Municipality of Carlisle 2019 Drinking Water Consumer Confidence Report (CCR)

The Municipality of Carlisle, Ohio has prepared the following 2019 water quality report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water.

We are pleased to report that our drinking water is safe and meets all federal and state requirements. In 2019, we had an unconditional license to operate our water system if you have any questions about this report or concerning your water utility, please contact Dan Casson Director of Service at 937-746-2675 or Chuck Howard, Water Plant Supt. at 937-743-2594. We want our valued customers to be informed about their water utility.

Our water source is well water from the Great Miami Valley Buried Aquifer. The City of Franklin also has back-up connections with the City of Springboro and Warren County. No water was transferred through the Springboro connection in 2019. This report does not contain information on the water quality received from Springboro, but a copy of their CCR report can be obtained by contacting Terry Morris at 937-603-1035.

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.

The State of Ohio conducted an assessment of our source water in 2003. The aquifer that supplies drinking water to the City of Franklin's wellfield has a high susceptibility to contamination. This determination was made due to the following reasons. One: The sand and gravel aquifer material is continuous to the surface and the soil is very sandy. Two: The tops of the well screens are at depths of between 45 and 80 feet, and the depth to the water is less than 20 feet. Three: The topography is relatively flat allowing rain to soak in rather than run off. Four: Water quality results indicate a pathway exists from the ground surface to the aquifer and there are significant contaminant sources exist within the protection area. Implementing appropriate protective measures can reduce the risk of future contamination. Signs are posted around drinking water sources for reporting spills and warnings for dumping of any kind. Additional actions due to contamination may be found in the City's Emergency Response Plan. This can be found on Franklin's website. See www.franklinohio.org. Additionally, for more information about the report, or to review the entire report, you can call Chuck Howard at 937-743-2594 or you can view the full report online at http://www.app.epa.ohio.gov/gis/swpa/OH8300412.pdf.

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 originate 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 that limits the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Drinking water, including bottled water, may be reasonably 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).

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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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 Municipality of Carlisle 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 is available from the Safe Drinking Water Hotline at 800-426-4791or at http://www.epa.gov/safewater/lead.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home will be higher than the levels at other homes in the community because of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at (1-800-426-4791).

The Municipality of Carlisle and The City of Franklin routinely monitors for contaminants in your drinking water in accordance to Federal and State laws. **We** sampled for bacteria, inorganic, volatile organic, nitrate, haloacetic acid and, trihalomethane contaminants. The tables below show the results of that monitoring, including the period of January 1 to December 31, 2019. The Ohio requires us to monitor some contaminants less than once per year because concentrations of the contaminants do not change frequently. Therefore, you may notice readings that are accurate even if they are more than a year old.

In the tables, you will find terms and abbreviations you might not be familiar with.. To help you better understand these terms we have provided the following definitions: *Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/1) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

MCL – Maximum Contaminate Level – The highest level of a contaminant that is allowed in a drinking water. MCLs are set as close to the MCLG's as feasible using the best available treatment technology.

MCLG - Maximum Contaminate Level Goal - The level of contaminant in drinking water below any known or expected risk to health. MCLG's allow for a margin of safety.

VOCs - Volatile Organic Chemicals. These are organic substances naturally occurring in the environment.

SOCs – Synthetic Organic Chemicals. These are substances including pesticides and other man made organic chemicals.

IDSE- Initial Distribution System Evaluation

PCi/l- Picocuries per liter

The symbol "<"- a symbol meaning 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.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

Franklin's TEST RESULTS									
Contaminant	Violation Y/N	Year sampled	Level Detected	Unit of Measure- ment	Range of Detections	MCLG	MCL	Likely Source of Contamination	
Inorganic Contaminant	S								
Barium	No	2019	.131	ppm	NA	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Fluoride	No	2019	1.03	ppm	.81 – 1.13	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.	
Nitrate (as Nitrogen)	No	2019	1.10	ppm	n/a	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	
Residual disinfectants	3								
Total Chlorine	No	2019	1.06	ppm	0.7 to 1.3	4	4	Water additive used to control microbes	
Contaminant	Sampling Point	Year Sampled	Average Detected	Unit of Measure- ment	Range of Detection	MCLG	MCL	Likely Source of Contamination	
Disinfection Byproduc	cts								
TTHM (Trihalomethanes)	Distribution	2019	33.15	ppb	19.7 – 46.6	NA	80	Byproducts of drinking water chlorination	
HAA5 (Total Haloacetic Acids)	Distribution	2019	6.35	ppb	4.4 – 8.3	NA	60	Byproducts of drinking water chlorination	

Franklin's TEST RESULTS										
Contaminant	Violat ion Y/N	Year sampled	90 th Percentile	Unit Measurement	# Samples Over AL	MCLG	Action Level (AL)	Likely Source of Contamination		
Lead and Copper										
Lead	No	2018	3.34	ppb	0	0	15	Corrosion of household plumbing systems; Erosion of natural deposits		
Copper	No	2018	.183	ppm	0	1.3	1.3	Erosion of natural deposits. Leaching from wood preservatives. Corrosion of household plumbing systems.		

(Franklin's Test Results)

Zero out of 30 samples were found to have lead levels in excess of the action level of 15 ppb. Zero out of 30 samples were found to have copper levels in excess of the action level of 1.3 ppm (Carlisle's Test Results)

Contaminant	Sampling Point	Year Sampled	Average Detected	Unit of Measure- ment	Range of Detection	MCLG	MCL	Likely Source of Contamination	
Disinfection Byproducts									
TTHM	Distribution	2019	31.75	ppb	30.6-32.9	N/A	80	Byproducts of drinking water	
(Trihalomethzxanes)								chlorination	
HAA5 (Total	Distribution	2019	12.75	ppb	9.5-16.0	N/A	60	Byproducts of drinking water	
Haloacetic Acids)								chlorination	

	Carlisle' TEST RESULTS										
Contaminant	Violat ion Y/N	Year sampled	90 th Percentile	Unit Measurement	# Samples Over AL	MCLG	Action Level (AL)	Likely Source of Contamination			
Lead and Copper		(Sampling not Required This Year)									
Lead				ppb				Corrosion of household plumbing systems; Erosion of natural deposits			
Copper				ppm				Erosion of natural deposits. Leaching from wood preservatives. Corrosion of household plumbing systems.			

Copies of this CCR and additional information may be obtained by contacting Carlisle Utility Clerk or Carlisle Service Department. At 937-746-0555 or from the Village Website: "www.carlisleoh.org". Additionally, all customers may ask questions or express concerns about this CCR or other water quality issues at Village council meetings. Council meetings are held on the Second and Froth Tuesday of each month

Contact. Dan Casson Director of Services Municipality of Carlisle at 937-746-2675 or e-mail dcasson@carlisleoh.org Mailing Address 474 Fairview Dr. Carlisle OH. 45005 Contact person: Charles Howard e-mailto:choward@franklinohio.org Phone Number: (937)743-2594 Mailing Address: 2651 Sonny Lewis Lane, Franklin, Ohio 45005 Date Distributed: May, 2020