

CITY OF MARTINS FERRY WATER DEPARTMENT

Drinking Water Consumer Confidence Report For 2024

Dear Customer:

This is the annual water quality report published by the Martins Ferry Water Department. We would like to take this opportunity to once again thank you for your support. Under the Safe Drinking Water Act communities are required to publish an annual Water Quality (Consumer Confidence) Report.

The Martins Ferry Water Department has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, and how to participate in decisions concerning your drinking water and water systems contacts. We are pleased to report that our drinking water is safe and meets federal and state requirements. The Water Department currently has an unconditioned license to operate our water system.

What is the source of your drinking water?

The source of Martins Ferry drinking water is ground water received from eight wells located at the north end of First Street, between the Ohio River and State Route 7. The Martins Ferry Water Department also has an emergency connection with the Village of Bridgeport. During 2024 we used no water from this connection. This report does not contain information on the water quality from the Village of Bridgeport but a copy of their Consumer Confidence Report can be obtained by contacting them at 740-635-2424.

What are sources of contamination to drinking water?

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: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm sewer water runoff, and residential uses; (D) 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; (E) Radioactive contaminants, which can be naturally-occurring or to be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, USEPA prescribes regulations which limit the number of certain contaminants in water provided by public water systems. FDA 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 some small amounts of 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 (1-800-426-4791).

Source Water Susceptibility Report:

The Ohio EPA completed a study of the Martins Ferry Public Water Supply's source of drinking water to identify potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the aquifer (water rich zone) that supplies water to Martins Ferry has a high susceptibility to contamination. This determination is based on the following:

- The lack of a protective layer of clay or shale overlying the aquifer.
- A relatively shallow depth (approximately 30 feet below ground surface) of the aquifer.
- The presence of significant potential contaminant sources in the protection area due to the proximity of businesses within our aquifer boundaries.

This susceptibility means that under currently existing conditions, the likelihood of this aquifer becoming contaminated is relatively high. This likelihood can be minimized by implementing appropriate protective measures. The city will do everything that they can to minimize any contamination and properly test the water to detect any contamination that would occur. More information about the source water assessment or what consumers can do to help protect the aquifer is available by calling Jeremy Shrodes or Charles Smith at the Martins Ferry Water Plant at (740) 633-1378.

License to Operate (LTO) Status Information:

In 2024 Martins Ferry had an unconditioned license to operate our water system.

Who needs to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised people such as people with cancer undergoing chemotherapy, people who have undergone transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infection. 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.

About your drinking water:

The EPA requires regular sampling to ensure drinking water safety. The Martins Ferry Water Department conducted sampling for bacteria, radiological, synthetic organic, and volatile organic contaminants in 2024. Samples were collected for a total of 53 different contaminants, most of which were not detected in the Martins Ferry water supply. The Ohio EPA requires us to monitor some contaminants less than once per year because the concentrations do not change frequently. Some of our data, though accurate, is more than one year old.

Monitoring & Reporting Violations & Enforcement Actions:

In 2024 Martins Ferry Water received no Violations or Enforcement Actions.

How do I participate in decisions concerning my drinking water?

Public participation and comments are encouraged at regular meetings of the City Council which meet on the first and third Wednesday of each month. For more information about attending the council meeting please call Martins Ferry City Building at 740-633-9462.

Lead Educational Information:

Some individuals are typically more vulnerable to lead in drinking water than the general population. 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. The City of Martins Ferry Water Department 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 thirty seconds to two 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 at (800) 426-4719 or at <http://www.epa.gov/safewater/lead>

Per the Lead and Copper Rules, Public Water Systems were required to develop and maintain a Service Line Inventory. A service line is the underground pipe that supplies your home or building with water. To view the Service Line Inventory, which lists the material type(s) for your location, you can visit <http://martinsferry.org>.

Contaminant (units)	MCLG or MRDLG	MCL or MRDL	Level Found	Range of Detections	Violation	Year Sampled	Typical Source of Contaminants
Radioactive Contaminants							
Radium-226	15pCi/L	5pCi/L	.086 pCi/L	N/A	NO	2022	Natural occurring radioactive elements in soil and rock
Radium-228	15pCi/L	5pCi/L	.122 pCi/L	N/A	NO	2022	Natural occurring radioactive elements in soil and rock
Inorganic Contaminants							
Fluoride (ppm)	4	4	1.095 ppm	1 – 1.2	NO	2024	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	.24 ppm	.24 - .24 ppm	NO	2024	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Bromate (ppb)	0	10	<.008 ppm	<.008 - <.008	NO	2024	By-Product of Drinking Water Chlorination
Selenium	50 ppb	50 ppb	1.22 ppb	NA	NO	2023	Industrial and Agricultural Sources
Nickel	NA	NA	3.58 ppb	NA	NO	2023	Industrial and Natural sources
Residual Disinfectants and Disinfection Byproducts							
Total Chlorine (ppm)	MRDLG=4	MRDL=4	.8425ppm	.82 - .88	NO	2024	Water Additive to control Microbes
Total Trihalomethanes (ppb)	NA	80	13.4 ppb	13.1-13.4	NO	2024	By-Product of Drinking Water Chlorination
Haloacetic Acids (ppb)	NA	60	14.6 ppb	5.24-14.6	NO	2024	By-Product Drinking Water Chlorination

