

# The Mount Sterling Water System

## Drinking Water Consumer Confidence Report

### For 2017

The **Mount Sterling Water System** 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 system contacts.

#### Source Water Information

The **Mount Sterling Water System** receives its drinking water from three (3) wells located at Mason Park, 690 Yankeetown Street. Ohio EPA recently completed a study of the Village of Mount Sterling'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 the Village of Mount Sterling has a low susceptibility to contamination. This determination is based on the following:

- Presence of a thick protective layer of clay overlying the aquifer,
- Significant depth (over 80 feet below ground surface) of the aquifer, and
- No evidence to suggest that ground water has been impacted by any significant levels of chemical contaminants from human activities.

This susceptibility means that under current existing conditions, the likelihood of the aquifer becoming contaminated is low. This likelihood can be minimized by implementing appropriate protective measures. More information about the source water assessment or what consumers can do to help protect the aquifer is available by calling Townhall at (740) 869-2040.

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 Village of Mount Sterling 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 1 800-426-4791 or at <http://www.epa.gov/safewater/lead>.

#### What are sources of contamination to drinking water?

The sources of drinking water both tap water and bottled water includes 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 byproducts 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 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. Immune 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 the *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 Sterling Water System conducted sampling for lead and copper, during 2017, TTHM/HAA5 during 2016. 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, are more than one year old.

### **Lead**

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### **License to Operate (LTO) Status information**

We have a current, unconditioned license to operate our water system.

### **How do I participate in decisions concerning my drinking water?**

Public participation and comments are encouraged at regular meetings of the **Mount Sterling Village Council** which meets **the second and fourth Monday's of each month beginning at 7 P.M.** For more information on your drinking water, contact Townhall at **(740) 869-2040**.

### **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.

**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.

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 (ug/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.

## Table of Detected Contaminants

Listed below is information on those contaminants that were found in the **Mount Sterling Water System**.

**TABLE OF DETECTED CONTAMINANTS**

Contaminants (Units)	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTION	VIOLATION	SAMPLE YEAR	TYPICAL SOURCE OF CONTAMINANTS
<b>Disinfections &amp; Disinfection Byproducts</b>							
HALOACETIC ACIDS (HHA5) (ppb)		60	<6.0	NA	N	2017	Byproduct of drinking water chlorination
TOTAL TRIHALOMETHANES (TTHMs) (ppb)		80	19.7	Na	N	2017	Byproduct of drinking water chlorination
<b>Residual Disinfectants</b>							
Asbestos			0.16			2012	
Total Chlorine (ppm)	MRDL 4	MRSLG 4	1.4	0.45 – 2.5	N	2010	Water additive to control microbes
<b>Inorganic/ Organic Contaminants</b>							
NITRATE NITRITE	10	10	0.11 <0.10	NA	N N	2016 2015	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Arsenic	4 <0.20 ug/l	4.0 ug/l	<4.4	NA	N	2015	
Antimony	<0.30 ug/l	6	<4.0ug/l		N	2015	
Lead		0.015 mg/l			N 0 out of 10 samples were found to have levels in excess of the lead action level of 15 ppb.	2017	
Copper		1.3 mg/l			N 0 out of 10 samples were found to have levels in excess of the copper action level of 1.3 ppm	2017	
Barium		2000 ug/l	<53.7		N	2015	
Beryllium		4 ug/l	<1.0		N	2015	
Cadmium		5 ug/l	<1.0		N	2015	
Chromium		1000 ug/l	<5.0		N	2015	
Cyanide		200 ug/l	<10.0 ug/l		N	2012	
Fluoride	4	4000 ug/l	<1.75 ug/l		N	2015	Erosion of natural deposits, Water additive which promotes strong teeth, Discharge from fertilizer and aluminum factories
Mercury		2 ug/l	<0.5 ug/l		N	2015	
Nickle			10.0 ug/l		N	2015	
Selenium		50 ug/l	<5.0 ug/l		N	2015	
Thallium Total		2 ug/l	<1.5 ug/l		N	2015	
Alachlor	0	0.002	<0.0002 mg/l		N	2017	
Atrazine	0.003	0.003	<0.0003 mg/l		N	2017	
Simazine	0.004	0.004	<0.00035 mg/l		N	2017	
<b>Radiologicals</b>							
Gross Alpha			<3.00		N	2015	
Radium			<1		N	2015	

## Typical Source of Contaminants

Asbestos	Decay of asbestos cement in water main; erosion of natural deposits
Arsenic	Erosion of natural deposit; runoff from orchards; runoff from glass & electronics waste
Antimony	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Alachlor	Runoff from herbicide used on row crops
Lead	Corrosion of household plumbing systems; erosion of natural deposits
Copper	Corrosion of household plumbing systems; erosion of natural deposits
Barium	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Beryllium	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Cadmium	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide	Discharge from steel/ metal factories; discharge from plastic and fertilizer plants
Mercury	Erosion of natural deposits; discharge from refineries and factories runoff from landfills and cropland
Selenium	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Thallium	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Atrazine	Runoff from herbicide used on row crops
Simazine	Herbicide runoff

