

FORT RILEY

Consumer Confidence Report (CCR) – 2015

Covering Calendar Year – 2014



This brochure is a snapshot of the quality of the water that we 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. If you would like more information, please contact Public Works, Water Quality Regulations Compliance Manager, at 239-2630.

Your water comes from 8 Ground Water Wells. Your water is treated at the Fort Riley Drinking Water Treatment Plant using bleach. Bleach is used as a disinfectant in your drinking water to kill or prevent the growth of bacteria.

The water treatment plant (WTP) is designed to provide 10 million gallons (Mgal) per day at maximum capacity. Currently, the plant produces an average of 2 to 3 Mgal per day to meet water demands on post. The WTP consists of multi-stage treatment, including lime softening, clarification, disinfection, and filtration. Treated water is distributed to various storage towers and throughout the installation. Line flushing is a regular process for Fort Riley's water distribution system to maintain residual chlorine levels.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limits the amount of certain contaminants in water provided by public water systems. Our water system is required to test a minimum of 50 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Fort Riley also tests for metals, certain pesticides such as Atrazine, nitrate/nitrite, and Volatile Organic Compounds. Testing for Secondary Contaminants ensures palatable, good quality water. We treat our water according to EPA's regulations. **The bottom line is that the water that is provided to you is safe.**

Your Right To Know

Water is one of the most vital elements in our lives. Thus, we must have confidence in its safety and quality. The U.S. Congress passed the Safe Drinking Water Act in 1974, and reauthorized it in 1986 and 1996. The U.S. EPA and the state of Kansas develop and enforce drinking water regulations to protect public health.

Where can I find more information?

The EPA's ground water and drinking water website at <http://www.epa.gov/safewater/faq/faq.html>

Kansas Department of Health and Environment: <http://www.kdheks.gov/pws/index.html>

Water Quality Data

The tables in this CCR list all of the drinking water contaminants which were tested for during the 2014 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, 2014. 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, are more than one year old.

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

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.

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.

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.

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

Metals (Mg/L)
Collection date: 5/5/2014

Analyte	MCL	Your Water
Antimony	0.006	ND
Arsenic	0.05	ND
Beryllium	0.004	ND
Cadmium	0.005	ND
Chromium	0.1	0.0023
Mercury	0.002	ND
Nickel	0.1	ND
Selenium	0.05	0.0011
Silver	0.1	ND
Thallium	0.002	ND

Regulated Contaminants	Collection Date	Your Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
ATRAZINE	9/8/2014	0.14	0.14	ppb	3	3	Runoff from herbicide used on row crops
BARIUM	5/5/2014	0.042	0.042	ppm	2	2	Discharge from metal refineries
CHROMIUM	5/5/2014	2.3	2.3	ppb	100	100	Discharge from steel and pulp mills
FLUORIDE	1/28/2014	0.75	0.5 - 0.75	ppm	4	4	Natural deposits; Water additive which promotes strong teeth.
NITRATE	1/28/2014	0.23	0.23	ppm	10	10	Runoff from fertilizer use
SELENIUM	5/5/2014	1.1	1.1	ppb	50	50	Erosion of natural deposits

During the 2014 calendar year, we had exceedances of TTHMs. The Public Notice is included with this year's CCR.

Disinfection Byproducts	Monitoring Period	Your Highest RAA	Range (low/high)	Unit	MCL	MCLG	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	2014	30	11 - 31	ppb	60	0	By-product of drinking water disinfection
TTHM	2014	91	29.49 - 100	ppb	80	0	By-product of drinking water chlorination

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.

Lead and Copper	Monitoring Period	90 th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2012 - 2014	0.023	0.001 - 0.08	ppm	1.3	0	Corrosion of household plumbing
LEAD	2012 - 2014	Non-Detect	Non-Detect	ppb		0	Corrosion of household plumbing

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>.

Secondary Contaminants	Collection Date	Our Highest Value	Range (low/high)	Unit	SMCL
ALKALINITY, TOTAL	5/5/2014	66	66	MG/L	300
CALCIUM	5/5/2014	33	33	MG/L	200
CHLORIDE	5/5/2014	48	48	MG/L	250
CONDUCTIVITY @ 25 C UMHOS/CM	5/5/2014	530	530	UMHO/CM	1500
CORROSIVITY	5/5/2014	-0.19	-0.19	LANG	0
HARDNESS, TOTAL (AS CaCO3)	5/5/2014	150	150	MG/L	400
MAGNESIUM	5/5/2014	16	16	MG/L	150
PH	5/5/2014	8.1	8.1	PH	8.5
PHOSPHORUS, TOTAL	5/5/2014	0.06	0.06	MG/L	5
POTASSIUM	5/5/2014	9.3	9.3	MG/L	100
SILICA	5/5/2014	19	19	MG/L	50
SODIUM	5/5/2014	41	41	MG/L	100
SULFATE	5/5/2014	100	100	MG/L	250
TDS	5/5/2014	310	310	MG/L	500

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

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).

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) included 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. 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.

Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Contaminants that may be present in sources water 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.

Frequently Asked Questions Fort Riley Drinking Water

- Why does my water smell like bleach?

Bleach is used as a disinfectant in your drinking water to kill or prevent the growth of bacteria. The faucets are designed to aerate or strip out chlorine from the bleach in the water and that is why you smell it.

- Why does my water come out looking orange/rusty colored sometimes?

Dissolved iron and manganese naturally occur in the water aquifer in this area. Those minerals tend to drop out of solution during periods of low use (such as over the weekend or overnight) to cause such a color problem. This aesthetic discoloration is not unhealthy or unsafe. Flushing or turning the tap on to run until the water is clear will help to remediate the discoloration.

- Is the water treated or cleaned?

Yes, your water is treated at the Fort Riley Drinking Water Treatment Plant using bleach.

- Why does my water taste funny/bad?

Drinking water may contain small/safe amounts of dissolved minerals that may influence its taste.

- My skin itches after showering. Does the shower water cause this itching?

No. Commonly called "Winter Itch", people's dry skin is a result of low humidity during winter months in Kansas. Hot water removes the skin's protective natural oils, causing irritation.

- What about home water treatment units?

Consumers who choose to purchase a home water treatment unit should carefully read its product information to understand what they are buying, whether it is a better taste or a certain method of treatment. Be certain to follow the manufacturer's instructions for operation and maintenance, especially changing the filter on a regular basis to prevent bacterial growth. Fort Riley neither endorses nor recommends specific home water treatment units. No single unit takes out every kind of drinking water contaminant; you must decide which type best meets your needs.