CITY OF ST. MARYS 2019 WATER QUALITY REPORT

Georgia Water System ID No.: GA0390001

Name of Water System Contact:
Bobby Marr
Dispatcher

<u>Contact Phone Number:</u> 912-882-4415 911

Summary of Water Quality Information

The **City of St. Marys** drinking water system is owned by the **City of St. Marys** and operated by **Tindall Enterprises**, **Inc.** The facility office is located at 418 Osborne Street in St. Marys, Georgia. If there are ever any comments or inquiries to be made, please feel free to contact Bobby Marr at the number listed above, Monday through Friday, during normal business hours.

The **City of St. Marys** is committed to providing your community with clean, safe, and reliable drinking water. This report contains information about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. It is submitted to the Georgia Department of Natural Resources Environmental Protection Division and is available to you upon request at **City Hall**. This report is available in its entirety on the St. Marys Public Works' document center webpage by visiting www.stmarysga.gov. For more information about your water or this report please call Bobby Marr.

Your water comes from three (3) community *groundwater* wells (102, 103, and 106) which have a combined service capacity of approximately 3.5 million gallons per day. Around 800 to 1100 feet deep underground is the *Upper Floridan Aquifer*, which is the water source for all 3 wells. The aquifer provides ample volumes of water for your community. These wells are distributed throughout the **City of St. Marys**. Any necessary treatment of the water, such as the addition of disinfectant and/or removal of contaminants, is performed at the well sites. Well properties are protected from activities which could potentially cause contamination of this water source through the implementation of a *Wellhead Protection Plan (WHPP)*.

The *WHPP* has been completed by the Georgia Department of Natural Resources Environmental Protection Division (EPD) and it identifies types of pollution to which your water supply could be vulnerable; it also includes information regarding potential sources of contamination in your water. The current *WHPP* indicates no potential pollution sources in the fifteen (15) foot control zones. Potential pollution sources within the wells' 100-foot management zones include access and secondary roads, electrical transformers, utility poles, underground and above ground storage tanks. Copies of the most updated *WHPP* are available upon request at **St. Marys City Hall**.

The **City of St. Marys** water system is tested for more than eighty (80) drinking water parameters a periodic basis determined by the EPD Drinking Water Program and/or the United States Environmental Protection Agency. Sample/testing schedules are based on initial contaminant level assessments and can be changed by EPD if deemed necessary. Samples are collected from within the water system for analysis of lead, copper, inorganic compounds, synthetic organic and volatile organic compounds once in a three (3) year cycle. Nitrate-nitrite levels are analyzed yearly, trihalomethanes and haloacetic acids are monitored quarterly, and bacteriological content is checked monthly. The water system is also sampled and analyzed for radionuclides every six (6) to nine (9) years, depending on the wells initial assessment results. EPD may issue waivers for the analysis of any of the mentioned compounds if analytical data shows that the drinking water is not vulnerable to contamination from these chemicals.

During 2019, the **City of St. Marys** water system was sampled and analyzed for bacteriological content, nitrate-nitrites, total trihalomethanes, haloacetic acids, lead and copper. **All detected contaminants are delineated in the accompanying chart.** Any contaminants not listed were not detected or were below reportable limits. We are proud to report that the City of St. Marys did not have any violations of water quality parameters during 2019.

Thirty (30) designated locations were selected throughout your community for the analysis of lead and copper. Locations may include single-family residences, multi-family residences, municipal buildings, and/or commercial locations. While sample results showed detectable levels of lead and copper, **NO** sample sites exceeded the action level limit for lead or copper.

Lead and copper are metals naturally found throughout the environment in soil and water. These metals can also be found in lead, copper, or brass household plumbing pipes and fixtures. Even consumer products such as paints, pottery, and pewter can contain lead and/or copper. Corrosion or deterioration of lead or copper-based materials, as well as erosion of natural deposits can release these metals into the 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. The City of St. Marys 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 http://www.epa.gov/safewater/lead.

Additionally, the following measures may also be taken to minimize exposure to lead and/or copper:

- Use cold water for drinking or cooking.
- Do not cook with or consume water from the hot water faucet.
- Do not use hot water for making baby formula.
- Use only "lead-free" solder, fluxes and materials in new household plumbing and repairs.

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's Safe Drinking Water Hotline at 800-426-4791.

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 their 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 at 800-426-4791.

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, 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 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 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 storm water 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 storm water runoff, agricultural application, 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 ensure that tap water is safe to drink, EPA prescribes regulations which 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 City of St. Marys strives to maintain the highest standards of performance and quality possible. In order to maintain a safe and dependable water supply, improvements that benefit the community must be made. Please help keep these costs as low as possible by utilizing good water conservation practices.

