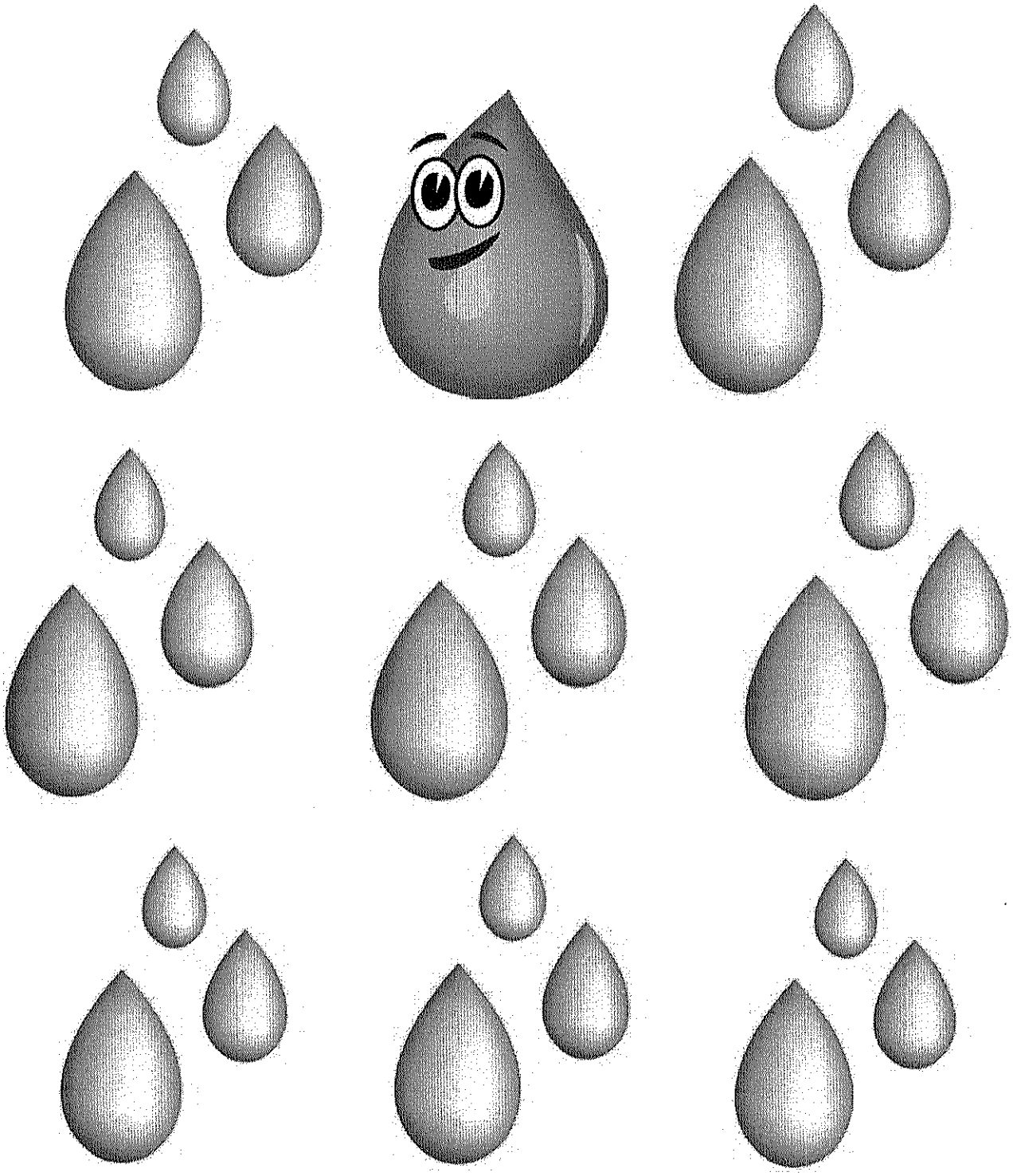
Bentleyville Municipal Authority

2022 Annual Drinking Water Quality Report

EVERY DROP COUNTS



QUALITY ON TAP! OUR COMMUNITY OUR PROFESSION

Annual Drinking Water Quality Report

Of the Municipal Authority of the Borough of Bentleyville
508 Main Street, Bentleyville, PA 15314

Report Year 2022 PWS ID: 5630030

Este informe contiene informacion muy importante sobre su agua de beber. Traduzcalo o hable con alguien que lo entienda bien. (This report contains very important information about your drinking water. Translate it, or speak with someone who understands it.)

WATER SYSTEM INFORMATION:

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Richard Motycki at 724-239-2381. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Tuesday of each month at 7:00 P.M. in our office located at 508 Main Street, entering through the rear of the building.

SOURCE OF WATER:

We purchase all our water from the Authority of the Borough of Charleroi. Their source of water is the Monongahela River, a surface water source. The water is treated at their Charleroi Filtration Plant.

