## VILLAGE OF BUCKEYE LAKE, LICKING COUNTY, OHIO

## Drinking Water Consumer Confidence Report For 2019

The Buckeye Lake Water System has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

The Village of Buckeye Lake purchases water from the Millersport Water Treatment Facility which receives its drinking water from four water wells located at Deep Cut Road and Refugee Street in Millersport, Ohio. The water treatment plant process includes gravity iron and manganese filtration, ion exchange water softening and chlorination to protect against possible contamination from outside influence. The water treatment plant is capable of producing one million gallons per day and provides quality and environmentally compliant drinking water.

The Ohio EPA completed a study of Millersport's source of drinking water, to identify potential contaminant sources and provide guidance on protecting the drinking water source. The aquifer that supplies drinking water (source water) to the water treatment facility has a low susceptibility to contamination due to the depth to water in the aquifer of 74 feet below ground surface and the presence of approximately 70 feet of clay, sand and gravel above the aquifer providing significant protection from contamination movement between the ground and the aquifer.

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).

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).

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. Buckeye Lake Water system 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 our 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 800-426-4791 or at <a href="http://www.epa.gov/safewater/lead/">http://www.epa.gov/safewater/lead/</a>

The EPA requires regular sampling to ensure drinking water safety. The Buckeye Lake Water System conducted sampling for total coliform bacteria; chlorine; Orthophosphate; PH; total alkalinity; total trihalomethanes and total haloacetic acids during 2019. Millersport collected samples for a total of 16 different contaminants, most of which were not detected in the Millersport Water System drinking water. 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.

On July 26, 2019, the Village of Buckeye Lake received a Tier 2 Treatment Technique Violation for failure to maintain the proper orthophosphate dosage within the acceptable range at the plant tap. Village of Buckeye Lake failed to maintain orthophosphate within an acceptable range for more than 9 days in the January to June 2019 monitoring period. The Village of Buckeye Lake Water System took the following steps to correct this violation and prevent future violations from occurring: increased sample intervals to 7 days instead of 14 days and now require a 30 min run time before sample is pulled for testing.

The Buckeye Lake Water System has a current, unconditioned "license to operate our water system."

Public participation and comment are encouraged at regular meetings of the Village of Buckeye Lake Council which meets monthly on the 2<sup>nd</sup> and 4<sup>th</sup> Monday at Village Hall at 7:00 PM. For more information on your drinking water contact Toby Miller at (740) 928-7100

Listed below is information on those contaminants that were found in the Millersport Water System and Buckeye Lake Water System drinking water.

For information on Millersport Water System source water assessment you can contact John Wood at 740-467-2374 or view the Source water assessment at <a href="http://www.app.epa.ohio.gov/gis/swpa/OH2301212.pdf">http://www.app.epa.ohio.gov/gis/swpa/OH2301212.pdf</a>.

## **TABLE OF DETECTED CONTAMINANTS**

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Inorganic Contaminants (Millersport Source Water)							
Fluoride	4 mg/l	4 mg/l	.96 mg/l	.96 mg/l	NO	2017	Erosion of natural deposit; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Barium	2 mg/l	2 mg/l	.286 mg/l	.286 mg/l	NO	2017	Erosion of natural deposits; Discharge from drilling wastes; Discharge from metal refineries
Disinfection By-Products (Buckeye Lake System)							
(TTHM's) Total Trihalomethanes	N/A	80 ug/l	67.4 ug/l	39.2-67.4 Ug/l	NO	2019	By-product of water chlorination
(HAA) Haloacetic Acids	N/A	60 ug/l	25.5 ug/l	8.5-25.5 Ug/l	NO	2019	By-product of water chlorination
Residual Disinfectants (Buckeye Lake System)							
	MRDL	MRDLG					
Chlorine	4 mg/l	4 mg/l	1.48/I	.31 – 1.48 Mg/l	NO	2019	Water additive used to control microbes
Lead and Copper (Buckeye Lake System)							
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	Zero 0		Zero 0	NO	2019	Corrosion of household plumbing systems
	O_ out of _1O samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ug/l)	1.3 ppm	Zero 0		0.816 ppm	NO	2019	Corrosion of household plumbing systems
	0_ out o	O_ out of10 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.					

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 ( $\mu$ g/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

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.

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

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

Picocuries per liter (pCi/L): A common measure of radioactivity.

Sampling results and any additional information may be obtained by contacting the Buckeye Lake Water Department at:

Contact Person: Toby Miller

Phone Number: (740)928-7100

Mailing Address: PO Box 2480 Buckeye Lake, Oh 43008