



# Suburban Property Inspections

Know what to expect - INSPECT<sup>sm</sup>  
Family owned and operated since 1988

## COPPER FACT SHEET

### Brief Overview:

<b>Category:</b>	Inorganic
<b>Acceptable Level:</b>	1.3 mg/L MCL, Secondary Drinking Water Standard
<b>Source:</b>	Occurs naturally in ground water, household plumbing materials
<b>Effect:</b>	Offensive taste, odor, staining, liver and kidney damage
<b>Follow up:</b>	Treat and retest
<b>Treatment:</b>	Corrosion Control

### Details:

#### Source:

Copper is a metal found in natural deposits as ores containing other elements and is widely used in household plumbing materials. Copper may occur in drinking water either by contamination of the source water used by the water system, or by corrosion of copper plumbing materials, which is the most common cause of elevated copper levels.

Copper works its way into the water by dissolving from copper pipes in the household plumbing. Corrosion of copper in water is greatest when the water is acidic. However, even water termed "non-corrosive" or water that has been treated to make it less corrosive can still corrode copper. The longer the water has stood idle in the pipes, the more copper it is likely to have absorbed. Newer homes with copper pipes may be more likely to have a problem. Over time, a coating forms on the inside of the pipes and can insulate the water from the copper in the pipes. In newer homes, this coating has not yet had a chance to develop.

#### Effect:

Copper can cause a metallic taste in your drinking water and may also cause blue or bluegreen stains around sinks and plumbing fixtures.

Copper is an essential nutrient, required by the body in very small amounts. The body has a natural mechanism for maintaining the proper level of copper in it. However, children under one year old have not yet developed this mechanism and, as a result, are more vulnerable to the toxic effects of copper.

The EPA has found copper to potentially cause the following health effects when people are exposed to it at levels above the acceptable level. Short periods of exposure can cause gastrointestinal disturbance, including nausea and vomiting. Use of water that exceeds the acceptable level over many years could cause liver or kidney damage. People with Wilson's disease may be more sensitive than others to the effects of copper contamination.

#### Follow up:

Often the standing copper results (water that has been sitting in pipes or plumbing fixtures) are over the acceptable level and flushed (water that has ran through the pipes) results 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.

If you are experiencing elevated copper levels in drinking water, it may be likely that lead levels are also elevated. This is especially true if the plumbing system in your home or apartment contains lead solder joints, lead service lines or brass fixtures. Since copper and lead enter drinking water under similar conditions, it is advisable to test for lead when testing for copper. Treat water, then retest.

#### Treatment:

We recommended 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.**



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