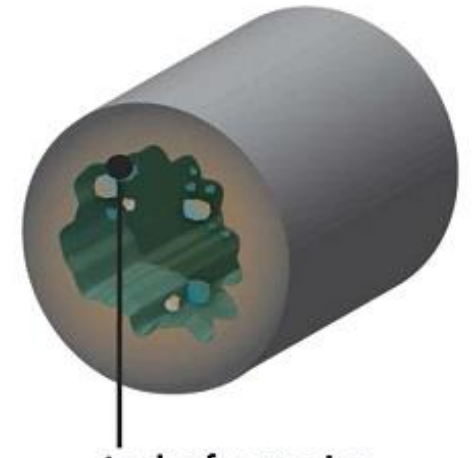


Regulation of Lead in Drinking Water

- Corrosion Control Optimization
 - When the action level is exceeded, the water system must begin corrosion control optimization by sampling and monitoring water quality parameters and source water.
 - EPD contracts with the Georgia Rural Water Association to provide sampling and technical assistance to water systems that need assistance meeting this requirement.
 - If sampling results indicate that the water has a corrosive quality, the water system will work with its engineer and EPD to evaluate corrosion control options and implement the appropriate corrosion control treatment (usually the addition of a chemical to increase the pH and/or the addition of a corrosion inhibitor).



A protective layer of **Orthophosphate** forms to prevent pipe corrosion.



Lack of corrosion control allows lead to leach from pipes into water.

Regulation of Lead in Drinking Water

- What can a consumer do to reduce potential exposure?
 - US EPA has developed a brochure to distribute to the public when high levels of lead are discovered that includes the steps being taken by the water provider to reduce the lead levels and also includes steps that the consumer can take such as:
 - 1) flushing the water at the tap before using the water;
 - 2) using only cold water for cooking and drinking; or
 - 3) purchasing an in-home treatment device that can remove lead.



Regulation of Lead in Drinking Water

- US EPA Plans to Revise the Drinking Water Rule for Lead
 - EPA published final amended rule in Federal Register January 15, 2021, with March 16, 2021 effective date and January 16, 2024 compliance date.
 - EPA has announced that it is considering additional changes to the rule.
 - EPA has proposed to extend the effective date until December 16, 2021 and the compliance deadline to September 16, 2024.



**U.S. ENVIRONMENTAL
PROTECTION AGENCY**

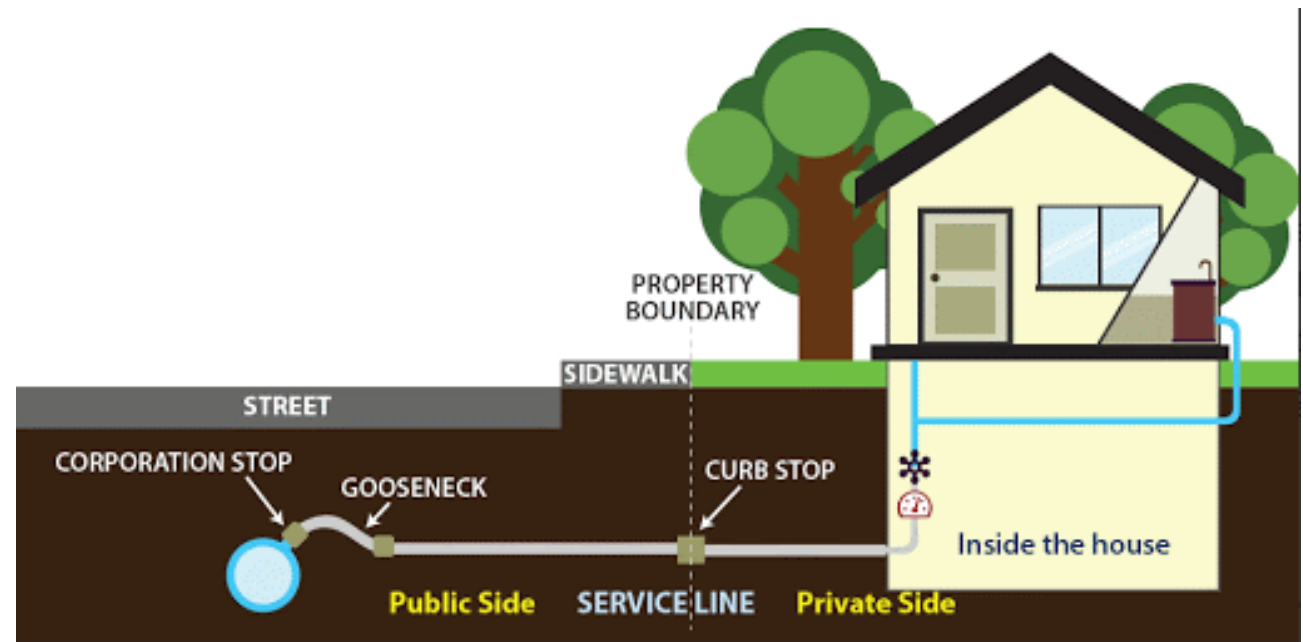
Regulation of Lead in Drinking Water

- EPA's Revised Lead Rule – Key Features
 - Testing at schools and child care facilities
 - Systems must conduct testing at each elementary school and child care facility once over a five year period (20% of facilities each year).
 - After five years, these facilities will continue receiving annual outreach and will have the opportunity to be tested for lead by the system on request.
 - Secondary schools can request testing at anytime.



Regulation of Lead in Drinking Water

- EPA's Revised Lead Rule – Key Features
 - Water systems required to revisit sampling sites to better target locations with lead service lines
 - Systems will have to pay attention to individual locations with elevated levels of lead by identifying the cause and mitigating the problem (find-and-fix)
 - For the first time systems will be required to develop a public lead service line inventory and create a plan for removing lead service lines
 - Systems above the trigger level of 10 parts per billion are required to work with their state to set an annual goal for replacing lead service lines
 - Water systems above the action level of 15 parts per billion are required to fully replace a minimum of three percent of the number of known or potential lead service lines annually



Regulation of Lead in Drinking Water

- Thank you!
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