

2020 DRINKING WATER CONSUMER CONFIDENCE REPORT

The City of Cuyahoga Falls has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report are general health information, water quality test results, how to participate in decisions concerning your drinking water, and water system contacts. In years prior, this report was called the Water Quality Report.

In 2020 the City of Cuyahoga Falls had an unconditioned license to operate our water system. Our goal is not just to meet the strict requirements of the EPA, but to provide treatment that surpasses these requirements in every category. To ensure that we reach this goal, Cuyahoga Falls tests the finished water frequently to ensure that all standards are met. The City of Cuyahoga Falls Water Utilities Department did not exceed any of the federally mandated maximum contaminant levels, nor did it need any variances of exemptions. Also met, were all of the requirements of our prescribed Treatment Techniques.

Source of Drinking Water

The City of Cuyahoga Falls uses well water as a source. The well field consists of 18 wells located in Water Works Park on the south bank of the Cuyahoga River. This area is part of a buried valley where permeable outwash gravels are crossed by major streams. The Cuyahoga River contributes flow to the aquifer and the well field is recharged by a series of man-made channels and lagoons.

The well field, which is the source of raw water to the water treatment plant, is surrounded by two theoretical protection zones. The "inner protection zone" is the area that provides groundwater to the City of Cuyahoga Falls' wells within one year of pumping. A chemical spill in this zone poses a greater threat to the drinking water, so this area warrants more stringent protection. The "outer protection zone" is the additional area that contributes water when the well is pumped for five years.

A Drinking Water Source Assessment, completed by the Ohio EPA for the City of Cuyahoga Falls' water system found that our source of drinking water has a high susceptibility to contamination for the following reasons:

- The sand and gravel aquifer has a depth to water ranging from 4 to 32 feet below ground surface.
- There is no low-permeability protective layer between the aquifer and the ground surface.
- Potential significant contaminant sources exist within the protection area.

A high susceptibility rating of the aquifer does not imply that the well field will become contaminated. It only means that the existing/known aquifer conditions are such that groundwater within the aquifer could become impacted if potential contaminant sources are not appropriately managed. A list of these potential contaminants is available in the drinking water source assessment report. If you would like more information about this assessment, contact our Water Treatment Plant manager, David Young at 330-971-8438.

Sources of Contamination to 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. 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 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 byproducts of industrial processes and petroleum production, and can also come from gas stations,
 urban stormwater runoff, 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, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protections 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 Federal Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

Special Precautions

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).

Treatment of Drinking Water

Raw water is pumped from the well field to the City of Cuyahoga Falls Water Plant. At the plant, a series of processes are used to reduce naturally occurring constituents found in the groundwater source. All of the water is discharged into iron removal filters, where chlorine is added to remove iron and manganese. Without treatment, iron and manganese may contribute to staining and mineral buildup in home water systems and can cause staining of clothing. Depending on the raw water hardness, approximately two-thirds of the iron filter effluent is softened using ion exchange softeners. This softened water effluent and the iron filter effluent that bypass the softening units are blended in the mixing tank to produce calcium carbonate (CaCo3) with a finished hardness of 160 to 180 ppm. In this mixing chamber, chlorine, fluoride, caustic soda and orthophosphate are added.

Chlorine is added to disinfect the water. Chlorine destroys or inactivates bacteria that may be introduced into the distribution system. Coliform bacteria are generally thought of as indicator bacteria. Its presence indicates that other potentially harmful bacteria may be present. Of the 640 samples analyzed in 2020, all showed 0% presence of coliform bacteria. The use of chlorine produces disinfection byproducts called trihalomethanes (TTHMs) and haloacetic acids (HAA5). The level of TTHMs and HAA5s produced in the Cuyahoga Falls water supply can be found in the Regulated Contaminants chart. Fluoride is added for protection from tooth decay. Caustic soda and orthophosphate are added for corrosion control and pH adjustment.

Monitoring the Quality of Drinking Water

The EPA requires regular sampling to ensure drinking water safety. The Ohio EPA requires monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old. The information provided below covers detected contaminants that are both regulated and unregulated by the EPA.

