

Cotton Plant Water Department

2015 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 Our 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 two wells that pump from the Claiborne Group Aquifer.

How Safe Is The Source Of Our Drinking Water?

The Arkansas Department of Health has completed a Source Water Vulnerability Assessment for Cotton Plant Water Department. 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 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: Microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; 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; Pesticides and herbicides which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; 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; Radioactive contaminants 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 has 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 Link Hubbard, Operator, or Mayor Willard C. Ryland, at 870-270-6305. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Tuesday of each month at 6:30 PM at the Cotton Plant City Hall.

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 1st to December 31st, 2015. 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.

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

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.

MICROBIOLOGICAL CONTAMINANTS						
Contaminant	Violation Y/N	Level Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)	Major Sources in Drinking Water
Total Coliform Bacteria	Y	2 positive samples attributed to January	Present	0	1 positive sample per month	Naturally present in the environment
		2 positive samples attributed to May				
	N	1 positive sample in April				
<p>♦ Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.</p>						
LEAD AND COPPER TAP MONITORING						
Contaminant	Number of Sites over Action Level	90 th Percentile Result	Unit	Action Level	Major Sources in Drinking Water	
Lead	1	0.004	ppm	0.015	Corrosion from household plumbing systems; erosion of natural deposits	
Copper	0	0.32	ppm	1.3		
<p>♦ We are on a reduced monitoring schedule and required to sample once every year for lead and copper at the customers' taps. Our last samples were submitted in 2014. Our next required monitoring period is 2016.</p> <p>♦ Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure</p>						
REGULATED DISINFECTANTS						
Disinfectant	Violation Y/N	Level Detected	Unit	MRDLG (Public Health Goal)	MRDL (Allowable Level)	Major Sources in Drinking Water
Chlorine	N	Average: 0.67 Range: 0.04 - 2.11	ppm	4	4	Water additive used to control microbes
BY-PRODUCTS OF DRINKING WATER DISINFECTION						
Contaminant	Violation Y/N	Level Detected	Unit	MCLG (Public Health Goal)	MCL (Allowable Level)	
HAA5 [Haloacetic Acids]	N	13.5	ppb	0	60	
TTHM [Total Trihalomethanes]	N	25.8	ppb	NA	80	
<p>♦ We are currently on a reduced monitoring schedule and required to sample one quarter every year for Total Trihalomethanes and Haloacetic Acids in the distribution system.</p>						
UNREGULATED CONTAMINANTS						
Contaminant	Level Detected	Unit	MCLG (Public Health Goal)	Major Sources in Drinking Water		
Chloroform	5.64	ppb	70	By-product of drinking water disinfection		
Bromodichloromethane	2.11	ppb	0			
Dibromochloromethane	0.68	ppb	60			
<p>♦ Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. MCLs (Maximum Contaminant Levels) and MCLGs (Maximum Contaminant Level Goals) have not been established for all unregulated contaminants.</p>						

VIOLATIONS – Cotton Plant Waterworks			
TYPE: Bacteriological Sampling	FROM:	TO:	CORRECTIVE ACTION:
Exceeded the Maximum Contaminant Level (MCL) for coliform bacteria	1/1/2015	1/31/2015	Adjusted the level of disinfectant and resumed bacteriological monitoring as required by state and federal regulations
	5/1/2015	5/31/2015	
Failure to conduct source water monitoring.	1/1/2015	1/31/2015	Resumed bacteriological monitoring as required by state and federal regulations
TYPE: Annual Drinking Water Quality Report			
Consumer Confidence Report (CCR) – Complete failure to provide annual water quality report to customers	7/1/2015	Nothing to date	Has not yet made 2014 report available to public.
TYPE: Lead and Copper testing	FROM:	TO:	CORRECTIVE ACTION:
Follow-up & Routine Tap Sampling – Failed to submit the appropriate number of lead & copper tap samples to the Arkansas Department of Health	1/1/2015	12/31/2015	Must submit the appropriate number of lead & copper tap samples to the Arkansas Department of Health during the 2016 sampling period
SIGNIFICANT DEFICIENCY			
Under the new Ground Water Rule, each Water Treatment System must be surveyed (audited) by the Arkansas Department of Health and all uncorrected Significant Deficiencies must be identified, corrected and reported to the public. Cotton Plant Water had one Significant Deficiency identified during their November 2012 Sanitary Survey.			
Nature of Deficiency		Progress to Date	
Improperly licensed operator.		Operator obtained appropriate licensure. Operator in Responsible Charge documentation 12/2015	

This institution is an equal opportunity provider and employer.

