

Annual Consumer Report on the Quality of Tap Water at Fort Riley During 2003

Introduction

This is an annual report on the quality of water delivered by Fort Riley. Under the “Consumer Confidence Reporting Rule” of the federal Safe Drinking Water Act (SDWA), community water systems are required to report this water quality information to the consuming public. Presented in this report is information on the source of Fort Riley’s water, its constituents and the health risks associated with any contaminants.

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 source water include:

- (a) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- (b) Inorganic contaminants, such as 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;
- (c) Pesticides and herbicides, which may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses;
- (d) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems;
- (e) Radioactive contaminants, which 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, the U.S. Environmental Protection Agency (EPA) prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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 (1-800-426-4791).

We continually monitor the drinking water for contaminants. Our water is safe to drink; however, some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as persons 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. The EPA/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the EPA's Safe Drinking Water Hotline (1-800-426-4791).

The Fort Riley Drinking Water System draws ground water from the alluvial aquifer at the confluence of the Smoky Hill and Republican rivers. Water from the eight wells in the alluvial aquifer provides drinking water to Main Post, Custer Hill, Camp Funston, Camp Forsyth, Camp Whitside, and Marshall Army Air Field. Fort Riley has one treatment facility through which our water passes before being consumed.

Monitoring of Your Drinking Water

Our water system uses only EPA-approved laboratory methods to analyze your drinking water. Our personnel take water samples from the distribution systems and residential taps. Samples are then analyzed on-site or shipped to the Kansas Department of Health and Environment (KDHE) laboratory in Topeka, Kansas.

At Fort Riley, we monitor for both regulated and unregulated contaminants. Contaminant groups are listed in Column 1 of Table 1. Column 2 of the table specifies the monitoring frequency for these contaminant groups.

Table 1

Analyte/Contaminant Group	Monitoring Frequency
Potability Characteristics (i.e. hardness, pH, chlorine residual, alkalinity, etc.)	Daily
Total dissolved solids	Weekly
Bacteria (a minimum of 25 samples from the distribution system)	Monthly
Trihalomethanes	Quarterly
Volatile Organic Chemicals and Nitrate	Annually
Synthetic Organic Chemicals, Lead, Copper, and other Inorganic Analyses	Tri-annually

Source Water Assessment

Source water assessments are performed to determine the quality of water before it is treated and distributed to customers. Additionally, source water assessments help us to identify ways to better protect our water source. A source water assessment performed in 2002 indicated that Fort Riley's water wells are not located near any significant source of contamination.

The EPA requires that source water assessments be completed for all public water supplies that treat and distribute raw source water. KDHE completed the source water assessments for all public water supplies with existing wellhead protection plans. If you require further information on the quality of Fort Riley's water sources, a copy of the source water assessment can be obtained on the KDHE website at www.kdhe.state.ks.us/nps.

Water Quality Data

Table 2 lists regulated drinking water contaminants that were detected. All regulated drinking water contaminants are tested at the KDHE Division of Health & Environmental Laboratories in Topeka. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless noted, the data presented in this table is from testing done January 1 – December 31, 2003. 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 is more than one year old, though representative of the water quality.

Definitions of Key Terms

To gain a better understanding of the water quality data presented in this report, several key terms are defined below:

Maximum Contaminant Level (MCL) : The highest level of a contaminant that is allowed in drinking water. The MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) : The level of a contaminant in drinking water below which there is no known or expected risk to health. The MCLGs allow for a margin of safety.

Action Level (AL) : The concentration of a contaminant, that, if exceeded, triggers treatment or other requirements, that a water system must follow. Our water system analyzes for some contaminants (including lead and copper), that are governed by ALs, and not MCLs.

Additional Acronyms/Terms Used In This Report

EPA	U.S. Environmental Protection Agency
KDHE	Kansas Department of Health and Environment
N/A	Not applicable.
pH	pH units - a measure of acidity or corrosivity.
ppm	Parts per million - a unit of measure equivalent to a single penny in \$10,000.
ppb	Parts per billion - a unit of measure equivalent to a single penny in \$10,000,000.
pCi/L	Picocuries per liter - a measure of radioactivity.
SDWA	Safe Drinking Water Act - Federal law that sets forth drinking water regulations.
90 th percentile	In a ranking of 10 contaminant samples, the ninth highest sample is the value that represents the 90 th percentile.

Table 2

Regulated Contaminates	Date	Level Detected	MCL	MCLG	Violation	Typical Source
Alpha Emitters	Apr 1999	1.0 pCi/l	15 pCi/l	0 pCi/l	No	Erosion of natural deposits
Atrazine	Jun 2003	<0.30 ppb	3 ppb	0 ppb	No	Runoff from herbicide used on row crops
Barium	Jan 2002	.276 ppm	2 ppm	2 ppm	No	Erosion of natural deposits
Fluoride	Jan 2002	0.19 ppm	4 ppm	4 ppm	No	Additive which promotes strong teeth
Nitrate	May 2003	< 0.10 ppm	10 ppm	10 ppm	No	Erosion of natural deposits
Selenium	Jan 2002	<1.0 ppb	50 ppb	50 ppb	No	Erosion of natural deposits
Total Trihalomethanes	Jan-Dec 2003	71.6 ppb	100 ppb	0 ppb	No	By-product of drinking water chlorination
90th Percentile (9th highest sample in a group of 10)						
Copper	Jan 2002	1.0 ppm	AL=1.3 ppm	N/A	No	Corrosion of household plumbing systems
Lead	Jan 2002	1.0 ppb	AL=15 ppb	N/A	No	Corrosion of household plumbing systems

Public Involvement

The Directorate of Environment and Safety prepared this Consumer Confidence Report. For additional information regarding this information, please contact the Fort Riley Directorate of Environment and Safety Drinking Water Program Coordinator at (785) 239-2630.