

# Annual Drinking Water Quality Report 2018

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

We are pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water.

**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 outlines the quality of our drinking water. If you have any questions about this report, please contact Sanitary District at 410-651-3831. We want our valued customers to be informed about their water utility and to understand the efforts we make to continually improve the water treatment process and protect our water resources. If you want to learn more, please attend any regularly scheduled meeting held on the second Thursday of each month at 1 p.m. in the Somerset County Office Complex, Princess Anne, Maryland. Please go to our website to confirm dates and times of meetings at [www.somersetmd.us](http://www.somersetmd.us) then select *Agencies* and then select *Sanitary District*.

Sources of drinking water (both tap water and bottled water) include rivers, 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 from the presence of animals or human activity. 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. A source water assessment was performed by the Maryland Department of the Environment (MDE) and is available on their website, [mde.maryland.gov](http://mde.maryland.gov).

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.

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 chemical, which are by-products of industrial processes and petroleum production. Organic chemical contaminants may also come from gas stations, urban storm water runoff and septic systems. Radioactive contaminants, which maybe naturally occurring or be the result of oil and gas production and/or mining activities.

In order to ensure tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by the public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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 established limits for a lifetime to have a one-in-a-million chance of having the described health effect.

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).

## 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.

**Definitions (continued)**

**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.

**Maximum Residual Disinfectant Level Goal (MRDLG)** - The “Goal” (MRDLG) is 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.

**Millirems per year (mrem/yr and/or mrem)** - 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.

**na** – not applicable

**Average – (Avg.)** – Regulatory compliance with some MCL’s are based on running annual average of monthly samples.

**Level 1 Assessment** – A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why coliform bacteria have been found in a water system.

**Level 2 Assessment** - A Level 1 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in a water system on multiple occasions.

The Somerset County Sanitary District, Inc. and the Maryland Department of the Environment routinely monitor for contaminants in your drinking water according to Federal and State laws. This table shows the results of that monitoring.

**Detected Contaminants Not in Violation of Limits: Fairmount, Rumbly & Frenchtown Water System**

| <b>Volatile Organic Contaminants</b>                       | <b>Level Detected</b>                   | <b>Unit of Measure</b> | <b>MCL</b>  | <b>MCLG</b>  | <b>Likely Source of Contamination</b>   |
|--|---|------------------------|-------------|--------------|---|
| 1. Total Trihalomethanes<br>Sampled 2018                   | 0.6 – 0.6<br>Highest Level<br>1.0       | ppb                    | 80          | N/A          | By-product of disinfection using chlorine when natural and/or manmade organic compounds are present in drinking water.    |
| <b>Radioactive Contaminants</b>                            | <b>Level Detected</b>                   | <b>Unit of Measure</b> | <b>MCL</b>  | <b>MCLG</b>  | <b>Likely Source of Contamination</b>   |
| 1. Beta/Photon Emitters (Gross Beta)<br>Sampled 10/26/2015 | 4.4 – 12.4<br>Highest Level<br>12.4     | pCi/L                  | 50          | 0            | Decay of natural and man-made deposits  |
| <b>Inorganic Contaminants</b>                              | <b>Level Detected</b>                   | <b>Unit of Measure</b> | <b>MCL</b>  | <b>MCLG</b>  | <b>Likely Source of Contamination</b>   |
| 1. Barium 1010<br>Sampled 03/21/2017                       | 0.031 - 0.032<br>Highest Level<br>0.032 | mg/l                   | 2           | 2            | Discharge from drilling waste.<br>Discharge from Metal finishing and processing   |
| 2. Fluoride 1025<br>Sampled 2018                           | 0.26 – 3.10<br>Highest Level 3.10       | mg/l                   | 4           | 2            | Erosion on natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| <b>Disinfectant Contaminants</b>                           | <b>Level Detected</b>                   | <b>Unit of Measure</b> | <b>MRDL</b> | <b>MRDLG</b> | <b>Likely Source of Contamination</b>   |
| 1. Chlorine<br>Sampled 2018                                | 0.6 – 1.0<br>Highest Level 1.0          | mg/l                   | 4           | 4            | Water additive to control microbes  |

**Detected Contaminants Not in Violation of Limits: Fairmount, Rumbly & Frenchtown Water System**

| <b>Inorganic Contaminants</b>   | <b>Level Detected 90th percentile</b> | <b>Unit of Measure</b> | <b>Action Level (AL)</b> | <b>MCLG</b> | <b>Likely Source of Contamination</b>   |
|---------------------------------|---------------------------------------|------------------------|--------------------------|-------------|---|
| 1. Lead<br>Sampled 09/25/2017   | 2                                     | ppb                    | 15                       | 0           | Corrosion of household plumbing systems and/or erosion of natural deposits                                    |
| 2. Copper<br>Sampled 09/25/2017 | 0.15                                  | ppm                    | 1.3                      | 1.3         | Corrosion of household plumbing systems and/or erosion of natural deposits. Leaching from wood preservatives. |

**Lead** if present at elevated levels 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>.

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 2018 measured in a range of 2.6 mg/l to 3.1 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.

**Non-Detected Contaminants:** The following are drinking water contaminants the Sanitary District tested for that were not detected in the water supply in the past year.

Total Haloacetic Acids                      Nitrate 1041

The Sanitary District monitors the drinking water regularly for bacterial contamination using Total and Fecal Coliform. No Bacterial Contamination was detected in the year 2018. The Sanitary District monitors the drinking water regularly for pH, Free 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 and Metals. Reports containing the results of these monitoring may be obtained upon request.

**The EPA and MDE have determined that your water IS SAFE. Thank you for allowing us to continue providing your family with safe and dependable quality water this year.**