



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 2012 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, 2012. 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 that is 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.

Monitoring Period Average (MPA): An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

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

Regulated Contaminants	Collection Date	Your Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source	
ARSENIC	5/14/2012	2.5	2.5	ppb	10	0	Erosion of natural deposits	
ATRAZINE	6/11/2012	0.33	0.33	ppb	3	3	Runoff from herbicide used on row crops	
BARIUM	5/14/2012	0.011	0.011	ppm	2	2	Discharge from metal refineries	
CHROMIUM	5/14/2012	3.5	3.5	ppb	100	100	Discharge from steel and pulp mills	
FLUORIDE	5/14/2012	1	0.75 - 1	ppm	4	4	Natural deposits; Water additive which promotes strong teeth.	
NITRATE	7/9/2012	1.2	0.88 - 1.2	ppm	10	10	Runoff from fertilizer use	
SELENIUM	5/14/2012	13	13	ppb	50	50	Erosion of natural deposits	
Disinfection Byproducts	Monitoring Period	Your Highest RAA	Range (low/high)	Unit	MCL	MCLG	Typical Source	
TOTAL HALOACETIC ACIDS (HAA5)	2012	32	13 - 46	ppb	60	0	By-product of drinking water disinfection	
TOTAL TRIHALOMETHANES (TTHMs)	2012	68	41 - 88	ppb	80	0	By-product of drinking water chlorination	
Lead and Copper	Monitoring Period	90 th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source	
COPPER, FREE	2009 - 2011	0.059	0.0054 - 0.23	ppm	1.3	0	Corrosion of household plumbing	
LEAD	2009 - 2011	1.3	1 - 3.6	ppb	15	0	Corrosion of household plumbing	
Chlorine/Chloramines Maximum Disinfection Level		MPA		MPA Units		RAA		
08/01/2012 - 08/31/2012		3.6		MG/L		3.0		
Total Organic Carbon Lowest Month for Removal		Number of Samples			Actual Removal Ratio		Required Removal Ratio	Lowest Monthly Removal Ratio
10/1/2012 - 10/31/2012		12			2.16		1.0 RATIO	1.40
Secondary Contaminants	Collection Date	Your Highest Value	Range (low/high)	Unit	SMCL			
ALKALINITY, TOTAL	1/24/2012	260	63.4 - 260	MG/L	300			
ALUMINUM	5/14/2012	0.047	0.047	MG/L	0.05			
CALCIUM	5/14/2012	18	18	MG/L	200			
CARBON, TOTAL	4/9/2012	5.7	1.6 - 5.7	ppm				
CHLORIDE	5/14/2012	220	220	MG/L	250			
CONDUCTIVITY @ 25 C UMHO/CM	5/14/2012	1300	1300	UMHO/CM	1500			
HARDNESS, TOTAL (AS CaCO3)	5/14/2012	120	120	MG/L	400			
MAGNESIUM	5/14/2012	18	18	MG/L	150			
NICKEL	5/14/2012	0.0012	0.0012	MG/L	0.1			
PH	5/14/2012	8.1	8.1	PH	8.5			
PHOSPHORUS, TOTAL	5/14/2012	0.26	0.26	MG/L	5			
POTASSIUM	5/14/2012	10	10	MG/L	100			
SILICA	5/14/2012	12	12	MG/L	50			
SODIUM	5/14/2012	210	210	MG/L	100			
SULFATE	5/14/2012	190	190	MG/L	250			
TDS	5/14/2012	710	710	MG/L	500			

Please Note: Because of sampling schedules, results may be older than 1 year.

Additional Required Health Effects Language

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer. 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 2012, 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.