



VILLAGE OF WILLIAMSBURG 2018 Drinking Water Consumer Confidence Report

The Village of Williamsburg 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. We are proud to report to you that our drinking water is safe and meets all federal and state requirements.

The Village receives its drinking water from Clermont County, Harsha Lake. The Clermont County Bob McEwen Water Treatment Plant (BMW) is located near Batavia and draws surface water from Harsha Lake, which was created by constructing a dam across the East Fork of the Little Miami River. Surface water is more susceptible to contamination than ground water, so extensive testing of raw water is conducted frequently. Chemical and bacteriological testing, as well as evaluation of the biological organisms living upstream of the lake is used to determine raw water quality and identify areas of concern. The Ohio EPA completed a source water assessment for BMW in 2004. Clermont County Public Water System's Drinking Water Source Assessment Report can be found online at <http://wwwapp.epa.ohio.gov/gis/swpa/OH1302212.pdf>. The protection area around Harsha Lake and the upstream portions of the East Fork Little Miami River includes a number of commercial and industrial facilities, but the great concern is runoff from agricultural fields, the potential for spills at road and rail crossings, and residential septic systems in the watershed. Persons who wish to learn more may contact Tim Neyer at (513) 732-7945. Additional information on the watershed collected by Clermont County is available from the Office of Environmental Quality (OEQ) at (513) 732-7894 or the website: <http://www.oeq.net>. After treatment, which included Granular Activated Carbon filtration, water from the lake meets all required drinking water standards.

For the purposes of source water assessments, all surface waters are considered to be susceptible to contamination. By their nature surface waters are open and accessible and can be readily contaminated by chemicals and pathogens, with relatively short travel times from source to the intake. Based on the information compiled for this assessment, the Bob McEwen Water Treatment Plant drinking water source protection area is susceptible to contamination from agricultural, residential and commercial sources, and from accidental releases and spills.

The Village of Williamsburg has an emergency connection with Brown County Rural Water Association. We do use the Brown County Rural Water Association connection as needed. We have a current unconditioned license to operate our water system. This report contains information on the water quality received from Brown County Rural Water Association, but a copy of their Consumer Confidence Report can be obtained by contacting at 937-375-4106.

Ohio EPA recently completed a study of Brown County Rural Water Association's source of drinking water to determine its susceptibility. According to this study, the aquifer (water saturated zone) that supplies drinking water to the Brown County Rural Water has a high susceptibility to contamination. This determination is based on the following: the nature of the aquifer in which the drinking water wells are located, presence of a relatively thin protective layer of clay overlying the aquifer, the shallow depth (less than 40 feet below ground surface) of the aquifer, and the presence of significant potential contaminant sources in the protection area, including periodic serious flooding of the Ohio River. This susceptibility rating means that under currently existing conditions, the potential of the aquifer to become contaminated is relatively high. This potential can be minimized by implementing appropriate

protective measures. More detailed information about the source water assessment or what consumers can do to help protect the aquifer is available by calling BCRWA at (937) 375-4106 ext. 236.

What are sources of contamination to drinking water?

The sources of drinking water (both tap water and bottled water) include 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 Federal 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. Samples were collected for several different contaminants most of which were not detected in the Village of Williamsburg 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,

may be more than one year old.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection's	Violation	Sample Year	Typical Source of Contaminants
HAA5 (ppb)	0	60	21.4	<6.0-57.3	N	2018	By-product of drinking water chlorination
THM (ppb)	0	80	50.9	22.2-106	N	2018	By-product of drinking water chlorination
Lead & Copper							
Lead (ppb)	0	AL=15	<2.0	<2.0-<2.0	N	2017	Corrosion of household plumbing systems, Erosion of natural deposits
Copper (ppb)	1.3	AL=1.3	<0.54	<0.01-0.59	N	2017	

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 Village of Williamsburg 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>.

License to Operate (LTO) Status Information

In **2018** we had an unconditioned license to operate our water system.

