# **ADC Tucker Unit** 2011 Annual Drinking Water Quality Report

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand, and be involved in, the efforts we make to continually improve the water treatment process and protect our water resources.

# Where Does My Drinking Water Come From?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our sources of water are three wells that pump from the Sparta Sand Aquifer.

# How Safe Is The Source Of Our Drinking Water?

The Arkansas Department of Health has completed a Source Water Vulnerability Assessment for ADC Tucker Unit. The assessment summarizes the potential for contamination of our sources of drinking water and can be used as a basis for developing a source water protection plan. Based on the various criteria of the assessment, our water sources have been determined to have a low to medium susceptibility to contamination. You may request a summary of the Source Water Vulnerability Assessment from our office.

# What Contaminants Can Be In Our Drinking Water?

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: <u>Microbial contaminants</u> such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; <u>Inorganic contaminants</u> 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; <u>Pesticides and herbicides</u> which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; <u>Organic chemical contaminants</u> 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; <u>Radioactive contaminants</u> which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to assure tap water is safe to drink, EPA prescribes regulations which 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.

#### Am I at risk?

All 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 the water poses a health risk. However, 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 small amounts of contamination. These people should seek advice about drinking water from their health care providers. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791. In addition, EPA/CDC guidelines on appropriate means to lessen the risk of infection by microbiological contaminants are also available from the Safe Drinking Water Hotline.

#### Lead and Drinking Water

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 are 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.

# How Can I Learn More About Our Drinking Water?

If you have any questions about this report or concerning your water utility, please contact Harold Williams, Director of Maintenance, at 870-550-1556. We want our water users to be informed about their water utility. Our water system currently holds no public meetings. If you want to learn more, contact Harold Williams.

# TEST RESULTS

We routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2011. In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms we've provided the following definitions:

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

ADC – Arkansas Department of Corrections

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Maximum Contaminant Level (MCL) - 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.

Maximum Contaminant Level Goal (MCLG) - unenforceable public health 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.

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.

Maximum Residual Disinfectant Level Goal (MRDLG) - 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

Chlorine

Parts per billion (ppb) - a unit of measurement for detected levels of contaminants in drinking water. One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per million (ppm) - a unit of measurement for detected levels of contaminants in drinking water. One part per million corresponds to one minute in two years or a single penny in \$10,000.

			MICR	DBIOL	OGICAL C	ONTAMINA	NTS			
Contaminar	nt	ation /N	Dn Level Detected		Unit		MCLG ic Health Goal) (		MCL able Level)	Major Sources in Drinking Water
Total Coliform Bacteria		N	None Present 0			1 positive month	e sample per	Naturally present in the environment		
			LEAD /	AND CO	OPPER TA	P MONITO	RING			•
Contaminant Number of Sites over Action Level		90 <sup>th</sup> Percentile Result		Unit	Act	Action Level		Major Sources in Drinking Water		
Lead	0		<0.003		ppm 0.0		0.015	Corrosion from household plumbir		sehold plumbing
Copper O		<0.20		ppm		1.3 system		ms; erosion of natural deposits		
<ul> <li>We are currently on a reduced monitoring schedule and required to sample once every three years for lead and copper at the customers' taps. The results above are from our last monitoring period in 2009. Our next required monitoring period is in 2012.</li> </ul>										
REGULATED DISINFECTANTS										
Disinfectant Violation Lev		vel Detected	linit				RDL Major Solution		ces in Drinking Vater	
Chlorino	N	Aver	age: 0.92	nnm		1		1	Water additiv	ve used to

Range: 0.3 - 5.0 control microbes Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

ppm

BY-PRODUCTS OF DRINKING WATER DISINFECTION					
Contaminant	Violation Y/N	Level Detected	Unit	<b>MCLG</b> (Public Health Goal)	MCL (Allowable Level)
HAA5 [Haloacetic Acids]	Ν	0.0	ppb	0	60
TTHM [Total Trihalomethanes]	Ν	0.0	ppb	NA	80

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We are currently on a reduced monitoring schedule and required to sample once every three years for Total Trihalomethanes and Haloacetic Acids in the distribution system. The results above are from our last compliance monitoring period in the spring quarter of 2010. Our next compliance monitoring period is in 2013.

VIOLATIONS – ADC Tucker Unit			
<b>TYPE: Bacteriological Sampling</b>	FROM:	TO:	CORRECTIVE ACTION:
Failed to submit valid bacteriological samples	6/1/2011	6/30/2011	Resumed bacteriological monitoring as required by state and federal regulations

	SIGNIFICANT DEFICIENCY
Department of Health and all und Arkansas Department of Correcti Sanitary Survey.	le, each Water Treatment System must be surveyed (audited) by the Arkansas corrected Significant Deficiencies must be identified, corrected and reported to the public. ions Tucker Unit had one Significant Deficiency identified during their July 21, 2010
Nature of Deficiency	Progress to Date
The Arkansas Department of Corrections Tucker Unit has no Cross Connection Control Program that prevents potentially contaminated non- drinking water from entering into the drinking water system. It has 45 days to submit a written Plan of the implementation of the Program and the Plan must meet the minimum standards for a Cross Connection Control Program. As part of its Cross Connection	As of this date the Arkansas Department of Corrections Tucker Unit has scheduled a May 2012 meeting with ADH personnel to assess the need for backflow preventers. A Cross Connection Control Program has been formally accepted for ADC state-wide as of February 10, 2012.
Control Program The Arkansas Department of Corrections Tucker Unit must also conduct its own survey to assess the need for backflow preventers.	