



# Mount Vernon

*An Innovative Community; Authentically Hometown*

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## City of Mount Vernon

### WATER TREATMENT PLANT

## ANNUAL WATER QUALITY REPORT REPORTING YEAR 2023

PWSID#: OH4200812

### Utility Introduction

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2023. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain dedicated to meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts or concerns about the information in this report.

For more information about this report, or for any questions relating to your drinking water, please call, the Water Treatment Plant (740) 393-9508

### Community Participation

Public participation and comment are encouraged at regular meetings of Mount Vernon City Council which meets at 7:30 pm on the second and fourth Monday of each month. In addition, Utilities Commission meetings are also held the first Thursday of each month at 8:30 am in City Council Chambers, all public meetings are held in the City of Mount Vernon's Council chambers, which are located on the second floor -- 40 Public Square, Mount Vernon, Ohio 43050.

### Where Does My Water Come From

The Mount Vernon Water Treatment Plant receives its drinking water from wells located in the City Mount Vernon well field which is located at Riverside Park. An additional well is located on the west side of the Kokosing River behind the sludge lagoons. The source of this ground water is the Buried Valley Aquifer coincident with part of the Kokosing River.

### Substances That Could Be in Water

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations limiting the number of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration

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 these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife; Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 agricultural, urban storm water runoff, and residential usages; Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban storm water runoff, and septic systems; Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

### **Source Water Assessment**

The plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area, and a determination of the water. It also includes an inventory or potential sources of contamination within the delineated area, and a determination of the water supply's susceptibility to contamination by the identified potential sources.

According to this study, the aquifer (water-rich zone) that supplies water to the City of Mount Vernon has a high susceptibility to contamination.

This determination is based on the following: The depth to water in the Buried Valley aquifer is less than 15 feet from the ground surface. Zero to 25 feet of clay is present in the vicinity of the wellfield, providing limited protection from contaminants infiltrating from the ground to the aquifer.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is high. This likelihood can be minimized by implementing appropriate protective measures.

More information is available by contacting City of Mount Vernon Engineering office (740) 393-9528 or the Water Treatment Plant (740) 393-9508

You may also view the Mount Vernon City PWS source water assessment report at:

<http://wwwapp.epa.ohio.gov/gis/swpa/OH4200812.pdf>

### **PFAS Sampling**

In 2020, our PWS was sampled as part of the State of Ohio's Drinking Water Per- and Polyfluoroalkyl Substances (PFAS) Sampling Initiative. Six PFAS compounds were sampled, and none were detected in our finished drinking water. For more information about PFAS, please visit [www.pfas.ohio.gov](http://www.pfas.ohio.gov).

### **Important Health Information**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>

### **Lead in Home 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. We are 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 of 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 are available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)

### **In 2023 we had an unconditioned License to operate our water system**

How to read the Water Quality Data Table: EPA establishes the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The table shows the concentrations of detected substances in comparison to regulatory limits. Substances that were tested for, but not detected, are not included in this table. Listed below is information on those contaminants that were found in the City of Mount Vernon drinking water.

## Sampling Results

During the past year, we have sampled the water to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data is included, along with the year in which the sample was taken.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	MCLG [MRDLG]	MCL [MRDL]	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATION	YEAR SAMPLED	TYPICAL SOURCE
Chlorite (ppm)	0.8	1.0	0.42	.20 - .43	NO	2023	By-product of drinking water disinfection
Chlorine Dioxide (ppm)	0.8	0.8	0.39	.27 - .39	NO	2023	By-product of drinking water disinfection
Chlorine (ppm)	[4]	[4]	1.19	1.16 - 1.24	NO	2023	Water additive used to control microbes
Fluoride (ppm)	4	4	0.271	N/A	NO	2021	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Barium (ppm)	2	2	0.023	N/A	NO	2021	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Total Coliform	N/A	TT	1 Positive TC	N/A	NO	2023	Naturally present in the environment

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90 <sup>TH</sup> %TILE)	SITES ABOVE AL/TOTAL SITES	VIOLAION	TYPICAL SOURCE
Copper (ppm)	2022	1.3	1.3	0.025	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2022	15	0	0.000	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

## Definitions

<b>AL (Action Level):</b> The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.	<b>MRDL (Maximum Residual Disinfectant Level):</b> 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.	<b>pCi/l (picocuries per liter):</b> The amount of radiation emitted per minute in a liter of water
<b>MCL (Maximum Contaminate Level):</b> 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.	<b>MRDLG (Maximum Residual Disinfectant Level Goal):</b> The level of 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.	<b>ppb (parts per billion):</b> One part substance per billion parts water (or micrograms per liter).
<b>MCLG (Maximum Contaminant Level Goal):</b> 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.	<b>PFAS:</b> Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam	called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still
<b>ppm (parts per million)</b> One part substance per million parts water (or milligrams per liter)	<b>ND (Not Detected):</b> Indicates that the substance was not found by laboratory analysis.	<b>TT (Treatment Technique):</b> A required process intended to reduce the level of a contaminant in drinking water.

