2023 ANNUAL DRINKING WATER QUALITY REPORT

HARMONY BOROUGH WATER AUTHORITY

PWSID # 5100042

Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó 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 describes our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact Cathy Funkhouser/Authority Manager at (724) 822-2378. 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 4th Thursday of every month at 7:00 PM at the Harmony Borough Building located at 217 Mercer Street.

SOURCE OF WATER: Our water is a surface water source from the Little Connoquenessing Creek. The water is treated at our 143 Nickle Road filtration plant (Entry Point #100). We also have an interconnection with Zelienople Borough who obtains their water from Beaver Falls Authority (Entry Point #101). The interconnection was not used in 2023.

A Source Water Assessment of our source was completed in 2003 by the PA Department of Environmental Protection (PADEP). The Assessment has found that our source, The Little Connoquenessing Creek is most susceptible to road deicing materials, accidental roadway spills, runoff from agricultural fields and leaks from storage tanks and on lot sewage disposal systems. Overall, our source has a moderate risk of significant contamination. Summary reports of the Assessment are available by writing to Harmony Borough Water Authority, 217 Mercer Street, Harmony, PA. 16037 and will be available on the PADEP Web site at www.depweb.state.pa.us (Keyword: "source water"). Complete reports were distributed to municipalities, water suppliers, local planning agencies and PADEP offices. Copies of the complete report are available for review at the PADEP Northwest Regional Office, 230 Chestnut Street, Meadville, PA. 16335, Records Management Unit at (814-332-6942.

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 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 AND ABBREVIATIONS:

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 – 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)

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

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

ppq = parts per quadrillion, or picograms per liter

DETECTED SAMPLE RESULTS:

Chemical Contaminant	MCL	MCLG	Highest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Total Organic Carbon	TT	N/A	**% Removal Required** 25%- 35%	**% Removal Achieved** (**1**) 32.00 % - 34.50 %	% Removed	2023	No Quarters in 2023 out of Compliance	Naturally Present in the environment
Chlorine (Distribution)	MRDL= 4	MRDLG =4	2.06 (February 2023)	1.15 – 2.06	ppm	2023	N	Water additive used to control microbes
Barium	2	2	0.0818	N/A	ppm	6/6/23	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride	2	2 **(2)**	0.17	N/A	ppm	6/6/23	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nickel	Not Regulated	Not Regulated	0.0021	N/A	ppm	6/6/23	N	Leaching from metals in contact with drinking water, erosion in the production of steel alloys.
Total Trihalomethanes	80	N/A	44.84 **(3)** (4th Quarter)	19.90-92.70	ppb	2023	N	Byproduct of drinking water chlorination
Haloacetic Acids	60	N/A	38.49 (**3**) (3rd Quarter)	22.30-61.20	ppb	2023	N	Byproduct of drinking water disinfection
Nitrate	10	10	0.24	N/A	ppm	8/8/23	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

(1) In quarters that the percent achieved was below required, there was no exceedance of the MCL because Harmony Borough Water Authority met alternative compliance criteria as required by the PA Safe Drinking Water Act.
(2) EPA's MCL for fluoride is 4 ppm. However, Pennsylvania has set a lower MCL to better protect human health.
(3) Indicates that these are the highest running annual average (RAA) calculated during 2023.

Entry Point Disinfectant Residual							
Contaminant	**Minimum Disinfectant Residual**	**Lowest Level Detected**	**Range of Detections**	**Units**	**Lowest Sample Date**	**Violation Y/N**	**Sources of Contamination**
Chlorine 2023	0.20	0.75	0.75 – 2.40	ppm	9/23/23	N	Water additive used to control microbes.

Contaminant	Action Level (AL)	MCLG	90th Percentile Value	Units	# of Sites Above AL of Total Sites	Violation of TT Y/N	Sources of Contamination
Lead (2022)	15	0	2.99	ppb	0 out of 20	N	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (2022)	1.3	1.3	0.18	ppm	0 out of 20	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

"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. Harmony Borough Water 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*."

Contaminant	MCL	MCLG	Highest Level Detected	Sample Date	Violation of TT Y/N	Source of Contamination
Turbidity	TT=1 NTU for a single measurement	0	0.052	11/22/23	N	Soil Runoff
	TT= at least 95% of monthly samples ≤0.3 NTU		100%	2023	N	

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, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, 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, 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).