PARTICULATE LEAD IN DRINKING WATER

Guidance

Lead results can vary between tests. You may have turned in many water samples for lead testing and gotten very different results for each. This document will help to explain why there may be such a difference.

TYPES OF LEAD IN DRINKING WATER

There are two different types of lead that can be present in drinking water, soluble lead and particulate lead.

Soluble Lead

Soluble lead is the lead that dissolves in water because of the chemical reaction between water and plumbing that contains lead. Water supplies use corrosion control to limit the amount of lead that dissolves in water. Corrosion control is generally the addition of a chemical called orthophosphate to the water, which creates a protective layer inside the pipes. Regular water use in your home helps coat the pipes as water containing orthophosphate moves through the pipes.

Particulate Lead

Particulate lead is like tiny grains of sand but is actually dislodged scale and sediment released into the water from plumbing. Disturbances, like replacing a water meter, construction, excavation activities, or home plumbing repair, increase the risk of particulate lead released by causing particulates to shake free from pipes and plumbing. Particulate lead is a concern because the lead content can be very high. Levels of particulate lead can vary between samples. A lead particulate could be present in a single glass of water, but not present in water sampled just before or after.

WHAT YOU CAN DO

Consider Using a Properly Certified Water Filter

When selecting a filter, it is important to know that your filter can remove both types of lead. Read packaging to find a filter that meets NSF/ANSI Standard 53, for the reduction of lead, and 42, for particulate (Class I). See example to the right. Be sure to maintain and replace the filter device in accordance with the manufacturer's instructions to protect water quality.

Clean Your Aerators

As part of routine maintenance, the aerator on the end of your faucet should be removed at least every six months to rinse out any debris that may include particulate lead. During construction activity, check your aerator more often. Start by checking it weekly. If no debris is present, decrease to monthly checks until construction is complete.

Watch For Construction Activities

Take note of any construction taking place near your home. When the ground is disturbed close to your home, it can increase the chance that lead particles can shake free from inside your pipes in the ground. If you see construction nearby, check your filters, clean your aerators and flush (run) the water in your home on a regular basis.