

A close-up photograph of water being poured from a glass pitcher into a clear glass. The water is captured in mid-pour, creating a dynamic splash and bubbles. The background is a blurred wooden surface.

# ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2018

*Presented By*



**SEWICKLEY  
WATER AUTHORITY**

## Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2018. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please remember that we are always available should you ever have any questions or concerns about your water.

### Source Water Assessment

In 2009 the SWA contracted with Spotts|Stevens|McCoy Engineers to develop a source water protection plan. The plan concluded that the SWA aquifer is susceptible to some risk of contamination from a variety of origins. Highway, railroad, and river accidents pose potential contaminant releases. Underground storage tanks, and business and residential activities in the area are also identified as potential contaminant sources. Remember to do your part by properly disposing of all household hazardous waste.



### Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.



### Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water;
- Monitoring and inspecting machinery, meters, gauges, and operating conditions;
- Conducting tests and inspections on water and evaluating the results;
- Maintaining optimal water chemistry;
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels;
- Documenting and reporting test results and system operations to regulatory agencies; and
- Serving our community through customer support, education, and outreach.

So, the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

### QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please contact General Manager Mark Brooks at (412) 741-9180, or by email at [mbrooks@sewickleywater.org](mailto:mbrooks@sewickleywater.org).

## Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA and DEP prescribe regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration and DEP regulations establish limits for contaminants in bottled water that 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 the water poses a health risk.

We remain vigilant in delivering the best-quality drinking water

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 at (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Where Does My Water Come From?

The Authority obtains water from two wells located on the treatment plant property at 900 Ohio River Blvd. in Glen Osborne Borough and from an intake crib under the river bed of the Ohio River. All three water sources are groundwater sources free of any influence by surface water. All water is drawn from an aquifer that is under and adjacent to the Ohio River. The aquifer is composed of prolific water-bearing coarse sand and gravel.



## Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We typically meet the third Thursday of each month, with the exception of December, at 7:30 p.m. at the Sewickley Municipal Building, 601 Thorn Street, Sewickley, PA. Please check [www.sewickleywater.org](http://www.sewickleywater.org) for our full 2019 meeting schedule.

## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. Also, the water we deliver must meet specific health standards. Here, we show only those substances that were detected in our water. (A complete list of all our analytical results is available upon request.) Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

In March of 2018, SWA failed to report the entry point disinfectant residual in a timely manner as required by the groundwater rule. Results of the analysis have been properly recorded and submitted late as required by state and federal law. The late reporting of this information had no impact on public health and safety. We have already taken the steps to ensure that adequate monitoring and reporting will be performed in the future so that this oversight will not be repeated.

### REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
<b>Chlorine [Distribution]</b> (ppm)	2018	[4]	[4]	0.02	0.02–0.98	No	Water additive used to control microbes
<b>Chlorine [Entry Point]<sup>1</sup></b> (ppm)	2018	MinRDL = 0.2	NA	0.34	0.34–0.96	No	Water additive used to control microbes
<b>Fluoride</b> (ppm)	2018	2	2	0.54	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
<b>Haloacetic Acids [HAAs]</b> (ppb)	2018	60	NA	7	NA	No	By-product of drinking water disinfection
<b>Nitrate</b> (ppm)	2018	10	10	3.46	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>TTHMs [Total Trihalomethanes]</b> (ppb)	2018	80	NA	23.4	NA	No	By-product of drinking water disinfection

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
<b>Copper</b> (ppm)	2016	1.3	1.3	0.783	0/20	No	Corrosion of household plumbing systems; Erosion of natural deposits
<b>Lead</b> (ppb)	2016	15	0	8	0/20	No	Corrosion of household plumbing systems; Erosion of natural deposits

<sup>1</sup>The amount-detected value for chlorine [entry point] represents the lowest level that was detected.

## Definitions

**90th %ile:** The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

**AL (Action Level):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

**LRAA (Locational Running Annual Average):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

**MCL (Maximum Contaminant Level):** 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.

**MCLG (Maximum Contaminant Level Goal):** 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.

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

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** 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.

**NA:** Not applicable

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).