

**TOWN OF EMMITSBURG - MD0100010**  
 Annual Water Quality Report for the period of January 1 to December 31, 2016

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

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Este informe contiene información muy importante sobre el agua que usted bebe.  
 Tradúzcalo ó hable con alguien que lo entienda bien.

**Source of Drinking Water**

The sources of drinking water (both tap water and bottled 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 pickup substances resulting from the presence of animals or from human activity.

**Contaminants 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, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or 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 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, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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.

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 (800-426-4791).

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. We 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 Information				
Source Water Name		Type of Water	Report Status	Location
EMMITSBURG WELL 1 FR690288	FR690288	GW	Y	EMMITSBURG
EMMITSBURG WELL 2 FR035425	FR035425	GW	Y	EMMITSBURG
EMMITSBURG WELL 3 FR650432	FR650432	GW	Y	EMMITSBURG
EMMITSBURG WELL 4 FR941117	FR941117	GW	Y	NEAR 4 W OF EMMITSBURG APPROX. 290 FT N OF HAMPTON VALLEY RD
EMMITSBURG WELL 5 FR733572	FR733572	GW	Y	NEAR 2 MI W OF EMMITSBURG APPROX. 1 MI N OF HAMPTON VALLEY RD
RAINBOW LAKE	01-WTP WELLS 1 2 3 5	SW	Y	8060 HAMPTON VALLEY ROAD

**LEAD & COPPER**

**Definitions:**

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	12/31/2013	1.3	1.3	0.1	0	ppm	Y	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Water Quality Test Results	
Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
Maximum Contaminant Level Goal or 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 Contaminant Level or 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 residual disinfectant level goal or 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.
Maximum residual disinfectant level or 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 microbial contaminants.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
ppm:	Milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
ppb:	Micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
na:	Not applicable.

**REGULATED CONTAMINANTS**

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	Daily 2016	1.1	0 - 1.2	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	Quarterly 2016	21	7.8 - 17.0	No goal for the total	60	ppb	N	By-product of drinking water disinfection

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Haloacetic Acids (HAA5)*	Quarterly 2016	21	7.8 - 17.0	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
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Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Total Trihalomethanes (TTHM)	Quarterly 2016	38	15 - 56.1	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	12/21/2016	0.009	0 - 0.009	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Nitrate [measured as Nitrogen]	12/21/2016	0.4	0.4 - .4	10	10	ppm	N	Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Ethylbenzene		.68	.68 - .68	700	700	ppb	N	Discharge from petroleum refineries
Xylenes		0.4	0.4 - .4	10	10	ppm	N	Discharge from Petroleum/ Chemical factories

TURBIDITY		Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement		5 NTU	0.183 NTU	N	Soil runoff.
Lowest monthly % meeting limit		1.0 NTU	100%	N	Soil runoff.

**Lead and Copper Rule**

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation End	Violation Explanation
LEAD CONSUMER NOTICE (LCR)	1/1/2014	7/29/2016	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after the results were reported. The reports have been sent.