ANNUAL WATER QUALITY REPORT

Water testing performed in 2008

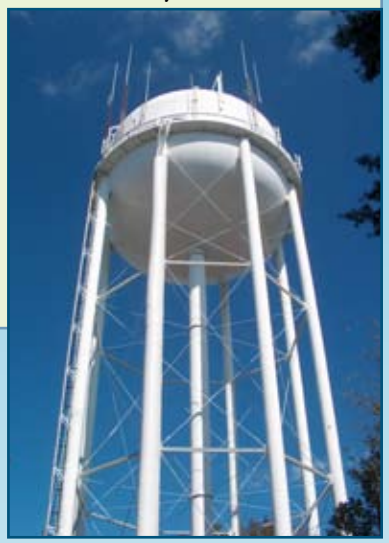
Marietta WATER

PWS ID#: GA0670005

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

Meeting the Challenge

Marietta Water is once again proud to present to you our Consumer Confidence Report (CCR). This edition covers all testing completed from January 1 through December 31, 2008. Over the years, we have dedicated ourselves to providing drinking water that meets and exceeds all state and federal drinking water standards. We continually strive to adopt new and better methods for delivering the best quality drinking water to you. Our exemplary efforts are consistently recognized by the Georgia Association of Water Professionals (GAWP). Within our categories for 2007, Marietta Water was awarded Water Distribution System of the Year, Consumer Confidence Report of the Year and Public Education Program of the Year! In addition, Marietta Water was named Wastewater Collection System of the Year for 2008! So as new challenges emerge, rest assured that we remain vigilant in meeting the challenges of environmental protection, water conservation and community education while continuing to serve the needs of all our water users.



Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Community Participation

Marietta Water operates under the supervision of the Board of Lights and Water (BLW). The BLW was created through the State Legislature. There are seven Board Members, including the Mayor (as Chair), a City Council Member (appointed by the Mayor) and five other members of the community (appointed by the City Council).

You can make an appointment to voice comments or concerns to the board on water related issues by calling the board manager at (770) 794-5109. The board meets the Monday before the second Wednesday of each month. Marietta Water maintains regular operating hours of Monday through Friday, 7:00 a.m. to 4:00 p.m. To reach the service and maintenance department 24 hours a day, please call (770) 794-5230.

Cryptosporidium and Giardia Monitoring

The CCMWA participated in a major drinking-water-quality testing program called the Supplemental Information Collection Rule (SICR). Two of the contaminants tested for under this rule are the parasites *Cryptosporidium* and Giardia, which have caused outbreaks of intestinal disease in the United States and abroad. These parasites are common in surface water and are very difficult to kill. Even a well run water system may contain some live oocysts (in the case of *Cryptosporidium*) or cysts (in the case of Giardia). The U.S. EPA is working to resolve several scientific issues that will allow it to set *Cryptosporidium* and Giardia safety standards. Our 1999 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* and Giardia in several months' samples. These organisms were detected in the water prior to treatment. During 1999, the water at Lake Allatoona was also tested. No oocysts or cysts were detected.

In order to comply with an upcoming federal regulation, the CCMWA has been monitoring for *Cryptosporidium* and Giardia in the raw water from both its water sources, the Chattahoochee River and Lake Allatoona. This monitoring was performed monthly during 2005. No *Cryptosporidium* oocysts were detected at either source. Giardia cysts were detected in two of the twelve samplings. Again, these organisms were detected in the water prior to treatment and only at the Chattahoochee River intake. Our treatment technique is designed and optimized to remove these contaminants. Therefore, no precaution about our drinking water is currently needed for the general public. See advice about special populations and a source for further information in the Important Health Information section.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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 or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban stormwater runoff and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Where Does My Water Come From?

Marietta Water purchases water from the Cobb County-Marietta Water Authority (CCMWA), a public utility founded in 1951. The CCMWA (http://www.ccmwa.org/) treatment facilities are supplied from two separate surface water sources. The James E. Quarles Treatment Facility, built in 1953, withdraws water from the Chattahoochee River. The Quarles plant can treat a maximum of 86 million gallons of water a day. This water is distributed and utilized on the eastern side of Cobb County and Marietta. The Hugh A. Wyckoff Treatment Facility, put online in 1972, withdraws water from Lake Allatoona. Lake Allatoona is a Corps of Engineers impoundment in north Cobb, south Cherokee and south Bartow counties. This manmade, multi-use lake is part of the Etowah River Basin. The Wyckoff plant can treat a maximum of 72 million gallons of water a day. This water is distributed and utilized on the north and west side of Cobb County and Marietta.

