

CITY OF AUSTELL

2010 Annual Water Quality Report

This is an annual report on the quality of water delivered by the City of Austell. This report meets the federal Safe Drinking Water Act (SDWA) requirements for the Consumer Confidence Report (CCR) and contains information on the source of our water, its constituents, and the health risks associated with any contaminants.

Safe water is vital to our community. Please read this report carefully, and if you have any questions, contact Austell Public Works at (770) 944-4325.

Overview

Water Source

The Cobb County – Marietta Water Authority has two (2) surface water sources supplying two treatment facilities. The Wyckoff Treatment Division is supplied from Lake Allatoona, a Corps of Engineers impoundment in north Cobb, south Cherokee and south Bartow counties. The Quarles Treatment Division receives water from the Chattahoochee River.

During 2002 the Cobb County – Marietta Water Authority and the Atlanta Regional Commission completed a source water assessment itemizing potential sources of water pollution to our surface drinking water supplies. This information can help you understand the potential for contamination of your drinking water supplies and can be used to prioritize the need for protecting drinking water sources.

A Source Water Assessment is a study and report which provides the following information:

- Identifies the area of land that contributes the raw water used for drinking water,
- Identifies potential sources of contamination to drinking water supplies, and
- Provides an understanding of the drinking water supply's susceptibility to contamination.

For more information on this project visit the Source Water Assessment website at <http://www.atlantaregional.com/swap/> or you can request information by mail from the ARC:

Matthew Harper
Environmental Planning Division
Atlanta Regional Commission
40 Courtland Street, NE
Atlanta, Georgia 30303

An explanation of the Water Quality Data Table

The table shows the results of our water quality analyses. Every regulated contaminant **that we detected** in the water, even in the minutest traces, is listed here. The table contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health (MCLG), the usual sources of such contamination, footnotes explaining our finding, and a key to units of measurement. Definitions of MCL, MCLG, AL, and TT are important:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's allow for a margin of safety.

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must implement.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

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 microbiological 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

The data presented in this report are from the most recent testing done in accordance with regulations.

Key to Table	
AL – Action Level	ppm – parts per million or milligrams per liter (mg/L)
MCL – Maximum Contaminant Level	ppb – parts per billion or micrograms per liter (µg/L)
MCLG – Maximum Contaminant Level Goal:	TT – Treatment Technique
NTU – Nephelometric Turbidity Unit	n/a – not applicable
MRDL – Maximum Residual Disinfectant Level	n/d – not detected
MRDLG – Maximum Residual Disinfectant Level Goal	BDL – Below Detection Limits

Tables of Contaminants

The Georgia Environmental Protection Division has determined that the concentrations of certain water quality monitoring parameters does not change frequently with our system, therefore some of the data presented in this report are greater than one year old.

Inorganic Contaminants								
Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Sources	Violation
Fluoride ¹	6/7/2010	ppm	4	4	1.02	0.0 – 1.02	Erosion of natural deposits; water additive which promotes strong teeth	NO
Lead ²	7/15/2008	ppb	AL =15	0	9.7	n/a	Corrosion of household plumbing systems.	NO
Copper ³	9/3/2008	ppm	AL =1.3	0	0.032	n/a	Corrosion of household plumbing systems.	NO
Nitrate/Nitrite ⁴	3/16/2010	ppm	10	10	0.48	0.39 – 0.48	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits	NO

Notes:

- ¹Fluoride is added to water to help in the prevention of dental cavities (caries) in children.
- ²Of the 50 sites tested, 3 exceeded the action level. The next round of testing is due in 2011.
- ³Of the 50 sites tested none exceeded the action level. The next round of testing is due in 2011.
- ⁴Nitrate and Nitrite are measured together.

Disinfection By-Products, By-Product Precursors and Disinfectant Residuals								
Contaminant	Date Tested	Unit	MCL	MCLG	Detected Level	Range	Major Sources	Violation
TTHM's (Total Trihalomethanes)	2/4/2010	ppb	80	0	44.0	14.8 – 82.3 ¹	By-products of drinking water disinfection	NO
HAA5's (Haloacetic Acids)	2/4/2010	ppb	60	0	26.0	10.8 – 35.1 ¹	By-products of drinking water disinfection	NO
TOC (Total Organic Carbon)	9/7/2010	ppm	TT	n/a	2.10	1.0 – 2.1	Decay of organic matter in the water withdrawn from sources such as lakes and streams	NO
Chlorite	1/4/2010	ppm	1.0	0.8	0.51	0.13 – 0.51	Byproduct of drinking water disinfection	NO
Chlorine Free	2/8/2010	ppm	MRDL = 4	MRDL G = 4	2.14	BDL ² – 2.14	Drinking water disinfectant	NO

Note:

- ¹This contaminant is regulated by the average concentration over a period of a year.
- ²Detection Limit for chlorine is 0.05 mg/L. Disinfection was confirmed by heterotrophic plate count. This is a method that measures total bacteria in a sample. The result was within acceptable limits.

Turbidity							
Contaminant	MCL	MCLG	Level Found	Range	Sample Date	Violation	Typical source
Turbidity ³	TT = 1 NTU	0	0.16	n/a	12/3/2010	NO	Soil runoff
	TT = percentage of samples <0.3 NTU		100%	n/a			

Note:

- ³Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

Microbiological Contaminants					
Contaminant	MCL	MCLG	Highest level detected (%)	Average detected level (%)	Violation
Total coliform bacteria	<5% positive samples during a monthly sampling period	0% positive samples during a monthly sampling period	9.09%	.76%	No
<i>Escherichia coli</i> (<i>E. coli</i>) bacteria	<5% positive samples during a monthly sampling period	0% positive samples during a monthly sampling period	0.00%	0.00%	No

Unregulated Contaminants – *Cryptosporidium* spp.

Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in one of our source waters. Our testing, performed at the raw (**untreated**) water intake on the Chattahoochee River, located immediately north of the Johnson Ferry Road crossing, revealed the presence of *Cryptosporidium*. **These organisms were detected in the water prior to treatment.** During the same monitoring periods as the Chattahoochee River, the water at Allatoona Lake was tested. No oocysts were detected. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Required Additional Health Information

To ensure tap water is safe to drink, EPA prescribes limits on the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled 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 United States Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

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. The City of Austell 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 website at <http://www.epa.gov/safewater/lead>.

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 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 storm 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, storm water runoff, and residential uses.
- d) Organic chemical contaminants, including synthetic (man-made) and volatile organics, which are by-products of industrial processes and petroleum production, and can also come from gasoline stations, urban storm water runoff, and septic systems.
- e) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 people, and infants can be particularly at risk. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the EPA's **Safe Drinking Water Hotline at 1.800.426.4791.**

Water quality data for community water systems throughout the United States are available on the internet at www.waterdata.com.

For more information regarding this report, you may contact:



Austell Public Works
5000 Austell-Powder Springs Road, Suite 101
Austell, Georgia 30106

Office: (770) 944-4325
E-Mail: info@austellga.gov
Website: www.austellga.gov