

# The City of Steubenville

## Water Department

1575 University Blvd.  
Steubenville, Ohio 43952  
Phone 740-283-6041

### ***Drinking Water Consumer Confidence Report 2017***

#### **Section 1: Introduction**

The City of Steubenville Water Department has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. This report is required as part of the Safe Drinking Water Act Reauthorization of 1996 and is required to be delivered to the consumers by July 1, 2018. Included within this report are general health information, water quality test results, and how to participate in decisions concerning your drinking water and water system contacts.

**The City of Steubenville water system meets all of the current federal and state standards for public water systems.**

The City of Steubenville has a current, unconditional license to operate our water system in 2017.

**Capital Improvements to your water system.**

The water line on Aberdeen Road was replaced, along with line relocations involved with the SR 7 project in 2017.

#### **Section 2: What is the source of your drinking water?**

The City of Steubenville Water Department receives its drinking water from the Ohio River. Our raw water pumping station and intakes are located at mile marker 65.3 of the Ohio River. Surface waters are by their nature susceptible to contamination, and numerous contaminant sources along their banks make them more so. The protection areas around the Ohio River include numerous potential contaminant sources, including municipal and industrial waste water discharges, combined sewer overflows, runoff from urban, residential, mining and agricultural areas, and transportation spills related to rail and highway crossings, commercial shipping and recreational boating. As a result, the drinking water supplied to the City of Steubenville public water supply system is considered to have a high susceptibility to contamination.

Historically, the Steubenville public water system has effectively treated this water source to meet drinking water quality standards. The potential for water quality impacts can be further decreased by implementing measures to protect the Ohio River. More detailed information is provided in the City of Steubenville Drinking Water Source Assessment report, which can be obtained by calling the Steubenville Water Department at (740) 283-6041.

#### **Section 3: What are sources of contamination to drinking water?**

The sources of drinking water both tap water and bottled water includes 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: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) 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, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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; (E) 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 prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA 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 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 (1-800-426-4791).

#### **Section 4: Who needs to take special precautions?**

**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 infection. 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 (1-800-426-4791).**

#### **Section 5: About your drinking water.**

The EPA requires regular sampling to ensure drinking water safety. The City of Steubenville Water Department conducted sampling for: bacteria; inorganic; radiological; synthetic organic; volatile organic contaminants during 2017. Samples were collected for a total of 50 different contaminants most of which were not detected in the City of Steubenville water supply. The Ohio EPA requires 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, though accurate, are more than one year old.

The City samples on a reduced frequency schedule for lead and copper. This will likely change, as changes to the rules are under consideration currently by EPA. Lead has recently been an issue in other communities. Steubenville last sampled in 2016, and is scheduled to sample again in 2019, should nothing change. Steubenville has always met EPA regulations for lead and copper, which is why reduced sampling was approved. Those results from the 2016 sampling event(s) are listed in the table of detected contaminants, as they are the most recent. A corrosion inhibitor is added to the water in Steubenville.

**The City of Steubenville Water Department did have a contact time monitoring and reporting violation in 2018, which requires the following Public Notice.**

### **DRINKING WATER NOTICE**

#### **City of Steubenville PWS did not meet Monitoring and Reporting Requirement**

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During January 12 through March 2, 2018, City of Steubenville PWS *did not adequately monitor for parameters necessary to determine contact time or CT values. CT testing is necessary to ensure the inactivation of microorganisms. We therefore cannot be sure of the quality of your drinking water at that time.*

#### ***What should I do?***

*There is nothing you need to do at this time. You do not need to boil your water at this time, or take other corrective action.*

## **What is being done?**

We are investigating and taking necessary steps to correct the problem as soon as possible. We are taking steps to ensure adequate monitoring will be performed in the future. The City of Steubenville PWS has returned to compliance by repairing the continuous chlorine analyzer, pH meter and temperature instruments as required. This will allow continuous monitoring and reporting of disinfection parameters required.

For more information, please contact Robert Disch at (740) 283-6041 or at 1565 University Blvd., Steubenville, Ohio, 43952.

*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools or businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.*

PWS# OH4102411    Date July 1, 2018

## **Section 6: Definitions of some terms contained within this report.**

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:

*Non-Detects (ND)* – laboratory analysis indicates that the contaminant is not present.

*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 (AL)* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*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.

