City of Bedford
2018 Water Quality Report

The City of Bedford is proud to present this 2018 Water Quality Report to you, our customer, on the quality of our drinking water. Included with this report is general health information, water quality test results, how to participate in decisions concerning your drinking water, and water system contacts.

The City of Bedford purchases its water from the City of Cleveland. Cleveland draws source water from four intakes located far offshore in Lake Erie's Central Basin. These intakes are spread out over 15 miles and are each 3 to 5 miles offshore where the water is cleaner and has been minimally impacted from tributary runoff and coastal activities. Lake Erie is considered to be a surface water source. Cleveland Water also has interconnections with other area water systems, but these are for emergency use only. These interconnections are designed for Cleveland Water to assist other water systems if needed. We received no emergency water in 2018.

The state of Ohio performed an assessment of our four source water intakes in the late 1990s. A Drinking Water Source Assessment Report was completed in 2003. For the purposes 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. Because Cleveland Water's intakes are located a considerable distance offshore, potential contamination from the Cuyahoga River and nearshore sources is minimized to a great degree. As a result, Ohio EPA considers Cleveland Water's source water (Lake Erie) to have a low susceptibility to contamination due to the location of our intakes.

Cleveland Water public water system treats the water to meet drinking water quality standards, but no single treatment technique can address all potential contaminants. To address this, Cleveland Water uses the multiple barrier approach for protecting and treating our source water. Protection of source water is one of the barriers we use. The potential for water quality impacts can be further decreased by implementing measure to protect Lake Erie. More detailed information is provide in the Cleveland Water Drinking Water Source Assessment Report which can be obtained by calling our Risk Management Section at 216-664-2444 x75838.

Bedford Division of Water

The City of Bedford purchases all of its water from Cleveland on a wholesale basis and resells it to all customers in its service area. The water purchased from Cleveland is measured by 16 master meters located at various boundary points in Bedford. There are approximately 5,000 water service accounts in the Bedford service area. Water is distributed to those accounts through about 50 miles of water mains that are maintained by the City of Bedford. Because Bedford has its own Water Department, it must adhere to all E.P.A. regulations, submit monthly reports to the E.P.A., and have the E.P.A inspect all operations on a regular basis.

**In 2018 The City of Bedford currently has an unconditioned license to operate our water system.

What to expect from Public Water Systems in the United States

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.

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 (1-800-426-4791).

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 must provide the same protection for public health.

Cleveland Water treats source water to remove contaminants. Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;

(B) 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;

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;

(D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems;

(E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 infection. 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 (1-800-426-4791).

About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The City of Bedford conducted sampling for bacteria, inorganic, radiological, synthetic organic, and volatile organic contaminants during 2018. Numerous samples were collected and analyzed for different and specific contaminants, most of which were not detected in the City of Bedford water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Definition of some terms used within 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 contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

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.

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

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

Turbidity: A measure of the cloudiness of water and an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. Cleveland Water's highest recorded treated water turbidity result for 2018 was 1.03 NTU and lowest monthly percentage of samples meeting the turbidity limits was 99.44%.
(i.e. total compliance at all four treatment plants).

Parts per Million (ppm) or milligrams per Liter (mg/L**)**: Units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

Parts per Billion (ppb) or micrograms per Liter (µg/L): Units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

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

The following abbreviations apply to all water quality reporting tables

AL = Action Level
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
NTU = Nephelometric Turbidity Units
mg/L = milligrans per liter; or parts per million
µg/L = micrograms per liter; or parts per billion
MRDL = Maximum Residual Disinfectant Level
MRDLG = Maximum Residual Disinfectant Level Goal
n/a = not applicable
ND = Not Detected
< = a symbol which means less than. A result of <5 means the lowest level that can be detected is 5 and the contaminant in that sample was not detected.
TT = Treatment Technique