Detected Contaminant Sampling

The EPA establishes the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The table shows the concentrations of detected substances found in the City of Cuyahoga Falls drinking water in comparison to regulatory limits. Substances that were tested for, but not detected, are not included in this table.

REGULATED CONTAMINANTS

Contaminants (Units)	MCL	MCLG	Individual results over AL	90% of test levels were <	Violation	Sample Period	Typical Source of Contaminants	
Lead (ppb)	AL=15	0	58.8ppb◊	5	No		Corrosion of household plumbing	
	◊The resample of our AL exceedance for Lead came back as "undetectable"(<5ppb)							
	1 out of 30 samples were found to have lead levels in excess of the lead action level of 15 ppb							

Copper (ppm)	AL=1.3	1.3	0	0.547	No	2018	Corrosion of household plumbing
	0 out of 30 samples were found to have copper levels in excess of the copper action level						
Fluoride (ppm)	4	4	1.0	0.8 to 1.1	No	Daily	Water additive that promotes strong teeth
Disinfection Byproducts	MCL	MCLG	Level Found	Range of Detections	Violation	Sample Period	Typical Source of Contaminants
TTHM (ppb) [Total Trihalomethane]	80	NA	66	24 to 80	No	2020	By-product of drinking water chlorination
HAA5 (ppb) [Haloacetic Acids]	60	NA	22	14 to 29	No	2020	By-product of drinking water chlorination
Residual Disinfectants	MRDL	MRDLG	Level Found	Range of Detections	Violation	Sample Period	Typical Source of Contaminants
Total Chlorine (ppm)	4	4	1.1	0.9 to 1.2	No	Daily	Water additive to control microbes

Unregulated Contaminant Monitoring Rule (UCMR) Sampling

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 2020, the City of Cuyahoga Falls participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). For a copy of the results, call David Young at 330-971-8438.

UNREGULATED CONTAMINANTS

Contaminants (Units)	Sample Year	Avg. Level Found	Range of Detections
Bromide (ppb)	2020	50	50
Total Organic Carbon (ppb)	2020	1390	1390
Haloacetic Acids (HAA5) (ppb)	2020	15.5	14.4 to 19.9
Haloacetic Acids (HAA6Br) (ppb)	2020	18.7	18.0 to 20.1
Haloacetic Acids (HAA9) (ppb)	2020	31.0	29.1 to 35.7

Lead Educational 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 Cuyahoga Falls 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 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. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure are available from the Safe Drinking Water Hotline at 800-426-4791 or at http://www.epa.gov/safewater/lead.

Reporting Violations

In the 2019 Water Quality Report, the City of Cuyahoga Falls failed to accurately report the 90th percentile for copper, and TTHM and HAA5. Copper should have been reported as 0.547 ppm, and TTHM and HAA5 should have been identified as NA. Information about our participation in the Unregulated Contaminant Monitoring Rule (UCMR) sampling was omitted. This information has been updated and properly reported for 2020.

Public Participation and Contact Information

The City of Cuyahoga Falls is constantly working to improve our treatment facilities and drinking water. We hope you agree that our safe and plentiful water supply is one of the many good qualities about living in Cuyahoga Falls. We are committed to providing you with information about your water supply. Customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards. Public participation and comments are encouraged. To participate or for more information on your drinking water or this report, contact Russell Kring, Water Utilities Superintendent at 330-971-8130.

The protection of our drinking water source is the responsibility of all area residents. One way to help keep our drinking water source safe is to dispose of chemicals, household cleaners and pesticides in the proper manner. Information on proper disposal of such hazardous waste can be found by calling 330-374-0383 or at http://summitreworks.com.

Definitions

- <u>Maximum Contaminant Level Goal (MCLG)</u>: 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.
- <u>Maximum Contaminant level (MCL)</u>: 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.
- <u>Maximum Residual Disinfectant Level (MRDL)</u>: 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.
- <u>Maximum Residual Disinfectant Level Goal (MRDLG)</u>: 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.

- <u>Action Level (AL)</u>: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Parts per Million (ppm) or Milligrams per Liter (mg/L) are 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) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
- The <u>"<"</u> 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.