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

*Maximum Residency Daily Limit (MRDL)* – Maximum allowed Chlorine residual allowed at the farthest point in the water system. MRDLG is *Maximum Residency Daily Limit Goal*.

*CT* means the mathematic product of a "residual disinfectant concentration" (C), which is determined before the first customer, and the corresponding "disinfectant contact time" (T).

**2017 Table of Detected Contaminants  
City of Steubenville Water Department**

<b>Contaminants (Units)</b>	<b>MCLG</b>	<b>MCL</b>	<b>Level Found</b>	<b>Range of Detections</b>	<b>Violation</b>	<b>Year Sampled</b>	<b>Typical Source of Contamination</b>
<b>Residual Disinfectants</b>							
Chlorine (ppm)	MRDLG = 4	MRDL = 4	2.18	1.56 – 2.61	No	2017	Water additive used to control microbes.
<b>Inorganic Contaminants</b>							
Lead (ppb)	0	Action Level =15	0	0 – 1.35	No	2016	Corrosion of household plumbing systems, erosion of natural deposits.
	0 out of 31 samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ppm) Distribution	1.3	Action Level =1.3	.117	0 –.210	No	2016	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
	0 out of 31 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.						
Nitrate (ppm)	10	10	1.11	.57 – 1.11	No	2017	Runoff from fertilizer use; erosion of natural deposits.
Fluoride (ppm)	4	4	1.03	.85 – 1.17	No	2017	Water additive, which promotes strong teeth; erosion of natural deposits.
Barium (ppm)	2	2	.0315	NA	No	2017	Discharge of drilling Waste; discharge from metal refineries; erosion of natural deposits.
<b>Volatile Organic Contaminants</b>							
Total Trihalomethanes (ppb)	NA	80	63.5	11.9 – 120.0	No	2017	By-product of drinking water chlorination.
Five Haloacetic Acids (ppb)	NA	60	49.7	12.7 – 82.1	No	2017	
<b>Treatment Technique</b>							
Turbidity (NTU)	NA	TT	1.05	.027 – 1.05	No	2017	Soil Runoff
Turbidity (% samples meeting standard)	NA	TT	99.8	99.8 – 100	No	2017	
Total Organic Carbon	NA	TT	1.38	.98 – 1.61	No	2017	Naturally present in the environment.

## **Section 7: Explanation of Violations**

**Monitoring Violation:** The CT monitoring violation of January 12 through March 2, 2018 occurred as a result of the equipment monitoring certain parameters used to calculate CT values being submerged in water, destroying the equipment. The equipment was replaced, and was in service on May 2, 2018.

## **Section 8: Turbidity**

Turbidity is a measure of the cloudiness of the water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported above the City of Steubenville Water Department's highest recorded turbidity result for 2017 was .105NTU and the lowest monthly percentage of samples meeting the turbidity limits was 99.9%.

## **Section 9: Explanation of Health Risks of chemicals detected.**

**Total Coliform Bacteria:** Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. The City of Steubenville Water Department tested over 300 samples in 2002. No samples tested positive.

## **Section 10: How do I participate in decisions concerning my drinking water?**

Public participation and comment are encouraged at regular meetings of Steubenville City Council, which meets every Tuesday at 7:30 P.M. at the City Building at 123 S. 3<sup>rd</sup> St. The Council's Utility Committee meets on an as needed basis. Information on any council meetings may be obtained from the Clerk of Council at (740) 283-6011.

## **Section 11: Educational Information on lead.**

If present, elevated lead levels 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. Steubenville 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 your potential for lead exposure by flushing your tap for 30 seconds to two minutes before using the 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 your exposure is available from the Safe Drinking Water Hotline at 800-426-4791 or at <http://epa.gov/safewater/lead>.

## **Section 12: Cryptosporidium**

The Steubenville PWS monitored for Cryptosporidium in the Ohio River during 2017. Cryptosporidium was detected in three (3) of the twelve (12) samples of the raw water sampled, and none was detected samples collected for the treated water. Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring of the source water and/or the finished water indicate the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. However, immune-comprised people are at greater risk of developing a life threatening illness. We encourage immune-comprised individuals to consult their doctor regarding appropriate precautions to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be sored through means other than drinking water.

**For more information on your drinking water contact the City of Steubenville Water Department at (740) 283-6041. We will be happy to answer any water-related questions that you may have.**