

VILLAGE OF BUCKEYE LAKE, LICKING COUNTY, OHIO
Drinking Water Consumer Confidence Report
For 2016

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).

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 2016. 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.

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

TABLE OF DETECTED CONTAMINANTS

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contaminants
Lead and Copper (BUCKEYE LAKE SYSTEM)							
Copper	1300	1300	491 ppb	<50 - 491 ppb	N	2016	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	0	0.015	0	0	N	2016	Corrosion of household plumbing systems; Erosion of natural deposits.
Disinfectants and Disinfection By-Products (BUCKEYE LAKE SYSTEM)							
Chlorine	4.0	4.0	2.20+ ppm	.22 –2.20+ ppm	N	2016	Water additive used to control microbes.
Haloacetic Acids (HAA5)	No goal for the total	60	29.8 ppb	13.1 – 29.8 ppb	N	2016	By-Product of drinking water chlorination.
Total Trihalomethanes (TTHM)	No goal for the total	80	91.8 ppb	30.4 – 91.8 ppb	N	2016	By-Product of drinking water chlorination.
Inorganic Contaminants (MILLERSPORT SOURCE WATER)							

Barium	2	2	0.171 mg/l	.171 -.171mg/l	No	2011	Discharge of drilling wastes; Erosion of natural deposits.
Fluoride	4	4	0.46 mg/l	.46 -.46 mg/l	No	2011	Erosion of natural deposits; Water additive which promotes strong teeth.
Nitrate	10	10	0.10 mg/l	.10 -.10 mg/l	No	2016	Runoff from fertilizer use; Erosion of natural deposits.
Arsenic	0	10	<3 ug/l	<3 ug/l	No	2016	Erosion of natural deposits
Radioactive Contaminants (MILLERSPORT SOURCE WATER)							
Gross Alpha			<3 pCi/l	<3 pCi/l	No	2014	Erosion of natural deposits
Radium-229			<1pCi/l	<1 pCi/l	No	2014	Erosion of natural deposits

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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 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 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 800-426-4791 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 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 (1-800-426-4791).

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 2nd and 4th Monday at Village Hall at 7:00 PM. For more information on your drinking water contact Toby Miller at (740) 928-7100.

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 ($\mu\text{g/L}$) 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.