

# **VILLAGE OF BETHESDA DRINKING WATER CONSUMER CONFIDENCE REPORT (CCR) FOR 2021**

The Bethesda Water Dept. has prepared the following report to provide information to you, the consumer, on the quality of drinking water as part of the Safe Drinking Water Act Reauthorization of 1996. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system.

The Village of Bethesda purchases its water from the Belmont County Sanitary Sewer District. The water supply originates from wells that are supplied from an aquifer along the Ohio River.

## **WHAT ARE SOURCES OF CONTAMINATION TO DRINKING WATER?**

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 materials, and can pick up substances from the presence of animals or human activity.

Contaminants that maybe present in source water; (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic system, agriculture operations, livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally occurring or results from urban storm water runoff, industrial or domestic wastewater discharge, oil and gas production, mining or farming; (C) Pesticides and herbicides uses; (D) Organic chemical contaminates, include synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas station, urban storm water runoff, and septic system; (E) Radioactive contaminant, 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, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations established 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 EPA's Safe 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 public. Those 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)

## **SOURCE WATER SUSCEPTIBILITY REPORT (BCWSD)**

An assessment that was conducted by the Ohio EPA places the well aquifer at a HIGH susceptibility rating due to the following; (A) Presence of a relatively permeable layer of silty clay overlying the aquifer; (B) Sallow depth (less than 20 feet below ground surface) of the aquifer; (C) The identification of VOC contaminated soils within the one year time of travel; (D) Presence of significant potential contaminant sources in the protection are; (E) The presence of manmade contaminants in treated water. For more information contact Belmont County Water & Sewer District at 740-695-3144.

## **ABOUT YOUR DRINKING WATER**

The EPA requires regular sampling to ensure drinking water safety. The Belmont County Water & Sewer District conducted sampling for bacteria, synthetic organic, and volatile organic contaminants during 2021. In 2021 the Bethesda Water Dept. conducted: (daily) sampling of chlorine levels, & residuals, (monthly) bacteria sampling and (yearly) sampling for levels of by-products from chlorination; Trihalomethane (TTHM), Haloacetic Acid (HAA5) samples taken on July 7 2021.

Chlorine ppm	MRDLG = 4	MRDL = 4	LEVEL FOUND 1.5	RANGE .9-1.5ppm	NO VIOLATIONS
TTHM ppb	MRDLG N/A	MCL 80ppb	LEVEL FOUND <2		NO VIOLATIONS
HAA5 ppb	MRDLG N/A	MCL 60ppb	LEVEL FOUND 16		NO VIOLATIONS
LEAD ppb	2021 test year	MCL 15ppb	90 <sup>th</sup> percentile	0.0 ppb	
COPPER ppb	2021 test year	MCL 1.3ppb	90 <sup>th</sup> percentile	<10 ppb	

Other regulated contaminants that the district tested with no violation being found are as follows; antimony, arsenic, beryllium nickel, thallium, lead, atrazine, and simazine. 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 Belmont County Water & Sewer and The Bethesda Water Department is responsible for providing high quality drinking water, but can't control the variety of materials used in plumbing components. When your water has been setting 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 <http://www.epa.gov/safewater/lead>.

## **DEFINITIONS FOR TERMS AND ABBREVIATIONS USED IN THIS REPORT ARE AS FOLLOWS:**

**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 Contaminant level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk of health. MCLGS allowed for a margin of safety.

**Maximum Residual Disinfection 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 disinfectant to control microbial contaminant.

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

**Not Detected (ND):** Not detected.

**Not Applicable (NA):** Not applicable.

**Parts per Billion (ppb):** Are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

**Part per Million (ppm):** Are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

In 2021 the Village of Bethesda had a current unconditional license to operate or maintain a public water system through 01/30/2022. Currently; PWS ID: OH0700511 License number 0700511-1395706-2021 Expires on 01/30/23. For question regarding this report or your water utility please contact Bethesda Water Dept. -- Office hours Monday thru Friday 9am – 1pm at (740-484-1566) Emergency numbers (740-391-3182) or (740-484-1250). CCR paper copies are available at the Municipal Building located at 112 South Main St., Bethesda, Ohio 43719 or electronic copies on line at; [www.bethesdaohio.org](http://www.bethesdaohio.org), listed under Gov. ( posted on water bills). Council Meetings are the 2nd Wed. each month. We encourage your participation and questions regarding your water system.

The Village of Bethesda received EPA violations for the following in 2021: failure to test for turbidity.

The Village of Bethesda is NOT required to test for turbidity. Turbidity refers to the clarity of water when light is passed through it.

This Consumer Confidence Report reflects changes in drinking water regulatory requirements during 2021. All water systems were required to comply with the Total Coliform Rule from 1989 to March 31,2016, and 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 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 Public Water System.

**FROM BELOMNT COUNTY WATER AND SEWER DISTRICT**

Table of detected contaminants

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Inorganic Contaminants</b>							
Barium (ppb)	2.0	2.0	0.028	N/A	NO	2020	Discharge of drilling wastes; Erosion of natural deposits;
Cadmium (ppb)	5.0	5.0	1.03	N/A	NO	2020	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries, runoff from waste batteries & paints
Nitrate (ppm)	10	10	0.747	N/A	NO	2021	Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Fluoride (ppm)	4	4	1.00	0.77-1.17	NO	2020	Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Radium 228 (pCi/L)	0	5.0	0.668	N/A	NO	2020	Erosion of natural deposits;
The MCL for Radium is comprised of both Radium 226 and Radium 228. Known as Combined Radium 226/228							
<b>Residual Disinfectants and Disinfectant By-Products</b>							
Chlorine (ppm)	MRDLG =4	MRDL =4	1.02	.87-1.27	NO	2021	control microbes
Haloacetic Acid 5 (ppb)	N/A	60	14.1	0-25.1	NO	2021	By-product of drinking water chlorination.
Total Trihalomethanes (ppb)	N/A	80	63.9	12.5-72.1	NO	2021	By-product of drinking water chlorination.
<b>Lead and Copper</b>							
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	none	<1	NO	2020	Corrosion of household plumbing; Erosion of natural deposits.	
Copper (ppm)	1.3 ppm	none	0.0117	NO	2020	Corrosion of household plumbing; Erosion of natural deposits.	
Zero out of 32 samples collected for copper were above the action level of 1.3 ppm Zero out of 32 samples collected for lead were above the action level of 15 ppb							
<b>Unregulated Contaminants</b>							
Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Chloroform (ppb)	N/A	N/A	3.80	2.4-5.3	NO	2021	
Bromoform (ppb)	N/A	N/A	2.70	.83-3.8	NO	2021	
Bromodichloro-Methane (ppb)	N/A	N/A	3.5	.55-9.4	NO	2021	
Dibromochloro-Methane (ppb)	N/A	N/A	8.2	3.16-13.2	NO	2021	

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In 2019 The Belmont County Water & Sewer District participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). For a copy of the results please call the Belmont County Water and Sewer District Water Treatment Plant at 740-676-7666