LEAD FACT SHEET

Brief Overview:

Category: Inorganic

Acceptable Level: 0.015 mg/L MCL Primary Drinking Water Standard

Source: Lead pipe, lead-based solder, and brass fixtures

Effect: Physical/mental development, kidney problems, high blood pressure

Follow up: Treat water, and then retest.

Treatment: Corrosion control; Filter

Details:

Source:
Lead is a metal found in natural deposits. It is sometimes used in household plumbing materials or in water service lines used to bring water from the water main to the home. Lead may occur in drinking water either by contamination of the source water used by the water system or by corrosion of lead plumbing or brass fixtures, which is the most common cause of elevated lead levels. Corrosion (dissolving or wearing away of metal) caused by a chemical reaction between water and the metal in the pipes. All water will corrode metal plumbing materials to some degree.

Lead is a highly toxic metal that was used for many years in products found in and around our homes, including plumbing pipes and fitting. Homes built before 1986 are more likely to have lead pipes, fixtures and solder. However, new homes are also at risk: even legally “lead-free” items contain up to 8% lead. The most common problem is with brass or chrome-plated brass faucets and fixtures, which can leach significant amounts of lead into the water, especially hot water.

Effect:
The health effects of lead are most severe for infants and children. In babies and children, exposure to lead in drinking water above the acceptable level can result in interference with red blood cell chemistry, delays in physical and mental development along with slight deficits in attention span, hearing and learning abilities. In adults, it can cause increases in blood pressure. Adults who drink this water over many years could develop kidney problems, high blood pressure, and other health problems.

Follow up:
Often, results for standing water (water that has been sitting in pipes or plumbing fixtures) are over the acceptable level and results for flushed water (water that has run through the pipes) are below the acceptable level. This is usually caused by corrosive water. Refrain from consuming water that has been in contact with your home’s plumbing for more than six hours. Before using water for drinking or cooking, flush the cold-water faucet by allowing the water to run until it has become as cold as it will get. Do not use water taken from the hot tap for cooking or drinking, and especially not for making baby formula. Boiling water actually increases the concentration of lead. If both results are over the acceptable level, do not use the water for cooking or drinking. Treat water, then retest.

If you are experiencing elevated lead levels in drinking water, it may be likely that the copper levels are also elevated. This is especially true if the plumbing system in your home or apartment contains copper pipes or brass fixtures. Treat water, then retest.

Treatment:
We recommend contacting a water treatment professional for corrosion control.

For further technical assistance, call Suburban Property Inspections at 1-866-866-6700, or call the U. S. Environmental Protection Agency Safe Drinking Water Hotline at 1-800-426-4791.