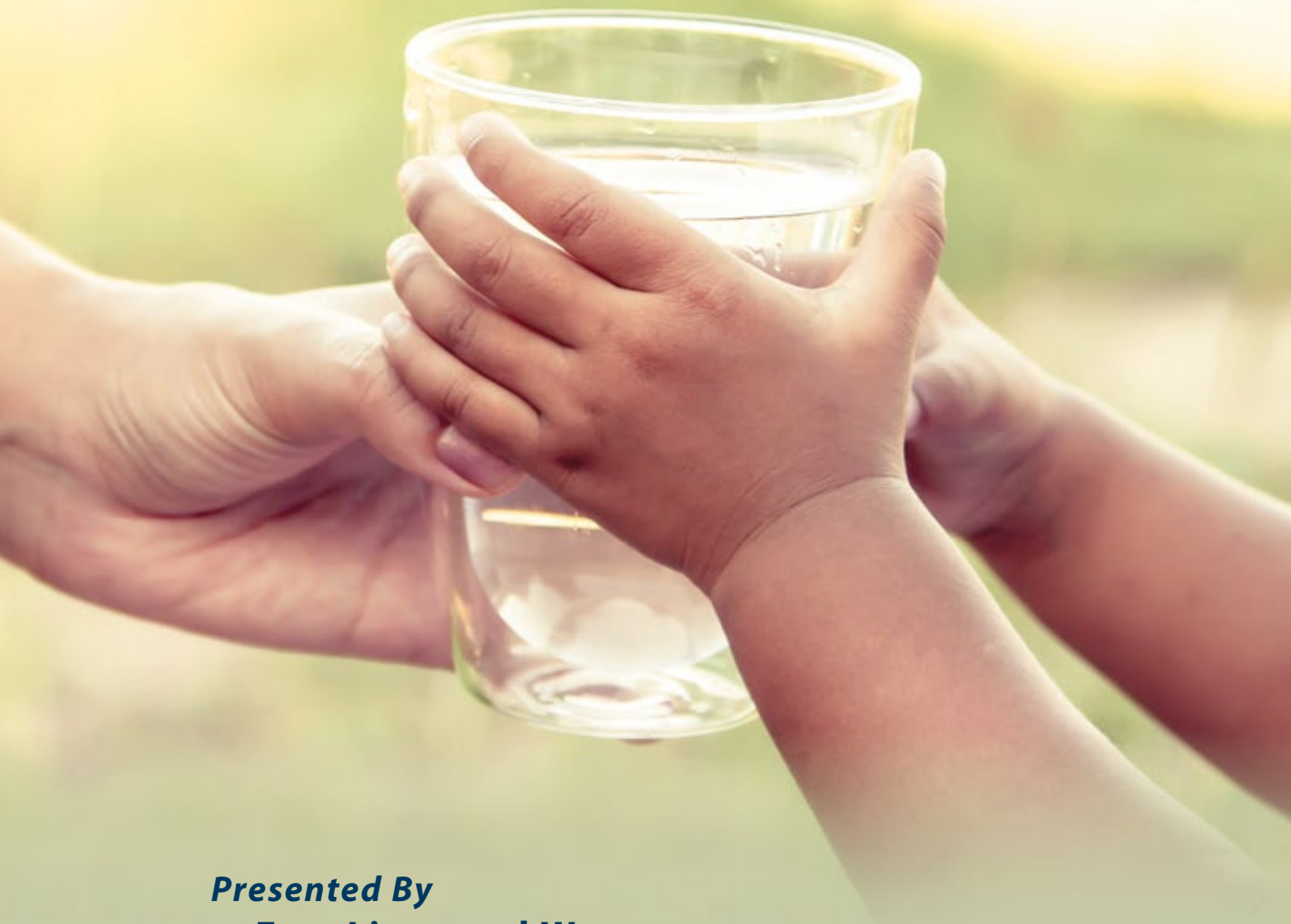


# ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2018



***Presented By***  
**East Liverpool Water  
Department**

## 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.

## Where Does My Water Come From?

City of East Liverpool Water Department customers are fortunate because we enjoy an abundant water supply from one source: the Ohio River. Our surface water treatment plant was constructed in 1916 to draw water from the Ohio River at mile marker 40.2, located at 2220 Michigan Avenue, East Liverpool, Ohio. On average, 2.5 million gallons of water was treated every day in 2018.



## Community Participation

You are invited to voice your concerns about your drinking water during the monthly council meetings on the first and third Monday of each month (except during summer) at 6:00 p.m. in City Hall Council Chambers, 126 West Sixth Street, East Liverpool, Ohio. If the date falls on a holiday, the meeting will be on the following Tuesday. The summer schedule for council meetings is the first Monday of the month.

## Source Water Assessment

A Source Water Assessment Plan (SWAP) is now available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination by the identified potential sources.

According to the SWAP, our water system had a susceptibility rating of high. It is important to understand that this susceptibility rating does not imply poor water quality, only the system's potential to become contaminated within the assessment area. If you would like to review the SWAP, please feel free to contact our office at (330) 385-5050, ext. 201, or (330) 385-8812, Monday through Friday, 8:00 a.m. to 5:00 p.m. You may also view the report online at <http://wwwapp.epa.ohio.gov/gis/swpa/OH1500811.pdf>.

