

Shorewood Village Water System Drinking Water Consumer Confidence Report For the Year 2021

The Shorewood Village Water System has prepared the following report to provide information to you, the consumer, on the quality of your drinking water. Included, within this report, is general health information, water quality test results, the processing of the water and its distribution to each resident, water system contacts, and how to participate in decisions concerning your drinking water. Your drinking water met all Ohio EPA Standards and the County has a current, unconditioned license to operate the water system.

SOURCE WATER INFORMATION

The Shorewood Village Water System receives its drinking water from ground water sources, these sources being two wells located at the Shorewood Village Water Treatment Plant southwest of the Shorewood Village Subdivision. The aquifer that supplies drinking water to the Shorewood Village Subdivision has a moderate susceptibility to contamination, due to the moderate sensitivity of the aquifer in which the drinking water well is located and the existence of potential contaminant sources within the protection zone. This does not mean that this well field will become contaminated; only that conditions are such that the ground water could be impacted by potential contaminant sources. In July of 2002, the Ohio EPA conducted a Drinking Water Source Assessment on the water system and it can be obtained at <http://www.wapp.epa.ohio.gov/gis/swpa/OH7201012.pdf> or by contacting the Sandusky County Sanitary Engineer's Office at (419) 332-9967. Future contamination may be avoided by implementing protective measures within the assessment. A chlorine solution is added for disinfection and a phosphate solution is added to sequester the iron, avoiding rust stains. This system's water is considered very hard (34 grains), and hardness can be eliminated with a home softening unit. Line flushing is typically performed annually, in September.

What are Sources of Contamination to Drinking Water?

The sources of drinking water, both tap and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As the water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material. The water can also 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, the United States Environmental Protection Agency (USEPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (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).

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 for infection. These people should seek advice about drinking water from their health care providers. The EPA/CDC guidelines on appropriate means to reduce the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

DRINKING WATER INFORMATION

The EPA requires regular sampling to ensure drinking water safety. Shorewood Village Water System conducted sampling for Bacteria, Disinfection Byproducts, Nitrate, and Synthetic Organic Chemicals during 2021. Some contaminants, required by the Ohio EPA, are not monitored annually because the concentrations of these contaminants do not change frequently. Some of our data regarding the other above-mentioned testing, though accurate, are more than one year old. Some contaminants whose test results are found to be below the minimum established detection level are not listed in this report.

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 plumbing. Shorewood Village Water System is responsible for providing high quality drinking water, but cannot control the variety of materials used in your 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 and 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 at <http://www.epa.gov/safewater/lead> or the Safe Drinking Water Hotline (1-800-426-4791).

TEST RESULTS

Below is information on contaminants that were found in the Shorewood Water System between 2017 and 2021.

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detection	Violation	Sample Year	Typical Source of Contaminants
Inorganic Contaminants							
Fluoride (ppm)	4	4	1.51	n/a	No	2019	Discharge from fertilizer and aluminum factories, and erosion of natural deposits (promotes strong teeth)
Nitrate (ppm)	10	10	0.31	n/a	No	2021	Run off from fertilizer use, leaching from septic tanks, sewage, and erosion of natural deposits
Radioactive Contaminants							
Alpha Emitters (pCi/l)	0	15	8.1	n/a	No	2019	Erosion of natural deposits
Combined Radium (pCi/l)	0	5	3.2	n/a	No	2019	Erosion of natural deposits
Disinfectant and Disinfectant By-Products							
Total Chlorine (ppm)	MRDLG = 4	MRDL = 4	0.70	0.36 to 0.99	No	2021	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	n/a	60	5.9	n/a	No	2021	By-product of drinking water disinfection
Total Trihalomethanes TTHMs (ppb)	n/a	80	31.0	n/a	No	2021	By-product of drinking water disinfection

Lead & Copper							
Contaminants (Units)	Action Level (AL)	MCLG	Individual Results over the AL	90% of test levels were less than	Violation	Sample Year	Typical Source of Contaminants
Lead (ppb)	15 ppb	0 ppb	None	0	No	2020	Corrosion of household plumbing and erosion of natural deposits
	Zero out of five was found to have Lead levels in excess of the Action Level of 15 ppb						
Copper (ppm)	1.3 ppm	1.3 ppm	None	0.109	No	2020	Corrosion of household plumbing, leaching from wood preservatives, and erosion of natural deposits
	Zero out of five was found to have Copper levels in excess of the Action Level of 1.3 ppm						

Monitoring and Reporting Violations

There were no monitoring or reporting violations for the year 2021.

Public Participation and comment are encouraged at the regular meetings of the County Commissioners which meets typically Tuesday and Thursday of each week. For more information or any concerns regarding this report, please contact the Sandusky County Sanitary Engineer's Office at 2100 Countryside Place, Fremont, Ohio 43420 or call (419) 332-9967.

DEFINITIONS

Terms, abbreviations, and units of measurements used or possibly used in the table:

- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Contact Time (CT):** The mathematical product of a "residual disinfectant concentration", which is determined before or at the first customer, and the corresponding "disinfectant contact time".
- **Cyanobacteria:** Photosynthesizing bacteria, also called blue-green algae, which naturally occur in marine and freshwater ecosystems, and may produce cyanotoxins, which at sufficiently high concentrations can pose a risk to public health.
- **Cyanotoxin:** Toxin produced by cyanobacteria. These toxins include liver toxins, nerve toxins, and skin toxins. Also sometimes referred to as "algal toxin".
- **Level 1 Assessment:** A study of the water system to identify the potential problems and determine (if possible) why total coliform bacteria have been found in a water system.
- **Level 2 Assessment:** A very detailed study of the water system to identify the potential problems and determine (if possible) why an E. coli MCL violation has occurred and /or why total coliform bacteria have been found in a water system on multiple occasions.
- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible, using the best available treatment technology.
- **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 Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of residual disinfectant below which there is no known or expected risk to health.
- **Microcystins:** Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.
- **n/a:** Not applicable.
- **Parts per Billion (ppb) or Micrograms per Liter ($\mu\text{g/L}$):** Units of measure for concentration of a contaminant. A part per billion corresponds to one second in approximately 31.7 years.
- **Parts per Million (ppm) or Milligrams per Liter (mg/L):** Units of measure for concentration of a contaminant. A part per million corresponds to one second in approximately 11.5 days.
- **Picocuries per Liter (pCi/L):** A common measure of radioactivity.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.