

2015

WATER QUALITY

CLEVELAND WATER



CLEVELAND WATER
WWW.CLEVELANDWATER.COM
1201 LAKESIDE AVE., CLEVELAND, OHIO 44114



Commitment to QUALITY

Cleveland Water is committed to providing our customers with a reliable supply of safe, quality drinking water to more than 1.4 million people in 80 communities. Add to this commitment our pledge to meet and exceed safe drinking water quality standards as members of the Partnership for Safe Water Program. The Partnership is a voluntary cooperative effort between the U.S. Environmental Protection Agency (USEPA), drinking water professional organizations, and more than 200 drinking water utilities across the country. All water utilities that join the Partnership agree to adopt stringent performance standards to protect the water supply against microbiological contamination.

Joining the Partnership requires a significant investment of time and resources aimed at evaluating treatment and optimizing performance to provide you, our customers, with great-tasting, safe water with an even higher degree of protection against microbiological contaminants than is required. We are proud that each of our four water treatment plants have attained a Level 3 in the Partnership for years; and, in the summer of 2015, our Crown Water Treatment Plant in Westlake, Ohio attained a Level 4 in the Partnership. This is an honor of excellence that only 14 other water plants across the country have attained.

“CLEVELAND WATER IS COMMITTED TO PROVIDING OUR CUSTOMERS WITH A RELIABLE SUPPLY OF SAFE, QUALITY DRINKING WATER.

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What to Expect From YOUR WATER

WHAT TO EXPECT FROM YOUR DRINKING WATER

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 from human activity.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which shall 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 at 1-800-426-4791.

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.

USEPA/Centers for Disease Control 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 1-800-426-4791.



POSSIBLE CONTAMINANTS IN SOURCE WATER

Microbial Contaminants	<i>such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.</i>
Inorganic Contaminants	<i>such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.</i>
Pesticides and Herbicides	<i>which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.</i>
Organic Chemical Contaminants	<i>including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.</i>
Radioactive Contaminants	<i>which can be naturally-occurring or be the result of oil and gas production and mining activities.</i>

TESTING AND TREATMENT

Cleveland Water takes multiple steps in our testing and treatment processes to make sure the water we deliver to your home is safe from lead and other contaminants.

We use surface water drawn from four intakes in Lake Erie which are located a considerable distance offshore to protect your water from possible contamination. Your water then goes through a thorough treatment process which includes removing small debris, filtering, and disinfecting. In addition, Cleveland Water regularly collects and tests approximately 300 water samples a day to ensure that the water our customers receive meets and exceeds Federal and State drinking water quality standards.

Our commitment to providing you, our customers, with quality drinking water is proven through the comprehensive testing and treatment processes we employ. We are also blessed to be on the shores of Lake Erie. Lake Erie is an ample and consistent supply of source water for the Cleveland Water system. This consistency is critically important. The more consistent the water is that goes into our treatment process, the less adjustments we need to make when we treat the water, and the more consistent and safe the water is when it leaves our treatment plants.

Know your WATER

Making sure customers receive quality water at all times is our Top Priority.

