

2011 City of Derby Test Results

Microbiological	Result	MCL	MCLG	Typical Source
Coliform (TCR)	In the month of August, 1 sample returned as positive	MCL: Systems that collect less than 40 samples/month - no more than 1 positive monthly sample	0	Naturally present in the environment

Disinfection Byproducts	Monitoring Period	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
Total Haloacetic Acids (HAA5)	2011	11	7.1-11	ppb	60	0	By-product of drinking water disinfection
Total Trihalomethanes (TTHMs)	2011	25	18-25	ppb	80	0	By-product of drinking water disinfection

Lead & Copper	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 2011, the City of Derby had zero violations of drinking water regulations. The table below lists all of the drinking water contaminants detected from the water system from which the city purchases drinking water.

Regulated Contaminants	Collection Date	Water System	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Arsenic	5/23/2011	City of Wichita	2.1	2.1	ppb	10	0	Erosion of natural deposits
Barium	5/23/2011	City of Wichita	0.044	0.044	ppm	2	2	Discharge from metal refineries
Chromium	5/23/2011	City of Wichita	1.1	1.1	ppb	100	100	Discharge from steel and pulp mills
Flouride	5/23/2011	City of Wichita	0.32	0.32	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth
Nitrate	5/23/2011	City of Wichita	1.4	0.8-1.4	ppm	10	10	Runoff from fertilizer use
Selenium	5/23/2011	City of Wichita	3.2	3.2	ppb	50	50	Erosion of natural deposits
Turbidity	4/27/2007	City of Wichita	0.22	0.22	NTU	1		Soil runoff

Secondary Contaminants	Collection Date	Water System	Highest Value	Range	Unit	SMCL
Alkalinity, Total	5/23/2011	City of Wichita	94.1	94.1	MG/L	300
Bromate	6/6/2011	City of Wichita	14	5.8-14	ppb	10
Calcium	5/23/2011	City of Wichita	26	26	MG/L	200
Chloride	5/23/2011	City of Wichita	120	120	MG/L	250
Conductivity @25C UMHOS/CM	5/23/2011	City of Wichita	720	720	UMHO/CM	1500
Hardness, Total (as CAC03)	5/23/2011	City of Wichita	120	120	MG/L	400
Magnesium	5/23/2011	City of Wichita	14	14	MG/L	150
PH	5/23/2011	City of Wichita	7.9	7.9	PH	8.5
Phosphorus, Total	5/23/2011	City of Wichita	0.06	0.06	MG/L	5
Potassium	5/23/2011	City of Wichita	4.4	4.4	MG/L	100
Silica	5/23/2011	City of Wichita	17	17	MG/L	50
Sodium	5/23/2011	City of Wichita	90	90	MG/L	100
Sulfate	5/23/2011	City of Wichita	67	67	MG/L	250
TDS	5/23/2011	City of Wichita	400	400	MG/L	500
Zinc	5/23/2011	City of Wichita	0.0052	0.0052	MG/L	5

2011 DERBY Water Consumer Confidence Report



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 2011. 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 of Derby is available at 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 cancer, organ transplant, 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 from 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 25 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.

Definitions

ACTION LEVEL (AL)

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

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.

NEPHELOMETERIC TURBIDITY UNIT (NTU)

A measure of 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)

PARTS PER BILLION (ppb) or micrograms per liter (ug/l)

SECONDARY MAXIMUM CONTAMINANT LEVEL (SMCL)

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

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. If the number of coliforms found exceeds the allowed amount, more testing is done. The City of Derby did not exceed the allowed amount in 2011.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components with service lines and home plumbing. The City of Derby water system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been sitting for several hours, the potential for lead exposure can be minimized by flushing the tap for 30 seconds to two minutes before using water for drinking or cooking. If you have concerns about lead in the water system, you can have your water tested. Information on lead in drinking water, testing methods, and steps to minimize exposure is available by calling the Safe Drinking Water Hotline at 800-426-4791 or online at www.epa.gov/safewater/lead.