

Water Quality

Overview

In 2005, as in years past, the City of Salina's tap water met all U.S. Environmental Protection Agency (EPA) and State of Kansas Department of Health and Environment (KDHE) drinking water health standards. City of Salina Water Division vigilantly safeguards its water supplies and again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard.



2005

annual

Spanish (Español)

Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúscalo o hable con alguien que lo entienda bien.

REPORT

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 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Water Source

In 2005, we treated approximately 1.1 billion gallons from 15 public water supply wells located in the Downtown Well Field and approximately 1.3 billion gallons from the Smoky Hill River.

Source water assessment and its availability

The source water assessment for the City of Salina Water Supply is available for examination at the office of the City Clerk; 300 W. Ash, Room 206 or at the Salina Water Treatment Plant, 401 South 5th St.

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 Environmental Protection Agency's (EPA) 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. Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife. Inorganic contaminants, such as salts and metals, 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 agriculture, urban storm water runoff and residential uses. Organic Chemical Contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems. Radioactive contaminants, can be naturally-occurring or be the result of oil and gas production and mining activities. In order to ensure that tap water is safe to drink, EPA prescribes regulations that 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.

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, Utilities Director or to Jim Wendell, Water Plant Superintendent, during normal office hours.

Water Conservation

Again this year the City of Salina is asking Salina area water users to be good stewards of our natural resources. The drought of the previous several years has greatly depleted the ground water in the Salina area. Continued diligence in conserving both Salina tap water and ground water in this area will assist in maintaining the water table until recharge occurs.

Results of voluntary monitoring

The City of Salina's Water Treatment Plant consistently produces water that meets or exceeds all Kansas Department of Health and Environment (KDHE) and U.S. Environmental Protection Agency (U.S. EPA) standards for safe drinking water. 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 insure 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 Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily

indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State

requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Water Quality Data Table

CONTAMINANTS (UNITS)	MCLG	MCL	SALINA WATER	RANGE LOW	RANGE HIGH	SAMPLE DATE	VIOLATION	TYPICAL SOURCE
Disinfectants & Disinfection By-Products								
Haloacetic Acids (HAA5) (ppb)	NA	60	25	16.6	39	2005	No	By-product of drinking water chlorination
Total Organic Carbon (ppm)	NA	TT	3.5	NA		2005	No	Naturally present in the environment
Trihalomethanes (THM4) (ppb)	MNR	MNR	51.1	NA		2005	No	By-product of drinking water chlorination

Inorganic Contaminants

Arsenic (ppb)	NA	50	1.5	NA		2005	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Asbestos (MFL)	7	7	0.198	NA		11/10/2004	No	Decay of asbestos cement water mains; Erosion of natural deposits
Barium (ppm)	2	2	0.013	NA		2005	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium [Total] (ppb)	100	100	3.2	NA		2005	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4	4	1.4	1.1	1.4	2005	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nickel (ppb)	MNR	MNR	1.7	NA		2005	No	Erosion of natural deposits; Leaching
Nitrate [measured as Nitrogen] 10 (ppm)		10	0.59	NA		2005	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	50	50	9.3	NA		2005	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
Sodium (ppm)	MNR	MNR	140	NA		2005	No	Erosion of natural deposits; Leaching

Microbiological Contaminants

Total Coliform (% monthly) ((Samples>=40/month) % monthly positive samples)	0	5%	0%	NA		—	No	Naturally present in the environment
Turbidity (Conventional or Direct Filtration) (NTU (in 95% of samples/month))	NA	TT<=0.3	0.28	NA		2005	No	Soil runoff

Unregulated Contaminants

Sulfate (ppm)	NA	NA	180	NA		2005	No	Erosion of natural deposits; Leaching
---------------	----	----	-----	----	--	------	----	---------------------------------------

CONTAMINANT(S) (UNITS)	MCLG	AL	SALINA WATER	# OF SAMPLES > EXCEEDING AL	SAMPLE DATE	EXCEEDS AL	TYPICAL SOURCE
------------------------	------	----	--------------	-----------------------------	-------------	------------	----------------

Inorganic Contaminants

Copper (ppm)	1.3	1.3	0.046	0		2005	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (ppb)	0	15	1.6	0		2005	No	Corrosion of household plumbing systems; Erosion of natural deposits

CONTAMINANT(S) (UNITS)	MRDL	MRDLG	SALINA WATER	RANGE LO	RANGE HIGH	SAMPLE DATE	VIOLATION	TYPICAL SOURCE
------------------------	------	-------	--------------	----------	------------	-------------	-----------	----------------

Disinfectants & Disinfection By-Products

Chloramine (as Cl ₂) (ppm)	4	4	2.8	NA		2005	No	Water additive used to control microbes
--	---	---	-----	----	--	------	----	---

Additional Quality Parameters

PARAMETER	UNITS
Alkalinity as CaCO ₃ (ppm)	66
Aluminum (ppb)	81
Calcium (ppm)	33
Chloride (ppm)	150
Magnesium (ppm)	11
Potassium (ppm)	7.8
Silica (ppm)	7.5
Total Dissolved Solids (ppm)	570
Total Hardness as CaCO ₃ (ppm)	130
pH	7.7

Units Description:

NA: Not applicable

ND: Not detected

NR: Not reported

MNR: Monitoring not required, but recommended.

ppm: parts per million, or milligrams per liter (mg/L)

ppb: parts per billion, or micrograms per liter (µg/L)

NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

MFL: million fibers per liter, used to measure asbestos concentration

% of monthly positive samples: Percent of samples taken monthly that were positive

Important Drinking Water Definitions:

MCLG: Maximum Contaminant Level Goal: 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.

MCL: Maximum Contaminant Level: 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.

AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MRDLG: Maximum Residual Disinfection Level Goal. 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.

MRDL: Maximum Residual Disinfectant Level. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.



For more information please contact:

Martha Tasker, Utilities Director
300 W. Ash St.
Salina, KS 67401
Phone: (785) 309-5725
Fax: (785) 309-5713
Email: martha.tasker@salina.org

Website: <http://www.salina-ks.gov>

James Wendell,
Water Plant Superintendent
401 S. Fifth St.
Salina, KS 67401
Phone: (785) 826-7305
Fax: (785) 826-7256
Email: jim.wendell@salina.org