



City of Salina
Consumer Confidence Report – 2011
Covering Calendar Year – 2010



This document is a snapshot of the quality of the water that the City of Salina provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It is important that customers be aware of the efforts that are made continually to improve their water systems.

Water Source

Your water comes from 15 groundwater wells located within the City of Salina and surface water from the Smoky Hill River.

Your water is treated to remove several contaminants and a disinfectant is added to protect you against microbial contaminants. The Safe Drinking Water Act (SDWA) required states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of our source water. For results of the assessment, please contact us or view on-line at: <http://www.kdheks.gov/nps/swap/SWreports.html>.

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 those 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).

Why are there contaminants in my drinking 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 EPA's Safe Drinking Water Hotline (800-426-4791).

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, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in water sources before we treat it include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water 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 storm water run-off, agriculture, and residential users.

Radioactive contaminants, which can be naturally occurring or the result of mining activity.

Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system tested a minimum of 50 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, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

Water Conservation

Again this year, the City of Salina is asking Salina area water users to be good stewards of our natural resources. Continued diligence in conserving raw water resources will help ensure that an adequate water supply is available to meet our customers' needs. The efficient use of water has the beneficial effect of limiting or postponing costly water system expansions.

Results of Voluntary Monitoring

Certified laboratories analyze water samples at various points in the treatment process on a daily basis. Samples are also obtained on a regular basis to ensure the water quality standard is maintained throughout the distribution system. In addition to the testing we are required to perform, the Water Division voluntarily tests for many additional substances and microscopic organisms to make certain our drinking water is safe and of high quality. Approximately 80,000 samples are taken and analyzed each year to provide quality assurance.

Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2010 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1-December 31, 2010. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old. **The bottom line is that the water provided to you is safe.**

Terms & Abbreviations

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 that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Secondary Maximum Contaminant Level (SMCL): 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.

Treatment Technique (TT): a required process intended to reduce levels of a contaminant in drinking water.

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.

Non-Detects (ND): lab analysis indicates that the contaminant is not present.

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

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

Picocuries per Liter (pCi/L): a measure of the radioactivity in water.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU): a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

Running Annual Average (RAA): an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

Testing Results for: City of Salina

Microbiological	Result			MCL			MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2010								
Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source	
ATRAZINE	6/7/2010	0.53	0.53	ppb	3	3	Runoff from herbicide used on row crops	
BARIUM	3/22/2010	0.0084	0.0084	ppm	2	2	Discharge from metal refineries	
CHROMIUM	3/22/2010	2.3	2.3	ppb	100	100	Discharge from steel and pulp mills	
FLUORIDE	10/25/2010	1.2	1.1 - 1.2	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth	
NITRATE	3/8/2010	1.9	0.62 - 1.9	ppm	10	10	Runoff from fertilizer use	
SELENIUM	3/22/2010	6.1	6.1	ppb	50	50	Erosion of natural deposits	
TURBIDITY	3/22/2010	2.1	2.1	NTU	1		Soil runoff	
Disinfection Byproducts	Monitoring Period	Highest RAA	Range	Unit	MCL	MCLG	Typical Source	
TOTAL HALOACETIC ACIDS (HAA5)	2010	42	4.3 - 43	ppb	60	0	By-product of drinking water disinfection	
TOTAL TRIHALOMETHANES (TTHMs)	2010	73	14 - 92	ppb	80	0	By-product of drinking water chlorination	
Lead and Copper	Monitoring Period	90 th Percentile	Range	Unit	AL	Sites Over AL	Typical Source	
COPPER, FREE	2008 - 2010	0.0043	0.0029 - 0.13	ppm	1.3	0	Corrosion of household plumbing	
LEAD	2008 - 2010	2.3	1.1 - 4.6	ppb	15	0	Corrosion of household plumbing	
Maximum Disinfection Level	MPA	MPA Units		RAA		RAA Units	Analyte Code	Analyte Name
09/01/2010 - 09/30/2010	3.4	MG/L		3.1		MG/L	1006	CHLORAMINE
Total Organic Carbon	Number of Samples		RAA		Removal Ratio		Required Removal Ratio	
06/01/2010 - 06/30/2010	12		1.9		2.05		1.0 RATIO	
Secondary Contaminants	Collection Date		Highest Value		Range		Unit	SMCL
ALKALINITY, TOTAL	3/22/2010		90.1		90.1		MG/L	300
ALUMINUM	3/22/2010		0.02		0.02		MG/L	0.05
CALCIUM	3/22/2010		24		24		MG/L	200
CHLORIDE	3/22/2010		150		150		MG/L	250
CONDUCTIVITY @ 25 C UMHOS/CM	3/22/2010		1100		1100		UMHO/CM	1500
HARDNESS, TOTAL (AS CAC03)	3/22/2010		140		140		MG/L	400
MAGNESIUM	3/22/2010		18		18		MG/L	150
PH	3/22/2010		7.6		7.6		PH	8.5
PHOSPHORUS, TOTAL	3/22/2010		0.64		0.64		MG/L	5
POTASSIUM	3/22/2010		7.9		7.9		MG/L	100
SILICA	3/22/2010		12		12		MG/L	50
SODIUM	3/22/2010		160		160		MG/L	100
SULFATE	3/22/2010		200		200		MG/L	250
TDS	3/22/2010		620		620		MG/L	500

Additional Required Health Effects Language

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. 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 associated with service lines and home plumbing. Your water system is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your 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 wish to 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 <http://www.epa.gov/safewater/lead>.

Overview

In 2010, as in years past, the City of Salina's tap water met all U.S. Environmental Protection Agency (EPA) and State Department of Health and Environment (KDHE) drinking water health standards. The City of Salina, Water Division, vigilantly safeguards its water supplies, and again, we are proud that our system has not violated a maximum contaminant level or other water quality standard.

Public Participation Opportunities

The Salina City Commission meets at 4 P.M. on Mondays at the City-County Building, 300 W. Ash. You may present items related to water issues at the commission meeting, or express your concerns to Martha Tasker, Director of Utilities during normal office hours at (785)309-5725 or e-mail at martha.tasker@salina.org.