LEAD

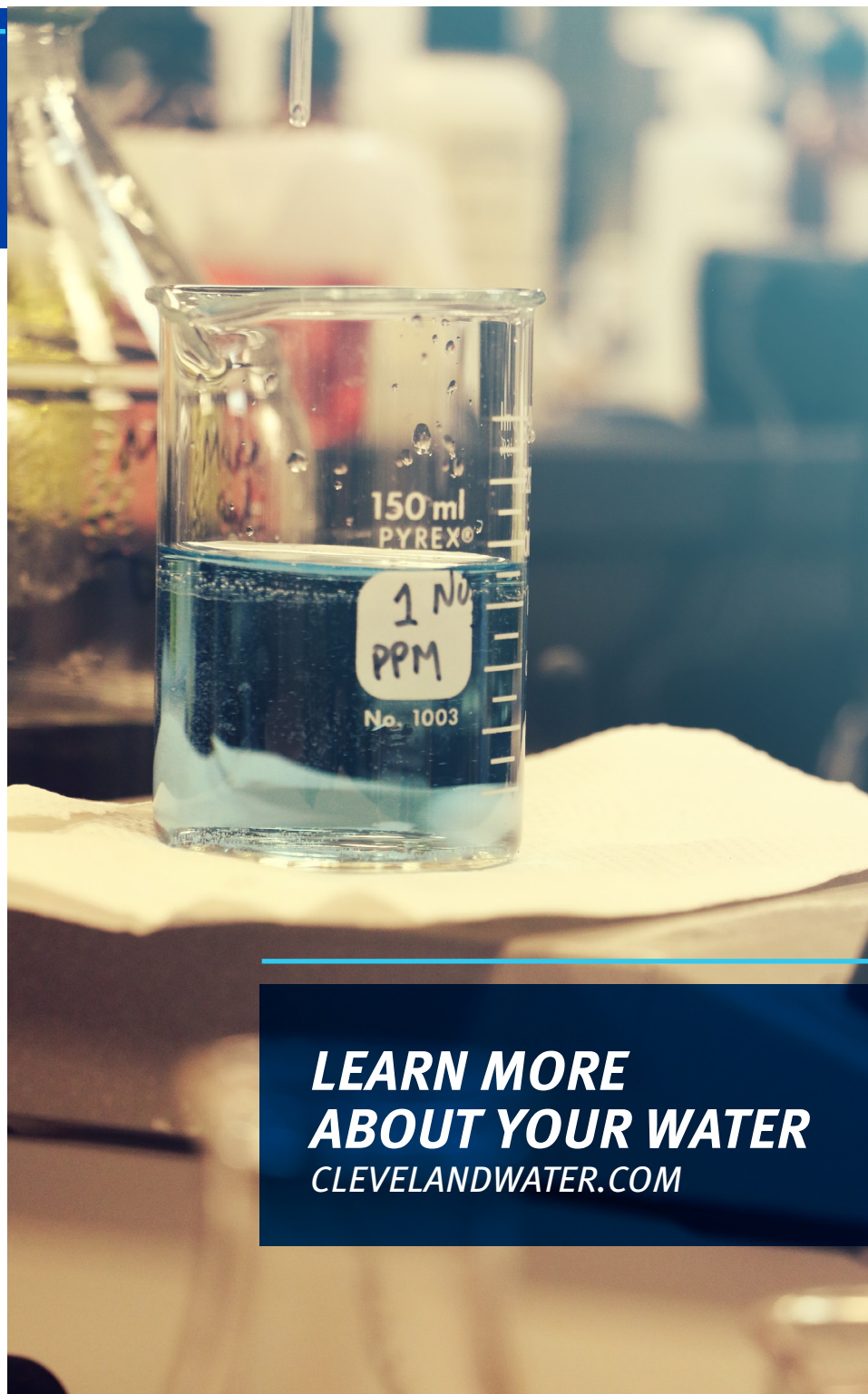
Cleveland Water follows the requirements of the Federal lead and copper rules as administered by the State of Ohio through the Ohio EPA. Additionally, our treatment process includes the use of orthophosphate. Orthophosphate inhibits corrosion – and by extension helps reduce potential risk – by laying down a thin film that acts as a barrier on metal pipes and fixtures. This helps reduce drinking water’s tendency to leach lead and copper out of plumbing materials and into the water. We are required to maintain a minimum pH and concentration of orthophosphate in our water as a treatment technique regulated by the Ohio EPA. We monitor far more frequently than we are required and report these results to the Ohio EPA on a regular basis as well.

It is important to note that elevated lead levels may pose serious health risks for children and pregnant women. Lead in drinking water is mainly from service lines that connect your home to the water main and home plumbing. While we are responsible for delivering high quality water, we cannot control the variety of materials used in plumbing components. Older homes, typically pre-1950, may use lead service lines and lead pipes. Pre-1988 homes may use lead-based solder, often used to join copper pipes.

