

2024 WATER QUALITY REPORT

ERIEWATER.ORG



Serving McKean Township
and McKean Borough

PWSID 6250096



Dear Valued Customers of the Erie Water Works,

Erie Water Works' guiding principle, World-Class Water, First-Class Service® is now a registered trademark – reinforcing our mission and the standard we uphold every day. Our team of water professionals, shown above, are committed to doing whatever it takes to deliver Erie tap water to your homes and businesses every second of the day. We are proud to present our 2024 Water Quality Report, which has no violations related to water quality.

Ensuring World-Class Water quality is our highest priority. It's also a priority of the U.S. Environmental Protection Agency (EPA), as established by the Safe Drinking Water Act. We celebrated the 50th Anniversary of this momentous Act on December 16, 2024. Erie tap water consistently exceeds the strict standards set by the PA Department of Environmental Protection (DEP) and the EPA. In the 2024 Filter Plant Performance Evaluation conducted by the DEP, our Richard S. Wasielewski Water Treatment Plant earned the highest rating—Commendable. Erie Water Works is proud to be among the top 13% of utilities statewide to achieve this distinction. We are equally committed to delivering First-Class Service. Our new customer payment portal offers a more user-friendly experience with enhanced features, making it easier than ever to manage your account once it's registered in the new system.

Our efforts to "Get The Lead Out" intensified in 2024 as we removed over 2,000 lead goosenecks in the water system! About 900 galvanized steel customer service lines were replaced as part of the project as they had been downstream of a lead gooseneck. Over \$8.7 million dollars was invested, with grant monies providing the majority of the funding. The progress being made to eradicate lead is tremendous and work will continue over the next 5 years to make sure all lead piping is removed from the water system.

As your trusted regional water supplier, we take pride in providing World-Class Water, First-Class Service®.

Cheers to water!

Chief Executive Officer



Monitoring Your Water

We routinely monitor for contaminants in your drinking water according to federal and state laws. Please note the Erie Water Works meets or exceeds all drinking water standards. The tables included in this report show the results of our monitoring for the period of January 1 to December 31, 2024.

Source Water

Our water source is exclusively surface water from Lake Erie. We are fortunate to operate two water filtration plants to provide a continuous water supply; the Chestnut Water Treatment Plant (Source Code 001) and the Richard S. Wasielewski Water Treatment Plant (Source Code 002). A Source Water Assessment and Protection (SWAP) program was completed and documented by the Erie Water Works in 2003. This program is a way to identify any sources of potential contamination that could affect the quality of our drinking water. The report indicated that there are no major potential sources of contamination to our water supply from accidental releases into the environment. The summary SWAP report is available online at www.eriewater.org/what-we-do/reports/ or at the offices of the Erie County Health Department.

The Erie Water Works is updating its Source Water Protection Plan with assistance from the Source Water Protection Technical Assistance Program (SWPTAP).

Contact Information

If you have questions about this report, please contact Ron Costantini, Senior Manager of Administration, at rcostantini@eriewaterworks.org.

Due to the complex nature of water treatment, we prefer questions in writing so they can be directed to the proper individuals to provide the most complete and accurate information about our product and services.

The Erie Water Works Board of Directors hold their monthly meeting the third Thursday of each month at 3:30 p.m. in the first floor conference room of the John J. McCormick Jr. Administration Building, 340 West Bayfront Parkway, Erie, PA 16507.

ERIE WATER WORKS

24 Hour Emergency Phone:
814-870-8087

Personnel are on duty 24/7

Este informe contiene información importante acerca de su agua potable.
Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda.
(This report contains important information about your drinking water.
Have someone translate it for you, or speak with someone who understands it.)

Special Information for Immuno-Compromised Individuals

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. The Environmental Protection Agency (EPA) and the Center for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infections by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Information about Lead

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

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. The Erie Water Works 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 2 minutes before using water for drinking or cooking. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. 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: <http://www.epa.gov/safewater/lead>.

Erie Water Works prepared a service line inventory that includes the type of material contained in each service line in our distribution system. This inventory can be accessed on our website at eriewater.org.

Information about Nitrate

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Information about Total Trihalomethanes (TTHMs)

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Total Coliform

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. If coliforms are found, this indicates the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct an evaluation to identify and correct any problems that were found. None of the 36 samples collected throughout 2024 were found to be positive for Total Coliform bacteria and all follow up check samples were negative with no problems identified in the evaluation of the system.

Abbreviations and Definitions

ACC: Alternative Compliance Criteria

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

CFE (Combined Filter Effluent): In a water treatment plant multiple filters are working simultaneously to filter water, CFE refers to the summation of this filtered water.

cm-1: Reciprocal centimeter or wave number; a unit of energy

CP: Chestnut Water Treatment Plant

Dist: Distribution System Sample

MCL (Maximum Contaminant Level): the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG 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 Disinfection Level): the highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfection Level Goal): the level of 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.

