



Easton Suburban Water Authority

2018 Water Quality Report

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

Easton Suburban Water Authority (Public Water Supply Number 3480050) is firmly committed to providing our customers with high quality drinking water that meets or surpasses state and federal standards for quality and safety. To ensure delivery of a quality product, we have made significant investments in treatment facilities, water quality monitoring and our distribution system. We are pleased to provide this Water Quality Report with results of our 2018 water testing. In addition to results of laboratory testing, this report also includes details regarding the source of our drinking water and how it compares to Environmental Protection Agency (EPA) and state standards. Any questions or concerns may be directed to Roy White at 610-258-7181 or visit us online at www.eswater.net.

Where does your water come from?

The water source for Easton Suburban Water Authority is the Delaware River. The water treatment and filtration plant has a capacity of producing 16 MGD (million gallons of water per day). Major improvements and plant upgrades, costing \$25,000,000, were completed in 2011 and are continuing to meet new Surface Water Treatment Regulations.

Under Section 1453 of the U.S. Environmental Protection Agency's 1996 Safe Drinking Water Act, states must evaluate all drinking water sources that serve public systems and provide a mechanism for development of local protection programs. In accordance with the Pennsylvania Department of Environmental Protection's Source Water Assessment and Protection Program (SWAP), a source water assessment has been completed and Easton's water treatment plant has been evaluated. The potential sources of contamination for this section of this surface water include both point and non-point sources of pollution. The Delaware River Basin Commission, USGS and USEPA are resources for information on levels of flow, water quality and planning issues for the Delaware River and its basin. SWAP programs of both Pennsylvania and New Jersey affect the surface water source for the Easton Water Treatment Plant. The complete assessment is available for public review at the regional DEP office. With proper credentials and purpose anyone can request a file review of the report. Any questions regarding this program or assessment should be addressed to DEP Central Office at 717-772-4014.

Educational Information

The sources of drinking water (both tap 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 water 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 storm water runoff and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also can come from gas stations, urban storm water runoff and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or a result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. We treat your water according to EPA's regulations. Food and 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

Customer Participation

Residents can help ensure the safety of our water supply by reporting any suspicious activity near any water tank, reservoir or fire hydrant, to our office at 610-258-7181, 24 hours any day of the week.

The Board of Directors of Easton Suburban Water Authority meets on the second Monday of each month at 3:00 pm at the Authority office located at 3700 Hartley Avenue in Palmer Township. Please feel free to attend and participate in these meetings.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers – a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl

without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.

- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Special Warning

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 at 800-426-4791.

Cryptosporidium Testing

Cryptosporidium is a microbial organism found in rivers and streams throughout the United States. Easton Suburban Water Authority began testing in August 2015 to monitor for *Cryptosporidium* and concluded monitoring in July 2017. Easton Suburban Water Authority had 2 detects in total in 2017. 1 detect was of 0.1 *Cryptosporidium* oocysts / 1.0 Liter and 1 detect was of 0.2 *Cryptosporidium* oocysts / 2.0 Liter. One sample per month was collected from the Delaware River. It is important to note that these detects were found in the source water, not the disinfected, treated water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Our treatment processes include, disinfection to inactivate organisms and filtration that will remove *Cryptosporidium*, but this does not guarantee that 100% of the organisms will be removed.

Cryptosporidium must be ingested to cause illness, and it may be spread by means other than drinking water. Ingestion of *Cryptosporidium* may cause an abdominal infection with symptoms including nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the illness within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection.

Unregulated Contaminants Rule (UCMR)

The 1996 Safe Drinking Water Act (SDWA) amendments require that once every 5 years EPA issue a new list of 30 unregulated contaminants to be monitored by public water systems. Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminants monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. UCMR lists 1, 2 and 3 were monitored and completed in compliance with EPA requirements. Monitoring of UCMR list 4 began in August 2018. 2 detects for manganese of 0.013 ppm and 0.008 ppm (with an average of 0.011) were found during our August and November sampling, but both are well under the 0.05 MCL required by DEP.

