WE ARE PLEASED TO REPORT THAT THE CHARLES TOWN UTILITY BOARD MET ALL FEDERAL AND STATE WATER STANDARDS FOR THE REPORTING YEAR 2017.

Additional Information

All other water test results for the reporting year 2017 were non-detectable.

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 **Charles Town Utility Board** 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 Safe Drinking Water Hotline at 1-800-426-4791 or at http://www.epa.gov/safewater/lead.

A copy of this report may be provided to you upon request at our office during regular business hours or may be downloaded from our website located online at: http://www.ctubwv.com/index.cfm/reports-information/ccr/

Charles Town Utility Board
832 South George Street
Charles Town, WV 25414

CHARLES TOWN Utility Board

2017 Annual Drinking Water Quality Report

PWS# WV3301905

2017 Annual Drinking Water Quality Report

PWS ID #WV3301905

Why am I receiving this report?

In compliance with the Safe Drinking Water Act Amendments, the **Charles Town Utility Board** is providing its customers with this annual water quality report. This report explains where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. The information in this report shows the results of our monitoring for the period of January 1st to December 31st, 2017 or earlier if not on a yearly schedule.

If you have any questions concerning this report, you may contact **Chris Hutzler, Chief Operator, 304-725-3761**. If you have any further questions, comments or suggestions, please attend any of our regularly scheduled board meetings held on the **2nd and 4th Wednesday** of every month at **4:00 p.m.** in the **Charles Town Utility Board office, Charles Town, WV**.

Where does my water come from?

Your drinking water source is **surface** water from the Shenandoah River.

Source Water Assessment

A Source Water Assessment was conducted in 2003 by the West Virginia Bureau for Public Health (WVBPH). The intake that supplies drinking water to the **Charles Town Utility Board** has a higher susceptibility to contamination, due to the sensitive nature of surface water supplies and the potential contaminant sources identified within the area. This does not mean that this intake will become contaminated; only that conditions are such that the surface water could be impacted by a potential contaminant source. Future contamination may be avoided by implementing protective measures. The source water assessment report that contains more information is available for review or a copy will be provided to you at our office during business hours or from the WVBPH 304-558-2981.

Why must water be treated?

All drinking water contains various amounts and kinds of contaminants. Federal and state regulations establish limits, controls, and treatment practices to minimize these contaminants and to reduce any subsequent health effects.

Contaminants in Water

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. FDA regulations establish limits of 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 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 (800-426-4791).

The source of drinking water (both tap and bottled water) includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of 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.

Contaminants that may be present in source water include:

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, that can be naturally-occurring, or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, farming.

Pesticides and herbicides, that 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, that can be naturally-occurring or the result of oil and gas production and mining activities.

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 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).

The **Charles Town Utility Board** routinely monitors for contaminants in your drinking water according to federal and state laws. The tables below show the results of our monitoring for contaminants.

Table of Test Results - Regulated Contaminants - Charles Town Utility Board

Regulated Contaminants								
Contaminant	**Violation Y/N**	**Level Detected**				**Unit of Measure**	**MCLG**	**MCL**	**Likely Source of Contamination**
Microbiological Contaminants									
Turbidity[1]	N	0.08 100% of monthly samples <0.3				NTU	0	TT	Soil runoff
Total Organic Carbon	N	1.64				ppm	NA	TT	Naturally present in the environment
Inorganic Contaminants									
Barium	N	0.032				ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	N	1.4				ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits.
Copper*	N	0.872				ppb	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	N	0.83				ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from aluminum and fertilizer plants
Lead*	N	6.9				ppb	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits
Nitrate	N	1.23				ppm	10	10	Runoff from fertilizer use; erosion of natural deposits
Volatile Organic Contaminants									
		200 N. West St.	Tuscawilla Plaza	Boundary St.	Moose Lodge				
Haloacetic Acids (HAAC5)	N	42.82 Annual Avg. Range 18.8-56.3	25.20 Annual Avg. Range 11.4-58	41.45 Annual Avg. Range 18.4-54.4	32.75 Annual Avg. Range 20.7-50.5	ppb	NA	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHMs)	N	32.8 Annual Avg. Range 12.5-49.3	36.72 Annual Avg. Range 18.3-56.6	41.95 Annual Avg. Range 15-56.5	39.30 Annual Avg. Range 20.6-58.6	ppb	NA	80	By-product of drinking water chlorination

Unregulated Contaminants

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Sodium	N	9.91	ppm	NE	20	Erosion of natural deposits
Sulfate	N	13.9	ppm	N/A	N/A	Runoff/leaching from natural deposits; industrial waste

Volatile Organic Contaminants

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Chlorine	N	3.00 Annual Avg. Range 0.2-3.4	ppm	4	4	Water additive used to control microbes

[1] Turbidity is a measure of the cloudiness in drinking water. Turbidity is monitored because it is a good indicator of the effectiveness of our filtration system.

* Copper and lead samples were collected from 94 area locations during 2017. Only the 90th percentile is reported. Two of the lead samples exceeded the MCL.

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical and mental development. Children could show deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

We have provided the out of compliance locations with information on the health effects of lead and lead remediation.

Water Quality Data Table

Definitions

Definitions of terms and abbreviations used in the table or report:

- **MCLG -** Maximum Contaminant Level Goal, or 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, or 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 technique.
- **MRDLG -** Maximum Residual Disinfectant Level Goal, or the level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect benefits of use of disinfectants to control microbial contaminants.
- **MRDL -** Maximum Residual Disinfectant Level, or the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary to control microbial contaminants.
- **AL -** Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.
- **TT -** Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

Abbreviations

Abbreviations that may be found in the table:

- **ppm** - parts per million or milligrams per liter
- **ppb** - parts per billion or micrograms per liter
- **NTU** - Nephelometric Turbidity Unit, used to measure cloudiness in water
- **NE** - not established
- **N/A** - not applicable