ND: Not Detected

ntu: Nephelometric turbidity unit: a measure of the clarity of water

PA DEP: Pennsylvania Department of Environmental Protection

pCi/L (Picocuries per liter): a measure of radioactivity in water

ppb: Parts per billion, or micrograms per liter ($\mu\text{g/L}$)

ppm: Parts per million, or milligrams per liter (mg/L)

ppq: Parts per quadrillion, pictograms per liter (pictograms/l)

ppt: Parts per trillion, or nanograms per liter (ng/L)

PSWID: Public Water Supply ID

SUVA: Specific Ultraviolet Absorbance

TOC: Total Organic Carbon

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

WP: Wasielewski Water Treatment Plant

Detected Sample Results

Public Water System ID: 6250096

Inorganic Contaminants							
Contaminant (Unit of measurement)	Location	Violation Yes/No	Level Detected	Range of Detection	MCLG	MCL	Sources of Contamination
Barium (ppm)	WP	No	0.022	(na)	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
	CP	No	0.021	(na)			
Fluoride (ppm) (a)	WP	No	0.54	(na)	2	2	Erosion of natural deposits; water additive which promotes stronger teeth; discharge from fertilizer and aluminum factories
	CP	No	0.44	(na)			
Orthophosphate (ppm)	WP	No	0.56	0.49-1.07	(na)	(na)	Water additive used for corrosion control
	CP	No	0.58	0.42-2.07			
	Dist	No	0.81	0.68-0.98			
Synthetic Organic Compound (SOC)							
Contaminant (Unit of measurement)	Location	Violation Yes/No	Level Detected	Range of Detection	MCLG	MCL	Sources of Contamination
Dioxin [2,3,7,8-TCDD] (ppq)	CP	No	0.52	0.44-0.59	0	30	Emissions from waste incineration and other combustion; Discharge from chemical factories
Disinfection and Disinfection By Products							
Contaminant (Unit of measurement)	Location	Violation Yes/No	Level Detected	Range of Detection	MCLG	MCL	Sources of Contamination
Haloacetic Acids (ppb) (Highest Running Average)	Dist	No	33.2	1.4-45.2	(na)	60	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb) (Highest Running Average)	Dist	No	64.5	31-115	(na)	80	Byproduct of drinking water disinfection
Chlorine (ppm) (Highest monthly average)	Dist	No	1.40	0.77-1.40	MRDLG = 4	MRDL= 4	Water additive used to control microbes
Microbiological Contaminants							
Turbidity							
Contaminant (Unit of measurement)	MCL		MCLG	Level Detected	Sample Date	Violation Yes/No	Sources of Contamination
Turbidity (CFE) (ntu)	TT= 1 NTU for a single measurement (WP)		0	1.000	2/29/2024	No	Soil runoff
	TT= 95% of monthly samples < 0.15 NTU (WP)		0	100.0%	February 2024	No	Soil runoff
	TT= 1 NTU for a single measurement (CP)		0	0.607	3/18/2024	No	Soil runoff
	TT= 95% of monthly samples < 0.3 NTU (CP)		0	100.0%	March 2024	No	Soil runoff

Detected Sample Results

Public Water System ID: 6250096

Microbiological Contaminants								
Turbidity								
Contaminant (Unit of measurement)	Location	Violation Yes/No	Level Detected	Range of Detection	MCLG	MCL	Sources of Contamination	
Turbidity (CFE) (ntu)	WP	No	0.023	0.003-1.00	(na)	TT	Soil runoff	
	CP	No	0.037	0.021-607	(na)			
Entry Point Disinfectant Residual								
Contaminant	Location	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detection	Units	Sample Date	Violation Yes/No	Sources of Contamination
Chlorine	WP	0.2	0.86	0.86-1.80	ppm	6/6/2024	No	Water additive used to control microbes
	CP	0.2	0.90	0.90-1.60	ppm	9/16/2024	No	
Lead and Copper Study								
Contaminant	Action Level (AL)		MCLG	90th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Yes/No	Sources of Contamination
Lead	15		0	0.141	ppb	0 of 11	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper	1.3		1.3	0.073	ppm	0 of 11	No	
Microbial								
Contaminant	Treatment Technique			MCLG	Assessments/ Corrective Actions		Violation Yes/No	Sources of Contamination
Total Coliform Bacteria	Any system that has failed to complete all the required assessments or correct all identified sanitary defects, is in violation of the treatment technique requirement			(na)	See detailed description under "Detected Contaminants Health Effects Language and Corrective Actions" section		No	Naturally present in the environment
Total Organic Carbon (TOC)								
Contaminant (Unit of measurement)	Location	Violation Yes/No	Level Detected	Range of Detection	MCLG	MCL	Sources of Contamination	
SUVA (ppm)	WP	No	1.03	0.34-1.75	(na)	(na)	Test to determine TOC reactivity	
	CP	No	1.00	0.80-1.17				
DOC (ppm)	WP	No	1.81	1.43-2.28	(na)	(na)	Test to determine TOC reactivity	
	CP	No	1.86	1.66-2.06				
UV254 (cm ⁻¹)	WP	No	0.018	0.005-0.037	(na)	(na)	Test to determine TOC reactivity	
	CP	No	0.019	0.017-0.020				
Contaminant	Range of % Removal Required		Range of Percent Removal achieved		Number of quarters out of compliance		Violation Yes/No	Sources of Contamination
TOC	25% (CP only)		21.6 - 30.3%		0		No	Naturally present in the environment
			ACC used when below 25%		SUVA			

(a) EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.

