

## 2023 ANNUAL DRINKING WATER QUALITY REPORT

**PWSID #:** 6330002 **NAME:** BROCKWAY BOROUGH MUNICIPAL AUTHORITY

*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 Brockway Borough Municipal Authority at 814-268-6565. 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 the second Monday of each month at 6:00PM in the Brockway Borough Municipal Authority Building located at 501 Main Street, Brockway, PA 15824

### **SOURCE(S) OF WATER:**

Our water source(s) is/are: Whetstone Filter Plant (entry point 112) drawing from Whetstone Branch, and Wells 2 and 6, located in Horton Township, Elk County, and Rattlesnake Filter Plant (entry point 111), drawing from Rattlesnake Creek and Well 5, located in Snyder Township, Jefferson County.

We at the Brockway Borough Municipal Authority work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our surface water sources that feed our Rattlesnake and Whetstone Reservoirs, which are the heart of our community, our way of life and our children's future

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, 2023. 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.

### **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 ( $\mu\text{g/L}$ )

*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:**

<b>Chemical Contaminants (Entry Points)</b>								
<b>Contaminant</b>	<b>MCL in CCR Units</b>	<b>MCLG</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>Units</b>	<b>Sample Date</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
Nitrate	10	10	0.23 for EP 111; 0.15 for EP 112	0.13 - 0.23	ppm	2023	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Alpha Emitters	15	0	0.358	- 0.443 to 0.358	pCi/L	2023	N	Erosion of natural deposits
Fluoride	2*	4	1.83 for EP 111 1.71 for EP 112	0.11 – 1.83 for EP 111 0.17 – 1.71 for EP 112	ppm	2023	N	**See description below
<b>Chemical Contaminants (Distribution System)</b>								
<b>Contaminant</b>	<b>MCL in CCR Units</b>	<b>MCLG</b>	<b>Level Detected</b>	<b>Range of Detections</b>	<b>Units</b>	<b>Sample Date</b>	<b>Violation Y/N</b>	<b>Sources of Contamination</b>
HAA5	60	n/a	10.58 RAA 1 <sup>st</sup> Q	1.54 – 5.5	ppb	Quarterly 2023	N	By-product of drinking water disinfection
TTHM	80	n/a	11.80 RAA 2 <sup>nd</sup> Q	1.17 – 13.2	ppb	Quarterly 2023	N	By-product of drinking water disinfection
Asbestos	7	7	1348.1	< 0.2 – 1348.1	MFL	July/Aug 2023	Y	Decay of asbestos cement water lines; erosion of natural deposits

\*EPA's MCL for fluoride is 4 ppm. Pennsylvania has set a lower MCL to better protect human health.

\*\*Fluoride Description – This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 mg/L of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis). Dental fluorosis, in its moderate or severe forms, may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Drinking water containing more than 4 mg/L of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease.

**Per- and polyfluoroalkyl substances (PFAS) (Sampled as part of EPA's UCMR5 Program)**

Regulated Contaminant	MCL	MCLG	Level Detected	Range	Units	Year Sampled	Violation Yes/No	Typical Source of Contaminant
PFOA	14	8	< 0.0013	N/A	ppt	2023	No	Discharge and waste from industrial facilities; stain-resistant treatments
PFOS	18	14	< 0.0013	N/A	ppt	2023	No	Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial facilities

**Entry Point Disinfectant Residual**

Contaminant	Minimum Disinfectant Residual	Lowest Level Detected	Highest Level Detected	Units	Sample Date of Lowest Detection	Violation Y/N	Sources of Contamination
Chlorine	0.20	0.40 for EP 111 0.27 for EP 112	2.09 for EP 111 2.01 for EP 112	ppm	12/29/2023 for EP 111 4/11/2023 for EP 112	N	Water additive used to control microbes.

**Distribution System Disinfectant Residual**

Contaminant	Disinfectant Residual Limits	Month of Highest Avg Result	Highest Avg Result	Over MRDL	Lowest Avg Result	Violation Y/N	Sources of Contamination
Chlorine	0.20 – 4.0	June	1.20	0	0.80	N	Water additive used to control microbes

**Lead and Copper (Subject to action levels)**

Contaminant	Action Level (AL)	MCLG	90 <sup>th</sup> Percentile Value	Units	# of Sites Above AL of Total Sites	Sample Date	Violation Y/N	Sources of Contamination
Lead	15	0	3.25	ppb	1 out of 26	June-Sept 2022	N	Corrosion of household plumbing.
Copper	1.3	1.3	0.933	ppm	1 out of 26	June-Sept 2022	N	Corrosion of household plumbing.

\*\*\*Infants and children who drink water containing lead 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.

\*\*\*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.

**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 <b>or</b> 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
<i>E. coli</i>	Routine and repeat samples are total coliform-positive <b>and</b> either is <i>E. coli</i> -positive <b>or</b> system fails to take repeat samples following <i>E. coli</i> -positive routine sample <b>or</b> system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .	0	0	N	Human and animal fecal waste.
Contaminants	TT	MCLG	Assessments/ Corrective Actions	Violation Y/N	Sources of Contamination
<i>E. coli</i>	Any system that has failed to complete all the required assessments <b>or</b> 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.

<b>Turbidity</b>						
<b>Contaminant</b>	<b>MCL</b>	<b>MCLG</b>	<b>Level Detected</b>	<b>Sample Date</b>	<b>Violation Y/N</b>	<b>Source of Contamination</b>
Turbidity	TT=2 NTU for a single measurement	0	100% less than 2.0 NTU	2023	N	Soil runoff
	TT= at least 95% of monthly samples <u>&lt;1.0</u> NTU		100% less than 1.0 NTU	2023	N	

**DETECTED CONTAMINANTS HEALTH EFFECTS LANGUAGE AND CORRECTIVE ACTIONS:**

N/A

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**OTHER VIOLATIONS:**

*We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether our drinking water meets health standards. The following is a list and description of violations that occurred during the calendar year.*

<b>Contaminant</b>	<b>Required sampling frequency</b>	<b>Number of samples taken</b>	<b>When all samples should have been taken</b>	<b>When samples were or will be taken.</b>
Asbestos	2023 Distribution system. Total number of samples up to water authority.	5	Through 2023	Due to higher result, samples will be taken quarterly until the level is below the MCL for four quarters in a row

### **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.
- 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 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 and DEP prescribe 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).

#### **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. Brockway Borough Municipal Authority 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>.

#### **Other Information**

About Nitrate: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of 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 for advice from your health care provider.