Public participation and comment are encouraged at regular meetings of **Village of Williamsburg Council**, which meets the second Thursday of every month at 5:30 p.m.at the Community Building, 107 West Main Street, Williamsburg, Ohio 45176. For more information on your drinking water contact Kyle Cribbet at (513) 724-6107.

Listed below is information on those contaminants that were found in the **Clermont County drinking water**.

TABLE OF DETECTED CONTAMINANTS

Regulated Substances							
Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation	Typical Source
Barium (ppm)	2018	2	2	0.036	0.027-0.036	No	Discharge of drilling wastes; Discharge of metal refineries; erosion of natural deposits

Chlorine (ppm)	2018	[4]	[4]	1.1	0.2-2.7	No	Water additive used to control microbes
Fluoride (ppm)	2018	4	4	1.00	0.56-1.57	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	2018	10	10	0.92	0.42-1.52	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Halocetic Acid(HAA) - Stage 1 DDBP (ppb)	2018	60	NA	48.0	25.6-71.9	No	By-product of drinking water disinfection
TTHMs [Total Trihalomethanes] - Stage 1 (ppb)	2018	80	NA	81.0	10.3-104.0	Yes	By-product of drinking water disinfection
Turbidity ** (NTU)	2018	TT	NA	0.264	0.021-0.264	No	Soil runoff
Turbidity(Lowest monthly percent of samples meeting limit)	2018	TT	NA	100.00	NA	No	Soil Runoff
Substance (Unit of Measure)	Year Sampled	AL	MCLG	Amount Detected (90th %tile)	Sites above AL/Total Sites	Violation	Typical Source
Copper (ppm)	2017	1.3	1.3	0.39	0/52	No	Corrosion of household plumbing systems, erosion of natural deposits
Lead (ppb)	2017	15	0	<5.0	0/52	No	Corrosion of household plumbing systems, erosion of natural deposits
Substance (Unit of Measure)	Year Sampled	SMCL	MCLG	Amount Detected	Range Low-High	Violation	Typical Source
Zinc (ppm)	2018	5	NA	0.010	0.010-0.010	No	Runoff/leaching from natural deposits; industrial wastes

Turbidity Footnote for Clermont County

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month, and shall not exceed 1 NTU at any time. As reported above the highest recorded turbidity result was 0.264 NTU and lowest monthly percentage of samples meeting the turbidity limit was 100%.

Listed below is information on those contaminants that were found in the **Brown County Rural Water** drinking water.

TABLE OF DETECTED CONTAMINANTS

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Residual Disinfectants							
Total Chlorine (ppm)	MRDLG = 4	MRDL = 4	0.92	0.85 - 0.99	No	2018	Water additive used to control microbes.
Inorganic Contaminants							
Nitrate (ppm)	10	10	0.31	0.31	No	2018	Runoff from fertilizers, erosion of natural deposits.

Fluoride (ppm)	4	4	0.91	0.86 - 0.95	No	2018	Water additive required by the State of Ohio E.P.A.	
Disinfection Byproducts								
Total Trihalomethanes (ppb)	0	80	35.7	28.1 – 35.7	No	2018	By-product of drinking water chlorination.	
Haloacetic Acids (ppb)	na	60	<6.0	Nd	No	2018	By-product of drinking water chlorination.	
Unregulated								
Chloroform (ppb)	Na	Na	2.6	1.8-2.6	No	2018	EPA regulations required us to monitor these contaminants while EPA considers setting limits on them. The contaminants are by-products of drinking water chlorination.	
Lead and Copper								
Lead and Copper	MCLG	AL	90 th percentile	# of sites found above the AL	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Lead (ppb)	0	15	<5.0	1-30	Nd – 50.6	No	2017	Corrosion of household plumbing systems.
Copper (ppm)	1.3	1.3	<0.05	0-30	Nd – 0.266	No	2017	Corrosion of household plumbing systems.

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.

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.

Nephelometric Turbidity Unit (NTU): - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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 level 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.

Treatment Technique (TT): A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.