

**What is the source of my water?**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and groundwater wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Our current water supply consists of five groundwater deep rock wells followed by disinfection. The District is planning for the future long range water supply needs to meet a growing customer base and correcting the violations by exploring treatment options, additional water sources and storage.

**Why are there contaminants in my water?**

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline (800-426-4791). Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, Department of Natural Resources prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Department of Health regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

**How might I become actively involved?**

The Public Water Supply District #1 of Lincoln County performs numerous tests on the water including bacteriological, inorganic and organic compound to make certain your water is safe and of the highest quality. If you have further questions about your drinking water or this report, please call Charlie McLeod, Local Manager, at 636-528-8919.

**Do I need to take any special precautions?**

Some people may be more vulnerable to contaminants in drinking water than is the general population. Immuno-compromised persons such as persons with cancer under going chemotherapy, persons who have undergone organ trans-plants, 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 risks of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791)

**Contaminants Report**

**Definitions:** **MCLG:** Maximum Contaminant Level Goal, or the level of a contaminant in drinking water below which there is no known or expected risk to health. The MCLGs allow for a margin of safety. **MCL:** Maximum Contaminant Level, or 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 technology. **AL:** Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. **pCi/L:** Picocuries per liter (a measure of radioactivity). **ppm:** Parts per million or milligrams per liter (mg/L) **ppb=**parts per billion or micrograms per liter (ug/L). **90<sup>th</sup> Percentile:** For lead & copper testing, 10% of results are above this level and 90% are below this level

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Barium	05-04-2009	.0419	0.00736-0.0419	ppm	2	2	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits
Fluoride	01-28-2009	4.2	1.94-4.2	ppm	4	4	Natural deposits; Water additive which promotes strong teeth
Chromium	05-04-2009	5.73	5.21-5.73	ppb	100	100	Discharge from steel and pulp mills

Disinfection By Products	Monitoring Period	RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2009							

Lead and Copper	Date	90 <sup>th</sup> Percentile	Range	Unit	AL	Sites over AL	Typical Source
Copper	2008-2010	0.135	0.0307-0.174	ppm	1.3	0	Corrosion of household plumbing systems
Lead	2008-2010	3.94	1.03-351	ppb	15	1	Corrosion of household plumbing systems

Microbiological	Result	MCL	MCLG	Typical Source
Coliform (TCR)	In the month of May, 1 sample returned as positive	MCL: systems that collect less than 40 samples per month-No more than 1 positive sample	0	Naturally present in the enviroment

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Gross Alpha Particle Activity	01-08-2009	7.4	5-7.4	pCi/L			Erosion of natural deposits
Gross Alpha, Excl. Radon & U	02-04-2008	14.8	3-14.8	pCi/L	15	0	Erosion of natural deposits
Radium, Combined (-226 & -228)	04-03-2009	3.1	1.3-3.1	pCi/L	5		Erosion of natural deposits
Radium-226	04-03-2009	3.1	1.3-3.1	pCi/L	5	0	

During the 2009 calendar year we had the noted violation of drinking water regulations

Type	Category	Analyte	Compliance Period
MCL, Average	Maximum Contaminant Violation Well 7	Fluoride	01-01-2009 – 03-31-2009

Some people who drink water containing fluoride in excess of the MCL over many years may get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children’s teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt the gums. Questions or concerns-Please call Ken Duzan, Missouri Department of Natural Resources, St Louis Regional Office at 573-751-7834 or Paul Mueller, Missouri Department of Natural Resources, Lincoln County Satellite Office at 636-528-4779.