

CITY OF MARTINS FERRY WATER DEPARTMENT

DRINKING WATER QUALITY REPORT FOR 2016

Dear Customer:

This is the eighteenth 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, 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 2016 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.

In order to insure that tap water is safe to drink, USEPA prescribes regulations, which limit the amount 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 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 (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 do 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 Donnie Neavin or Bill Suto at the Martins Ferry Water Plant at (740) 633-1378.

Who needs to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons 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 2016. Samples were collected for a total of 75 different contaminants most of which were not detected in the Martins Ferry water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations do not change frequently. Some of our data, though accurate, are more than one year old.

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>

How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of City Council which meets the first and third Wednesday of each month. For more information on your drinking water contact Donnie Neavin or Bill Suto at (740) 633-1378.

Listed below is information on those contaminants that were found in the Martins Ferry drinking water:

CONTAMINANTS (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Year Sampled	Typical Source of Contamination
RESIDUAL DISINFECTS							
Chlorine (ppm)	4	4	0.60 ppm	0.20 – 1.0 ppm	NO	2016	Water additive used to control microbes
INORGANIC COMPOUNDS							
Fluoride (ppm)	4	4	1.0 ppm	0.81 - 1.19 ppm	NO	2016	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (ppm)	10	10	.694 ppm	NA	NO	2016	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Bromate (ppb)	0	10	<5 ppb	<5 ppb	NO	2016	By-product of drinking water chlorination
Lead (ppb) Action Level (AL)	0	AL=15 ppb	90th % <5.0 ppb	<5.0-8.2 ppb	NO	2014	Corrosion of household plumbing; Erosion of natural deposits.
Copper (ppm) Action Level (AL)	AL=1.3 ppm	AL=1.3 ppm	90th % .506ppm	<.05-.86 ppm	NO	2014	Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives.
Barium (mg/L)	2	2	0.0763 (mg/L)	.05-.1 (mg/L)	No	2014	Discharge of drilling wastes; Discharge from metal refinery; Erosion of natural deposits
VOLATILE ORGANIC CONTAMINANTS							
TTHMs, (ppb) Total Trihalomethanes	NA	80	22.89 ppb	NA	NO	2016	By-product of drinking water chlorination
Haloacetic Acids (ppb)	NA	60	5.93 ppb	NA	NO	2016	By product of drinking water chlorination

Definitions of some terms contained in this report:

Maximum Contaminant Level (MCLG): The level of a contaminant that is allowed in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

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

Parts per million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration as 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 (ug/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

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

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.