# 2009 annual water quality Report Volume #2 - July, 2010

(Consumer Confidence Report)

This report is intended to provide you with important information about your drinking water and the efforts made to provide safe drinking water.

MO3024055

## What is the source of drinking 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.

## Source Water Assessment

The Department of Natural Resources conducted a source water assessment to determine the susceptibility of our water source to potential contaminants. This process involved the establishment of source water area delineations for each well and then a contaminant inventory was performed within those delineated areas to assess potential threats to each source. Assessment maps and summary information sheets are available on the internet at: http://maproom.missouri.edu/ swipmaps/pwssid.htm. To access the maps you will need to enter the State-assigned identification code, MO3024055. The Source Water Inventory Project maps and information sheets provide a foundation upon which a more comprehensive source water protection plan can be developed.

#### 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 groundwater include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- 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.
- · Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- 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.

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, the 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.

## Do I need to take any special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 (800-426-4791).

## How might I become actively involved?

If you would like to observe the decision-making process that affect drinking water quality or if you have any further questions about your drinking water report, please call us at 573-449-8723 to inquire about scheduled meetings or contact persons.

### **Violations and Health Effects Information**

No violations occurred in calendar year 2009.

Our drinking water comes from these groundwater wells:					
McTurnan	Harmon				
Trimble	Gillespie				
Liberty	Woodhaven				
South	Airport				
Sapp	Elm Tree				
Koch	Botner				
Bethel	Route E				

#### **Definitions:**

# **Contaminants Report 2009**

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

90th %: 10% of test results are above this level and 90% are below this level.

**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 treatment technology.

**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. MCLGs allow for a margin of safety.

Range: Shows the highest value found during a testing period. If only one sample was taken, then this number equals the

riignest value.

## **Unit Abbreviations**

- ppb: parts per billion
- ppm: parts per million
- μg/L: micrograms per liter
- pCi/L: picocuries per liter
- n/a: not applicable

The State has reduced monitoring requirements for certain contaminants to less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Records with a sample year more than one year old are still considered representative.

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ANTIMONY, TOTAL	3/3/2009	1.19	1.19	ppb	6	6	Discharge from petroleum refineries; Fire retardants; Ceramics; Electronics; Solder
ARSENIC	12/10/2009	5.73	4.96 - 5.73	ppb	10	n/a	Erosion of natural deposits
BARIUM	3/3/2009	0.0955	0.00436 - 0.0955	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM	12/10/2009	2.47	2.41 - 2.47	ppb	100	100	Discharge from steel and pulp mills
FLUORIDE	3/3/2009	1.63	0.65 - 1.63	ppm	4	4	Natural deposits; Water additive which promotes strong teeth
SELENIUM	12/10/2009	0.95	0.4 - 0.95	ppb	50	50	Erosion of natural deposits

Radionuclides	Collection	Highest	Range	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (-226 & -228)	3/4/2009	3.5	1.3 - 3.5	pCi/L	5	0	Erosion of natural deposits
COMBINED URANIUM	2/27/2006	1.4	1.4	μg/L	30	0	Erosion of natural deposits
GROSS ALPHA, EXCL. RADON & URANIUM	3/4/2009	8.7	2.1 - 8.7	pCi/L	15	0	Erosion of natural deposits
GROSS ALPHA	3/4/2009	9.6	3 - 9.6	pCi/L			Erosion of natural deposits
RADIUM-226	3/4/2009	2.6	1.3 - 2.6	pCi/L	5	0	
RADIUM-228	3/4/2009	1.2	0.5 - 1.2	pCi/L	5	0	

Lead and Copper	Date	90th %	Range	Unit	AL	Sites	Typical Source	
LEAD	2008-2010	6.83	1.08-17.2	ppb	15	1	Corrosion of household plumbing systems	
COPPER	2008-2010	0.0968	0.00686- 0.155	ppm	1.3	0	Corrosion of household plumbing systems	
Disinfection By Products No Detected Results were found in Calendar Year 2009								
Microbiological	Microbiological No Detected Results were found in Calendar Year 2009							

President Jerome Glascock
Vice President Jimmy Lloyd Sapp
Members Gary Phillippe
Jane Sapp
John Spry
Interim Manager David Lee
Clerk Janet Sears
Telephone 573.449.0324
Telephone

**Board of Directors**