PUBLIC NOTICE

The Cotton Plant Waterworks is a public water system subject to regulation under
(name of water system)
the federal Safe Drinking Water Act. Those regulations require the notification of customers whenever a violation occurs, and is the basis for this notice.

The U.S. Environmental Protection Agency sets national standards for drinking water. Public water systems are required to regularly have their water bacteriologically tested in a certified laboratory. These samples are analyzed for total and fecal coliform. Coliform bacteria is used as an indicator for more serious pathogenic organisms.

When any sample is found to contain coliform bacteria, the water system is required to submit specific resamples from the area in which the coliform bacteria was found. This water system failed to complete this resampling requirement in September, 20 14 after detecting coliform bacteria in the distribution system. (month(s))

Failure to meet this requirement does not mean that the water is unsafe or that alternate sources of water should be used. The water system has Submitted necessary Groundwater samples to ADH.
(detail the action taken to correct the violation)

Should you have any questions concerning this notice, contact the water system at 870-270-6305 or the Engineering Section of the Department of Health at 501-661-2623.
(Phone#)

PUBLIC NOTICE

The Cotton Plant Waterworks is a public water system subject to regulation under
(name of water system)

the federal Safe Drinking Water Act. Those regulations require the notification of customers whenever a violation occurs, and is the basis for this notice. This water system failed to meet the maximum contaminant level for total coliform in

January, 2015.

(month(s))

The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that the presence of total coliforms is a possible health concern. Total coliforms are common in the environment and are generally not harmful themselves. The presence of these bacteria in drinking water, however, generally is a result of a problem with water treatment or the pipes which distribute the water, and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and any associated headaches and fatigue. These symptoms, however, are not just associated with disease causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set an enforceable drinking water standard for total coliforms to reduce the risk of these adverse health effects. Under this standard, no more than 5 percent of the samples collected during a month can contain these bacteria, except that systems collecting fewer than 40 samples per month that have one total coliform positive sample per month are not violating the standard. Drinking water which meets this standard is usually not associated with a health risk from disease causing bacteria and should be considered safe.

Failure to meet the total coliform standard does not mean that the water is unsafe or that alternate sources of water should be used. The water system has Adjusted the chlorination and resampled to assure that there is no coliform bacteria present.

(detail the action taken to correct the violation)

Should you have any questions concerning this notice, contact the water system at 870-270-6305 or the Engineering Section of the Department of Health at 501-661-2623.

(Phone#)

BACTERIOLOGICAL MCL

PUBLIC NOTICE

The Cotton Plant Waterworks is a public water system subject to regulation under
(name of water system)
the federal Safe Drinking Water Act. Those regulations require the notification of customers whenever a violation occurs, and is the basis for this notice. This water system failed to meet the maximum contaminant level for total coliform in May, 2015.
(month(s))

The United States Environmental Protection Agency (EPA) sets drinking water standards and has determined that the presence of total coliforms is a possible health concern. Total coliforms are common in the environment and are generally not harmful themselves. The presence of these bacteria in drinking water, however, generally is a result of a problem with water treatment or the pipes which distribute the water, and indicates that the water may be contaminated with organisms that can cause disease. Disease symptoms may include diarrhea, cramps, nausea, and possibly jaundice, and any associated headaches and fatigue. These symptoms, however, are not just associated with disease causing organisms in drinking water, but also may be caused by a number of factors other than your drinking water. EPA has set an enforceable drinking water standard for total coliforms to reduce the risk of these adverse health effects. Under this standard, no more than 5 percent of the samples collected during a month can contain these bacteria, except that systems collecting fewer than 40 samples per month that have one total coliform positive sample per month are not violating the standard. Drinking water which meets this standard is usually not associated with a health risk from disease causing bacteria and should be considered safe.

Failure to meet the total coliform standard does not mean that the water is unsafe or that alternate sources of water should be used. The water system has Adjusted the chlorination and resampled to assure that there is no coliform bacteria present.
(detail the action taken to correct the violation)

Should you have any questions concerning this notice, contact the water system at 870-270-6305 or the Engineering Section of the Department of Health at 501-661-2623.
(Phone#)