2023 ANNUAL DRINKING WATER QUALITY REPORT
MOUNT JOY BOROUGH AUTHORITY
PWSID# 7360091

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 represents the Mount Joy Borough Authority and shows our water quality and what it means. The Mount Joy Borough Authority's public water system identification number (PWSID) is 7360091. If you have any questions about this report or concerning your water utility, please contact Scott Kapcsos, Authority Manager at the Mount Joy Borough Authority office. The phone number is (717) 653-5938. We want you to be informed about your water supply, if you want to learn more, please attend any of our regularly scheduled meetings. The meetings are held on the first and third Tuesday of each month at 4:00 p.m. at the Borough Municipal Center.

SOURCE WATER Information:

Water supplied to our customers come from three (3) production wells, two (2) wells pump to the Carmany Road Water Treatment Plant and one (1) well pumps to the South Jacob Street Water Treatment Plant, all three (3) wells are classified by the PA DEP as being GUDI (Groundwater Under Direct Influence) wells. The groundwater supplied by two (2) wells comes from what is known as the Donegal Creek Drainage Basin and along with the Carmany Road Treatment plant located in East Donegal Township. The groundwater supplied by the third (3rd) well comes from what is known as the Chiques Creek watershed located in Mount Joy Borough and supplies the South Jacob Street Treatment plant located in East Donegal Township. In addition to the Treatment Plant facilities, there is one (1) booster pumping station and three (3) water storage tanks. The average daily output from the water treatment plant for 2023 was 903,621 gallons per day.

Water Assessment of our sources was completed in 2004 by the PA Department of Environmental Protection (PADEP). The Assessment has found that our sources are potentially most susceptible to ex. road deicing materials, accidental spills along roadways and railways, leaks in underground storage tanks and agriculture/residential spills. Overall, our sources have moderate risk of significant contamination. Summary reports of the Assessment are available by writing to the Mount Joy Borough Authority at P.O. Box 25 Mount Joy Pa. 17552 and will be available on the PADEP website at www.dep.state.pa.us (Keyword: "DEP source water"). 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 PADEP South-central Regional Office, Records Management Unit at 717-705-4700.

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 per 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 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 Reporting Level (MRL) – Detections below this level do not need to be reported.

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: Carmany Road – Entry Point

Inorganic Contaminants	MCL In CCR Units	MCLG	Highest Level Detected	Range of Detections	Units	Violation Y/N	Sources of Contamination
Barium (2021)	2	2	0.019	.015 – .019	ppm	N	Erosion of natural deposits.
Nitrate	10	10	3.72	2.75 – 4.16	ppm	N	Soil runoff
Chromium (2021)	100	100	1	- - -	ppb	N	Erosion of natural deposits.
Sodium (2020)	N/A	N/A	118.0	83.4 - 118	ppm	N	Erosion of natural deposits.

Distribution System - Disinfection Byproducts and Byproduct Precursors

Contaminants	MCL In CCR Units	MCLG	Highest Level Detected	Range of Detections	Units	Violation Y/N	Sources of Contamination
Haloacetic Acids (ppb)	60	n/a	10.60	0.0 – 10.60	ppb	N	By-product of drinking water disinfection
TTHMs [Total trihalomethanes] (ppb)	80	n/a	41.80	0.0 – 41.80	ppb	N	By-product of drinking water chlorination
Chlorine (in the distribution)	mrdl=4	mrdl=4	1.64	1.29 – 1.64	ppm	N	Water additive used to control microbes

Lead and Copper Rule

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	6	ppb	0	N	Corrosion of household plumbing
Copper 2022	1.3	1.3	0.189	ppm	0	N	Corrosion of household plumbing

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. Mount Joy Borough Authority is responsible for providing high quality drinking water but cannot control the variety of materials used in household 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 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.

- There was one sample location that reported a 27 ppb for Lead, it was determined that collection of the sample was not in accordance with the standard protocol for sample collection. A second sample was taken and analyzed which resulted in an analysis result of 2 ppb, which is below the MCL of 15 ppb.

Disinfection Residuals: Carmany Road

Entry Point Disinfectant Residual							
Contaminant	**Minimum Disinfectant Residual**	**Lowest Level Detected**	**Range of Detections**	**Units**	**Date of Lowest Detection**	**Violation Y/N**	**Sources of Contamination**
Chlorine (at the Carmany water plant)	0.2	1.41	1.41 – 2.29	ppm	05/03/2022	N	Water additive used to control microbes.

Turbidity: Carmany Road

Contaminant	**MCL**	**MCLG**	**Level Found**	**Sample Date**	**Range Found**	**Violation Of TT Y/N**	**Source of Contamination**
Turbidity	TT=1 NTU for a single measurement	0	.19 NTU	08/21/2023	.02 - .19 NTU	N	Soil runoff
	TT= at least 95% of monthly samples ≤0.3 NTU		100%	1/1/2023 - 12/31/2023	n/a	N	

Turbidity is a measure of the cloudiness of the water (in Nephelometric Turbidity Units). We monitor it because it is a good indicator of the effectiveness of our filtration system.

Total Organic Carbon: – Carmany Road

Total Organic Carbon (TOC)					
Contaminant	**Range of % Removal Required**	**Range of percent removal achieved**	**Number of quarters out of compliance**	**Violation Y/N**	**Sources of Contamination**
TOC	NA *	0% to 100%	0	N	Naturally present in the environment.

**Our raw water TOC levels are low enough that no removal is required, but our treatment system removes even those low levels of TOC.*

HEALTH EFFECTS:
No MCL's or treatment techniques were exceeded.

OTHER REQUIRED TESTING:
None.

OTHER VIOLATIONS:
A TTHM and HAA5 sample was pulled six days prior to the quarterly monitoring requirement. Analysis results of these samples were below the MCL in effect; therefore, no further action was required.

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:

- 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 time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.
- 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 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).

OTHER INFORMATION:

Whether your tap water comes from surface or ground water, all drinking water sources are vulnerable to a variety of contaminants from a variety of activities. Preventing pollution is critical to protecting drinking water from contamination and reducing the need for costly treatment. Community involvement and individual action is the key to providing a safe supply of drinking water. Local Watershed Organizations greatly contribute to helping to clean up and preserve the water quality in our area streams.