

# 2019

## ***Annual Water Quality Report***

### **Greensburg Municipal Water Works**

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality 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 comes from two sources: Surface water from Flatrock River which is located 6 miles Northwest of Greensburg on Highway 421 and; Ground water from six (6) wells which are located in an aquifer that runs along Freeland Road and North Ireland Street. Well information is available through our Wellhead Protection Program.

I'm pleased to report that our drinking water is safe and meets federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Rick Denney (voice 812.663.2641 – fax 812.662.0620 Email [watersupt@cityofgreensburg.com](mailto:watersupt@cityofgreensburg.com)). 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 third (3<sup>rd</sup>) Tuesday of every month at 6:00 p.m. in City Hall, located at 314 W. Washington Street.

The Greensburg Municipal Water Works routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2019. 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 this 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:

*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.

*Nephelometric Turbidity Unit (NTU)* - Nephelometric turbidity unit is 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.

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

*Maximum Contaminant Level* - The "Maximum Allowed" (MCL) is 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* - The "Goal"(MCLG) is 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.

## TEST RESULTS

Contaminant	Range	Level Detected	Unit Measurement	MCL G	MCL	Likely Source of Contamination
<b>Microbiological Contaminants</b>						
01. Turbidity	.05 to .29	.15 Yearly Avg	NTU	n/a	TT =.05	Soil runoff
Highest single measurement = .29 All of our samples were below the turbidity limits specified for our filtration technology. Turbidity is measured to determine the clarity of the water after filtration. It is used to determine whether small particles that could cause disease are able to get through our treatment process and into the water system.						
<b>Inorganic Contaminants</b>						
02. Copper		* 90% value 0.288	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
03. Fluoride	0.2 to 1.7	0.6 Yearly Avg.	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
04. Nitrate (as Nitrogen)	1 Test	0.81	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
05. Lead	6.6	2.8	ppb	15	AL=15	
0.6 Barium	0.074		ppm	2.0		
<p>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. GWW 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 <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>".</p> <p>Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.</p> <p>*Copper: 90% of samples at or below this level. (30 samples taken in 2017)</p>						
<b>Disinfectants and Disinfection By-products</b>						
Chlorine	2019	1	1-1	4	ppm	Water additive used to control microbes
08. TTHM [Total Trihalomethanes]	35.2 to 77.5	AVG. 53.66	ppb	N/A	80	By-product of drinking water chlorination
09. HAA5's Total	2 to 67.2	AVG. 43.45	ppb	N/A	60	By-product of drinking water chlorination
10. Total Organic Carbon	0.75 to 2.82	AVG. 1.53	ppm	N/A	>1.0 Annual Ave.	By-product of drinking water chlorination
<b>Unregulated Contaminants</b>						
11. Sodium	1 Test	8.35	ppm	None	None	Consumer Information
12. Water Hardness		320 =19 grains	gpg			Moderately Soft- Consumer Information
<b>Gross Alpha excluding radon and uranium</b>						
6-17-2014	0.76 To 1.11	Highest 1.11	pCi/L	0	15	Erosion of natural deposits

Synthetic Organic Contaminants including Pesticides	RANGE	Highest	Units	MC L	Violation	
Atrazine	0 - 0.5	0.5	ppb	3	No	Runoff from Herbicides
PCBs	0 - 100	100	ppt	500	No	Runoff from landfills, discharge of waste chemicals
Methoxychoir	2019	0.3	0-0.3	40	No	Runoff/leaching from insecticide used on vegetables, fruits, alfalfa, and livestock

## Violations

Some people who drink water containing haloacetic acids/trihalomethanes in excess of the MCL over many years may have an increase risk of getting cancer.

Violation Type	Violation Begins	Violation End	Violation Explanation
MCL, LRAA	01/1/2019	3/31/2019	Water samples showed that the amount of this contaminant in our drinking water was above its standard
MCL, LRAA	4/1/2019	6/30/2019	Water samples showed that the amount of this contaminant in our drinking water was above its standard
MCL, LRAA	7/1/2019	9/30/2019	Water samples showed that the amount of this contaminant in our drinking water was above its standard
MCL, LRAA Trihalomethanes	4/1/2019	6/30/2019	Water samples showed that the amount of this contaminant in our drinking water was above its standard

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.

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. 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 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, stormwater runoff, and residential uses.
- Organic chemicals, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive materials, 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 & Drug Administration (FDA) regulations establish limits for 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 contaminants does not necessarily indicate that the 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 at (800) 426.4791.

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).

We at the Greensburg Municipal Water Works 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.



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