Annual Drinking Water Quality Report- June 2018

The Myerstown Water Authority is pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality drinking water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water is drawn from three (3) drilled deep wells located in the Stracks Dam Well field located northwest of the Borough of Myerstown in Jackson Township. We are pleased to report that our drinking water meets all federal and state requirements. If you have any questions about this report or concerning your water utility, please contact Chris Strause of the Myerstown Water Authority at (717) 866-9301. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Thursday of each month at 7:00 P.M. at the Myerstown Water Authority Water Treatment Facility located at 601 Stracks Dam Road, Myerstown, PA 17067. The Myerstown Water Authority routinely monitors for constituents in your drinking water according to Federal and State laws. The following table shows the results of our monitoring for the period of January 1, 2017 to December 31, 2017. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In the following 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 contaminant is not present at a detectable level.

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.

Parts per billion (ppb) or Micrograms per liter – 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) - a measure of the radioactivity in water Turbidity - a measure of the clarity of the water. Turbidity is monitored to determine the effectiveness of our filtration system.

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

Maximum Contaminant Level (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 Contaminant Level Goal (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 Residual Disinfectant Level (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.

Maximum Residual Disinfectant Level Goal (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.

Treatment Technique (TT) -a required process intended to reduce the level of a contaminant in drinking water.

Test Results

Microbiological Contaminants

Contaminant (Unit of Measurement)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely source of contamination
1. Turbidity (ntu)	N	0.06	(a)	n/a	TT	Soil runoff

Inorganic contaminants

Contaminant (Unit of Measurement)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely source of contamination
2. Copper (ppm) (2016 data)	N	0.906(b)	0.024-0.906(b)	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits, leaching from wood preservatives
3. Lead (ppb) (2016 data)	N	13(b)	< 2 - 13(b)	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
4. Nitrate (as Nitrogen) (ppm)	N	3.41	3.41	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

Disinfection Byproducts, Byproduct precursors, and Disinfectant Residuals

Contamiant (Unit of Measurement)	Violation Y/N	Level Detected	Range	MCLG	MCL	Likely source of contamination
5. Haloacetic Acids (HAA) (ppb)	N	3	0 - 3	n/a	60	Byproducts of drinking water disinfection
6. TTHMs (Total Trihalomethanes (ppb)	N	24	8 - 24	n/a	80	Byproducts of drinking water disinfection
7. Chlorine (ppm)	N	1.55(c)	1.0 - 1.8	MRDLG=4	MRDL=4	Water additive used to control microbes

Footnotes:

(a) The lowest monthly percentage of samples meeting the turbidity limits specified in 141.73. "In 2017, 100% of samples met the turbidity limits."

(b) 0 of 20 samples analyzed was above the action level of .015 for lead and 0 of 20 samples analyzed were above the action level of 1.3 for copper. For Copper and Lead, Level Detected value is 90th percentile result.
(c) For Chlorine, Level Detected value is average result in 2017.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.
Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using your tap water. Additional information is available from the Environmental Protection Agency's (EPA's) Safe Drinking Water Hotline at 1-800-426-4791.

What Does This Mean?

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. 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. In order to assure that tap water is safe to drink, the EPA prescribes regulations which hunt the amount of certain contaminants in water provided by public water systems. Food & Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791. Sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the land surface 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 human activity. Contaminants that may be present in source water include:

1. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

2. Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from storm water run-off, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

3. Herbicides and pesticides which may come from a variety of sources such as agriculture, storm water run-off or residential uses.

4. 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, storm water run-off or septic systems.

5. Radioactive contaminants which can be naturally occurring or can be the result of oil and gas production or mining activities.

MCLs are set at very stringent levels for health effects. 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 MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

In our continuing efforts to maintain a safe and dependable water supply it may be necessary to make improvements in your water system. The costs of these improvements may be reflected in the rate structure. Periodic rate adjustments may be necessary in order to address these improvements.

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).

In 2002 the Pennsylvania Department of Environmental Protection completed a Source Water Assessment for the Myerstown Water Authority to evaluate potential threats to the raw water sources used by the Authority. A copy of the Source Water Assessment Report is available for review from the Authority or the Department of Environmental Protection's South Central Regional Office, Records Management Unit (717-705-4732). A summary report of the assessment is available on the PADEP website at www.dep.state.pa.us (directLDSTK "source water").

It is recommended that you have your hot water heater flushed on an annual basis.

Please call our office if you have questions.

We at the Myerstown Water Authority work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

Este infonne contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.