

Village of Bremen

Drinking Water Consumer Confidence Report For 2021

Section 1: Introduction

The Village of Bremen 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.

Section 2: Source Water Information

The Village of Bremen receives its drinking water from two well fields consisting of four wells, located at the village park and at the Water Treatment Plant.

The Water Treatment Plant has aeration, filtration, softening, chlorination, and phosphate for corrosion control.

The Ohio EPA completed a study of the water system's source of drinking water to identify potential contaminant sources and provided guidance on protecting the drinking water source. According to this study, the aquifer (water-rich zone) that supplies water to the Village of Bremen has a high susceptibility to contamination. This determination is based on the following.

- There is no significant confining layer between the ground surface and the water table.
- The depth to water is less than 25 feet below the ground surface.

Copies of the source water assessment report prepared for The Village of Bremen are available by contacting The Village Administration Office at 740-569-4788.

Section 3: 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 amounts 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).

Section 4: 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).

Section 5: About your drinking water.

The EPA requires regular sampling to ensure drinking water safety. The Village of Bremen conducted sampling for bacteria; inorganic; radiological; synthetic organic; volatile organic during 2021. Samples were collected for a total of over 100 different contaminants most of which were not detected in the Village of Bremen 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, are more than one year old.

Section 6: Table of Detected Contaminants

Listed below is information on those contaminants that were found in the Village of Bremen drinking water.

TABLE OF DETECTED CONTAMINANTS

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Bacteriological							
Total Coliform	0	0	0	N/A	NO	2021	Present Naturally in the environment
Radioactive Contaminants							
Gross Alpha (pCi/L)	0	15.0	2.65	N/A	NO	2017	Erosion of natural deposits
Radium-228 (pCi/L) combined 226 & 228	0	5	0.74	N/A	NO	2017	Erosion of natural deposits
Inorganic Contaminants							
Barium (ppm)	0	2.0	0.045	N/A	NO	2017	Discharge of drilling wastes, erosion of natural deposits.
Arsenic (ugl)	0	10	3.0	<3.0-3.0	NO	2021	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Volatile Organic Contaminants							
Total Trihalomethanes (TTHMs) (ppb)	NA	80	43.4	2.3-17.0	NO	2021	By-product of drinking water chlorination.
Haloacetic Acids (HAA5) (ppb)	NA	60	3.5	<1.00-3.5	NO	2021	By-product of drinking water chlorination.
Residual Disinfectants							
Total Chlorine (PPM)	MRDL=4	MRDL=4	0.98	0.0- 2.28	NO	2021	Water additive used to control microbes.
Lead and Copper							
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	0	<5	NO	2021	Corrosion of household plumbing systems. Erosion of natural deposits.	
	0 out of 10 samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ppm)	1.3 ppm	0	1.132	NO	2021	Corrosion of household plumbing systems. Erosion of natural deposits.	
	0 out of 10 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.						

Section 7: 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 Bremen 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>.

Section 8: Revised Total Coliform Rule (RTCR) Information

All water systems were required to begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the PWS.

Section 9: License to Operate (LTO) Status Information

In 2021 The Village of Bremen had an unconditioned license to operate our water system.

Section 10: How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of Village of Bremen Council which meets the **2nd Monday of each month**. For more information on your drinking water contact The Village Administration Office 740-569-4788.

Section 11: 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.
- **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.

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