Questions?

For more information about this report, or for any questions relating to your drinking water, please call Tim Marshall, Environmental Compliance Coordinator, at (770) 794-5229.

Water Conservation

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Harvest rainwater for garden irrigation, filling birdbaths, etc. Marietta Parks and Recreation supports water conservation by using harvested rainwater for the fountain on Marietta Square and other landscape irrigation purposes.
- Replace old inefficient plumbing fixtures and/or appliances. Marietta Water is supporting water conservation by offering a rebate to encourage the installation of more efficient toilets.

Finally, don't forget to follow the current water restriction rules.

For more information go to www.mariettawater.com and follow the appropriate links.

Source Water Assessment

During 2002, the CCMWA 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 that 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.

Individual source pollution involves actual facilities, which have contaminants on site that can pose a potential health risk if humans consume those contaminants. Nonpoint source pollution is caused by development and by everyday activities that take place in residential, commercial and rural areas; nonpoint source pollution is carried by rainfall to streams and lakes. After evaluating these sources of pollution, the report found the Chattahoochee watershed susceptibility ranking to be high and the Lake Allatoona watershed susceptibility ranking to be medium.

For more information on this project, visit the source water assessment Web site at www.atlantaregional.com/swap/, or you can request information by mail from the Environmental Planning Division, Atlanta Regional Commission, 40 Courtland Street NE, Atlanta, GA 30303.

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. Marietta Water 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 or at www.epa.gov/safewater/lead.

Sampling Results

During the past year we have taken thousands of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. Every regulated contaminant that we detected in the water, even in the minutest traces, is listed here. Although all of the substances listed are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of the substance was present in the water.

The State allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine[1] (ppm)	2008	[4]	[4]	2.12	ND–2.12	No	Water additive used to control microbes
Chlorite (ppm)	2008	1.0	0.8	0.42	ND–0.42	No	By-product of drinking water disinfection
Fluoride (ppm)	2008	4	4	0.97	ND–0.97	No	Erosion of natural deposits; Water additive that promotes strong teeth
Haloacetic Acids [HAA][2] (ppb)	2008	60	0	20.0	8.5–34.3	No	By-products of drinking water disinfection
Nitrate/Nitrite[3] (ppm)	2008	10	10	1.2	0.48–1.2	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes][2] (ppb)	2008	80	0	36.0	15.0–68.5	No	By-products of drinking water disinfection
Total Coliform Bacteria (% positive samples)	2008	5% of monthly samples are positive	0	1.37%	NA	No	Naturally present in the environment
Total Organic Carbon (ppm)	2008	TT	NA	2.0	1.0–2.0	No	Naturally present in the environment; Decay of organic matter in the water withdrawn from sources such as lakes and streams
Turbidity[4] (NTU)	2008	TT=1NTU	0	0.23	ND–0.23	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2008	TT=95% of samples < 0.3 NTU	0	100%	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community[5]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2008	1.3	0	0.032	0/50	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2008	15	0	9.7	3/50	No	Corrosion of household plumbing systems; Erosion of natural deposits

IDSE RESULTS[6]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Haloacetic Acids [HAA]–IDSE Results (ppb)	2008	25.5	8.6–39.0	By-products of drinking water disinfection
TTHMs [Total Trihalomethanes]–IDSE Results (ppb)	2008	59.8	11.9–93.5	By-products of drinking water disinfection

[1] Detection limit for chlorine is 0.05 ppm. Disinfection was confirmed by heterotrophic plate count. This is a method that measures total bacteria in a sample. The result was within acceptable limits.

[2] This contaminant is regulated by the average concentration over a period of a year.

[3] Nitrate and Nitrite are measured together.

[4] Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

[5] The next round of testing is due in 2011.

[6] We were required by the U.S. EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE) and is intended to identify locations in our distribution system that may have elevated disinfection by-product concentrations. Disinfection by-products (e.g., HAAs and TTHMs) result from continuous disinfection of drinking water and form when disinfectants combine with organic matter that naturally occurs in the source water. Amount detected is the highest LRAA (Locational Running Annual Average) for 17 sample sites. The range is for all samples taken during this evaluation from October 2007 to August 2008.

Definitions

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

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.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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