Lead and Copper							
Contaminant (units)	Action Level (AL)	MCLG	Individual Results over the AL	90 TH Percentile Value	Violation	Year Sampled	Typical Source of Contaminants
Lead (ppb)	15 ppb	0 ppb	0	1.6 ppb	NO	2024	Corrosion of household plumbing; Erosion of natural deposits.
	0 out of _24_ samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ppm)	1.3 ppm	1.3 ppm	0	.186 ppm	NO	2024	Corrosion of household plumbing; Erosion of natural deposits
	0 out of _24_ samples were found to have copper levels in excess of the lead action level of 1.3 ppm.						

What was corrected for 2024:

The reported Level Found of 13 ug/L for Total Trihalomethanes (TTHM) should have been reported as 13.4 ug/L. The reported Level Found of 9.2 ug/L for Haloacetic Acids (HAA5) should have been reported as 14.6 ug/L. TTHM and HAA5 were labeled as Volatile Organic Contaminants but should have been labeled as Disinfection By-Products. The 90th Percentile reported in the CCR for Lead should have been reported as 1.6 ppb not 0.52 ppb. The 90th Percentile reported in the CCR for Copper should have been reported as 0.186 ppm not 0.74 ppm

The Table of Detected Contaminants should include the most recent data for all detected contaminants. The 2023 detections of Selenium (1.22 ppb) and Nickel (3.58 ppb) were not included in the Table of Detected Contaminants in your report. The Year Sampled for both Radium-226 and Radium-228 should have been reported as 2022 not 2023. The Table of Detected Contaminants should only contain the most recent data for contaminants that have been detected in your drinking water. The Table in the 2024 report contains a contaminant that was not detected in your PWS's water (Barium). The units reported in the Table of Detected Contaminants were reported in varying formats. Units should be consistent throughout the table - using either ppb/ppm or ug/L and mg/L.

Other Corrections:

In reviewing information to correct information that was reported incorrectly, it was also determined that information from the 2020 CCR had incorrect information. Please review the following data for notification of corrections to the 2020 CCR.

The required Table of Detected Contaminants was incomplete and/or inaccurate in the report. The level found and range for TTHM was incorrect. The range should have been 14 – 33.6 ug/L, with a level found of 33.6 ug/L. The range for HAA5 was incorrect. The correct range should have been 2.9 - 7 ug/L. c. The value for the 90th percentile for lead was

incorrect. The correct value should have been 2 ug/L. The terms 'MRDL' and 'MRDLG' were missing from the table (for chlorine) and in the definitions section.

Definitions of some terms contained within this report.

- **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 Contaminant Level (MCL):** The highest level of contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

- **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 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.

- **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

- **Treatment Technique (TT):** A required process intended to reduce the level of contaminants in drinking water.

- **Contact Time (CT):** means the mathematical product of a "residual disinfectant concentration" (C), which is determined before or at the first customer, and the corresponding "disinfectant contact time" (T).

- **Microcystins:** Liver toxins produced by a number of cyanobacteria. Total microcystins are the sum of all the variants/congeners (forms) of the cyanotoxin microcystin.

- **Cyanobacteria:** Photosynthesizing bacteria, also called blue-green algae, which naturally occur in marine and freshwater ecosystems, and may produce cyanotoxins, which at sufficiently high

concentrations can pose a risk to public health.

- **Cyanotoxin:** Toxin produced by cyanobacteria. These toxins include liver toxins, nerve toxins, and skin toxins. Also sometimes referred to as “algal toxin”.

- **Level 1 Assessment** is a study of the water system to identify the potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

- **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.

- **PFAS:** 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 ongoing.

- **Master Meter (MM):** A master meter is one that connects a wholesale public water system to

consecutive public water system(s). This type of meter monitors the amount of water being sent to the consecutive system(s) and can also be used to determine the quality of water being delivered to the consecutive system(s).

- **Parts per Million (ppm) or Milligrams per Liter (mg/L)** are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

- **Parts per Billion (ppb) or Micrograms per Liter (µg/L)** are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

- **The “<” symbol:** A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

- **Picocuries per liter (pCi/L):** A common measure of radioactivity.

To receive a paper copy of the CCR please contact the Utility Office at 740-633-6151. If you have questions concerning the CCR please call James Jenkins at 740-317-9309.