

# 2016 Annual Water Quality Report

**Medina County**  
Southern Water District  
PWS ID#: OH5260712



## 2016 CONSUMER CONFIDENCE REPORT MEDINA COUNTY SOUTHERN WATER DISTRICT PWS ID #: OH5260712

The U.S. Environmental Protection Agency (EPA) has adopted rules which require all water suppliers to annually provide information on the quality of water supplied to customers. Medina County, your drinking water provider, has prepared this Consumer Confidence Report in order to meet these requirements and to inform you of the quality of water you are receiving. This report indicates that the water the County has been providing to you meets all requirements adopted by the U.S. EPA. The Medina County Chippewa Lake Water Plant obtains its water from three wells located at 7090 Lake Rd. The Westfield Water Plant obtains its water from two wells located west of the Village and one on Westfield Road. In addition, there are also two emergency water supply connections to the County's Northwest Water System. The Chippewa Lake connection, at the Chippewa Water Plant and The Westfield emergency connection on Friendsville Road near Lafayette Road was not used in 2016.

For more information about this report, or for any questions relating to your drinking water, please call Dave Ling, Water Distribution Systems Supervisor, at (330) 723-9585.

### COMMUNITY PARTICIPATION

The Medina County Board of Commissioners holds regularly scheduled meetings every Tuesday at 9:30 a.m. at the County Administration Building, 144 N. Broadway, Medina. Information regarding these meetings can be found on the Medina County Events and Meeting Calendar at <http://www.co.medina.oh.us/calendar.html>. The public may also address any drinking water concerns to the Medina County Sanitary Engineer's Superintendent of Treatment, Dave Bazilevich, at (330) 723-9585.

## **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 [www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline](http://www.epa.gov/ground-water-and-drinking-water/safe-drinking-water-hotline).

## **SUBSTANCES THAT COULD BE IN WATER**

To ensure that tap water is safe to drink, U.S. EPA prescribes regulations limiting the amount 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 stormwater 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 agriculture, urban stormwater runoff, and residential uses; 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 stormwater 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.

## **LEAD AND DRINKING WATER**

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. Medina County is responsible for providing high quality drinking water, but cannot control contaminants that may be contributed to the water through the variety of materials used in plumbing components. When your water has been sitting for several hours, metals from these fixtures can leach into your water. 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 or at [www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water](http://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water).

## **OPERATING LICENSE**

Medina County currently has an unconditioned license issued by the Ohio EPA to operate The Medina County Southern water system.

## **SOURCE WATER ASSESSMENT**

The Ohio EPA recently completed a study of the Chippewa Lake System wells in an attempt to identify any 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 County's Chippewa Lake System has a moderate susceptibility to contamination. This susceptibility rating means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is moderate, not the existence of contamination. The aquifer from which Westfield draws water has a high susceptibility to contamination. This does not mean the water supply will become contaminated, only that conditions are such that ground water could be impacted by potential contaminant sources. Therefore, Medina County has developed a Wellhead Protection Plan to protect the ground water supply from potential contamination. Detailed information is provided in the Source Water Assessment Report, which can be obtained by calling the Medina County Sanitary Engineers at 330-723-9585.

Some things that customers can do to protect the drinking water supply is to dispose of the following chemicals properly: cleaning products, auto products, fuel oil, furniture strippers, lawn and garden products, and oil-based paints. Customers should not dispose of these in sinks, toilets or storm drains. Storm drains transmit water and pollutants directly to the ground or streams.

## SAMPLING RESULTS

The Ohio EPA requires regular sampling to ensure drinking water safety. Along with daily treatment monitoring requirements, Medina County regularly conducts sampling for bacterial, inorganic, radiological, synthetic organic, and volatile organic contaminants. The Ohio EPA requires the monitoring of some contaminants less than once per year because the concentration of these contaminants does not change frequently. In these cases, the most recent sample data is included along with the year in which the sample was taken.

### Contaminant Monitoring Results

#### CHIPPEWA WATER PLANT

Substance (units)	Level Found	Range Detected	MCL	MCLG	Violation	Sample Year	Typical Source
Nitrate (ppm)	0.39	0.31 – 0.49	10	10	NO	2016	Natural deposits, fertilizers, sewage
Nitrite (ppm)	0.24	0.16 - 0.33	1	1	NO	2016	Natural deposits, fertilizers, sewage
Radium-228 (pCi/L)	<1	N/A	5	0	NO	2015	Erosion of natural deposits.
Fluoride (ppm)	0.29	N/A	4	4	NO	2015	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer ad aluminum factories.
Barium (ppm)	0.0 276	N/A	2	2	NO	2015	Discharge from drilling wastes, metal refineries & natural deposits.

#### WESTFIELD WATER PLANT

Substance (units)	Level Found	Range Detected	MCL	MCLG	Violation	Sample Year	Typical Source
Arsenic (ppb)	<3.0	NA	10	10	NO	2015	Erosion of natural deposits, runoff from glass/electronics prod wastes.
Fluoride (ppm)	0.31	NA	4	4	NO	2015	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

#### JOINT DISTRIBUTION

Substance (units)	Level Found	Range Detected	MRDL	MRDLG	Violation	Sample Year	Typical Source	
Total Chlorine (ppm)	1.21	0.23 - 2.66	4	4	NO	2016	Water additive used to control microbes	
Substance (units)	Level Found	Range Detected	MCL	MCLG	Violation	Sample Year	Typical Source	
*Total Trihalomethanes (ppb)	48.9	27.6 – 70.3	80	NA	NO	2016	By-product of drinking water chlorination	
*Haloacetic Acids (ppb)	18.2	6.6 – 29.8	60	NA	NO	2016	By-product of drinking water chlorination	
Substance (units)	Level Found	Range Detected	MCL	MCLG	Violation	Sample Year	Sites above AL/Total Sites	Typical Source
Copper (ppb)	151	<50 – 718	AL=1300	1300	NO	2016	0/20	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead (ppb)	<5.0	<5.0 – 12.6	AL=15	0	NO	2016	0/20	Corrosion of household plumbing systems; Erosion of natural deposits.

\*Disinfection byproducts are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both TTHMs and HAA5s.

## Definitions

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

**MCL (Maximum Contaminant Level):** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

**MCLG (Maximum Contaminant Level Goal):** 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.

**MRDL (Maximum Residual Disinfectant Level):** 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.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of a 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.

**NA:** Not applicable

**ND (Not Detected):** Indicates that the substance was not found by laboratory analysis.

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**pCi/L (picocuries per liter):** A measure of radioactivity.

**Ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**Ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**Removal ratio:** A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

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