

ANNUAL WATER QUALITY REPORT

Reporting Year 2024



Presented By
Berlin Water Control

PWS ID#: CT0070021

Our Commitment

We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2024. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

Ray Jarema

Manager, Berlin Water Control Commission

Important Health Information

Sources of lead in drinking water include corrosion of household plumbing systems and erosion of natural deposits. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Sources of copper in drinking water include corrosion of household plumbing systems, erosion of natural deposits, and leaching from wood preservatives. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health-care providers. The U.S. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (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.



Source Water Assessment

Source Water Assessment reports were completed by the State Department of Public Health for Berlin Water Control and the New Britain Water Department. The risk level for Berlin's well sources and New Britain's water purchased is LOW. The reports are available at the following links:

- www.dir.ct.gov/dph/Water/SWAP/Community/CT0890011.PDF
- <https://www.dir.ct.gov/dph/Water/SWAP/Community/CT0070021.pdf>

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, or doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute-accredited certifier to reduce lead in drinking water. Contact us if you are concerned about lead and 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 epa.gov/safewater/lead.



To address lead in drinking water, public water systems were required to develop and maintain an inventory of service line materials by October 16, 2024. Developing an inventory and identifying the location of lead service lines (LSL) is the first step for beginning LSL replacement and protecting public health. Please contact us if you would like more information about the inventory or any lead sampling that has been done.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the fourth Tuesday of each month at 7:00 p.m. at Town Hall, 240 Kensington Road. Dates and times are also posted on the town's website, berlinct.gov. Customers are encouraged to attend in person or via Zoom.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Ray Jarema, Manager, at (860) 828-7065.

Where Does My Water Come From?

For over 50 years, the Berlin Water Control Commission has provided the residents of Berlin with a safe, palatable supply of drinking water. This report has been prepared to provide the approximately 2,900 residential, commercial, and industrial customers of this supply with the confidence that the water they consume meets or, in most cases, exceeds all state and federal requirements for drinking water.



The Berlin Water Control Commission was established in 1966. In 2024 it produced 398,134,705 gallons of water to its residential, commercial, and industrial customers. The commission produced 50.03 percent (199,173,200 gallons) of its water needs and purchased 43.16 percent (171,830,914 gallons) from the New Britain Water Department and 6.81 percent (27,130,591 gallons) from the Cromwell Fire District. This report covers the portion of the supply originating from wells owned and operated by the commission. Reports for the New Britain Water Department and Cromwell Fire District can be provided upon request.

The Berlin Water Control Commission supply, excluding that provided by the New Britain Water Department and Cromwell interconnection, comes from two sources, Elton Well 1B and Elton Well 2A. A third well, Swede Pond Production Well 2, installed in 1973 (with a depth of 92 feet and a capacity of 550 gallons per minute) was replaced by Well 2A in 1996.

Elton Well 1 was installed in 1973, rehabilitated in 1994 and 1997, and replaced in 1998 by Well 1A. Well 1A was replaced by Well 1B in 2017. Elton Well 2A (with a depth of 95 feet and a production of 350 gallons per minute) was placed in service in 1996 and rehabilitated in 2017. It was resurged to increase yield. Water from Elton Wells 1B and 2A is blended prior to entering the distribution system.

Substances That Could Be in 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:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic Contaminants, such as salts and metals, which can occur naturally in the soil or groundwater or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

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.

Radioactive Contaminants, which can occur naturally or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the U.S. EPA 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 mean that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline (800-426-4791) or visiting [epa.gov/safewater](https://www.epa.gov/safewater).

Water Conservation Tips

You can play a role in conserving water and save yourself money in the process by becoming conscious of the amount of water your household is using and looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

Automatic dishwashers use three to six gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.

Turn off the tap when brushing your teeth.

Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.

Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.

Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

We participated in the fifth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR5) program by performing additional tests on our drinking water. UCMR5 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water to determine if it needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data is available to the public, so please feel free to contact us if you are interested in obtaining that information.

Berlin Water Control was selected by the U.S. EPA to test for 29 per- and polyfluoroalkyl substances (PFAS) and lithium. All results were less than the minimum reporting level. This includes our wellfield and purchased water from New Britain Water Department and Cromwell Fire District. If there are any questions, please contact Ray Jarema at (860) 828-7065. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2024	2	2	0.012	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chloride (ppm)	2024	250	250	20.45	NA	No	Road salt; Fertilizers; Sewage; Water softener discharge; Saltwater intrusion in coastal environments
Chlorine (ppm)	2023	[4]	[4]	1.08	0.75–1.08	No	Water additive used to control microbes
Fluoride (ppm)	2024	4	4	0.78	0.44–0.78	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2024	60	NA	20	<7–20	No	By-product of drinking water disinfection
Nitrate (ppm)	2024	10	10	0.025	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Organic Carbon [TOC] (ppm)	2024	TT ¹	NA	1.53	1.2–1.53	No	Naturally present in the environment
Trichloroethylene (ppb)	2024	5	0	<0.5	<0.5–1.3	No	Discharge from metal degreasing sites and other factories
TTHMs [total trihalomethanes] (ppb)	2024	80	NA	53	26–53	No	By-product of drinking water disinfection
Turbidity ¹ (NTU)	2024	TT	NA	0.56	NA	No	Soil runoff

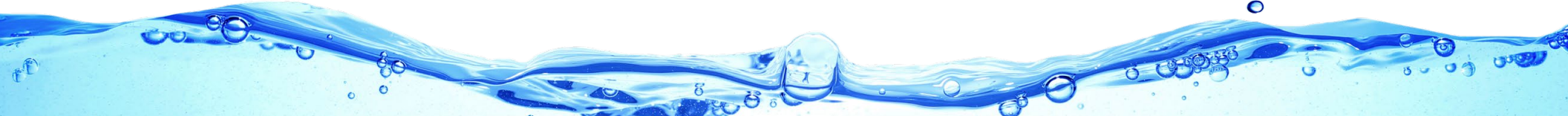
Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2024	1.3	1.3	ND	ND–0.02	0/29	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2024	15	0	2.1	ND–6.5	0/29	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Manganese (ppb)	2019	50	NA	2	1–2	No	Leaching from natural deposits
pH (units)	2024	6.5-10.0	NA	9.7	9.3–9.7	No	Naturally occurring

UNREGULATED SUBSTANCES				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Sodium (ppm)	2024	10.6	NA	NA

¹ Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.



Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

About Our Monitoring Violations

1. We incurred a monitoring and reporting violation, and as a customer, you have a right to know what happened and what was done to correct the situation. The Water Department did not collect test samples during the appropriate time frame for the following: net gross alpha, uranium, and combined radium 226 + 228 from January 1, 2022, through December 31, 2024.

What is being done?

Samples were collected on March 19, 2025, and tested. There is no known threat to public health. Historically, test results are good, and while sampling is conducted every three years, we are proposing to change the frequency to six years. We anticipate being in compliance by May 1, 2025.

If you have questions, please contact Ray Jarema at (860) 828-7065 or Town of Berlin Water Department, 240 Kensington Road, Berlin, CT 06037.

