City Corporation P.O. Box 3186 Russellville, AR 72811

# IMPORTANT INFORMATION ABOUT YOUR WATER QUALITY

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Russellville, AR Permit No. 37

ity Corporation continues to focus on the upgrade, maintenance, and modernization of both the water and sewer systems through a progressive completion of our 2003 Water and Wastewater Master Plan. Plans for summer 2006 include: installing a 13.9 million gallon flow equalization basin at the Pollution Control Facility at a projected cost of \$3.7 million; advertising for bids to convert from chlorine gas at the Water Treatment Plant to Sodium Hypochlorite as the primary disinfectant at a projected cost of \$2.3 million; design phase of a new 2.0 million gallon water storage tank, to be built in the vicinity of weir road at a projected cost of \$1.7 million.

If you have questions or need additional information, please stop by our office at 205 West 3rd Place, call us at 968-2105, or visit our web site at www.citycorporation.com.

# 2005 Water Quality Report



Best Tasting Drinking Water in Arkansas

ity Corporation is pleased to present to you the 2005 Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water at a reasonable cost. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, can pick up substances resulting from the presence of animals or from human activity. Our source is surface water from the Illinois Bayou which supplies the Huckleberry Creek Reservoir.

Contaminants that may be present in source water include: <u>Microbial contaminants</u> such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; <u>Inorganic contaminants</u> 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; <u>Pesticides and herbicides</u> which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; <u>Organic chemical contaminants</u> 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; <u>Radioactive contaminants</u> which can be naturally occurring or be the result of oil and gas production and mining activities.

The Arkansas Department of Health & Human Services has completed a Source Water Vulnerability Assessment for City Corporation. This assessment summarizes the potential for contamination of our sources of drinking water and can be used as a basis for developing a source water protection plan. Based on the various criteria of the assessment, our water sources have been determined to have a low to medium susceptibility to contamination. You may request a summary of the Source Water Vulnerability Assessment from the City Corporation office.

All 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 the 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 at 1-800-426-4791.

In order to assure tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If you have any questions about this report or your water utility, please contact Kenny Lutz at 968-2105. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled board meetings that are held on the third Tuesday of each month at 5:00 PM in our conference room at 205 West 3<sup>rd</sup> Place in Russellville.

City Corporation routinely monitors for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1st to December 31st, 2004. In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms we have provided the following definitions:

**Action Level** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements. **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.

**Maximum Residual Disinfectant Level (MRDL)** - the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

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.

NA - not applicable

**Nephelometric Turbidity Unit (NTU) -** a unit of measure for the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Parts per million (ppm) – a unit of measurement for detecting levels of contaminants in drinking water. One part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb)** – a unit of measurement for detecting levels of contaminants in drinking water. One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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Contaminant	Violation	Level	Unit of	MCLG	MCL	Major Sources in Drinking
	Y/N	Detected	Measurement			Water
Total Coliform Bacteria	N	1 positive sample in July, 2005 1 positive sample in September, 2005	Present	o	2 or more positive samples per month	Naturally present in the environment
Turbidity	N	Highest yearly sample result: 0.21 Lowest monthly % of samples meeting the turbidity limit: 100%	NTU	NA	> 0.3NTU in > 5% of samples or any 1 sample > 1 NTU	Soil runoff

## **INORGANIC CONTAMINANTS**

Contaminant	Violation	Level Detected	Unit of	MCLG	MCL	Major Sources in Drinking Water	
	Y/N		Measurement				
Fluoride	N	Average: 0.81 Range: 0.55 – 1.02	ррт	4	4	Water additive which promotes strong teeth	
Nitrate (as Nitrogen)	N	0.16	ррт	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
LEAD AND COPPER TAR MONITORING							

### LEAD AND COPPER TAP MONITORING

Contaminant	Number of Sites over Action Level	90 <sup>th</sup> Percentile Result	Unit of Measurement	Action Level	Major Sources in Drinking Water
Lead	0	0.006	ррт	0.015	Corrosion from household plumbing
Copper	0	0.26	ррт	1.3	systems; erosion of natural deposits.

DISINFECTION BY-PRODUCT PRECURSORS

The percentage of Total Organic Carbon (TOC) removal was routinely monitored in 2005, and our water system met all TOC removal requirements set by USEPA. Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by-products. These by-products include trihalomethanes (THMs) and haloacetic acids (HAAs).

### **REGULATED DISINFECTANTS**

Disinfectant	Violation	Level	Unit of	MRDLG	MRDL	Major Sources in Drinking Water
	Y/N	Detected	Measurement			
Chlorine	N	Average: 0.76 Range: 0.01 – 1.54	ррт	4	4	Water additive used to control microbes

# VOLATILE ORGANIC CONTAMINANTS

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Contaminant	Violation	Level Detected	Unit of	MCLG	MCL	Major Sources in Drinking
	Y/N		Measurement			Water
HAA5 [Haloacetic Acids]	N	Highest running annual average: 44.9 Range: 14 – 75.9	ppb	o	60	By-products of drinking
TTHM Highest [Total N annual a		Highest running annual average: 30.3 Range: 17.4 – 103.9	ppb	NA	80	water disinfection

### **UNREGULATED CONTAMINANTS**

Contaminant	Level Detected	Unit of Measurement	MCLG	Major Sources in Drinking Water
Chloroform	27.3	ppb	NA	
Bromodichloromethane	6.91	ppb	0	By-products of drinking water disinfection
Dibromochloromethane	1.34	ppb	60	

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. MCLs (Maximum Contaminant Levels) and MCLGs (Maximum Contaminant Level Goals) have not been established for all unregulated contaminants.

VIOLATIONS

annual water quality report

VIOLATIONS				
TYPE:	FROM:	TO:	CORRECTIVE ACTION:	
Failed to submit the proper number of valid bacteriological samples	8/1/2005 9/1/2005		Submitted appropriate number of valid bacteriological samples to the Arkansas Department of Health & Human Services the following month	
Consumer Confidence Report (CCR) - Failure to provide the state with certification of distribution of the	10/1/2005	10/3/2005	Provided the state with certification of distribution of the annual water quality report	