



2011 U.S. Army Garrison- Rock Island Arsenal Consumer Confidence Report

For the Period from 01 January to 31 December 2011

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

We want our valued customers to be informed about their water quality. If you would like to learn more, please feel welcome to attend any of our regularly scheduled meetings. The source water assessment for our supply has been completed by the Illinois EPA. If you would like a copy of this information, please contact Reita Kuster, (309) 782-2445, e-mail: reita.a.kuster.civ@mail.mil. To view a summary version of the completed source Water Assessments, including: Importance of Source Water; Susceptibility to Contamination Determination; and documentation/recommendation of Source Water protection efforts, you may access the Illinois EPA website at <http://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>. The Illinois EPA has labeled our community water supply Rock Island Arsenal—IL1615387.

Is my water safe?

Last year, we conducted tests for over 80 contaminants for comparison to the maximum contaminant level (MCL) allowed in public drinking water. We are pleased to announce that all sample results were below the MCL threshold. This report is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

Source of Drinking Water:

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.

Where does my water come from?

The Rock Island Arsenal's water treatment plant has the Mississippi River as its water source. The Mississippi River is considered a surface water source, and the source intake is "INTAKE (31946) MISSISSIPPI RIVER".

Source water assessment and its availability:

Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection. Within the Illinois portion of the Upper Mississippi River Watershed, which is illustrated in Figure 3, many commodities, including manufactured goods, petrochemicals, and pesticides are transported along the river system. The production, storage, and transportation of these commodities are a major concern, especially when occurring near surface water intakes. In addition, agricultural runoff within the Illinois portion of the Upper Mississippi River Basin contributes to the susceptibility of the Rock Island Arsenal intake. With high flow rates and long distances of travel on the Mississippi River, critical areas can be extensive. The critical area for the Rock Island Arsenal intake was determined using data from a joint U.S. Environmental Protection Agency/U.S. Geological Survey project. This project used a computer modeling program (SPARROW) to determine travel times on major rivers in the United States. Accidental spills of hazardous materials into navigable waterways are a major concern because of their frequency in the United States in recent years. Illinois has access to 1,116 miles of inland waterway that can handle commercial barge traffic. These include the Upper Mississippi River, Illinois River Waterway, and the Ohio River. Along these waterways are numerous facilities that load and unload hazardous materials. Analyses of reported spills indicate that between 1974 and 1989, 794 accidental spills of hazardous materials occurred along Illinois waterways. Approximately 92% of these spills occurred along the Mississippi and/or the Illinois River. Figure 2 shows the critical area of concern (Zone 1) for the Rock Island Arsenal intake. Spills occurring in this critical area will travel to the intake in five hours or less, making contingency planning and spill reporting a major concern in this watershed. Further information concerning spill response planning on the Mississippi River may be found in U.S. EPA's website at www.epa.gov/region5/oil and at U.S. Geological Survey's website ftp://ftp.umesc.er.usgs.gov/pub/gis_data/oil_spill. The Upper Mississippi River Water Suppliers Coalition is currently working to develop an Early Warning Monitoring Network on the Mississippi River. This Network would enhance response times by providing supplies with early notification of spills on the Mississippi River.

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.

Where did the contaminants in my drinking water come from?

Contaminants that may be present in source water include: (1) Microbial contaminants, such as viruses and bacteria may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife, (2) 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, (3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses, (4) 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., and (5) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

What is the EPA's involvement with my drinking water?

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.

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).

What about Lead in my drinking water; Do I need to take special precautions?

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. We cannot control the variety of materials used in plumbing components. When 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>.

How can I get involved?

Please forward all questions regarding information in this Consumer Confidence Report to Reita Kuster, (309) 782-2445, e-mail: reita.a.kuster.civ@mail.mil. If you have an interest in participating in future discussions that may affect water quality, request that you contact us at the phone number or e-mail noted above. In response, you will be contacted with time and place for our next water quality meeting.
Source Water Information:

Type of Water: SW – surface water
Water System: IL1615387, ROCK ISLAND ARSENAL

Water Quality Test Results: Regulated Contaminants

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	1		0	No.	Naturally present in the environment.

Lead and Copper

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# of Sites Over AL	Units	Violation	Likely Source of Contamination
Lead		0	15	11.8	2	ppb	No.	Corrosion of household plumbing systems; Erosion of natural deposits.

Disinfectants and Disinfectant By-Products

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chloramines		3.1	2.3556 – 4.0444	MRDLG = 4	MRDL = 4	ppm	No.	Water additive used to control microbes.
Haloacetic Acids (HAA5) *		53	19 – 42.5	No goal for the total.	60	ppb	No.	By-product of drinking water chlorination.
Total Trihalomethanes (TThm)*		36	19 – 60	No goal for the total.	80	ppb	No.	By-product of drinking water chlorination.

*Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Inorganic Contaminants

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium		0.0174	0.0174 - 0.0174	2	2	ppm	No.	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride		0.1	0.11 – 0.11	4	4.0	ppm	No.	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Manganese		24	23.8 – 23.8	150	150	ppb	No.	This contaminant is not currently regulated by the USEPA However the state regulates Erosion of natural deposits.
Nitrate (measured as Nitrogen)		1	1.34 – 1.34	10	10	ppm	No.	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Sodium		13	12.6 – 12.6			ppm	No.	Erosion from naturally occurring deposits; Used in water softener regeneration.

Radioactive Contaminants

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	10/22/2008	0.9	0.9 – 0.9	0	5	pCi/L	No.	Erosion of natural deposits.

Gross alpha excluding radon and uranium	10/22/2008	2	2 - 2	0	15	pCi/L	No.	Erosion of natural deposits.
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Turbidity

Turbidity	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	1 NTU	0.21 NTU	No.	Soil runoff.
Lowest monthly % meeting limit	0.3 NTU	100%	No.	Soil runoff.

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set. There were no TOC violations during this reporting period.

Important Drinking Water Definitions

Terms	Definitions
Action Level	ACTION LEVEL: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
ALG	ACTION LEVEL GOAL: The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for the margin of safety.
Avg	AVERAGE: Regulatory compliance with some MCLs are based on running annual average of monthly samples.
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.
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.
MRDL	MAXIMUM RESIDUAL DISINFECTANT LEVEL: 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.
MRDLG	MAXIMUM RESIDUAL DISINFECTANT 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.
NA	Not applicable.
NTU	NEPHELOMETRIC TURBIDITY UNITS. Turbidity is a measure of the cloudiness of the water. Monitored because it is a good indicator of the effectiveness of filtration systems.
ppb	PARTS PER BILLION: micrograms per liter or one ounce in 7,350,000 gallons of water.
ppm	PARTS PER MILLION: milligrams per liter or one ounce in 7,350 gallons of water

For more information please contact:

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