

The City of Lakewood Division of Water

The City of Lakewood owns and operates its water distribution system. This system consists of approximately 106 miles of water main pipelines. The Lakewood Division of Water is responsible for all system maintenance and improvements. To ensure our systems ability to supply the citizens of Lakewood with drinking water of the highest quality, the Division of Water has been involved in an ongoing system improvements program. Since 1960, approximately 68 miles of this aging pipe have been replaced. The remaining 38 miles of pipeline were installed between 1901 and 1959, making them between 58-117 years old. All system improvements are funded by water system user fees. We have a current "unconditional license to operate or maintain a Public Water System" issued by the Ohio EPA .

The City of Lakewood purchases its drinking water in treated form from the City of Cleveland Division of Water. It is introduced into our distribution system through 18 entry points located near the perimeters of our city. The City of Lakewood does not adjust pressure or perform any additional water treatment.

In 2017, the business and residents of Lakewood consumed nearly 1.6 billion gallons of water, an average of about 4.50 million gallons per day.

The source of your drinking water is Lake Erie, a surface water source and one of the five Great Lakes, which collectively store approximately 20% of the world's fresh water supply. 95% of the water entering Lake Erie comes from the upstream great lakes Superior, Michigan, and Huron. The remaining 5% comes from rain and snow in the Lake Erie drainage basin and includes the various streams and rivers that flow into the lake. Since no single treatment process can address all possible contaminants, our water is treated using a multiple barrier process. Implementing measures to protect Lake Erie can only help to improve our water quality. There are a number of ways that we can help to accomplish this:

- Do not deposit trash and debris into storm and sanitary sewers.
- Properly dispose of household wastes such as fertilizers, pesticides, paints, paint thinners, motor oil and anti-freeze.
- Support local watershed and environmental groups.

Additional information, including The City of Cleveland's Drinking Water Source Assessment Report can be found online at

<http://wwwapp.epa.ohio.gov/gis/swpa/OH1801212.pdf>.

For the purpose of source water assessments, all surface waters are considered to be susceptible to contamination. By their nature surface waters are accessible and can be easily contaminated by chemicals and pathogens from an upstream spill. Contaminants may rapidly arrive at the public drinking water intake with little warning or time to prepare. However, based on the information compiled for this assessment, the Cleveland Critical Assessment Zone (CAZ), must be classified as low susceptibility due to the distance and depth of the intakes from potential contaminant sources.

The sources of drinking water both tap and bottled 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, 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 OEPA Safe Drinking Water Hotline (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Persons with compromised immune systems

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 and Prevention (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 (800) 426-4791

Lead Information...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 City of Lakewood 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 1-2 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. The Safe Drinking Water hotline will provide information on lead testing methods and steps you can take to minimize exposure at (800) 426-4791 or at www.epa.gov/safewater/lead.

Questions concerning this report may be directed to Nicholas Del Vecchio, Division Manager, Lakewood Division of Water and Wastewater Collection at (216) 529-1867. Because Lakewood purchases its drinking water in treated form from the City of Cleveland, questions may also be directed to the City of Cleveland Division of Water Customer Service at (216) 664-3130, or Public Relations at (216) 664-2444. Residents may bring concerns regarding the City's drinking water distribution system to meetings of the Lakewood Public Works Committee. Contact the Lakewood City Council Information Line at (216) 529-6055 for scheduling.

CITY OF LAKEWOOD 2017 WATER QUALITY REPORT



Michael P. Summers, Mayor

Lakewood City Council:

Sam O'Leary, President, Ward 2

David Anderson, Vice-President, Ward 1

John Litten, Ward 3

Daniel O'Malley, Ward 4

Thomas Bullock, At-Large

Megan F George, At-Large

Tristan Rader, At-Large



CITY OF LAKEWOOD 2017 WATER QUALITY REPORT

Under the Safe Drinking Water Act, each community water system is required to provide its customers with an annual report regarding the quality of their drinking water. In compliance with this Federal regulation, the City of Lakewood Division of Water has produced the following report. Included in this report are details about the source of your drinking water, water quality test results (indicating how your drinking water compares to standards set by regulatory agencies), as well as general health information.

The City of Lakewood

Water Sampling

From June through August of 2015, the City of Lakewood Division of Water collected tap water samples from 30 Lakewood homes. Those samples were then sent to an EPA approved laboratory for analysis of their lead and copper content. All test results were well within State and Federal regulations for drinking water quality.

DEFINITIONS

The following definitions will be helpful in interpreting the water quality tables contained in this report:

- 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.
- 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.
- Treatment Technique:**
A required process intended to reduce the level of a contaminant in drinking water.
- Action Level:**
The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- 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 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.

