



# Metcom

## St. Mary's County Metropolitan Commission

Persimmon Hill / Ben Oaks

PWSID # 0180046

2016 Annual Water Quality Report

*“Investing in a water secure future for St. Mary's County”*

Once again, we proudly present our Annual Water Quality Report. This edition covers all testing completed from January through December 2016. We are pleased to tell you that our compliance with all State and Federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best quality water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

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. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system and may have an increased risk of getting cancer. 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 (1-800-426-4791).

The source of your drinking water is two wells, one in the Aquia Aquifer, and one in the Patapsco Aquifer. Wells in the Aquia aquifer range in depth from 450 to 600 feet beneath the land's surface. The Patapsco Aquifer ranges in depth from 800 to 950 feet beneath the land's surface. Our water comes from confined aquifers. The confining units are thick, impervious clay layers that lie above and below the water-bearing sand strata. We are very fortunate that these confining layers naturally protect our aquifers. The only treatment your water receives is the addition of chlorine as a precautionary disinfecting agent prior to entering your water distribution system.

We are pleased to report that our drinking water is safe and meets or exceeds Federal and State requirements. The following report is provided in compliance with Federal regulations and will be provided annually. This report outlines the quality of our drinking water and what that quality means.

For more information regarding your drinking water or water service, call Gary Reynolds at the St. Mary's County Metropolitan Commission at (301) 737-7400, Extension 104 Monday through Friday, 7:30 am to 4:30 pm, or visit our website [www.metcom.org](http://www.metcom.org).

In this report 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:

### DEFINITIONS

ND = Non-Detects

Indicates that the substance was not found by laboratory analysis.

ppm = Parts Per Million or Milligrams Per Liter (mg/l)

One part per million corresponds to one minute in two years or a single penny in \$10,000.00.

ppb = Parts Per Billion or Micrograms Per Liter (ug/l)

One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.00.

pCi/L = Picocuries Per Liter

Picocuries per liter is a measure of the radioactivity in water.

AL = Action Level

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. (Note: Only applies to copper and lead levels)

MCLG = Maximum Contaminant Level Goal

The "Goal" is 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.

MCL = Maximum Contaminant Level

The "Maximum Allowed" is 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.

N/A = Non-Applicable

No minimum levels have been established by the EPA.

### **Substances That Might Be in Drinking Water**

It is important to understand that the EPA has determined that the detection of these substances in the drinking water does not constitute a known threat to public health at levels less than the MCL. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect. The St. Mary's County Metropolitan Commission's water has proved to be below those levels for the contaminants listed.

The St. Mary's County Metropolitan Commission found some regulated contaminants present in your water system at levels below the Maximum Contaminant Level (MCL). These levels have been determined by the EPA to be safe. These contaminants are shown below, along with the MCLG and MCL for each one detected.

Although we ran tests for over 75 regulated contaminants, only the following listed substances were found. For a complete list of tested, undetected substances, contact the Water Division at (301) 737-7400.

Substance	Date Tested	Unit	MCL	MCLG	Level Detected	Possible Sources
<b>Distribution</b>						
TTHM's Total Trihalomethane	2016	ppb	80	N/A	5.1	By-product of drinking water disinfection
Copper	2015	ppm	1.3	AL=1.3	.18	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Chlorine	2016	ppm	0-1.2	4	1.1-1.2	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2016	ppm	60	N/A	1.6	By-product of drinking water disinfection
<b>Regulated Inorganic Contaminants</b>						
Arsenic	2014	ppb	10	0	0-5.8	Erosion of natural Deposits; Runoff from orchards; runoff from glass and electronics production wastes.
Barium	2014	ppm	2	2	.026	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2014	ppm	4.0	4.0	0.2	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Un-regulated</b>						
Sodium	2011	ppm	N/A	N/A	51.5	Erosion of natural deposits
Radon-222	2011	pCi/L	N/A	N/A	225	Naturally occurring gas caused by the decay of uranium
Chloroethane	2014	ppb	N/A	N/A	.5	Used in the manufacture of dyes, drugs, perfumes, insecticides and gasoline additives; it is also used as a refrigerant and anesthetic, and may form in tap water as a result of chlorination.

### **Additional Information for Lead**

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 St. Mary's Metropolitan Commission 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>.

### **Source Water Assessment**

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for the thirty-five community water systems in St. Mary's County, including the Persimmon Hills community supply. The required components of this report as described in Maryland's Source Water Assessment Program (SWAP) are 1) delineation of an area that contributes water to the source, 2) identification of potential sources of contamination within the areas, and 3) determination of the susceptibility of the water supply to contamination. Recommendations for protecting the drinking water supply conclude this report.

The water supply sources of the community systems in St. Mary's County are naturally protected confined aquifers of the Atlantic Coastal Plain physiographic province. The Persimmon Hills water system is currently using one well that pumps water from the Aquia Formation. The Wellhead Protection areas were delineated by the WSP using U.S. EPA's approved methods specifically designed for this source.

Potential point sources of contamination within and near the assessment areas were noted from field inspections and contaminant inventory databases. Well information and water quality data were also reviewed.

The susceptibility analysis is based on a review of the existing water quality data for each water system, the presence of potential sources of contamination in the individual assessment areas, well integrity, and aquifer characteristics. It was determined that the Persimmon Hills water supply is not susceptible to contaminants originating at the land surface due to the protected nature of confined aquifers. The water supply is susceptible to naturally occurring arsenic (based on the new EPA standard). The susceptibility of the water supply to radon-222, a naturally occurring element, will depend on the final MCL that is adopted for this contaminant.

### **Arsenic Statement**

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

## Substances That Might Be in Drinking Water

To ensure that tap water is safe to drink, the U.S. EPA imposes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for the 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 source 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, 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 storm water 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 which 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 activities.

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

## Fluoride

No fluoride has been added to any of our water systems. However, small amounts of fluoride exist naturally in our water source. These levels may not meet the recommended amounts for dental protection. You may wish to consult with your dental care provider to discuss fluoride supplements. To inquire about the amount of fluoride detected in the water system, please call the Water Division at (301) 737-7400 between the hours of 8:00 a.m. and 4:30 p.m.

St. Mary's County Metropolitan Commission  
23121 Camden Way  
California, MD 20619  
www.metcom.org

### **Radon**

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. (You should pursue radon removal for your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call your state radon program or call EPA's Radon Hotline (800-SOS-RADON).

### **How Can I Get Involved?**

The public is invited to participate in the Commission meetings and voice concerns about the drinking water or any Commission-related issues. The public meetings are held on the second and fourth Thursday of every month beginning at 3 pm. Meetings are held at the Commission's Main Office, 23121 Camden Way, California, MD 20619.

The Commission members and the election district (ED) that they represent are as follows: Alice Gaskin (ED1); John Carey (ED2/9); Mike Mummaugh (ED3); Bryan M. Barthelme, Chairman (ED4/5); Mike Thompson (ED6); Robert A. Russell, Vice-Chairman (ED7); Steven Willing (ED8); Capt. Scott Starkey, CO, Patuxent River NAS; and the Director of the St. Mary's County Metropolitan Commission, George Erichsen.

### **Metcom Mission**

Construct, operate and maintain public water supply and public waste water conveyance and treatment systems in a manner that is sustainable, reliable, economical and safe for the Commission's employees, the environment, and the citizens of St. Mary's County; and to ensure that construction is timely and in accordance with the St. Mary's County Comprehensive ( Land Use ) Plan.