(na) Not Applicable

Detected Contaminants Health Effects Language and Corrective Actions

As demonstrated in our Detected Sample Results, the Erie Water Works did not receive any violations as a result of our water quality in 2024. We did receive minor reporting violations issued by the Pennsylvania Department of Environmental Protection. It is important to note that the quality and safety of the drinking water was never in question.

In 2024, Perfluorinated substances were added to the monitoring requirements. The Erie Water Works completed this monitoring in 2023 as a part of the Unregulated Contaminant Monitoring Rule (UCMR5) and requested that data be used for the initial monitoring requirement. This request was approved but not before the first quarter sample reporting period was over therefore the results were submitted late. 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 the first quarter, we did not complete all monitoring by the specified dates for perfluorooctanesulfonic acid and perfluorooctanoic acid therefore cannot be sure of the quality of your drinking water during that time. As a result, we received two minor late reporting violations. Samples were taken and were non-detectable for these contaminants.

In February 2024, the chlorine results for the Chestnut Water Treatment Plant were mistakenly submitted under the Wasielewski Water Treatment Plant's DEP code. Each water treatment plant has its own specific code for data reporting to the state reporting system. Therefore, two reports were submitted under the Wasielewski Water Treatment Plant's DEP code and no report was received for the Chestnut Water Treatment Plant. This report was fixed with the correct code and resubmitted. 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 February, we did not complete all monitoring on the specified dates for chlorine therefore cannot be sure of the quality of your drinking water during that time. We received a late reporting violation because samples were taken, but initially reported under the incorrect report code.

Educational Information

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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or 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 stormwater run-off, 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 run-off, and residential uses.
- 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 stormwater run-off, and septic systems.
- 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 and PA DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems.

Drinking water may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the 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 (800-426-4791).

Top Customer Questions

Do you homebrew or have an aquarium?

Below are some common water quality parameters frequently requested for anything from homebrewing to balancing your aquarium water.

	Average	Min	Max
Alkalinity (CaCO ₃ ,mg/L)	90.9	82.1	97.3
Calcium Hardness (mg/L)	81.9	74.4	93.8
Elemental Calcium (mg/L)	32.8	29.8	37.6
Total Hardness (CaCO ₃ ,mg/L)	119.4	109.6	129.8
as Grains per Gallon	6.97	6.40	7.58
Total Dissolved Solids (mg/L)	187.9	171.9	250.2
Conductivity (uS/cm)	286.5	263.1	374.5
pH	7.85	7.40	8.98
Chloride (mg/L)	21.5	16.3	29.8



Should I be concerned about lead in my drinking water?

No. The corrosion control treatment we use is extremely effective. We're also making historic investments to eradicate all lead piping in the water system. Physically removing lead piping is the most effective means to eliminate the risk.

What could cause my water to have an earthy flavor sometimes?

Seasonal algae blooms in Lake Erie and changing weather conditions can cause earthy or musty tastes and odors. These natural compounds have no known health effects. We take steps to reduce their presence when detected.

Is fluoride added to my drinking water?

Since 2002, Erie Water Works has added fluoride to its water supply to support community dental health. Fluoridation is a safe, effective, and widely recognized practice that helps prevent tooth decay. The process follows strict guidelines set by health authorities, including the CDC and EPA, ensuring fluoride levels remain within safe limits. For more information, consult with your dentist or physician.

Why is my water cloudy?

Water that is cloudy or white in appearance is usually caused by an abundance of air. Cold water holds more air in solution than warm water. The best thing to do is let it sit in an open container until the bubbles naturally dissipate.



Why does my water sometimes smell like a swimming pool?

The Erie Water Works utilizes Sodium Hypochlorite in the treatment process to kill bacteria and waterborne organisms in order to keep the water safe. This disinfectant is what occasionally gives tap water the chlorine smell. To reduce the chlorine taste and smell, place water in a glass container uncovered in the refrigerator overnight to dissipate the chlorine, removing most of the taste, but also the disinfectant that kills bacteria growth. Discard any unused water after a few days.

Can I get my water tested by Erie Water Works?

If you have concerns about your water, please contact our water quality professionals at laboratory@eriewaterworks.org



World-Class Water,
First-Class Service®

eriewater.org



Erie Water Works Mission Statement

"To guarantee a continuous, uninterrupted, reasonably priced supply of quality water to its customers which assures public health while promoting regional stability and future development."