A Source Water Assessment of our source was completed in 2002 by the PA Department of Environmental Protection (PADEP). The Assessment has found that our source is potentially most susceptible to accidental spills along the transportation corridor and "wildcat" sewers dumping raw sewage directly to the river and to a lesser degree by industry and storm water runoff from developed areas. Overall, our source has high risk of significant contamination. Summary reports of the Assessment are available by writing to Richard Motycki at 508 Main Street, Bentleyville, PA 15314 and are available on the PADEP Web site at www.dep.state.pa.us (Keyword: "source water"). Complete reports are distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the PADEP Southwestern Regional Office, Records Management Unit at (412) 442-4000.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infections by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

EDUCATIONAL INFORMATION:

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 be naturally-occurring or result from urban storm water run-off, 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 storm water 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 storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure the tap water is safe to drink, EPA and DEP prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA and DEP 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 (800-426-4791).

OTHER INFORMATION:

The Authority is constantly working to maintain and improve its system. **Under the Rules & Regulation of the Bentleyville Municipal Authority, all property owners are responsible for the locating of water curb boxes which are to be exposed and accessible at all times, especially in case of emergency. The Authority is NOT responsible for the location of water curb boxes. The property owner will be responsible and bear ALL COSTS for its location.**

Thank you for allowing us to continue providing your family with clean quality water. "We at the Bentleyville Municipal Authority work diligently to provide our residents with top quality water", said Ken Yohe, Board Chairman. We ask that all of our customers help protect our water sources, which are the heart of our community, our way of life and our children's future. If you suspect a leak, please do not hesitate to call our office at 724-239-2381 or call 911 to report the location. Thank you for your cooperation and consideration.

MONITORING YOUR WATER:

The Bentleyville Municipal Authority and the Authority of the Borough of Charleroi routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of most recent monitoring required for the period of January 1 to December 31, 2022. The State allows 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 is from prior years in accordance with the Safe Drinking Water Act. The date has been noted on the sampling results table.

DETECTED SAMPLE RESULTS FOR BENTLEYVILLE MUNICIPAL AUTHORITY

Chemical Contaminant	MCL	MCLG	Highest Level Detected	Range of Detections	Units	Sample Date or Frequency	Violation Y/N	Sources of Contamination
TTHMs (Total Trihalomethanes)	80*	N/A	.99	1-10	CCR	Q	N	By-product of chlorination
HAA5 (Haloacetic Acids)	60*	N/A	0.0329	10-30	CCR	Q	N	By-product of Chlorination
Chlorine	MRDL 4	MRDLG 4	1.48	0.34-1.48	ppm	M	Y	Water additive used to control microbes

*Compliance is determined by a Running Annual Average (RAA)

Contaminant Date Sampled	Action Level (Al)	MCLG	90th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead 2016-18	15	0	.0	CCR	0 out of 10	N	Corrosion of household plumbing
Copper 2019-22	1.3	1.1	.12	ppm	0 out of 10	N	Corrosion of household plumbing

Microbial Contaminants Date (s) Sampled	MCl	MCLG	Highest # or % of Positive Samples	Violation Y/N	Typical Sources of Contamination
Total Coliform Bacteria Monthly	For Systems that collect <40 samples/month: •>1 positive monthly sample For systems that collect ≥40 samples/month •5% of monthly samples are positive	0	0 of 12	N	Naturally present in the environment

OTHER VIOLATIONS:

2022 ANNUAL DRINKING WATER QUALITY REPORT

PWSID #: 5630039 *The Authority of the Borough of Charleroi*

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, ó hable con alguien que lo entienda. (This report contains important information about your drinking water. Have someone translate it for you or speak with someone who understands it.)

WATER SYSTEM INFORMATION:

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact The Authority of the Borough of Charleroi Offices at (724) 483-3585. We want you to be informed about your water supply. If you want to learn more, please attend any of our regularly scheduled meetings. Meetings are held on the Third and Fourth Tuesday of each month at 4:00 PM at the Authority Offices, 3 McKean Avenue Charleroi, Pennsylvania 15022.

SOURCE(S) OF WATER:

Monongahela River

A Source Water Assessment of our source(s) was completed by the PA Department of Environmental Protection (Pa. DEP). The Assessment has found that Monongahela River Intake is most susceptible to accidental spills along the transportation corridor and "wildcat" sewers dumping raw sewage directly to the river. This intake is also susceptible to a lesser degree by industry and storm water runoff from developed areas. Overall, the Monongahela Watershed has a high risk of significant contamination. A summary report of the Assessment is available on the Source Water Assessment Summary Reports eLibrary web page: www.elibrary.dep.state.pa.us/dsweb/View/Collection-10045. Complete reports were distributed to municipalities, water supplier, local planning agencies and PADEP offices. Copies of the complete report are available for review at the Pa. DEP Southwest Regional Office, Records Management Unit at (412) 442-4000.

