## **Annual Drinking Water Quality Report**

## City of Pooler, Georgia 2009

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. The City of Pooler Water Department conducted several hundred tests for potential contaminants in our drinking water during the previous year. Only one of those parameters was detected at a level higher than EPA allows. As our public notice stated at the time, our water only temporarily exceeded drinking water standards for this parameter. For more information on this occurrence, see the additional information provided in this report. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. Our wells draw groundwater from the Upper Floridan Aquifer and we get additional water from the City of Savannah's surface water treatment plant.

If you have any questions about this report or concerning your water utility, please contact Mark L. Williams at 748-4800. 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 City Council meetings. They are held on the first and third Monday of each month at 6:00 P.M. at the Pooler City Hall. This report will be mailed to consumers and copies may be obtained from City Hall.

The City of Pooler Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. The Test Results table shows the monitoring results for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2009. 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 or from 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 systems, agricultural livestock operations, and wildlife.
- 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.
- 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 naturallyoccurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The **Test Results** table lists the contaminants which were detected and the level at which the detection occurred. For brevity, we have only listed the contaminants which were detected within the past years tests or the latest test for the contaminant. In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

**Parts per million (ppm) or Milligrams per liter (mg/l)** - One part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb) or Micrograms per liter (g/l)** - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**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)**: 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 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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

MNR - Monitoring not required, but recommended.

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 EPA Safe Drinking Water Hotline (1-800-426-4791).

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-amillion chance of having the described health effect.

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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by

Cryptosporidium and other microbiological contaminants are available from the **Safe Drinking Water Hotline** (800-426-4791). Please call our office if you have questions.

We at the **City of Pooler Water Department** work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

The Georgia Source Water Assessment Program addresses promotion and protection of public drinking water sources. The program is available to the public.

Test Results – City of Pooler Groundwater System							
Substance Tested and Detected	AL	MCL G	Amount Detected	Range of Detections	Sample Date	Violation	Typical Source of Contamination
Total Coliform	MCL >1 pos. sample/month	0	2 positive/month	0 – 2 pos.	2009	YES	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.
Fluoride (ppm)	4	4	0.70	0.04 - 2.08	2009	NO	Erosion of natural deposits; water additive that promotes strong teeth.
Chlorine ( ppm )	MRDL= 4	MRD L G = 4	0.46	0.22 – 1.63	2009	NO	Water additive used to control microbes.

**About our Total Coliform violation:** During November of 2009 our water exceeded the MCL for number of positive samples for total coliform. We sent a notice warning you of this problem when it occurred. The source of the problem was located and has been eliminated. We continue to monitor total coliform levels monthly. We regret exposing you to any potential risk. You should know that symptoms of coliform bacteria exposure may include diarrhea, cramps, nausea, possible jaundice and any associated headaches and fatigue.

The City of Savannah Water Laboratory performed more than 136,000 tests and procedures during 2009 to ensure water quality. Tests have been made on more than 160 water quality parameters. The City has met all sampling and reporting requirements. The following table lists all detected substances that require monitoring.

The City of Savannah Water Supply and Treatment Department (I & D System)

Substance Tested and Detected	Unit	Goal MCLG	MCL	Amount Detected	Range of Detection	Does It Meet Standards?	Probable Source
Chlorine	ppm	MRDLG=4	MRDL=4	3.68	0.02-3.68	Yes	Water additive used to control microbes
Chloramine	ppm	MRDLG=4	MRDL=4	2.31	0.02-2.31	Yes	Water additive used to control microbes
Turbidity	NTU	0	TT=1 NTU TT = 95% of samples < 0.3 NTU	0.62 NTU 99.19%	NA	Yes	Soil runoff
Total Organic Carbon	ppm	NA	TT	50% Removal	25.0 -67.0% Removal	Yes	Naturally present in the environment
Copper <sup>1,3</sup>	ppb	1300	AL=1300	350 (90 <sup>th</sup> Percentile)	No sample > AL	Yes	Corrosion of household plumbing
Lead <sup>2,3</sup>	ppb	0	AL=15	3.3 (90 <sup>th</sup> Percentile)	2 Samples > AL	Yes	Corrosion of household plumbing
TTHM's (Total Trihalomethanes)	ppb	0	80	55.00	34.0-96.6	Yes	Byproduct of water chlorination
THAA's (Total Haloacetic Acids)	ppb	0	60	47.48	3.3 – 90.8	Yes	Byproduct of water chlorination
Nitrate	ppm	10	10	0.36	0.36	Yes	Fertilizer runoff