

City of Bellevue Water Department

Drinking Water Consumer Confidence Report

2022

Introduction

The Bellevue Water Department 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. Water main replacement projects were completed, fire hydrants have been replaced, and a meter change out program is being completed. The City of Bellevue purchases 200,000 gallons or more of water daily from Erie County, the water is pumped into the North Industrial Park water tower. Upon notification of boil alerts and violations of Erie County Water, the City of Bellevue will not pump any of the county's water into the city's water system.

Source Water Assessment, where does your water come from?

The City of Bellevue operates a community public water system that serves a population of 8203 people through 3500 service connections. A community public water system is a system that regularly supplies drinking water from its own sources to at least 15 service connections used by year-round residents of the area or regularly serves 25 or more people throughout the entire year. The water treatment system obtains its water from Frink Run and Berry Creek. Berry Creek lies entirely within a karst limestone region, and a portion of the water in the river originates from ground water. The system's treatment capacity is 3.0 million gallons per day. Water is pumped from Frink Run and Berry Creek into four up ground reservoirs for storage prior to treatment. The City of Bellevue's treatment processes include lime softening, coagulation, sedimentation, stabilization, fluoridation, sand filtration, and disinfection.

Source Water Assessment Information

The Ohio EPA conducted a source water assessment for the City of Bellevue. For the purposes of source water assessments in Ohio, all surface waters are susceptible to contamination. By their nature, surface waters are 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 City of Bellevue drinking water source protection area is susceptible to agricultural runoff, pesticide and fertilizer storage, underground injection wells for storm water, and above ground storage tanks.

It is important to note that this assessment is based on available data, and therefore may not reflect current conditions in all cases. Water quality, land uses and other activities that are potential sources of contamination may change with time. While the source water for the City of Bellevue Public Water System is considered susceptible to contamination, historically, the City of Bellevue Public Water System has effectively treated this source water to meet drinking water quality standards for all regulated constituents, except nitrates. The City of Bellevue does not have a source water protection or watershed implementation program. More detailed information is provided in the City of Bellevue's Drinking Water Source Assessment report, which can be obtained by calling the Water Superintendent at 419-484-5520.

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 natural-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 stormwater 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 stormwater 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 stormwater 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 amounts of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water and 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 Ohio EPA'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. The Bellevue Water Department conducted sampling for **bacteria, inorganics, radiological, synthetic organics, and volatile organic's** contaminants during **2022**. Samples were collected for different contaminants, most of which were not detected in the City's water supply. The Ohio EPA requires the water filtration plant 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. Last year, as in years past, your tap water met all U. S. Environmental Protection Agency (EPA) and state drinking water health standards. Local water vigilantly safeguards its water supplies and, once again, we are proud to report our system has not violated a maximum contaminant level or any other water quality standard.

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 daily samples and shall not exceed 1 NTU at any time. The Bellevue Water Department's highest recorded turbidity result for 2022 was 0.4 NTU, range was 0.02 to 0.40, lowest monthly percentage of samples meeting the turbidity limits was 100%. There were no violations. The .4 NTU was from the ground tank being cleaned and inspected.

The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest running annual average ratio between the % of TOC removed to the % of TOC required to be removed. A value of greater than 1 indicates that the water system is compliant with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements. The value reported under the "range" for TOC is the lowest monthly ratio to the highest monthly ratio.

Under the Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), the City of Bellevue's water system was required by USEPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), it is intended to identify locations in our distribution system with elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning in 2013. A reevaluation was completed in 2021 and a new location was added and one location was dropped. Disinfection byproducts are the result of providing continuous disinfection of your drinking water and from when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acid (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfectants byproducts in drinking water, including both TTHMs and HAA5s. Some people who drink water containing trihalomethanes in excess of the MCL over many years, may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. Levels of TTHM's are different from place to place within the system and from day to day.

Lead if present, with elevated levels 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. City of Bellevue water system 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. The City's water system was not in violation for lead. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

License to Operate Status Information

City of Bellevue has a current, unconditioned license to operate the water system.

Public Participation Information, how do I participate in decisions concerning my drinking water?

Public participation is encouraged at regular meetings of the Bellevue City Council which meets on the second and fourth Monday of each month at 7:30 p.m. at the Bellevue City Centre.

For more information on your drinking water or for a copy of the CCR, home water testing, treatment and filtration can be obtained by contacting the Water Superintendent at (419)484-5520. The CCR is available on the City's website www.cityofbellevue.com.

2022 Water Quality Data Table

CITY OF BELLEVUE 2022 CCR

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. The EPA requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table. PFAS or polyfluoroalkyl substances initiative was tested, six compounds were sampled and none were detected in 2021.

2022 Water Quality Data Table - City of Bellevue - All samples from 2022 sampling year.

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Level Found	Range		Violation	Typical Source
				Low	High		
Disinfectants & Disinfection By-Products							
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)							
Chlorine (as Total Cl2) (ppm)	4	4	1.9	1.7	2.1	No	Water additive used to control microbes.
Haloacetic Acids (HAA5) (ppb)	N/A	60	30.8	15.9	28.4	No	By-product of drinking water chlorination.
Total Trihalomethanes (TTHM) (ppb)	N/A	80	75.4	44.9	87	No	By-product of drinking water disinfection.
Total Organic Carbon	N/A	TT	2.3	1.8	2.7	No	Naturally present in the environment.
Inorganic Contaminants							
Fluoride (ppm)	4	4	0.9	0.86	0.93	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Contaminants							
Nitrate (ppm)	10	10	1.8	0.1	3.5	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Microbiological Contaminants							
Turbidity (NTU)	N/A	TT	0.4	0.02	0.4	No	Soil runoff
99.9% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.40. Any measurement in excess of 1.0 is a violation unless otherwise approved by the state.							
Inorganic Contaminants							
Action Level (AL) at consumer taps Year	AL	Individual Results over the AL	90% of test levels were less than	Sample Date	Number of Samples Exceeding AL	Exceeds AL	Typical Source
Copper (ppb)	1300	0	61	2020	0	No	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb)	15	47	0	2020	1	No	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper: 0 of 20 samples were found to have copper levels in excess of the copper action level of 1.3 ppm; Lead:1 out of 20 samples were found to have lead in excess of the lead action level of 15 ppb. The next round of testing will be in 2023.							
Violations and Exceedances							
There were no violations for 2022.							

Maximum Contaminant Level Goal or 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 or 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. Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow. ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water. ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water. NTU: Nephelometric Turbidity Units. Turbidity is a measure of cloudiness in the water. Monitored because it is a good indicator of the effectiveness of our filtration system. TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water. N/A: Not applicable. MRDLG: Maximum residual disinfection level goal. The level of a 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. MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water.