

The City Of Circleville

Department of Public Utilities

Drinking Water Consumer Confidence Report for 2021

Director of Public Service, James Stanley
Utilities Operations Manager, Brian Frost
Water Plant Superintendent, Michael Smith
Water Distribution Superintendent, Josh Anderson

March 14, 2022

Introduction

The City of Circleville has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. OEPA requires that all municipal water systems provide such information annually. Included within this report is general health information, water quality test results, instruction on how to participate in decisions concerning your drinking water, and water system contacts. The Circleville Water Plant annually produces water that is at or better than all State & Federal EPA quality standards for health & aesthetics. Further, we have initiated our annual flushing program. The results of which will significantly reduce instances of discolored water.

Source Water Information

The City of Circleville receives its drinking water from three (3) ground water wells located at the Water Treatment Plant (663 Island Rd Circleville, Ohio 43113). The Water Treatment Plant is an iron and manganese removal facility which was built in 1962, upgraded in 1983, expanded in 1990 and upgraded in 2012. The City of Circleville completed a water system backup connection with Earnhart Hill Water system in June 2015 for emergency use only.

During 2021, the City of Circleville did not use any water from this connection.

Ohio EPA completed a study of the City of Circleville's source water to identify potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the aquifer (water rich zone) that supplies water to the City of Circleville has a high susceptibility to contamination. This determination is based on the following:

- Due to a minimal thickness of clay protective layer above the aquifer.
- Shallow depth of the aquifer (less than 15 feet below ground surface).
- Presence of significant potential contaminant sources within the required protection area.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is relatively high. This likelihood can be minimized by implementing appropriate measures. More information about the source water assessment or what consumers can do to help protect the aquifer is available by calling Michael Smith at **(740)-477-8242**.

What are sources of contamination to drinking water?

The sources of drinking water both tap water and bottled water, includes 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: (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 by-products 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.

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 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 (1-800-426-4791).

Who needs to take 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).

About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The City of Circleville conducted sampling for **Disinfection Byproducts; Nitrate; Lead and Copper; Residual Disinfectants; and Bacteria** contaminants during **2021**. Samples were collected for many different contaminants most of which were not detected in the City of Circleville 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. Some of our data, though accurate, are more than one year old. Fifteen (15) routine bacteria samples were required to be taken monthly.

Table of detected Contaminants

Listed below is information on those contaminants that were found in the City of Circleville drinking water.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contaminants
Radiological							
ALPHA EMITTERS (pCi/L)	0	15	1.5	N/A	NO	2019	Erosion of natural deposits
Inorganic contaminants							
COPPER (ppm)	1.3	AL=1.3	0.960	0.10-2.5	NO	2021	Corrosion of household plumbing systems.
			90% were <				
1 out of 30 samples were found to have copper levels in excess of the copper action level of 1.3 ppm							
BARIUM (ppm)	2	2	0.135	N/A	NO	2019	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
FLUORIDE (ppm)	4	4	1.15	0.80-1.20	NO	2021	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Disinfection Byproducts							
TOTAL TRIHALOMETHANES TTHMs (ppb)	N/A	80	30.0	24.8-30.0	NO	2021	By-product of drinking water chlorination
HALOACETIC ACIDS (HAA5) (ppb)	N/A	60	11.7	<6.0-11.7	NO	2021	By-product of drinking water chlorination
Residual Disinfectants							
TOTAL CHLORINE (ppm)	MRDLG 4.0	MRDL 4.0	1.25	1.01-1.42	NO	2021	Water additive used to control microbes.

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 Circleville 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. 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>.

License to Operate (LTO) Information:

In **2021** the City of Circleville had an, unconditional license to operate our water system.

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of Circleville Service Committee which meets the fourth Tuesday of the month and Circleville City Council which meets the first and third Tuesday of the month. For more information on your drinking water contact Michael Smith **at (740)-477-8242**.

Definitions of some terms contained 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.
- **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.
- **Picocuries per Liter (pCi/L):** A common measure of radioactivity.
- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **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 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.
- **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.