

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

IMPORTANT INFORMATION  
ABOUT YOUR WATER QUALITY

Presorted  
Standard  
U.S. Postage  
**PAID**  
Russellville, AR  
Permit No. 37

# 2004 Water Quality Report

PROOF



In Russellville, City Corporation is the responsible agency for billing, operations, and maintenance of the Russellville Water and Sewer System. We take pride in providing you, our customer, with the highest quality service and product to meet your water and wastewater needs. City Corporation is pleased to present to you the 2004 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. City Corporation is committed to Service and Product Excellence.

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 Huckleberry Creek Reservoir.

Contaminants that may be present in source water 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.

The Arkansas Department of Health 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, or accessed through the Arkansas Department of Health's website at [www.healtharkansas.com/eng/swphtm](http://www.healtharkansas.com/eng/swphtm).

City 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. Our construction department has been busy relocating water and sewer mains and services located along East 16th Street and East 4th Street in conjunction with the Russellville street and drainage improvement program. Water mains have also been relocated at the South Frankfort Avenue widening and the Mill Creek interchange projects.

At the Water Treatment Plant we are currently in the design phase of a new chemical storage building and a sodium

hypochlorite feeder to replace the current liquid chlorine disinfectant feed system. We also are in the planning stage for repainting the 14th and Houston Street water storage tank. At the Pollution Control Works we are preparing to build an Equalization Basin to allow the plant to store an additional 12 million gallons of hydraulic overload during storm events, for a total storage of about 20 million gallons. New skimmer equipment will be installed in two clarifiers and design work is also in progress for the replacement of two outdated sewer pumping stations.

If you need additional information feel free to contact us by phone at 968-2105 or stop by our office at 205 West 3rd Place. You can also contact us via the City Corporation web site at [www.citycorporation.com](http://www.citycorporation.com).

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. 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 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 968-2080. 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 3rd 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:

TEST RESULTS						
MICROBIOLOGICAL CONTAMINANTS						
Contaminant	Violation Y/N	Level Detected	Unit of Measurement	MCLG	MCL	Major Sources in Drinking Water
Total Coliform Bacteria	N	1	Present	0	> 1 positive monthly sample	Naturally present in the environment
Turbidity	N	Highest yearly sample result: 0.16 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
♦ Turbidity is a measurement of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system						
INORGANIC CONTAMINANTS						
Contaminant	Violation Y/N	Level Detected	Unit of Measurement	MCLG	MCL	Major Sources in Drinking Water
Fluoride	N	Average: 0.69 Range: 0.60 – 0.83	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	N	0.25	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
LEAD AND COPPER TAP MONITORING						
Contaminant	Number of Sites over Action Level	90 <sup>th</sup> Percentile Result	95 <sup>th</sup> Percentile Result	Unit of Measurement	Action Level	Major Sources in Drinking Water
Lead	1	0.004	0.006	mg/L	0.015	Corrosion from household plumbing systems; erosion of natural deposits.
Copper	0	0.26	0.3	mg/L	1.3	
♦ City Corporation on a reduced monitoring schedule and requires monitoring once every three years for lead and copper at the customers' taps. Our last monitoring period was in 2002. Our next required monitoring period is the year 2005. ♦ Infants and young children are especially more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in your community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flushed for 20 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).						
DISINFECTION BY-PRODUCT PRECURSORS						
♦ Total Organic Carbon (TOC) removal was routinely monitored in 2004, and our water system met all TOC removal requirements set by USEPA. Total Trihalomethanes (TTHM) has not been monitored. However, 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 Y/N	Level Detected	Unit of Measurement	MRDLG	MRDL	Major Sources in Drinking Water
Chlorine	N	Average: 0.68 Range: 0.01 – 1.67	ppm	4	4	Water additive used to control microbes
VOLATILE ORGANIC CONTAMINANTS						
Contaminant	Violation Y/N	Level Detected	Unit of Measurement	MCLG	MCL	Major Sources in Drinking Water
HAA5 [Haloacetic Acids]	N	Highest running annual average: 42.8 Range: 13.8 – 72.4	ppb	0	60	By-products of drinking water disinfection
TTHM [Total Trihalomethanes]	N	Highest running annual average: 30.3 Range: 11.5 – 52.9	ppb	NA	80	
UNREGULATED CONTAMINANTS						
Contaminant	Level Detected	Unit of Measurement	MCLG	Major Sources in Drinking Water		
Chloroform	27	ppb	NA	By-products of drinking water disinfection		
Bromodichloromethane	5.81	ppb	0			
Dibromochloromethane	0.79	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.						

PROOF

### DEFINITIONS

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

**Maximum Contaminant Level** - The "Maximum Allowed" (MCL) is 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** - The "Goal" (MCLG) is 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)** - is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Parts per million (ppm) or Milligrams per liter (mg/L)** - One part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb) or Micrograms per liter (µg/L)** - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Treatment Technique (TT)** - a required process intended to reduce the level of a contaminant in drinking water.