Municipality of Carlisle 2017 Drinking Water Consumer Confidence Report (CCR)

The Municipality of Carlisle, Ohio has prepared the following 2017 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 2017 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 Chuck Howard, Water Plant Supt. at 743-2594 or Dan Casson, Service Director at 937-746-2675. 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 2017. 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. 1: The sand and gravel aquifer material is continuous to the surface and the soil is very sandy. 2: 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. 3: The topography is relatively flat allowing rain to soak in rather than run off. 4: 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.

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 which limits 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 be reasonably expected to contain at least trace amounts of some constituents. 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 City of Franklin and 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 or 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 may be higher than the levels at other homes in the community as a result 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 City of Franklin and the Municipality of Carlisle routinely monitors for constituents in your drinking water in accordance to Federal and State laws. Franklin 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 1st to December 31st, 2017. The Ohio requires us to monitor some contaminants less than once per year because concentrations of the contaminants do not change frequently. So 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've 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/l) - 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.

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

Maximum Contaminant 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.

 \emph{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

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 constituents, 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 constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

The following table represents water from the Franklin Water Treatment Plant.

TEST RESULTS											
Contaminant	Violat ion Y/N	Year sampled	Level Detected	Unit of Measure- ment	Range of Detections	MCLG	MCL	Likely Source of Contamination			
Inorganic Contamina	ants				•		•				
Barium	No	2016	.182	ppm	NA	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits			
Fluoride	No	2017	1.00	ppm	.80 – 1.01	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories			
Nitrate (as Nitrogen)	No	2017	1.17	ppm	NA	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits			
Total Coliform Bacteria (TC)	No	2017	0	%	0	0	5	Naturally present in the environment.			
Residual disinfectant	ts										
Total Chlorine	No	2016	.98	ppm	0.8 to 1.20	4	4	Water additive used to control microbes			
Organic Contaminar	nts										
TTHMs [Total Trihalomethanes]	No	2017	30.87	ppb	26.16 – 30.87	0	80	Byproducts of drinking water chlorination			
HAA5's (Total Haloacetic Acids)	No	2017	10.98	ppb	8.97 – 10.98	0	60	Byproducts of drinking water chlorination			

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	2017	2.50	ppb	0	0	15	Corrosion of household plumbing systems; Erosion of natural deposits			
Copper	No	2017	.34	mg/l	0	0	1.3	Erosion of natural deposits. Leaching from wood preservatives. Corrosion of household plumbing systems.			

Zero out of 10 samples were found to have lead levels in excess of the action level of 15 ppb. Zero out of 10 samples were found to have copper levels in excess of the action level of 1.3 ppm.

Copies of this CCR and additional information may be obtained by contacting Municipality of Carlisle service director Dan Casson (937-746-2675) or City of Franklin Water

Plant. Copies may also be obtained from the Public Works Building at 202 Baxter Drive or from the City's website: "www.franklinohio.org". Contact person: Charles Howard e-mail: choward@franklinohio.org

Phone Number: (937)743-2594

Mailing Address: 2651 Sonny Lewis Lane, Franklin, Ohio 45005
City of Franklin's PWSID: OH8300412 Municipality of Carlisle PWSID# 8303803 Date Distributed: June 2018