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 infections. 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* (800-426-4791).

MONITORING YOUR WATER:

We routinely monitor for contaminants in your drinking water according to federal and state laws. The following tables show the results of our monitoring for the period of January 1 to December 31, 2022. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

DEFINITIONS:

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

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. 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 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.

Minimum Residual Disinfectant Level (MinRDL) - The minimum level of residual disinfectant required at the entry point to the distribution system.

Level 1 Assessment – A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment – A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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

Mrem/year = millirems per year (a measure of radiation absorbed by the body)

pCi/L = picocuries per liter (a measure of radioactivity)

ppb = parts per billion, or micrograms per liter (µg/L)

ppm = parts per million, or milligrams per liter (mg/L)

ppq = parts per quadrillion, or picograms per liter

ppt = parts per trillion, or nanograms per liter

DETECTED SAMPLE RESULTS:

Chemical Contaminants								
Contaminant	**MCL in CCR Units**	**MCLG**	**Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Chlorine	MRDL = 4	MRDLG = 4	1.52	0.20 – 1.52	ppm	Monthly	N	Water additive to control microbes
Nitrate	10	10	< 1.00	N/A	ppm	08/16/22	N	Runoff from fertilizer use
Haloacetic Acids (HAA5)	60	N/A	33.6	15.1 - 44.4	ccr	Quarterly	N	By-product of drinking water chlorination
Total Trihalomethanes (TTHM)	80	N/A	56.3	14.4 - 100	ccr	Quarterly	N	By-product of drinking water chlorination

** Range represents the highest and lowest levels detected during the monitoring year. TTHM/HAA5 compliance is based on the Running Annual Average (RAA) of all levels detected at a specific sample location. The Authority sampled quarterly at four (4) different locations throughout the distribution system in 2022. The highest RAA of the sampled locations in 2022: (HAA5 = 33.6) (TTHM = 56.3).*

Entry Point Disinfectant Residual							
Contaminant	**Minimum Disinfectant Residual**	**Lowest Level Detected**	**Range of Detections**	**Units**	**Sample Date**	**Violation Y/N**	**Sources of Contamination**
Chlorine	0.2	0.79	0.79 - 1.68	ppm	04/03/22 (L) 09/29/22 (H)	N	Water additive used to control microbes.

Lead and Copper							
Contaminant	**Action Level (AL)**	**MCLG**	**90th Percentile Value**	**Units**	**# of Sites Above AL of Total Sites**	**Violation Y/N**	**Sources of Contamination**
Lead	15	0	2.15	ppb	0	N	Corrosion of household plumbing.
Copper	1.3	1.3	0.192	ppm	0	N	Corrosion of household plumbing.

Lead and Copper samples listed above were taken from 6/1/2022 through 9/30/2022. The Authority is scheduled to collect lead and copper samples again in 2025 when the next required sampling cycle begins.

Microbial (related to Assessments/Corrective Actions regarding TC positive results)					
Contaminants	**TT**	**MCLG**	**Assessments/ Corrective Actions**	**Violation Y/N**	**Sources of Contamination**
Total Coliform Bacteria	Any system that has failed to complete all the required assessments **or** correct all identified sanitary defects, is in violation of the treatment technique requirement	N/A	See detailed description under "Detected Contaminants Health Effects Language and Corrective Actions" section	N	Naturally present in the environment.

Microbial (related to E. coli)					
Contaminants	**MCL**	**MCLG**	**Positive Sample(s)**	**Violation Y/N**	**Sources of Contamination**
E. coli	Routine and repeat samples are total coliform-positive, **and** either is *E. coli*-positive **or** system fails to take repeat samples following *E. coli*-positive routine sample **or** system fails to analyze total coliform-positive repeat sample for *E. coli*.	0	0	N	Human and animal fecal waste.
Contaminants	**TT**	**MCLG**	**Assessments/ Corrective Actions**	**Violation Y/N**	**Sources of Contamination**
E. coli	Any system that has failed to complete all the required assessments **or** correct all identified sanitary defects, is in violation of the treatment technique requirement	N/A	See description under "Detected Contaminants Health Effects Language and Corrective Actions" section	N	Human and animal fecal waste.

Turbidity						
Contaminant	**MCL**	**MCLG**	**Level Detected**	**Sample Date**	**Violation Y/N**	**Source of Contamination**
Turbidity	TT=1 NTU for a single measurement	0	0.056	09/19/2022	N	Soil runoff
	TT= at least 95% of monthly samples≤0.3 NTU		100%	2022	N	

DETECTED CONTAMINANTS HEALTH EFFECTS:

Total coliform bacteria are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present.

Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

OTHER VIOLATIONS:

None

EDUCATIONAL INFORMATION:

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 be naturally occurring or result from urban stormwater run-off, 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.
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- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

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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* (800-426-4791).

Information about Lead

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 Authority of the Borough of Charleroi 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* or at *http://www.epa.gov/safewater/lead*.