Water Quality Data

The tables on the following pages list all of the drinking water contaminants that we detected during the 2018 calendar year. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented is from testing done January 1 – December 31, 2018. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Contaminant	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Distribution Chemical Contaminants								
Chlorine (ppm)	4	4	0.88	0.62	1.14	2018	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	33.5	9.0	48.6	2018	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs) (ppb)	NA	80	73.1	18.7	103.0	2018	No	By-product of drinking water disinfection

Entry Point								
Fluoride (ppm)	4	2	0.7	NA	NA	2018	No	Water additive which promotes strong teeth
Barium (ppm)	2	2	0.027	NA	NA	2018	No	Erosion of natural deposits
Radiological Contaminants								
Radium 228 (pCi/L)	0	5	1.2	NA	NA	2014	No	Erosion of natural deposits

Contaminant	MCLG	MCL	Level Detected	Sample Date	Violation	Typical Source
Turbidity (NTU)	≤0.15	TT = 1 NTU for a single measurement	0.11	2018	No	Soil runoff
		TT = at least 95% of monthly samples ≤ 0.3 NTU	100%		No	

Contaminant	% Removal Required	Range of removal achieved	No. of quarters out of compliance?	Violation	Typical Source
Total Organic Carbon	35	38-55%	0	No	Naturally present in the environment

Contaminant	Minimum Residual required	Your Water	Range		Sample Date	Violation	Typical Source
			Low	High			
Entry Point Disinfectant Residual							
Chlorine (ppm)	0.20	1.40	1.10	1.70	2018	No	Water additive used to control microbes

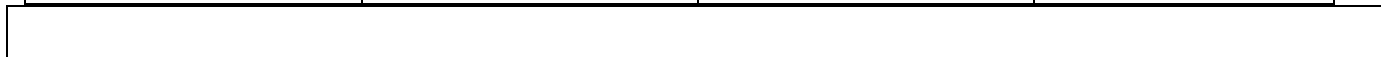
Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	Units	# Sites above AL	Exceeds AL?	Typical Source
Lead and Copper							
Lead (ppb)	15	0	0	Ppb	0 out of 38	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	1.3	1.3	0.21	Ppm	0 out of 38	No	Corrosion of household plumbing systems; erosion of natural deposits

Additional Information for 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. Easton Suburban Water Authority 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 at 800-426-4791 or at www.epa.gov/safewater/lead.

Additional Monitoring

Contaminants	Recommended Limits or Range	Your Water	Typical Source
Total Alkalinity		32.7 ppm	Secondary Drinking Water Standards refer to recommended limits on compounds that might pose a nuisance to the customer. These compounds affect aesthetic quality (appearance, taste and odor) but do not pose a health risk.
Aluminum	0.2 ppm	0.012 ppm	
Calcium Hardness		34.1 ppm	
Chloride	250 ppm	26.2 ppm	
Color	15 Color Units	< 5 Color Units	
Corrosivity	-1 to +1 Langelier Index	-1.12 Langelier Index	
Foaming Agents (MBAS)	0.5 ppm	< 0.05 ppm	
Hardness	0 to 250 ppm	58 ppm	
Iron	0.3 ppm	< 0.100 ppm	
Manganese	0.050 ppm	< 0.010 ppm	
Odor	3 TON	<1 TON	
pH	6.0 to 8.5	7.3	
Sulfate	250 ppm	21.7 ppm	
Total Dissolved Solids	500 ppm	124 ppm	
Zinc	5 ppm	0.37 ppm	
Calcium		13.6 mg/L	
Cyanide (free)	0.2 MRDL	0.007 mg/L	
Nitrate	10 mg/L	0.52 mg/L	



Terms and Abbreviations

AL	Action Level	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
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.
NTU	Nephelometric Turbidity Units	A measure of water clarity.
pCi/L	Picocuries per liter	A measure of radioactivity.
TON	Threshold Odor Number	A measure of odor.
ppm	Parts per million or milligrams per liter (mg/L)	One part per million equals about: 1 minute in 2 years or 1 inch in 16 miles.
ppb	Parts per billion or micrograms per liter (µg/L)	One part per billion equals about: 1 second in 32 years or 1 inch in 16,000 miles.
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
NA	Not Applicable	Results are not applicable.
MRDL	Maximum Residual Disinfectant Level	Highest level of disinfectant allowed in drinking water. There is convincing evidence that additional 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 contamination.

Assessment

We are required to monitor our drinking water for specific contaminants on a regular basis. In July, the laboratory reported the presence of Coliform bacteria in 6% of the samples taken, the standard is no more than 5%. We resampled all locations as well as several additional locations and the laboratory reported no presence of Coliform in any of the check samples. Given the results of the resampling and the residual of disinfectant in the water, it was determined that the cause of the initial positive samples can be contributed to the mishandling of the sample bottles during collection and/or transportation.

Violations:

None.