

# City of Emerson, Georgia ANNUAL WATER QUALITY REPORT FOR 2011

**(FOR EMERSON CUSTOMERS SUPPLIED BY BARTOW COUNTY WATER)**

## IMPORTANT INFORMATION ABOUT THE SAFETY OF YOUR DRINKING WATER

The City of Emerson Water Department is pleased to report that during 2011 your community's drinking water met or exceeded all safety and quality standards set by the Georgia Environmental Protection Division (EPD) and the Federal Environmental Protection Agency (EPA). **Customers receiving this report were supplied by water purchased from the Bartow County Water Department for distribution by the City of Emerson.** The source of water furnished to Emerson is Lake Allatoona (surface water). The lake water is treated by the City of Cartersville water filtration plant located on Highway 41 near Emerson. Emerson contracts with the City of Cartersville's Drinking Water Laboratory for analysis of finished water bacteriological quality twice monthly.

The following table presents the results of testing published by the Bartow County Water Department and the Georgia EPD Drinking Water Laboratory for the drinking water supplied by the Bartow County Water Department during 2011.

<b><u>DRINKING WATER ANALYSIS TABLE</u></b>						
<u>All Results for 2011</u>						
Substance Detected	Unit	MCLG	MCL	Amount Detected	Does it meet Standards?	Probable Source
Fluoride	ppm	4.0	4.0 2.0 (SMCL)	0.94	Yes	Water additive which promotes strong teeth; Erosion of natural deposits
Lead	ppb	0	15 (AL)	4.7	Yes	Corrosion of plumbing systems
Copper	ppb	1300	1300 (AL) 1000(SMCL)	160	Yes	Corrosion of plumbing systems
Nitrate	ppm	10	10	0.89	Yes	Runoff from fertilizer use
Turbidity	NTU	N/A	0.3 (AL) 1.0	0.26	Yes	Soil runoff
Iron	ppm	0	0.1 (AL) 0.3 (SMCL)	0.01	Yes	Erosion of natural deposits; Naturally occurring in trace amounts
Manganese	PPM	0	0.03 (AL) 0.05 (SMCL)	0.02	Yes	Erosion of natural deposits; Naturally occurring in trace amounts
pH	Standard	6.8 (Low)	6.8 (AL) 6.5-8.5 (SMCL)	7.10(Low) 7.26 (High)	Yes	Lime added to control pH levels
TTHM's (Total Trihalomethanes)	ppb	0	80	55.9	Yes	By-products of drinking water disinfection
TTAA's (Total Haloacetic Acids)	ppb	0	60	53.7	Yes	By-products of drinking water disinfection
TOC (Total Organic Carbon)	ppm	N/A	N/A	2.2	Yes	Decay of organic matter in the water withdrawn from water sources such as lakes and streams

**Note:** Previous testing has shown that lead and copper levels in the drinking water supply are consistently below the Action Level established. Therefore, Bartow County has received a waiver from Georgia EPD for reduced frequency of monitoring for lead and copper.

## Background Information about Sources of Contaminants in Drinking Water in the USA

The sources of drinking water (both tap 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 and human activity. Contaminants that may be present in source water include the following:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic tank systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban 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 tank systems.
- **Radioactive contaminants**, which can be naturally occurring or may be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the State of Georgia and Federal EPA prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. For bottled water, Food and Drug Administration regulations establish limits for the 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 can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791) or contacting additional information sources on the Internet:

<http://www.epa.gov/ow>

<http://www.dnr.state.ga.us/epa>

**Notice:** 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 health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

**Concerning Lead:** If present, elevated levels of lead 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 Emerson water system 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 leading in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

### DEFINITIONS

**(MCL) Maximum Contaminant Level:** 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.

**(MCLG) Maximum Contaminant Level Goal:** 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.

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

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

**(NTU):** Nephelometric turbidity unit, a measure of the clarity of water.

**(ppm):** Parts per million means 1 per 1,000,000 (corresponds to 1 minute in 2 years, or 1 cent in \$10 thousand.)

**(ppb):** Parts per billion means 1 per 1,000,000,000 (corresponds to 1 minute in 2,000 years or 1 cent in \$10 million.)

*For more information about your water or this report please call Kevin McBurnett, Emerson City Manager, at (770) 382-9819 between the hours of 8:00 a.m. and 5:00 p.m. on weekdays. The regular City of Emerson Council meetings are held at 7:00 p.m. on the 2nd and 4th Monday of each month at City Hall, 700 Highway 293, Emerson, Georgia 30137. Attendance and participation by the Public is invited.*