WHAT YOU SHOULD KNOW

- Faucet aerators (the wire screen where water comes out of the faucet) that are not cleaned regularly may also increase lead exposure.
- Some lead may dissolve into water when water sits in your pipes overnight or when it is unused during the day. As a precaution, let the cold tap water run until you feel a change in water temperature to make sure you’re getting water from the main on your street. This usually takes 30 seconds to 2 minutes.
- Always use cold water for cooking and drinking since hot water dissolves lead more quickly than cold water.

If you want to have your tap water tested for lead levels, go to www.epa.ohio.gov/ddagw/Documents/labcert.aspx to locate an Ohio EPA-certified laboratory. The Safe Drinking Water Hotline, 1-800-426-4791, or its website, www.epa.gov/lead is another valuable resource for additional information.



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Cleveland's SOURCE WATER

Do your part and help protect Lake Erie.

We are fortunate because 20% of the world's freshwater is in the Great Lakes watershed of which Lake Erie is a part. Cleveland Water uses surface water drawn from four intakes in Lake Erie as the source of our drinking water. Ninety percent of the water entering Lake Erie comes from the upstream Great Lakes – Superior, Michigan, and Huron – as well as all of the rivers and streams that flow into these Lakes. The remaining 10% comes from rain and snow in the Lake Erie drainage basin which includes the various streams and rivers that flow into Lake Erie.

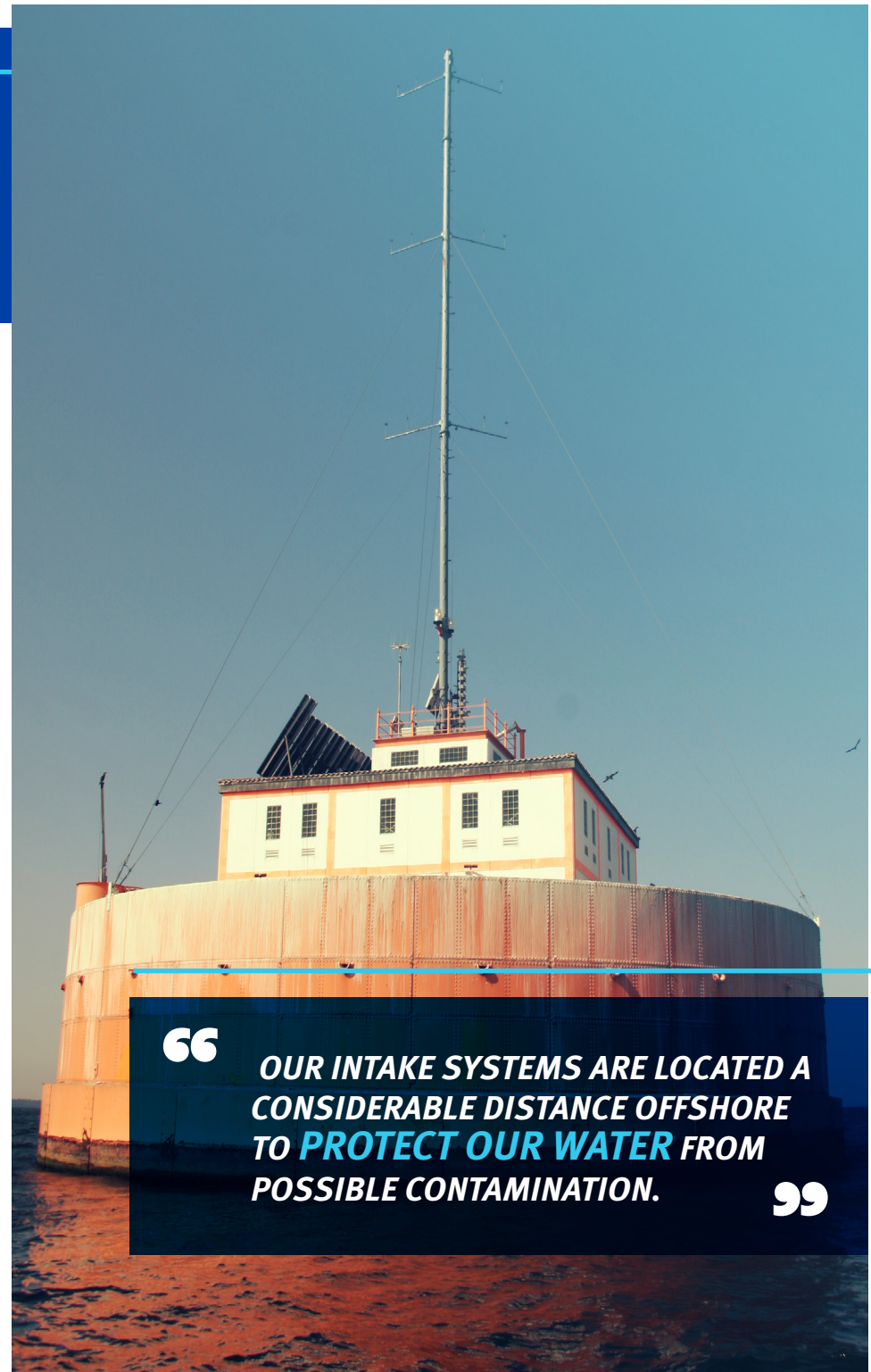
By their nature, surface waters, such as lakes and rivers, are accessible and can be contaminated by chemicals and disease-causing organisms. Since our intake systems are located a considerable distance offshore (built in the early 1900's and again in the – 1940's and 1950's), potential contamination from rivers, streams and other nearby sources is greatly minimized.

