

Meeting the Challenge

We are once again proud to present our annual water quality report covering all testing performed between January 1 and December 31, 2017. 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 share with us your thoughts or concerns about the information in this report. After all, well-informed customers are our best allies.

For more information about this report, or for any questions relating to your drinking water, please call Sam Sutherland, Public Utilities Director-Water or the Laboratory Staff at (740) 456-4946.

Where does my water come from?

The City of Portsmouth Waterworks customers are fortunate because we enjoy an abundant water supply from the Ohio River. The Ohio River begins at Pittsburgh, Pennsylvania, and then travels approximately 350 miles to Portsmouth. The City of Portsmouth Water Treatment Plant, located at 4862 Gallia Street, was constructed in 1950 to treat water from the Ohio River. The treatment plant currently provides roughly 6 million gallons of clean drinking water every day. Treated water is pumped from the treatment plant to the east 25 miles, to the west 15 miles and to the north 8 miles. Our system serves approximately 43,000 customers in the cities of Portsmouth, Sciotoville, Wheelersburg, West Portsmouth and Rosemount.



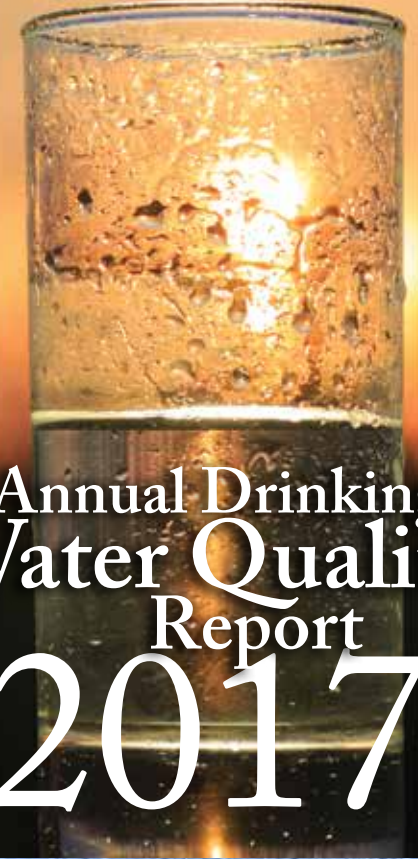
City of Portsmouth
4862 Gallia Street
Portsmouth, OH 45662

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. Portsmouth City Council meets the 2nd and 4th Monday of each month beginning at 6 p.m. at the Portsmouth Municipal Building, 728 2nd Street, Portsmouth, OH. You are also invited to contact Acting City Manager, Sam Sutherland or his staff at (740) 354-8807.

City of Portsmouth

PWS ID#: OH7300111



Annual Drinking Water Quality Report 2017



*Sam Sutherland, Public Utilities Director
and Acting City Manager*

Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water.

Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Source Water Information

The City of Portsmouth's public water system uses surface water drawn from the Ohio River. Surface waters are by their nature susceptible to contamination, and numerous potential 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 wastewater 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 Portsmouth's public water system is considered to have a high susceptibility to contamination. Historically, The Portsmouth public water system has effectively treated this source water to meet drinking water quality standards. The potential for water contamination can be further decreased by implementing measures to protect the Ohio River. More detailed information is provided in the City of Portsmouth's Drinking Water Source Assessment Report, which can be obtained by calling Sam Sutherland, Public Utilities Director Water, at (740) 456-4946.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 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>.

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 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 www.epa.gov/safewater/lead.

Definitions

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

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety

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.

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.

N/A: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm (parts per million): milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

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

We have a current, unconditioned license to operate our water system.

Disinfectants and Disinfection By-Products

| Contaminant (Units) | Collection Date | Level Detected | Range of Levels Detected | MCLG | MCL | Violation (Y/N) | Likely Source of Contamination |
|------------------------------------|-----------------|----------------|--------------------------|-----------------------|---------|-----------------|--|
| Chlorine (ppm) | 2017 | .073 | .055-0.73 | MRDLG = 4 | MRDL= 4 | N | Water additive used to control microbes |
| Haloacetic Acids (HAA5) (ppb) | 2017 | 19.1 | ND-22.2 | No goal for the total | 60 | N | By-products of drinking water chlorination |
| Total Trihalomethanes (TTHM) (ppb) | 2017 | 58.4 | 20.4-77.1 | No goal for the total | 80 | N | By-products of drinking water chlorination |

Inorganic Contaminants

| Contaminant (Units) | Collection Date | Level Detected | Range of Levels Detected | MCLG | MCL | Violation (Y/N) | Likely Source of Contamination |
|--------------------------------------|-----------------|----------------|--------------------------|------|-----|-----------------|--|
| Barium (ppm) | 2017 | 0.038 | NA | 2 | 2 | N | Discharge of drilling wastes, metal refineries; erosion of natural deposits |
| Fluoride (ppm) | 2017 | 1.18 | 0.81-1.18 | 4 | 4.0 | N | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate (measured as Nitrogen) (ppm) | 2017 | 1.04 | 0.57-1.04 | 10 | 10 | N | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |

Lead and Copper

| Contaminant (Units) | Collection Date | 90th Percentile | # Of Samples over AL | MCLG | Action Level (AL) | Violation (Y/N) | Likely Source of Contamination |
|---------------------|-----------------|-----------------|----------------------|------|-------------------|-----------------|--|
| Copper (ppm) | 2017 | <0.05 | 0 | 1.3 | 1.3 | N | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems |
| Lead (ppb) | 2017 | <0.005 | 0 | 0 | 15 | N | Corrosion of household plumbing systems; Erosion of natural deposits |

Treatment Technique

| Contaminant (Units) | Collection Date | Level Detected | Range of Levels Detected | MCLG | MCL | Violation (Y/N) | Likely Source of Contamination |
|--|-----------------|----------------|--------------------------|------|-----|-----------------|--------------------------------------|
| Turbidity (NTU) ¹ | 2017 | 0.18 | 0.03-0.18 | N/A | TT | N | Soil runoff |
| Turbidity (% samples meeting standard) | 2017 | 100% | NA | N/A | TT | N | Soil runoff |
| Total Organic Carbon ² | 2017 | 1.44 | 1.07-2.00 | N/A | TT | N | Naturally present in the environment |

¹ Footnote: Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system. The turbidity limit set by the EPA is 0.3 in 95% of the daily samples and shall not exceed 1.0 at any time. As reported above, the City of Portsmouth's highest recorded turbidity result for 2015 was .39, and the lowest percentage of samples meeting the turbidity limit 99.59 percent.

² Footnote: The value reported under "Amount Detected" for Total Organic Carbon (TOC) is the lowest ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of TOC removal requirements.

