

# 2013 WATER QUALITY REPORT FOR THE SHARPSBURG WATER SYSTEM PWSID # 0210017

## **Is my water safe?**

Last year your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards with the exception of one test result. We routinely monitor for the presence of drinking water disinfection byproducts such as total trihalomethanes and haloacetic acids. Testing results showed that in October our system exceeded the standard or maximum contaminant level (MCL), for Total Trihalomethanes. The standard for Total Trihalomethanes is 80 parts per billion (ppb). The standard for Haloacetic Acids is 60 ppb. TTHMs and HAAs are disinfection byproducts that occur when chlorine is added to a drinking water source with naturally occurring organic matter. Washington County Department of Water Quality is currently working with the Maryland Department of the Environment to evaluate the treatment process and researching treatment options to reduce Trihalomethanes in the water supply. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situation.

## **Do I need to take special precautions?**

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

## **Where does my water come from?**

The water supply for the Sharpsburg Water System comes from the Potomac River, a surface water source. This water is processed through the Sharpsburg Water Treatment Plant. The Water Treatment Plant provides filtration, chlorination, pH adjustment, Ultra Violet disinfection and fluoridation of the water prior to entering the distribution system.

## **Source water assessment and its availability**

The Maryland Department of the Environment's Water Supply Program (WSP) has conducted a Source Water Assessment for the Sharpsburg Water System. 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, and 3) determination of susceptibility of the water supply to contamination. Recommendations for protecting the drinking water supply conclude this report.

## **Why are there contaminants in my drinking water?**

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (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: microbial contaminants, such as viruses and bacteria, that 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; and 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 that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

## **How can I get involved?**

For more information on getting involved, please contact our main office at (240) 313-2600.

## Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
<b>Disinfectants &amp; Disinfectant By-Products</b>								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
TTHMs [Total Trihalomethanes] (ppb) Stage I	NA	80	68.4	34.57	125.63	2013	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] (ppb) Stage II	NA	80	107.47	85.09	141.7	2013	NA	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb) Stage I	NA	60	27.35	13.9	45.7	2013	No	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb) Stage II	NA	60	24.87	18.3	36.12	2013	No	By-product of drinking water chlorination
Total Organic Carbon(% Removal)	NA	TT	29.27	NA	NA	2013	No	Naturally present in the environment
<small>'On October 1, 2013, our system transitioned from the Stage 1 Disinfection Byproducts (DBP) Rule to the Stage 2 DBP Rule; the Stage 2 DBP Rule has different monitoring and reporting requirements than the Stage 1 DBP Rule. Stage 1 DBP data shown above (for Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5)), reflect the system-wide averages of each contaminant group, and the detected ranges for the system, from the first three quarters of 2013. The Stage 2 DBP data shown above reflect the range of monitoring results from all Stage 2 TTHM and HAA5 monitoring locations from the fourth quarter of 2013. Subsequent consumer confidence reports will include only Stage 2 DBP Rule data.'</small>								
<b>Inorganic Contaminants</b>								
Fluoride (ppm)	4	4	0.36	0	0.85	2012	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	0.7	0.6	0.8	2013	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium (optional) (ppm)		MPL	12.8	12.8	12.8	2013	No	Erosion of natural deposits; Leaching

Radioactive Contaminants								
Radium (combined 226/228) (pCi/L)	0	5	0.8	NA	.	2011	No	Erosion of natural deposits

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
Inorganic Contaminants							
Lead - action level at consumer taps (ppb)	0	15	0	2011	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper - action level at consumer taps (ppm)	1.3	1.3	0	2011	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Violations and Exceedances TTHM's ( Total Trihalomethanes)
<p>Testing results from the 4<sup>th</sup> quarter sampling show that our system exceeds the standard, or maximum contaminant level (MCL), for total trihalomethanes (TTHM's.) the standard for TTHM's is 80 ppb averaged at an individual monitoring location over the year. In October 2013 our average TTHM level was 107.47 ppb. TTHM's, which are four volatile organic chemicals, form when disinfectants react with natural organic matter in the water. We are working to minimize the formation of TTHM's while ensuring the adequate level of disinfection to protect customers from exposure to bacteria.</p> <p>We are installing new equipment and applying new treatment techniques to eliminate future violations.</p> <p><i>Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.</i></p>

#### **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. Sharpsburg 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>.

#### **Additional information for Sodium**

The presence of sodium in your water is attributed to the composition of the aquifer. Sodium is a contaminant which is not subject to any proposed or promulgated national primary drinking water regulation by EPA or MDE, but is analyzed and reported for individuals who are on a sodium restricted diet. Sodium is an essential nutrient which FDA reports the average person receives all that is required by eating a regular diet with no salt added.

Unit Descriptions	
Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

<b>Important Drinking Water Definitions</b>	
<b>Term</b>	<b>Definition</b>
MCLG	MCLG: Maximum Contaminant Level Goal: 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	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. 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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

**Results of voluntary monitoring**

The Washington County Department of Water Quality conducts routine testing of your water system that is not included in the Water Quality Data Table. The MDE has also completed testing that is not included in the Water Quality Data Table. A list of these parameters and their results are located in the Table of Results of Customer Interest below.

**TABLE OF RESULTS OF CUSTOMER INTEREST**

<b>PARAMETER</b>	<b>LEVEL/RANGE DETECTED</b>	<b>UNIT OF MEASUREMENT</b>
pH	6.5-7.5	Standard Unit
Chlorine	.2 to 3.9	ppm
Hardness	86 to 120	ppm
Alkalinity	74 to 101	ppm
Turbidity	0.1 to 0.8	ntu
Iron	0.0 to .310	ppm
Manganese	.000 to .026	ppm
Chloroform	28.7 to 57	ppm
Bromochloromethane	13.8 to 18	ppm
Dibromochloromethane	1.7 to 3.6	ppm
Aluminum	.26	ppm

**For more information on the  
Sharpsburg Water System  
telephone Mr. Kim L. Bowers at  
240-313-2600**