Since no single treatment process can address all possible contaminants, we use a multiple barrier process to treat Lake Erie water in order to meet drinking water quality standards. Additionally, implementing measures to protect Lake Erie can improve our water quality.

WHAT YOU CAN DO

- Remove trash and debris from sewers and storm drains.
- Dispose of household wastes such as fertilizers, pesticides, paints, paint thinners and motor oil properly.
- Prevent soil erosion by planting trees, grass or shrubs along streams and rivers.
- Support local watershed groups as well as other organizations dedicated to protecting the environment.

For more information about potential pollution sources, contact Cleveland Water's Risk Management Section at 216-664-2444, x5838 and ask for our Drinking Water Source Assessment Report.



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OUR INTAKE SYSTEMS ARE LOCATED A CONSIDERABLE DISTANCE OFFSHORE TO PROTECT OUR WATER FROM POSSIBLE CONTAMINATION.

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Testing OUR WATER

*Proud to provide
the highest quality
water possible to
our customers.*

COMPLIANCE WITH DRINKING WATER REGULATIONS

Cleveland Water is in compliance with all Maximum Contaminant Levels (MCL) and Treatment Techniques (TT) for drinking water. Based upon our excellent compliance record, Cleveland Water has a current, unconditional license to operate our water system. This license is issued by the Ohio EPA. We are proud to provide you, our customer, with the highest quality water possible.

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

COLIFORM MONITORING

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.

We collect over 350 Total Coliform (TC) bacteria results monthly, or more than 4,200 samples annually. During 2015, three of these 4,200 samples were positive, and each was retested immediately and found to be likely due to a simple sample collection error.

UNREGULATED CONTAMINANTS

Unregulated contaminants are substances for which USEPA has no established drinking water standard. USEPA requires us to monitor in order to determine where certain substances occur and whether USEPA needs to regulate those substances in the future.

