

Sardinia Water Supply

Consumer Confidence Report for
2019

What is a Consumer Confidence report?

In 1996, Congress amended the Safe Drinking Water Act. It added a provision requiring that all community water systems deliver to their customers a brief annual water quality report. Consumer Confidence Reports (CCR's) summarize information that the water system already collects to comply with regulations. Every community water system that has at least 15 service connections serving year round residents must prepare and distribute a report. These systems typically include cities, towns, homeowners associations, and trailer parks. Each water system must deliver its annual report to consumers by July 1 of the following year. Since the Village of Sardinia purchases its water from the Brown County Rural Water Association, some of the data in this report is supplied from them. This report is based on data collected in the 2019 calendar-year

unless noted otherwise. Not all contaminants are required to be analyzed each year. The table lists those contaminants detected most recently within the past five years.



THE SOURCE OF YOUR WATER:

BROWN COUNTY RURAL WATER ASSOCIATION PUMPS WATER FROM AN AQUIFER LOCATED NEAR THE OHIO RIVER, WEST OF RIPLEY, TO THE TREATMENT PLANT. THE GROUND WATER IS THEN TREATED FOR IRON AND MANGANESE IN ADDITION TO SOFTENING AND STABILIZATION. 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 WATER TO THE TREATMENT PLANT HAS A HIGH SUSCEPTIBILITY TO CONTAMINATION. THIS IS DUE TO THE NATURE OF THE AQUIFER IN WHICH THE DRINKING WATER WELLS ARE LOCATED, THE PRESENCE OF A RELATIVELY THIN PROTECTIVE LAYER OF CLAY OVERLYING THE AQUIFER, THE SHALLOW DEPTH (LESS THAN FORTY 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 IS AVAILABLE IN BCRWA'S WELLHEAD PROTECTION REPORT AND SUSCEPTIBILITY ANALYSIS REPORT, WHICH CAN BE OBTAINED FOR REVIEW BY CALLING BROWN COUNTY RURAL WATER AT 937-375-4106 EXT. 224.

About your water system:

Although the Village of Sardinia purchases bulk water from the Brown County Rural Water Association, it maintains its own public water supply identification with the Ohio Environmental Protection Agency and has a current, unconditioned license to operate its water system. Sardinia is required to maintain its own water system, including water mains and valves, water meters and fire hydrants, and most importantly, the water quality delivered to its customers. Water purchased from the Brown County Rural Water Association is safe potable water when delivered to the Village of Sardinia. It is Sardinia's responsibility to keep it that way. Flushing of water lines is just one of the many ways which Sardinia maintains its water quality. The Village of Sardinia relies heavily on the Brown County Rural Water Association for adequate contaminant removal and testing. There are however some Ohio EPA testing requirements that Sardinia must perform. For example, we must collect and analyze our water every day for chlorine. Chlorine ensures that the water will be free of microbial contaminants before reaching the consumer. In the case of a water main break, chlorine present in the water will help ensure the destruction of microbial contamination that may

enter the broken main. Sardinia is also responsible for having its water tested for Total coliform and E-Coli bacteria each month. Total coliform bacteria is not necessarily harmful in itself but is used as an indication that contamination may exist. E-Coli, on the other hand, indicates a definite contamination problem. In addition, the Village of Sardinia must have its water tested at least every three years for lead and copper. 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 Sardinia water supply 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>.

Table of Detected Contaminants

Contaminant and Year	Violation Y/N	Level Found	Units	MCLG	MCL	Range	Possible Source of Contamination
Inorganic Contaminants - Brown Co Rural Water Sampling Results							
Fluoride 2019	No	0.897	ppm	4	4	0.75 - 1.1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate 2019	No	1.78	ppm	10	10	n/a	Runoff from fertilizer use; Leaching from septic tanks; Erosion of natural deposits.
Disinfection Byproducts - Sardinia Water Sampling Results							
TTHM's Total 2019	No	38.1	ppb	n/a	80	33.5 - 38.1	Byproduct of drinking water chlorination.
HAA5's Total 2019	No	6.9	ppb	n/a	60	< 6.0 - 6.9	Byproduct of drinking water chlorination.
Unregulated Contaminants - Sardinia Water Sampling Results							
Bromodi-chloromethane 2019	No	9.0	ppb	n/a	n/a	8.1 - 9.8	Byproduct of drinking water chlorination.
Bromoform 2019	No	9.2	ppb	n/a	n/a	9.0 - 9.3	Byproduct of drinking water chlorination.
Chloroform 2019	No	3.6	ppb	n/a	n/a	2.9 - 4.3	Byproduct of drinking water chlorination.
Dibromo-chloromethane 2019	No	14.2	ppb	n/a	n/a	13.5 - 14.8	Byproduct of drinking water chlorination.
Residual Disinfectants - Sardinia Water Sampling Results							
Total Chlorine 2019	No	0.98	ppm	4 MRDLG	4 MRDL	0.71 - 1.19	Water additive used to control microbes.
Lead and Copper - Sardinia Water Sampling Results							
Contaminant and Year	Violation Y/N	Action Level	Individual Results Over the Action Level	90 % of Test Levels Were Less Than	Possible Source of Contamination		
Lead 2018	No	15 ppb	0 of 10 samples were found to have lead greater than AL	0 ppb	Corrosion of household plumbing systems.		
Copper 2018	No	1.3 ppm	0 of 10 samples were found to have copper greater than AL	0 ppm	Corrosion of household plumbing systems.		

- **Maximum Contaminant Level Goal (MCLG):** The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- D** • **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.
- e** • **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of residual disinfectant below which there is no known or expected risk to health.
- f** • **Maximum Residual Disinfectant Level (MRDL):** The highest residual disinfectant level allowed.
- i** • **Parts per Million (ppm):** Units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
- n** • **Parts per Billion (ppb):** Units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
- i** • **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. **The “>” Symbol:** A symbol which means greater than.
- o** • **The “n/a” Abbreviation:** An abbreviation which means not applicable.
- n** • **BDL:** Below Detectable Limit.
- s** • **Action Level (A.L.):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Questions & Answers

- ***Why are there contaminants in my water?***

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. Food and Drug Administration 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 at 800-426-4791.

- ***Is our water system meeting other rules that govern our operation?***

The Ohio EPA requires us to test our water on a regular basis to ensure its safety. The Sardinia Water Supply had no violations of these requirements in 2019.

- ***Do I need 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 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 microbial contaminants are available from the Safe Drinking Water Hotline at 800-426-4791.

- ***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.

**Village of Sardinia
P.O. Box 27
Sardinia, OH 45171
937-446-3807**

Meetings:

**2nd Monday of each month at
7:00 p.m. in village office located at 151 Maple Ave.**

Public participation and comment are encouraged. To participate or for more information on your drinking water contact Ty Pack, Village Administrator at 937-446-3807.