JACKSON COUNTY PWSD #13 MO1024279 2006 Annual Water Quality Report

We are very pleased to provide you with this year's Annual Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

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 water comes from the following source(s):

TRI-COUNTY WATER AUTHORITY: MO1071079

Groundwater-wells located in the Missouri River Alluvium.

We have an award winning Groundwater Protection Plan

which controls activity around the wells

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, 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.

Is our water system meeting other rules that govern our operations?

The Missouri Department of Natural Resources regulates our water system and requires us to test our water on a regular basis to ensure its safety. Our system has been assigned the identification number MO1024279 for the purposes of tracking our test results. Last year, we tested for a variety of contaminants. The detectable results of these tests are on the following pages of this report. Any violations of state requirements or standards will be further explained later in this report.

We at PWSD #13 are proud of the fact we have had no violations.

How might I become actively involved?

If you would like to observe the decision-making process that affects drinking water quality, or if you have any further questions about your drinking water report, please contact Charles Dellario at 816-578-2249. If you would like to learn more, please attend any of our regularly scheduled meetings which are held at 6:00 P.M. on the second Wednesday of each month at our office located at: 99 Lake Lotawana Rd., Lake Lotawana, MO.

Do I need to take special precautions?

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 (800-426-4791).

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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. MCLGs allow for a margin of safety.
- 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.
- AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- TT: Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

 90th. Percentile: For lead and copper testing. 10% of test results are above this level and 90% are below this level.

 Level Found: Is the average of all test results for a particular contaminant.
- Range of Detections: Shows the lowest and highest levels found during a test period. If only one sample was taken, this number equals the Level Found.
- MRLDG: Maximum Residual Disinfectant Level Goal or the level of a drinking water disinfectant below which there is no known or expected risk of health.
- MRDL: Maximum Residual Disinfectant Level or the highest level of a disinfectant allowed in drinking water.

- PPB: parts per billion or micrograms per liter PPM: parts per million or milligrams per liter N/A: not applicable
- NTU: Nephelometric Turbidity Unit, used to measure cloudiness in drinking water MFL: million fibers per liter, used to measure asbestos concentration. ND: not detectable at testing limits.

The state has reduced monitoring requirements for certain contaminants to less often 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

<u>Inorganic</u>	Units	MCL			Range of Detection	Violation	Sample Year			
ARSENIC	ppb	50	n/a	1.6900	1.69	No	2005			
Sources of Arsenic: Erosion of natural deposits; runoff from orchards, runoff from grass and electronics plants wastes.										
BARIUM	ppm	2	2	.0419	.0419	No	2005			
Sources of Barium: Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.										
FLUORIDE	ppm	4	4	0.1800	.18	No	2005			
Sources of Fluoride: Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.										
NITRATE+NITRITE (as N)	ppm	10	10	< 0.05	<0.05-0.08	No	2006			
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Sources of Nitrate+Nitrite (as N)):									
Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.										
Disinfection By-products										
Total Trihalomethanes (TTHM)		80	n/a	19.4000	19.4	No	2005			
Total Haloacetic Acids (THAA)	• •	60	n/a	<13.5	4.76-15.3	No	2005			
Sources of TTHM and THAA: By-products of drinking water chlorination.										

Copper

Collection Period	Unit 90 TH	. Percentile	Range	Action Level	Sites over AL	Sources
1/1/2004 - 12/31/2004	ppm	.0.161	0.00842 - 0.219	AL=1.3	0	Corrosion of household plumbing systems.
Lead 1/1/2004-12/31/2004	ppb	3.02	1 - 11.7	AL=15	0	Corrosion of household plumbing systems.

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Reseller Contaminants

Regulated Contaminants	Collection Date	Water System	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ARSENIC	5/24/2005	TRI-COUNTY WATER AUTHRTY	1.69	1.69	ppb	10.00 0		Erosion of natural deposits
BARIUM	5/24/2005	TRI-COUNTY WATER AUTHRTY	0.0419	0.0419	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE	5/24/2005	TRI-COUNTY WATER AUTHRTY	0.18	0.18	ppm	4.0	4	Natural deposits; Water additive which promotes strong teeth.

Secondary Contaminants	Collection Date	Water System	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ALKALINITY, TOTAL	5/24/2005	TRI-COUNTY WATER	73	73	MG/L			
CALCIUM	5/24/2005	AUTHRTY TRI-COUNTY WATER AUTHRTY	12.4	12.4	MG/L			
CHLORIDE	5/24/2005	TRI-COUNTY WATER AUTHRTY	24.5	24.5	MG/L	250		
HARDNESS, CARBONATE	5/24/2005	TRI-COUNTY WATER AUTHRTY	96.9	96.9	MG/L			
MAGNESIUM	5/24/2005	TRI-COUNTY WATER AUTHRTY	16	16	MG/L			
PH	5/24/2005	TRI-COUNTY WATER AUTHRTY	7.99	7.99	PH	8.5		
POTASSIUM	5/24/2005	TRI-COUNTY WATER AUTHRTY	5.67	5.67	MG/L			
SODIUM	5/24/2005	TRI-COUNTY WATER AUTHRTY	39.1	39.1	MG/L		20	
SOLIDS, TOTAL DISSOLVED (TDS)	5/24/2005	TRI-COUNTY WATER AUTHRTY	227	227	MG/L	500		
SULFATE	5/24/2005	TRI-COUNTY WATER AUTHRTY	64.7	64.7	MG/L	250		

During the 2006 calendar year, the water system(s) that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Type	Category	Analyte	Compliance Period
No Violations Occurred in the Cal	lendar Year of 200	6		