Annual Drinking Water Quality Report 2015

STAR CITY WATER SYSTEM
370 Broadway Avenue
Star City, WV 26505
PWS# WV3303116
May 31, 2016

Why am I receiving this report?

In compliance with the Safe Drinking Water Act Amendments, the **Star City Water System** 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, 2015.

If you have any questions concerning this report, you may contact **Darl Nuce or Kevin Nuce, 304-599-3550.** If you have any further questions, comments or suggestions, please attend any of our regularly scheduled Town Council meetings held at **7:00PM on alternate Tuesdays** in the **Star City Municipal Building, 370 Broadway Avenue, Star City, WV.**

Where does my water come from?

Your drinking water is **purchased** from **Morgantown Utility Board** which uses surface waters of the Monongahela River and Cobun Creek as its source.

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 **Morgantown 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 which 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 which 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) or http://water.epa.gov/drink/contaminants/ .**

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, 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, 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 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.**

Water Quality Data Table

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 which a water system must follow.

- **TT - Treatment Technique**, or a required process intended to reduce the level of a contaminant in drinking water.

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
- **N/A** - not applicable

The **Morgantown Utility Board and the Star City Water System** routinely monitor 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 – Morgantown Utility Board

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity	N	0.014 100% of monthly samples <0.3	NTU	0	TT	Soil runoff
Total organic carbon	N	1.84	ppm	NA	TT	Naturally present in the environment
Inorganic Contaminants						
Barium	N	0.0395	ppm	2	2	Discharge from drilling waste; erosion of natural deposits
Copper*	N	0.0148	ppm	1.3	AL=1.3	Corrosion of household plumbing
Fluoride	N	0.70	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth
Lead*	N	1.5	ppb	0	AL=15	Corrosion of household plumbing

Nitrate	N	0.41	ppm	10	10	Runoff from fertilizer use; leakage from septic tanks, sewage; erosion of natural deposits
Volatile Organic Contaminants						
Chlorine	N	1.3 Annual Avg. Range 0.5-1.7	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
Haloacetic acids (HAAC5) Stage 2 Site 1 Site 2 Site 3 Site 4 Site 5 Site 6 Site 7 Site 8 Site 1 Site 2 Site 3 Site 4 Site 5 Site 6 Site 7 Site 8	N	Annual Avg. 26.10 31.93 26.68 16.17 25.70 20.18 26.37 25.20 Range 15.0 – 35.4 23.3 – 39.1 10.6 – 45.0 1.06 – 33.2 14.3 -39.5 17.0 – 33.6 9.7 – 45.1 10.1 – 38.8	ppb	NA	60	By-product of drinking water disinfection

Total Trihalomethanes (TTHMs) Stage 2	N		ppb	NA	80	By-product of drinking water chlorination
		Annual Avg.				
Site 1		43.60				
Site 2		45.13				
Site 3		35.13				
Site 4		52.73				
Site 5		33.83				
Site 6		49.55				
Site 7		37.10				
Site 8		44.03				
		Range				
Site 1		20.6 – 59.7				
Site 2		23.9 – 60.6				
Site 3		15.0 – 52.5				
Site 4		21.0 – 68.4				
Site 5		13.7 – 50.5				
Site 6		22.5 – 63.7				
Site 7		12.7 – 53.0				
Site 8		16.7 – 57.2				

* Copper and lead samples were collected from 30 area residences from 6/4-7/12, 2013. Only the 90th percentile is reported. None of the samples exceeded the MCL. MUB's next scheduled sampling for lead and copper is set for 2016

Table of Test Results - Unregulated Contaminants

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Aluminum	N		ppb	NE	200	Erosion of natural deposits
River		.306				
Cobun		.110				
Sodium	N		ppm	NE	20	Erosion of natural deposits
River		15.42				
Cobun		18.93				
Sulfate	N		ppm	250	250	Erosion of natural deposits
River		62.10				
Cobun		18.0				

Table of Test Results - Regulated Contaminants – Star City

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Volatile Organic Contaminants						
Chlorine	N	1.0 Annual average Range 0.5-1.0	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes
Halocetic acids HAAC5	N	26.73 Annual average Range 7.83-45.8	ppb	NA	60	By-product of drinking water disinfection
Total trihalomenes TTHMs	N	55.1 Annual average Range 7.58-90.8	ppb	NA	80	By-product of drinking water chlorination

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or nervous system, and may have an increased risk of getting cancer.

WE ARE PLEASED TO REPORT THAT THE STAR CITY WATER SYSTEM MET ALL FEDERAL AND STATE WATER STANDARDS FOR THE REPORTING YEAR 2015.

Additional Information:

All other test samples for 2015 were non-detects**.**

Turbidity is a measure of the cloudiness in water. We monitor it because it is a good indicator of the effectiveness of our filters.

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The **Star City Water System** 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 water for 30 seconds to two 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 or at http://www.epa.gov/safewater/lead.

This report will not be mailed. A copy will be provided to you upon request at our office during regular business hours.