



## 2018 ANNUAL DRINKING WATER QUALITY REPORT

*Este informe contiene información importante acerca de su agua potable.  
Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda.*

### **WATER SYSTEM INFORMATION:**

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact the Water Department at (724) 775-9604. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled Borough Council meetings. They are held the 2<sup>nd</sup> and 4<sup>th</sup> Tuesday of each month at 7pm at the Borough building.

### **SOURCES OF WATER:**

Our water sources are groundwater wells located along the Ohio River bank which draw water from an underground aquifer.

A *Source Water Assessment* of our sources was completed by the PA Department of Environmental Protection (Pa. DEP). The Assessment has found that our sources are potentially most susceptible to accidents and spills from traffic along nearby roads, railroads, the Ohio River, and at local industrial sites. Overall, our sources have high risk of significant contamination. A summary report of the Assessment is available on the *Source Water Assessment & Protection web page* at (<http://www.dep.state.pa.us/dep/deputate/watermgt/wc/Subjects/SrceProt/SourceAssessment/default.htm>). Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the Pa. DEP Southwest Regional Office, Records Management Unit at (412) 442-4000.

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 microbial contaminants are available from the *Safe Drinking Water Hotline* (800-426-4791).

### **MONITORING YOUR WATER:**

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2018. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

**DEFINITIONS:**

*Action Level (AL)* - 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.

*Minimum Residual Disinfectant Level (MinRDL)* - The minimum level of residual disinfectant required at the entry point to the distribution system.

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

*ppb* = parts per billion, or micrograms per liter (µg/L)

*ppm* = parts per million, or milligrams per liter (mg/L)

*pCi/L* = picocuries per liter (a measure of radioactivity)

**DETECTED SAMPLE RESULTS:**

<b>Chemical Contaminants</b>							
<b>Contaminant (units)</b>	<b>MCL</b>	<b>MCLG</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>Sample Date</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
Barium (ppm)	2	2	0.0835	N/A – single sample	9/11/18	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Haloacetic Acids (HHA) (ppb)	60	N/A	7.4	N/A – single sample	9/11/18	N	By-product of drinking water disinfection
Nickel (ppb)	N/A	N/A	1.7	N/A – single sample	9/11/18	N	Corrosion of household plumbing
Nitrate (ppm)	10	10	3.84	N/A – single sample	9/11/18	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Trihalomethanes (TTHMs) (ppb)	80	N/A	32	N/A – single sample	9/11/18	N	By-product of drinking water chlorination

<b>Chemical Contaminants</b>							
<b>Contaminant (units)</b>	<b>MCL</b>	<b>MCLG</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>Sample Date</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
Fluoride (ppm)	2	2	0.3	N/A – single sample	9/11/18	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Chlorine (ppm)	MRDL =4	MRDLG =4	0.56	0.25-0.56	Monthly (2018)	N	Water additive used to control microbes

<b>Entry Point Disinfectant Residual</b>						
<b>Contaminant (units)</b>	<b>MinRDL</b>	<b>Lowest Level Detected</b>	<b>Range of Detections</b>	<b>Sample Date</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
Chlorine (ppm) (sampled continuously)	0.4	0.02	0.02-2.53	4/10/18	N	Water additive used to control microbes.

<b>Lead and Copper</b>						
<b>Contaminant (units)</b>	<b>Action level (AL)</b>	<b>MCLG</b>	<b>90<sup>th</sup> Percentile Value</b>	<b># of Sites Above AL of Total Sites</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
Lead (ppb) (2016 Data)	15	0	5.9	0 of 20	N	Corrosion of household plumbing; Erosion of natural deposits.
Copper (ppm) (2016 Data)	1.3	1.3	0.202	0 of 20	N	Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives.

**HEALTH EFFECTS & OTHER VIOLATIONS:**

No MCL's or Treatment Techniques were exceeded, and no other violations were reported.

Two times during the year, the Borough's sampling data were submitted to the PaDEP reporting system and either data entry or other computer system technical issues occurred (most recent in December, 2018). The errant data appeared to place the Monaca Water System in violation. Both issues have been investigated and resolved with PaDEP by the Borough Water Department and no violations actually occurred.

### ***EDUCATIONAL INFORMATION:***

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 stormwater 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 stormwater 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 stormwater runoff, and septic systems.
- 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 and DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP 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 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).

### ***Information about 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. The Borough of Monaca 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>.

### ***OTHER INFORMATION:***

Flushing is necessary to maintain water quality and reduce iron deposits in the mains. When hydrants are being flushed in your neighborhood, expect to see discolored water and decreased pressure at your tap for a short time. After the flushing is completed, run cold water through your taps until the water clears. We apologize for this inconvenience, but flushing is absolutely necessary to protect drinking water quality and public health. Also, we ask that all our customers help us protect our water sources and alert us to any line breaks or unusual water conditions. We ask that when reporting an issue, the report be made by calling the Borough Office (724-775-9600).