



# Suburban Property Inspections

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

## ARSENIC FACT SHEET

### Brief Overview:

<b>Category:</b>	Inorganic
<b>Acceptable Level:</b>	0.010 mg/L MCL, Primary Drinking Water Standard
<b>Source:</b>	Natural occurring, Pesticide, Industrial Waste, Smelting
<b>Effect:</b>	Short and Long-term Health Effects
<b>Follow up:</b>	Test for Pesticides, Herbicides, VOC's, Trace Metals
<b>Treatment:</b>	HMRG Filtration System

### Details:

#### Source:

Arsenic is an element that occurs naturally in air, water, soil, rocks and minerals, food and living organisms in low concentrations. Other sources of arsenic from human activities include urban runoff, pesticides, fossil fuel combustion, treated lumber, smelting and mining wastes. It is also used in paints, dyes, semiconductors and embalming from past centuries.

#### Effect:

Human exposure to arsenic can cause both short-term and long-term health effects. Long-term arsenic ingestion from drinking water is strongly associated with increased risk of skin cancer, and there is substantial evidence that it increases the risk for cancers of the bladder, lung, kidney, liver, nasal passages and prostate. Non-cancer effects can include thickening and discoloration of the skin, stomach pain, nausea, vomiting, diarrhea, numbness in hands and feet, partial paralysis and blindness. Skin lesions, peripheral neuropathy and anemia are hallmarks of chronic arsenic exposure.

#### Follow up:

If arsenic is found in an agricultural area pesticide-herbicide testing is suggested. When found in an industrial area, Volatile Organic Chemical testing is suggested if not already performed. Additional Trace Metal testing should also be considered.

#### Treatment:

If the level in your private well exceeds the public drinking water standard of 10 ppb, you are urged to consider taking steps to reduce your long-term exposure to those levels of arsenic. Long-term measures usually involve treatment devices, and should be used for any water that will be consumed by you and your family members (drinking, making beverages, preparing food, etc.). Bathing & hand washing, washing laundry, and flushing toilets are examples of water uses that do not require treatment. You cannot remove arsenic by boiling the water. In fact, you will increase the concentration of arsenic in the water that remains after boiling.

Due to the toxicity of arsenic, its cancer causing concerns and the difficulty in removing different species of arsenic, treatment should be left to experienced professionals.

Arsenic can be found in water in two different forms: Pentavalent Arsenic (also known as Arsenic 5, Arsenic V, or Arsenate) and Trivalent Arsenic (also known as Arsenic 3, Arsenic III, or Arsenite). There are new advances in water treatment that can remove both species of Arsenic. The HMRG filtration system prevents arsenic from being released back into our environment. There are certain compounds that can interfere with this type of treatment, your water professional may recommend testing for the following: Iron, Ortho phosphate, Silica and Vanadium.

Following installation of this system, the consumer should have the treated water tested for total arsenic to verify arsenic reduction is being achieved and the system is functioning properly.

For more information visit the USEPA web site: <http://www.epa.gov/safewater/arsenic.html>

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.



Home • Septic • Termite • Radon • Mold • Water



# Suburban Property Inspections

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



Home • Septic • Termite • Radon • Mold • Water