



City of Mount Vernon Drinking Water Consumer Confidence Report For 2017

Introduction

The City of Mount Vernon 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 you can participate in decisions concerning your drinking water and water system.

Source Water Information.

The Mount Vernon Water Treatment Plant receives its drinking water from wells located in the Mount Vernon well field, part of which is located in 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.

The aquifer that supplies drinking water to the City of Mount Vernon has a high susceptibility to contamination due to the sensitive nature of the aquifer in which the wells are located and the existing potential contaminant sources identified. This does not mean that the well field will be contaminated; only that conditions are such that ground water could be impacted by potential contaminant sources. Future contamination may be avoided by implementing protective measures. The City has a Source Water Protection Plan in draft form. More information is available by contacting Mathias Orndorf at 393-9502 or 393-9508 or the Ohio EPA at 614-644-2752.

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 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 be the result of oil and gas production and mining activities. In order to ensure 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).

Who needs to take special precautions?

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 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 (1-800-426-4791).

About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The Mount Vernon Water Department conducted sampling for bacteria, nitrate, and disinfection byproducts during 2017. The Ohio EPA requires 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, though accurate, may be more than one year old. Listed below is information on those contaminants that were found in the Mount Vernon drinking water.

TABLE OF DETECTED CONTAMINANTS

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Bacteriological							
Total Coliform	0	1 positive sample per month	1	0-1	NO	2017	Naturally present in the environment
Fecal Coliform or E.coli	0	1 positive sample per month	0	N/A	NO	2017	Human or Animal Fecal waste
Inorganic Contaminants							
Barium (ppm)	2	2	0.021	0-0.021	NO	1-4-2012	Erosion of natural deposits; discharge of drilling wastes; discharge from metal refineries
Fluoride (ppm)	4	4	0.33	0-0.33	NO	1-6-2015	Erosion of natural deposits; Discharge from fertilizers and aluminum factories
Disinfection By-products							
	MCLG	MCL					
Chlorite (mg/l)	0.8	1.0	0.49	0.40-0.49	NO	2017	By-product of drinking water disinfection
Residual Disinfectants							

MRDLG MRDL							
Chlorine Dioxide	0.8 mg/l	0.8	0.40mg/l	0.23-0.40	NO	2017	Water additive used to control microbes
Lead and Copper							
Contaminants (units)	Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical source of Contaminants	
Lead (ppb)	15 ppb	1- 19.6 ppb retest was <5ug/l	15 ppb	NO	2015	Corrosion of household plumbing systems; erosion of natural deposits	
	1 out of 30 samples were found to have lead levels in excess of the lead action level of 15 ppb.						
Copper (ppm)	1.3 ppm	NA	0.022	NO	8-7-12	Corrosion of household plumbing systems; erosion of natural deposits	
	0 out of 30 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.						

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 Mount Vernon Water Plant 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 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 is available from the Safe Drinking Water Hotline at 800-426-4791 or at <http://www.epa.gov/safewater/lead>. You can also find information about lead pipes and links to other sites on the City's web page under lead mapping.

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 the MCLGs as feasible using the best available treatment technology.

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.

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.

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.

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.

We currently have an unconditional license to operate our water system.

Please share this information with other people who drink this water.

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2016. All water systems were required to comply with the Total Coliform Rule from 1989 to March 31, 2016, and begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule there is no longer a maximum contaminant level violation for multiple total coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist. If found, these must be corrected by the PWS.