KEY	AL	= Action Level
	MCL	= Maximum Contaminant Level
	MCLG	= Maximum Contaminant Level Goal
	NTU	= Nephelometric Turbidity Units
	mg/L	= Milligrams per liter (or parts per million)
	µg/L	= Micrograms per liter (or parts per billion)
	TT	= Treatment Technique
	MRDL	= Maximum Residual Disinfectant Level
	MRDLG	= Maximum Residual Disinfectant Level Goal
	N/A	= Not applicable
ND	= Not detected	

WATER QUALITY TABLE							
Contaminant	MCLG	MCL	Cleveland Water	Range of Detections	Violations	Year	Typical Source in Drinking Water
Microbiological Contaminants							
Turbidity (NTU)*	N/A	TT = 1	0.16	0.02 - 0.16	N/A	2017	Soil runoff
		TT=95% of samples must be less than or =0.3 NTU	100%	100%			
Total Coliform Bacteria	0	No more than 5% of samples per month	0.75%	0.05% - 0.75%	N/A	2015	Naturally present in the environment
Inorganic Contaminants							
Fluoride (mg/L)	4	4	1.0	0.8 - 1.3	N/A	2017	Water additive which promotes strong teeth
Nitrate [as Nitrogen] (mg/L)	10	10	.95	<0.01 – 0.95	N/A	2017	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium (mg/L)	2	2	0.02	0.015 - 0.02	N/A	2009	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Lead & Copper							
Contaminant	MCLG	AL	Lakewood Water	# of sites above AL	Violations	Year	Typical Source in Drinking Water
Copper (mg/L)	1.3	1.3	ND	0 out of 30 sites	No	2015	Corrosion of household plumbing systems
Lead (µg/L)	0	15	ND	0 out of 30 sites	No	2015	Corrosion of household plumbing systems
Organic Contaminants							
Organic Contaminants	MCLG	MCL	Lakewood Water	Range of Detections	Violations	Year	Typical Source in Drinking Water
TTHMs [Total Tri-Halo-Methanes] (µg/L)	N/A	80	18.2	ND - 18.2	No	2017	By-product of drinking water chlorination
HAA (Halo-acetic Acids) (µg/L)	N/A	60	6.32	ND - 6.32	No	2017	By-product of drinking water chlorination
IDSE TTHM	N/A	N/A	N/A	5.90 - 42.5	N/A	2008	By-product of drinking water chlorination
IDSE HAAS	N/A	N/A	N/A	0 - 31.2	N/A	2008	By-product of drinking water chlorination
Total Organic Carbon (mg/L)	N/A	TT	1.01	1.01 - 1.4	N/A	2010	Naturally present in the environment
Disinfectant							
Disinfectant	MRDL-G	MRDL	Cleveland Water	Range of Detections	Violations	Year	Typical Source in Drinking Water
Chlorine (mg/L)	4	4	1.0	0.9 - 1.1	No	2015	Water additive used to control microbes

* Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system .

UNREGULATED CONTAMINANTS (Monitoring Required)

Disinfection By-products	Cleveland Water	Range of Detections	Typical Source in Drinking Water
Chloroform (µg/L)	1.5	0.7-2.1	By-product of drinking water chlorination
Bromoform (µg/L)	5.6	4.7 - 6.14	By-product of drinking water chlorination
Bromodichloromethane (µg/L)	2.5	1.4 - 3.2	By-product of drinking water chlorination
Dibromochloromethane (µg/L)	1.6	1.3 - 2.1	By-product of drinking water chlorination

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

Contaminants	Level Found	Range of Detections
Chlorate (µg/L)	31.8	ND - 31.8
Chromium-6 (µg/L)	0.0780	0.0640 - 0.0780
Molybdenum (µg/L)	1.16	1.11 - 1.16
Strontium(µg/L)	0.66	ND - 0.66
Testosterone (µg/L)	0.000034	ND - 0.000034
Vanadium (µg/L)	ND	ND

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

Compliance With Drinking Water Regulations

The City of Lakewood Division of Water is in compliance with all maximum contaminant level requirements.

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, livestock, and wildlife.
- Inorganic contaminants, such as salts and metals, which can occur naturally or result from urban storm water runoff, industrial/domestic wastewater, oil/gas production, mining or farming.
- Pesticides and herbicides from agricultural/residential use, or from storm water runoff.
- Organic chemical contaminants, which are by-products of industrial processes, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, either naturally occurring or from oil and gas production and mining activities.