

# 2010 Contaminant Testing Results for Crossville

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Contaminant	Unit	MCLG Health Goal	MCL EPA's Limits	Level & Range Detected		Violation (Yes/No)	Year Sampled	Potential Source of Contamination
				Holiday Hills	Meadow Park			
Turbidity*	NTU	NA	TT=5NTU	0.28 (highest)	0.14 (highest)	NO	2010	The suspended matter in water.
				100% of samples below 0.3NTU				
Total Organic Carbon*		NA	TT	ave- 1.58	ave-1.65	NO	2010	Naturally present in the environment.
Copper	PPB	1.3	1.3 = AL	0.21 (90th percentile)		NO	2009	Erosion of household plumbing systems; Erosion of natural deposits
				All 30 samples below AL				
Fluoride	PPM	4	4	.89 (average)	.96 (average)	NO	2010	Erosion of natural deposits; Water additive to promote strong teeth
				0.43 - 1.33				
Lead	PPB	0	0.015 = AL	0.002 (90th percentile)		NO	2009	Corrosion of household plumbing systems; Erosion of natural deposits
				93% below AL				
Nitrate	PPM	10	10	BDL	BDL	NO	2010	Runoff from fertilizer use, leakage from septic tanks, sewage; Erosion of natural deposits
Chlorine Residual	PPM	MRDLG = 4	MRDL = 4	Distribution system Annual Average: 1.55		NO	2010	Water additive used to kill disease-causing organisms such as viruses.
Total Trihalomethanes (TTHMs)	PPB	NA	80	43.3 (average)	47.4 (average)	NO	2010	Byproduct of drinking water chlorination.
				24.8 - 62.6	23.3 - 87.8			
Haloacetic Acids (HAA5s)	PPB	NA	60	38.0 (average)	47.4 (average)	NO	2010	Byproduct of drinking water disinfection.
				24.1 - 75.5	26.9 - 88.3			
Sodium	PPM	NA	NA	9	9.1	NA	2010	Erosion of natural deposits
Hardness	PPM	NA	NA	35	25	NA	2010	Erosion of natural deposits.

\* We met the treatment technique requirement for total organic carbon and turbidity.

**Trihalomethanes & Haloacetic Acids:** compounds formed when natural organic compounds from decaying vegetation and soil react with chlorine.

## Cross Connections

Over the next few months, the warm weather will bring people outdoors to work in their yards and gardens and begin getting swimming pools ready. The City of Crossville would like to ensure that our customers are aware of the dangers associated with these activities. An ordinary garden hose is a common way to contaminate a water supply when the hose is submersed in any liquid or attached to certain devices used to spray pesticides or herbicides. This forms a cross connection. A cross connection is a situation where a possible source of contamination is directly linked to our public water system. If the end of your hose is connected to a chemical container, swimming pool or other contaminant during a water main break or fire, the substance can be siphoned back into the water system. This condition, known as back siphonage, could cause public health hazard. Devices are available to prevent this problem; however the best solution is to always be careful how you use your water hose. Please help us provide a safe supply of water to all of our customers. Remember, never place your water hose in anything you would not want to drink.

## \*Note:

The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data though accurate may be more than one year old.

**Turbidity** is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. The EPA has two requirements: (1) That the maximum level found must be less than 1 NTU; and (2) That the level must be under 0.3 NTU 95% of the time.

**TTHMs:** Some people who drink water containing Trihalomethanes in excess of the MCL of 80 parts per billion over many years may experience problems with liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

**HAA5s:** Some people who drink water containing Haloacetic Acids in excess of the MCL of 60 parts per billion over many years may have an increased risk of getting cancer.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below, which there is no known or expected risk to health. MCLGs allow for a margin of safety

**90th Percentile:** 90% of samples are equal to or less than the number in the chart.

**NTU or Nephelometric Turbidity Units:** A measure of clarity.

**NA:** Not applicable.

**ND:** Not detectable at testing limits.

**Treatment Technique or TT:** A required process intended to reduce the level of a contaminant in drinking water.

**Action Level or AL:** The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.

**Maximum Residual Disinfectant Level Goal**

**(MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water.

**BDL:** Below Detectable Limit