Table of Detected Contaminants - City of Cleveland													
Contaminants (Units)	When We Checked	MCLG	MCL	Baldwin Water Plant		Crown Water Plant		Morgan Water Plant		Nottingham Water Plant		Violation	Typical Source of Contaminant
				Level Found	Range	Level Found	Range	Level Found	Range	Level Found	Range		
Turbidity (NTU)	2018	n/a n/a	TT * (<1 NTU) TT *(%)	0.1 100%	0.02-0.1	0.07 100%	0.04-0.07	0.17 100%	0.04-0.17	1.03 99.44%	0.02-1.03	No	Soil runoff
Total Organic Carbon	2018	n/a	TT **	1.18	1.13-1.71	1.18	1.07-1.43	1.21	1.13-1.53	1.27	1.14-1.52	No	Naturally present in the environment
Total Chlorine (mg/L)	2018	4 (MRDLG)	4 (MRDL)	1.13	1.03-1.18	1.06	1.00-1.11	1.14	1.07-1.17	1.13	1.07-1.17	No	Water additive used to control microbes
Fluoride (mg/L)	2018	4	4	1.08	0.82-1.28	0.99	0.82-1.03	1.07	0.66 - 1.24	1.01	0.8-1.14	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories.
Nitrate as Nitrogen (mg/L)	2018	10	10	0.99	0.11-0.99	0.54	0.12-0.54	0.54	0.11-0.54	0.57	0.11-0.57	No	Run off from fertilizer use; Leaching from septic tanks, sewage, erosion of natural deposits.

*Turbidity is a measure of the cloudiness of water and an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month and shall not exceed 1 NTU at any time for each of our water treatment plants. As reported above, Cleveland Water's highest recorded treated water turbidity result for 2018 was 1.03 NTU and the lowest monthly percentage of samples meeting the turbidity limits was 99.44%.

Disinfection Byproducts - City of Bedford							
Contaminants (Units)	When We Checked	MCLG	MCL	Level Found	Range	Violation	Typical Source of Contaminant
Total Trihalomethanes (TTHM) (µg/L)	2018	n/a	80	31.2	16.10-41.6	No	Byproduct of drinking water chlorination
Haloacetic Acids (HAA5) (µg/L)	2018	n/a	60	11.9	8.2-14.6	No	Byproduct of drinking water chlorination
Total Chlorine (mg/L)	2018	4 (MRDLG)	4 (MRDL)	1.07	0.76-1.28	No	Water additive used to control microbes

Lead and Copper - City of Bedford						
Contaminants (units)	Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical source of Contaminants
Lead (ppb)	15 ppb	0	3	No	2018	Corrosion of household plumbing systems; Erosion of natural deposits.
	0 out of 30 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.					
Copper (ppm)	1.3 ppm	0	0.1	No	2018	Corrosion of household plumbing systems;
	0 out of 30 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.					

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In 2018 the City of Bedford participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). All results were below the detection limit. For a copy of the results please call John Sokolowski at (440) 735-6588.

Lead Education 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. Cleveland Water 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 3 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 http://www.epa.gov/safewater/lead.

Keep Your Home's Water Healthy

Flush, Clean and Consume Cold are the actions all customers should implement to help ensure the highest quality of water is coming out of your tap, especially if there is the possibility of lead in your plumbing system. In some situations, a water system repair/replacement may temporarily increase lead leaves in water and/or cause discoloration. As a standard practice the USEPA recommends these actions (flush, clean, consume cold) which are important to take when water has been restored after a disruption of service

FLUSH

Flush your cold water lines before consuming water when water has not been used for 6 or more hours. The goal is to have cold, fresh water from the main in the street come out of your tap before drinking the water. To flush the plumbing, run water until you feel a temperature change then run water for an additional 30 seconds to 3 minutes. The time depends on the length of your service line. When in doubt, flush it out.

CLEAN

Clean your faucet aerator screens regularly. Small particles of solder and other material can accumulate in faucet aerators and in some circumstances can release lead into the water. Aerators should be cleaned at least twice a year, and more frequently after work on your plumbing system.

CONSUME COLD

Always use cold water for cooking, drinking and preparing baby formula. Hot water corrodes pipes faster and is more likely to contain lead. If you need hot water for food or drinks, get water from the cold water tap then heat the water.

How do I participate in decisions concerning my drinking water?

This City of Bedford holds regular council meetings at City Hall, where public participation and comments are encouraged. Dates and times are posted inside City Hall located at 165 Center Road. If you are interested in learning more about the quality of your water, contact John Sokolowski, Water Department Superintendent, at (440) 735-6588.

Please share this information with all the other 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.