DEFINITION OF TERMS AND ABBREVIATIONS USED IN THIS REPORT

<u>Maximum Contaminant Level (MCL):</u> "The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG as feasible using the best available treatment technology."

<u>Maximum Contaminant Level Goal (MCLG):</u> "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."

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

<u>Secondary Maximum Contaminant Level (SMCL):</u> reasonable goals for drinking water quality. Exceeding SMCL's may adversely affect odor or appearance, but there is no known risk to human health.

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

<u>Maximum Residual Disinfectant Level (MRDL):</u> "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."

<u>Maximum Residual Disinfectant Level Goal (MRDLG):</u> "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.

Not Detected (ND): By regulation, this substance or group of substances was tested for in our finished tap water; however, none was detected at the testing limit.

<u>TTHMs (Total Trihalomethanes):</u> One or more of the organic compounds Chloroform, Bromodichloromethane, Chlorodibromomethane, and/or Bromoform.

<u>HAA5s (Haloacetic Acids):</u> One or more of the organic compounds Monochloroacetic Acid, Dichloroacetic Acid, Trichloroacetic Acid, Monobromoacetic Acid, and Dibromoacetic Acid.

NA: Not applicable to this contaminant

ppb or ug/l: parts per billion or micrograms per liter

ppm or mg/l: parts per million or milligrams per liter

pCi/l: picocuries per liter, a measurement of radiation

CITY OF ST. MARYS WATER SYSTEM 2019 WATER QUALITY DATA

WSID: GA0390001

The table below lists all the drinking water contaminants that have been detected in your drinking water. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The data presented in this table is from testing done during the year noted. The Federal Environmental Protection Agency (EPA) and the Georgia Department of Natural Resources Environmental Protection Division (EPD) require monitoring for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

	DETECTED INORGANIC CONTAMINANTS TABLE											
Parameter	Units	MCL [SMCL]	MCLG	St. Marys Water System Results	Range of Detections	Sample Date	Violation No/Yes	Typical Source of Contaminant				
Chlorine	ppm	4	**	0.71	0.02 to 1.7	2019	No	Water additive used for the control of microbes				
Fluoride	ppm	4 [2]	4	0.59	0.59 to 0.59	2018	No	Erosion of natural deposits; water additive used to promote strong teeth				
Iron	ppb	[300]	**	830	830 to 830	2018	No	Erosion of natural deposits				

DETECTED ORGANIC CONTAMINANTS TABLE										
St. Marys Range of Sample Violation										
Parameter	Units	MCL	MCLG	Water System Results	Detections	Date	No/Yes	Typical Source of Contaminant		
Haloacetic Acids	ug/l	60	**	15.55	2.2 to 27.6	2019	No	By product of drinking water disinfection		
Total Trihalomethanes	ug/l	80	**	58.8	20.8 to 93.4	2019	No	By product of drinking water disinfection		

OTHER DETECTED UNREGULATED CONTAMINANTS TABLE											
MCL St. Marys Range of Sample Violation											
Parameter	Units	[SMCL]	MCLG	Water System Results	Detections	Date	No/Yes	Typical Source of Contaminant			
Sodium	ppm	**	**	33	33 to 33	2018	No	Erosion of natural deposits			

LEAD AND COPPER MONITORING RESULTS										
Action St. Marys # of sample sites Sample Violation										
Parameter	Units	Level	MCLG	90th Percentile	above Action Level	Date	No/Yes	Typical Source of Contaminant		
Lead	ppb	15	0	0.00	0	2019	No	Corrosion of household plumbing		
Copper	ppm	1.3	1.3	0.047	0	2019	No	Corrosion of household plumbing		

MICROBIOLOGICAL MONITORING RESULTS										
St. Marys Positive Sample Date Sample Violation										
Parameter	Units	MCL	MCLG	Number of Positive Samples	(Month)	Year	No/Yes	Typical Source of Contaminant		
Total Coliform	Present/	1*	0	2	October	2019	No	Naturally present in the environment		
E.Coli	Absent	0	0	0	NA	2019	No	Human and animal fecal waste		

RADIONUCLIDES MONITORING RESULTS										
St. Marys Range of Sample Violation										
Parameter	Units	MCL	MCLG	Water System Results	Detections	Date	No/Yes	Typical Source of Contaminant		
Alpha emitters	pCi/L	15	0	ND	NA	2017	No	Erosion of natural deposits		
Combined Radium 226/228	pCi/L	5	0	ND	NA	2017	No	Erosion of natural deposits		

Parameters, values and/or sources may vary

^{*}Total Coliform Rule MCL= 1 positive sample for systems that collect < 40 samples a month

^{**} No established MCL, SMCL or MCLG