## 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>.



## Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration 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 these contaminants does not necessarily indicate that the water poses a health risk.

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.

**We remain vigilant in delivering the best-quality drinking water**

## About Our Violation

The January 2018 source water sample *E. coli* counts were not monitored in the time frame allowed by OAC Rule 3745-81-65 (1)(2) and the East Liverpool Water Department's approved sampling schedule. We are required to collect these samples to determine if additional treatment of our source water is necessary. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did to correct the situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether our drinking water meets health standards. During the weeks of May 6 through 12 and May 20 through 26, 2018, we did not monitor for microcystins and therefore cannot be sure of the quality of our drinking water during that time.

### What Should I Do?

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

This notice is to inform you that the East Liverpool public water system did not monitor or report results for the presence of microcystins in the public drinking water system during the weeks of May 6 through 12 and May 20 through 26, 2018, as required by the Ohio Environmental Protection Agency. You do not need to take any action in response to this notice.

### What Is Being Done?

Upon being notified of this violation, the East Liverpool Water Department revised the sampling schedule to add a replacement *E. coli* count sample on October 10, 2018. The water department also revised printed operation procedures to be clearer on what tests are required and when these tests, as well as other steps to ensure adequate reporting, will be preformed in the future.

Upon being notified of this violation, the water supply was required to have the drinking water analyzed for total microcystins according to their monitoring schedule. The East Liverpool Water Department will take steps to ensure that adequate monitoring will be performed in the future. A sample was collected on June 13, 2018.

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

For sample results and additional information, please contact Paul McCarthy, Water Superintendent, at (330) 385-8812 or stop by our office at 2220 Michigan Avenue, East Liverpool, Ohio.



## Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show 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 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.

We participated in the fourth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water in order to determine if U.S. EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

Note that we have a current, unconditioned license to operate our water system.

REGULATED SUBSTANCES								
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Barium (ppm)	2018	2	2	0.032	0.032–0.032	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Chlorine (ppm)	2018	[4]	[4]	0.85	0.36–1.4	No	Water additive used to control microbes	
Fluoride (ppm)	2018	4	4	1.07	0.81–1.20	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
Haloacetic Acids [HAA] (ppb)	2018	60	NA	28.5	13.1–46.8	No	By-product of drinking water disinfection	
Nitrate (ppm)	2018	10	10	0.76	0.58–0.99	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
TTHMs [Total Trihalomethanes] <sup>1</sup> (ppb)	2018	80	NA	63.6	20.7–86.7	No	By-product of drinking water disinfection	
Total Organic Carbon [TOC] <sup>2</sup> (removal ratio)	2018	TT	NA	1.02	1.0–1.7	No	Naturally present in the environment	
Turbidity <sup>3</sup> (NTU)	2018	TT	NA	0.21	0.03–0.21	No	Soil runoff	
Turbidity (Lowest monthly percent of samples meeting limit)	2018	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff	
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)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2018	1.3	1.3	0.07	ND–0.12	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2018	15	0	7.5	ND–15	0/30	No	Lead service lines, corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

## UNREGULATED CONTAMINANT MONITORING RULE - PART 4 (UCMR4)

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH
2-Methoxyethanol (ppb)	2018	4.45	4.45–4.45
Bromide (ppm)	2018	0.029	0.029–0.029
HAA5 (ppb)	2018	26.36	7.76–40.6
HAA6Br (ppb)	2018	11.22	3.83–16.1
HAA9	2018	36.74	11.0–52.8
Manganese (ppb)	2018	2.03	0.74–3.76

<sup>1</sup> Some people who drink water containing trihalomethanes (TTHM) in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.

<sup>2</sup> The value reported under Amount Detected for TOC is the lowest ratio of percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements.

<sup>3</sup> Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

## 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 which, if exceeded, triggers treatment or other requirements which 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.

**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.

**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):** 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).

**removal ratio:** A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

**SMCL (Secondary Maximum Contaminant Level):** These standards are developed to protect aesthetic qualities of drinking water and are not health based.

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

## 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. A list of laboratories certified in the State of Ohio to test for lead may be found at <http://www.epa.ohio.gov/ddagw> or by calling (614) 644-2752. 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).



## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Paul McCarthy, Water Superintendent, at (330) 385-5050, ext. 201, or (330) 385-8812.



## BY THE NUMBERS

The number of Olympic-sized swimming pools it would take to fill up all of Earth's water.

**800**  
TRILLION

**1¢**

The average cost for about 5 gallons of water supplied to a home in the U.S.

The amount of Earth's water that is salty or otherwise undrinkable, or locked away and unavailable in ice caps and glaciers.

**99%**

**50**  
GALLONS

The average daily number of gallons of total home water use for each person in the U.S.

The amount of Earth's surface that's covered by water.

**71%**

**330**  
MILLION

The amount of water on Earth in cubic miles.