

2024 ANNUAL WATER QUALITY REPORT

FROM THE MARS BOROUGH WATER DEPARTMENT PWS # 5100049

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien. (This report contains important information about your drinking water. Have someone translate it for you or speak with someone who understands it.)

We are pleased to present to you this annual consumer confidence report. This report is designed to inform you about the quality of water and services we deliver to you every day. Our constant goal is to supply you with a dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and to protect our water resources. We are committed to ensuring the quality of your water. Our water source is ground water wells. The Borough wells and treatment plant are located south of town along the Mars Valencia Road.

A ground water protection plan has been developed for Mars Borough. Copies are available from our office at 301 Arch Street. This plan can supply more information such as potential sources of contamination. We are pleased to report that our drinking water meets state and federal requirements. If you have any questions concerning this report, please contact Mars Borough Water Works at (724) 625-1480 or the Borough office at (724) 625-1858.

We want our valued customers to be informed about their water utility. You are welcome to attend any of our regularly scheduled meetings. They are held on the first and third Mondays of each month, at 7:00 pm, at the Mars Municipal Building located at 301 Arch Street.

Mars Borough routinely monitors for contaminants in your drinking water according to Federal and State laws. The tables show the results of our monitoring for the period January 1, 2023 to December 31, 2024.

In this table, you will find many terms and abbreviations that you may not be familiar with. To help you better understand these terms we have provided the following definitions:

Parts per Million (ppm) or Milligrams per Liter (mg/l) - One part per million corresponds to one minute in two years or a single penny in \$ 10,000.

Parts per Billion (ppb) – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

ppt (ng/l) = parts per trillion, or nanograms per liter

Action Level (AL) - The concentration of a contaminant that, 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 “Goal” is 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 contamination.

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.

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 (2024)	0.53	0.25**	0.25-1.82	ppm	2/28/24	N	Water additive used to control microbes.

****Although this Lowest Level Detected is below the Minimum Disinfectant Residual the required level was reached within the required 4-hour time frame.**

DETECTED SAMPLE RESULTS

Chemical Contaminants								
Contaminant	MCL in CCR Units	MCLG	Highest Level Detected	Range of Detections	Units	Sample Date	Violation Y/N	Sources of Contamination
Barium	2	2	0.214	0.175-0.214	ppm	2/9/24	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	100	100	4.31	3.45-4.31	ppb	2/9/24	N	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride	2*	2*	0.20	0.00-0.20	ppm	2/9/24	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nickel	Not Regulated	Not Regulated	2.37	0.00-2.37	ppb	2/9/24	N	Leaching from metals in contact with drinking water, erosion in the production of steel alloys.
Nitrate	10	10	0.53	0.00 – 0.53	ppm	2/9/24	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
cis-1,2-Dichloroethylene	70	70	2.49	1.73 – 2.49	ppb	2/9/24	N	Discharge from industrial chemical factories
Perfluorooctanoic acid (PFOA)	14	8	5.07 (Average of 12 Samples)	4.57-5.73	ppt	2024	N	Discharge from manufacturing facilities and runoff from land use activities
Perfluorooctanesulfonic acid (PFOS)	18	14	7.83 (Average of 12 Samples)	6.72-9.45	ppt	2024	N	Discharge from manufacturing facilities and runoff from land use activities
TTHMs [Total trihalomethanes]	80	N/A	50.40	N/A	ppb	8/5/24	N	By-product of drinking water chlorination
Haloacetic Acids (HAA)	60	N/A	0.00	N/A	ppb	8/5/24	N	By-product of drinking water disinfection
Chlorine (Distribution)	MRDL = 4	MRDLG= 4	0.96 (February 2024)	0.67 – 0.96	ppm	2024	N	Water additive used to control microbes

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

The Mars Borough Water Department prepared a service line inventory that includes the type of material contained in each service line in our distribution system. This inventory can be accessed by contacting our office at (724) 625-1858.

Lead and Copper 2022								
Contaminant	Action Level (AL)	MCLG	90 th Percentile Value	Range of Tap Sampling Results	Units	# of Sites Above AL of Total Sites	Violation Y/N	Sources of Contamination
Lead	15	0	0.00	0.00-2.98	ppb	0 out of 10	N	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	1.3	1.3	0.214	0.0392-0.385	ppm	0 out of 10	N	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Lead: 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 Mars Borough Water Department is 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, 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. If you are concerned about lead in your water and wish to have your water tested, contact The Mars Borough Water Department at (724) 625-1858. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at www.epa.gov/safewater/lead.

Violations: In June of 2024 we monitored for Entry Point Chlorine, but the results were received by the PA Department of Environmental Protection past the required due date resulting in reporting/monitoring violations.

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 EPA's Safe Drinking Water Hotline.

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/Centers for Disease Control (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. You may also visit EPA's website at (www.epa.gov/safewater/).

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 salt and metals, can be naturally occurring or result from urban storm water 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 storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, are byproducts of industrial process 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 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.

It is important to understand that MCLs are set at very stringent levels for health effects. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day, at the MCL level, for a lifetime, to have a one in one million chance of having the described health effect.