MONITORING OUR WATER CONTENTS

Inorganic Contaminants	MCLG	MCL	Level Found	Range of Detections	Typical Source in Drinking Water
Fluoride (mg/L)	4	4	1.0	0.7-1.4	Water additive which promotes strong teeth.
Nitrate [as Nitrogen] (mg/L)	10	10	1.07	0.1-1.07	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Lead & Copper	MCLG	AL	Level Found	# of sites above the AL	Typical Source in Drinking Water
Copper (mg/L)	1.3	1.3	0.07	0 out of 51 sites	Corrosion of household plumbing systems.
Lead (µg/L) ***	0	15	ND	1 out of 51 sites	Corrosion of household plumbing systems.
Organic Contaminants	MCLG	MCL	Level Found	Range of Detections	Typical Source in Drinking Water
TTHMs [Total trihalomethanes] (µg/L)	N/A	80	36.1	9.7-61.5	By-product of drinking water chlorination.
HAA [Haloacetic Acids] (µg/L)	N/A	60	33.3	8.4-55.3	By-product of drinking water chlorination.
Total Organic Carbon *	N/A	TT	1.1	1.0-1.7	Naturally present in the environment.
Disinfectant	MRDLG	MRDL	Level Found	Range of Detections	Typical Source in Drinking Water
Total Chlorine (mg/L)	4	4	1.0	0.9-1.1	Water additive used to control microbes.
Microbiological Contaminants	MCLG	MCL	Level Found	Range of Detections	Typical Source in Drinking Water
Turbidity (NTU)**	N/A	TT=1	0.17	0.02-.17	Soil runoff.
		TT=95% of samples must be less than or=0.3 NTU	100%		
Total Coliform Bacteria (TC)	0	<5% are positive per month	0.75%	0%-0.75%	Naturally present in the environment.

UNREGULATED CONTAMINANTS

Contaminant	Level Found	Range of Detections
Chlorate (µg/L)	60.0	22.0-120.0
Chromium-6 (µg/L)	0.10	0.03-0.20
Molybdenum (µg/L)	1.3	1.0-1.5
Strontium (µg/L)	168.5	150-210
Testosterone (µg/L)	0.00016	ND-0.00016
Vanadium (µg/L)	0.4	ND-0.7

*Cryptosporidium has not been found in our source water samples during the most recent monitoring period.

DEFINITIONS

Maximum Residual Disinfectant Level (MRDL):

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.

Maximum Contaminant Level (MCL):

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.

Action Level (AL):

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

* The values reported under "Level Found" for Total Organic Carbon (TOC) is the lowest running annual average ratio between the percent of TOC actually removed to the percentage of TOC required to be removed. A value of 1 or greater under "Level Found" indicates compliance with TOC removal requirements. A value less than 1 indicates a violation of the TOC removal requirements. The value reported under the "Range" of TOC is the lowest monthly ratio to the highest monthly ratio.

** A measure of the cloudiness of the water that serves as a good indicator of the effectiveness of the water treatment process.

*** Samples collected June – September 2015. One lead sample was above the action level. Follow-up monitoring at this site had results below the detection limit on two separate occasions. The original sample result was likely due to sampling error.

CHART KEY

NTU: Nephelometric Turbidity Units

mg/L: Milligrams per liter, or parts per million

µg/L: Micrograms per liter, or parts per billion

N/A: Not applicable

ND: Not detected

AL: Action Level

MCL: Maximum Contaminant Level

MCLG: Maximum Contaminant Level Goal

TT: Treatment Technique

MRDL: Maximum Residual Disinfectant Level

MRDLG: Maximum Residual Disinfectant Level Goal

pCi/L: Picocuries per liter, a measure of radioactivity

"<": a symbol which means less than. A result of "<5" means that the lowest level that can be detected is 5 and the contaminant in that sample was not detected.

Maximum Residual Disinfectant Level Goal (MRDLG):

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

Maximum Contaminant Level Goal (MCLG):

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 required process intended to reduce the level of a contaminant(s) in drinking water.



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To ask questions about information contained in this report or to learn more about your drinking water, please contact Cleveland Water's Water Quality Line at 216-664-2639.

To learn more about our Speaker's Bureau Program, contact the Office of Special Events at 216-664-2444, x5853.