

# *Annual Drinking Water Quality Report*

Somerset County Sanitary District, Inc.  
Rumbley, Frenchtown and Fairmount Subdistricts  
PWSID # 0190012

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. 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. We are committed to ensuring the quality of your water. Our water sources are the Nevette Muir Road and Upper Hill Road wells. The Nevette Muir Road well has a depth of 1,145 feet. The Upper Hill Road well has a depth of 1,137 feet. Our wells draw from the Potomac Aquifer, which is then treated and pumped, into your water distribution system.

We are pleased to report that our drinking water is safe and meets 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.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If you have any questions about this report, please contact the Sanitary District at 410-651-3831. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any regularly scheduled meeting held on the second and fourth Thursdays of each month at 2 p.m. in the Somerset County Office Complex, Princess Anne, Maryland.

The Somerset County Sanitary District, Inc. routinely monitors for constituents in your drinking water in accordance with Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2016. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

## **Definitions**

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:

***Non-Detects (ND)*** - laboratory analysis indicates that the constituent is not present.

***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 (ug/l)*** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

***Picocuries per liter (pCi/L)*** - picocuries per liter is a measure of the radioactivity in water.

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

***Action Level (A.L.)*** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

***Maximum Contaminant Level (MCL)*** - The "Maximum Allowed" (MCL) 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.

**Maximum Contaminant Level Goal (MCLG)** - The “Goal” (MCLG) 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.

**Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.

**Million Fibers per Liter (MFL)** - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

**Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Non-Detected Contaminants:** Following is a list of potential drinking water substances that the Sanitary District is required to test for, but which have not been detected in the water supply in the past year. We are only required to provide information on those substances detected in the finished water supply, but are providing a list of the non-detected contaminants in each well or in the system in order to better inform you about the extent of testing done to the water supply.

1040 Nitrate

**Detected Contaminants NOT in Violation of the MCL:** In addition to these undetected substances that were subject to testing, the Sanitary District did find some regulated substances present in the water system at levels below the maximum allowable level (MCL) which is determined safe by the EPA. These substances are shown below, along with MCL and MCLG for each one detected.

Contaminant	Level Detected	Unit of Measurement	MCL	MCLG	Likely Source of Contamination
<b>Fairmount, Rumbley &amp; Frenchtown Water System</b>					
1. Total Trihalomethanes	1.1 – 1.4	ppb	80	N/A	By-product of disinfection using chlorine when natural and/or manmade organic compounds are present in drinking water. Concentration can be dependent on ambient temperature.
2. Total Haloacetic Acids	< 2.0	ppb	60	N/A	By-product of disinfection using chlorine when natural and/or manmade organic compounds are present in drinking water. Concentration can be dependent on ambient temperature.

**Plant ID # 01 Well # 1 (Nevette Muir)**

1. Fluoride 1025	2.14 - 2.86	mg/l	4	2	Erosion on natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
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**Plant ID # 02 Well # 2 (Upper Hill)**

1. Fluoride 1025	0.37 – 2.79	mg/l	4	2	Erosion on natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
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Though the samples monitored for **Fluoride did not exceed the Maximum Contaminant Level (MCL)**, these samples did exceed the Secondary Maximum Contaminant Level (SMCL) for fluoride in the Drinking Water. Samples collected in 2016 measured in a range of 0.37 mg/l to 2.86 mg/l. Consequently, the U.S.E.P.A. requires that the Sanitary District provide the following language in this public notice regarding the potential effects of consuming water with fluoride levels in excess of the SMCL Standard. The SMCL is based on aesthetics and is not a health concern.

Federal regulations require that Fluoride, which occurs naturally in your water, not exceed a concentration of 4.0 mg/l in the drinking water. This is an enforceable standard called a Maximum Contaminant Level or MCL, and it has been established to protect the public health. Exposure to drinking water levels above 4.0 mg/l for many years may result in some cases in crippling skeletal fluorosis, which is a serious bone disorder. Federal law requires that we notify you when monitoring indicates that the fluoride in your drinking water exceeds 2.0 mg/l. This is intended to alert families about dental problems that might affect children under nine years of age. The fluoride concentration of your water exceeds this guideline.

Fluoride in children's drinking water at levels of approximately 1 mg/l reduces the number of dental cavities. However, some children exposed to levels of fluoride greater than about 2.0 mg/l may develop dental fluorosis. Dental fluorosis in its moderate and severe forms is a brown staining and /or pitting of the permanent teeth. Because dental fluorosis occurs only when developing teeth (before they erupt from the gums) are exposed to elevated Fluoride levels, households without children are not expected to be affected by this level of fluoride. Children under age nine should be provided with alternative sources of drinking water or water that has been treated to remove Fluoride to avoid the possibility of staining and pitting on their teeth. You may also want to contact your dentist about the proper use by young children of fluoride containing products. Your water supplier can lower the concentrations of the fluoride in the water so that you will still receive the benefits of cavity prevention while the possibility of staining and pitting is minimized. Removal of fluoride may significantly increase your water cost. Treatment systems are commercially available for home use. Information on such systems is available by calling the Sanitary District or contacting your local hardware or home products dealer.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in the drinking water is primarily from materials and components associated with service lines and home plumbing. The Somerset County Sanitary District Inc. 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 drinking 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 Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

The Sanitary District monitors the drinking water regularly for bacterial contamination using Total and Fecal Coliform and E.Coli as indicator bacteria. No Bacterial Contamination was detected in the year 2016. The Sanitary District monitors the drinking water daily and weekly for pH, Free Chlorine and Total Chlorine to ensure water quality.

The Sanitary District and the Maryland Department of the Environment have monitored for the following groups of contaminants within the last five years: Synthetic Organic Compounds, Volatile Organic Compounds, Metals and Radionuclides. Reports containing the results of these monitoring may be obtained on request.

As you can see by the table, our system had no violations in 2016. Your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water **IS SAFE** at these levels.

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man made. These substances can be microbes, inorganic or organic chemicals and radioactive substances. All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's 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-a-million chance of having the described health effect.

Thank you for allowing us to continue providing your family with clean, quality water this year. Please call our office if you have questions.