

## 2010 City of Derby Test Results

Microbiological	Result	MCL	MCLG	Typical Source
Coliform (TCR)	One sample returned as positive in October	Systems that collect less than 40 samples/month can have no more than one positive monthly sample	0	Naturally present in the environment
E. Coli	One sample returned as positive in June	A routine sample and a repeat sample are Total Coliform Positive. One sample is also Fecal Positive/E. Coli positive	0	Human and animal fecal waste

Disinfection Byproducts	Monitoring Period	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
Total Haloacetic Acids (HAA5)	2010	14	9.8-13	ppb	60	0	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2010	29	23-33	ppb	80	0	Byproduct of drinking water chlorination

	Monitoring Period	90th Percentile	Range	Unit	AL	Sites over AL	Typical Source
Copper, Free	2008-2010	0.26	0.049-0.44	ppm	1.3	0	Corrosion of household plumbing
Lead	2008-2010	6.6	1.4-32	ppb	15	1	Corrosion of household plumbing

In 2010, the City of Derby had no violations of drinking water regulations. The following tables list all of the drinking water contaminants detected from the water system from which the City purchased its drinking water.

Regulated Contaminants	Collection Date	Water System	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Arsenic	4/6/10	City of Wichita	1.5	1.5	ppb	10	0	Erosion of natural deposits
Barium	4/6/10	City of Wichita	0.03	0.03	ppm	2	2	Discharge from metal refineries
Flouride	4/6/10	City of Wichita	0.33	0.33	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth
Nitrate	4/6/10	City of Wichita	1.4	1.4	ppm	10	10	Runoff from fertilizer use
Selenium	4/6/10	City of Wichita	5	5	ppb	50	50	Erosion of natural deposits
Turbidity	4/24/07	City of Wichita	0.22	0.22	NTU	1		Soil runoff

Secondary Contaminants	Collection Date	Water System	Highest Value	Range	Unit	SMCL
Alkalinity, total	4/6/10	City of Wichita	77.2	77.2	MG/L	300
Bromate	7/6/10	City of Wichita	9.3	5.3-9.3	ppb	10
Calcium	4/6/10	City of Wichita	27	27	MG/L	200
Chloride	4/6/10	City of Wichita	130	130	MG/L	250
Conductivity @ 25 C UMHOS/CM	4/6/10	City of Wichita	770	770	UMHO/CM	1500
Hardness, total (as CaCO3)	4/6/10	City of Wichita	130	130	MG/L	400
Iron	4/6/10	City of Wichita	0.02	0.02	MG/L	0.3
Magnesium	4/6/10	City of Wichita	16	16	MG/L	150
PH	4/6/10	City of Wichita	7.7	7.7	PH	8.5
Phosphorus, total	4/6/10	City of Wichita	0.052	0.052	MG/L	5
Potassium	4/6/10	City of Wichita	3.9	3.9	MG/L	100
Silica	4/6/10	City of Wichita	11	11	MG/L	50
Sodium	4/6/10	City of Wichita	97	97	MG/L	100
Sulfate	4/6/10	City of Wichita	93	93	MG/L	250
TDS	4/6/10	City of Wichita	420	430	MG/L	500

# 2010 Water Consumer Confidence Report

*Providing quality water to Derby residents.*

[www.derbyweb.com](http://www.derbyweb.com)

# The Quality of Derby's Water

This brochure serves as the annual quality report of the water provided by the City of Derby in 2010. To learn more about water, attend a Water Board meeting on the fourth Tuesday of most months at 6:30 p.m. at City Hall, 611 Mulberry Rd. Meetings are also broadcast live on Channel 7. For more information, call the City of Derby at 788-1424.

The City's drinking water is supplied by the City of Wichita. The water is treated to remove several contaminants, and a disinfectant is added to protect against microbial contaminants. The Safe Drinking Water Act requires each state to develop a Source Water Assessment for each public water supply that treats and distributes raw source water to identify potential contamination sources. The assessment for Derby is available at [www.kdheks.gov/nps/swap/SWreports.html](http://www.kdheks.gov/nps/swap/SWreports.html) or by contacting the City of Derby at 788-1424.

Some people may be more vulnerable to contaminants found in drinking water due to health issues such as cancers, organ transplants, HIV/AIDS, or age (elderly or infants). If you are in one of these categories, please seek advice from your health care provider about drinking water. EPA/CDC guidelines on how to reduce the risk of infection by cryptosporidium and other microbial contaminants are available by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

Please remember that all drinking water, including bottled water, may contain a small amount of 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 Safe Drinking Water Hotline at 800-426-4791.

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

## Contaminants that water may be treated for include:

*Microbial* - viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations or wildlife.

*Inorganic* - 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* - may come from a variety of sources, such as stormwater runoff, agriculture, and residential users.

*Radioactive* - can be naturally occurring or the result of mining activity.

*Organic* - synthetic and volatile chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff and septic systems.

To ensure that tap water is safe to drink, the EPA regulates the amount of certain contaminants in water provided by public water systems. Derby treats its water according to EPA regulations. The Food and Drug Administration, which regulates bottled water, must provide the same protection for public health.

The City of Derby tested a minimum of 20 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, additional tests are performed to determine if harmful bacteria are present in the water supply. If the legal limit is exceeded, the water supplier must notify the public.

The tables on the back side of this brochure list all drinking water contaminants detected in 2010. The presence of these contaminants does not necessarily indicate the water posed a health risk. Unless noted, the data for testing was gathered from January 1 to December 31, 2010. The state requires the City to monitor certain contaminants less than once per year because the concentrations of these contaminants do not generally vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

## Definitions

### Maximum Contaminant Level Goal (MCLG)

The goal is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

### Maximum Contaminant Level (MCL)

The maximum allowed MCL is the highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available technology.

### Secondary Maximum Contaminant Level (SMCL)

The recommended level for a contaminant that is not regulated and has no MCL.

### Action Level (AL)

The concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

Parts per Million (ppm) or milligrams per liter (mg/l)

Parts per Billion (ppb) or micrograms per liter (ug/l)

### Nephelometric Turbidity Unit (NTU)

A measure of clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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### Additional Information

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Coliforms were found in more samples than allowed (2 in 40). This serves as a warning of potential problems.

Elevated levels of lead may cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials associated with service lines and home plumbing. The City's water provider is responsible for providing high quality drinking water, but cannot control the materials used in plumbing components. When water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).