



Lead Facts

Our Water

- There is no lead in Charleston Water System water.
- None of our water mains are made of lead, or contain any lead.
- No schools in our service area have lead service lines.
- Water arrives at all schools 100% lead free.

Water Treatment

- We continuously monitor water quality parameters.
- We adjust our water's pH and buffering capacity and add a corrosion inhibitor (orthophosphate) to inhibit lead's leaching from private plumbing, solder, and fixtures.

*The US Food & Drug Administration (FDA) considers phosphates a safe food additive.

Regulatory Compliance

- Our orthophosphate corrosion control program, implemented in 1992, has not allowed our sample homes to exceed the EPA's Maximum Contaminant Level (MCL) of 15 parts per billion (see page 2.)

What the EPA's LIFETIME LEAD MCL tells us:

- A 154 lb. adult can drink 2 liters of water containing 15 ppb of lead every day for 70 years and never experience adverse health effects, and the 15 ppb level includes an adequate margin of safety.



Compliance with EPA Lead & Copper Rule (LCR)

Data below is from 51 private homes known to contain high quantities of lead (service line, plumbing/fixtures/etc.)

1992-1994:

- We reported the highest lead levels in the nation under the new Lead and Copper Rule at 211 ppb.
- Began corrosion control program with orthophosphate and entered a consent agreement with EPA to control lead corrosion.
- Began a lead and copper public education program and a pilot program to optimize corrosion control.

1994-2000:

- Dec., 1994: Lead results under the EPA Action Limit. Sampled 100 homes, 2x/year, meeting EPA criteria in every case.
- June, 2000: Approved for reduced monitoring; once per year (50 homes.)

2002-Present

- Jan., 2002: Approved for reduced monitoring; every three years, 50 homes.
- **Aug., 2018;** All 51 homes tested under the EPA Action Limit (15 ppb.) Highest value was 11 ppb. 33 of the homes below the detection limit.

