

# 2021 Annual Water Quality Report

Medina County  
Southern Water District  
PWS#: OH5260712



## 2021 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. The Westfield emergency connection at Friendsville Rd. and Lafayette Rd. was used for 28 days, using a total of 6.859 million gallons.

For more information about this report, or for any questions relating to your drinking water, please call Charles Burgess, Water Supply Coordinator, 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 <https://www.medinaco.org/upcoming-events/>. The public may also address any drinking water concerns to the Medina County Sanitary Engineer's Superintendent of Treatment, Dave Brandon, 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.

### **OPERATING LICENSE**

In 2021 Medina County had an unconditioned license issued by the Ohio EPA to operate The Medina County Southern Water System.

### **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 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>.

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

### Contaminants Sampled By Medina County Sanitary Engineers

#### Chippewa Water Treatment Plant

| Substance (units)                    | Sample Year | Level Found | Range of Detections | MCLG | MCL | Violation | Typical Source   |
|--------------------------------------|-------------|-------------|---------------------|------|-----|-----------|--|
| Barium (ppm)                         | 2021        | 27.4        | NA                  | 2    | 2   | No        | Discharge of Drilling Waste; Discharge from metal refineries; Erosion of natural deposits.                                 |
| Cyanide (mg/L)                       | 2021        | .004        | NA                  | 200  | 200 | No        | Discharge from plastic and fertilizer factories; Discharge from steel/Metal factories.                                     |
| Flouride (ppm)                       | 2021        | .3          | NA                  | 4.0  | 4.0 | No        | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate [measured as Nitrogen] (ppm) | 2021        | .52         | NA                  | 10   | 10  | No        | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits                                |
| Nitrite [measured as Nitrogen] (ppm) | 2021        | .03         | <.01-.03            | 1    | 1   | No        | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.                               |
| Radium 228 (pCi/L)                   | 2021        | 1.4         | NA                  | 0    | 5   | No        | Erosion of natural deposits.   |

#### Westfield Water Treatment Plant

|                                      |      |      |    |     |     |    |  |
|--------------------------------------|------|------|----|-----|-----|----|--|
| Barium (ppm)                         | 2021 | 16.5 | NA | 2   | 2   | No | Discharge of Drilling Waste; Discharge from metal refineries; Erosion of natural deposits.                                 |
| Cyanide (mg/L)                       | 2021 | .002 | NA | 200 | 200 | No | Discharge from plastic and fertilizer factories; Discharge from steel/Metal factories.                                     |
| Flouride (ppm)                       | 2021 | .31  | NA | 4.0 | 4.0 | No | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Arsenic (ppb)                        | 2021 | 1    | NA | 0   | 10  | No | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes                     |
| Nitrate [measured as Nitrogen] (ppm) | 2021 | .13  | NA | 10  | 10  | No | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits                                |

| Joint Distribution Results         |             |                            |                                   |                       |                   |   |  |
|------------------------------------|-------------|----------------------------|-----------------------------------|-----------------------|-------------------|---|--|
| Residual Disinfection              |             |                            |                                   |                       |                   |   |  |
| Substance (units)                  | Sample Year | Level Found                | Range of Detections               | MCLG                  | MCL               | Violation   | Typical Source                             |
| Total Chlorine Residual (ppm)      | 2021        | 1.16                       | 0.37 – 2.54                       | 4.0                   | 4.0               | No  | Water additive to control microbes         |
| Volatile Organic Contaminants      |             |                            |                                   |                       |                   |   |  |
| Haloacetic Acids [HAA5] (ppb)      | 2021        | 21                         | 13.9 - 27.7                       | No goal for the total | 60                | No  | By-product of drinking water disinfection. |
| Total Trihalomethanes [TTHM] (ppb) | 2021        | 68                         | 65.5 – 69.7                       | No goal for the total | 80                | No  | By-product of drinking water disinfection. |
| Lead and Copper Results            |             |                            |                                   |                       |                   |   |  |
| Substance (units)                  | Sample Year | Individual Results Over AL | 90% of Test Levels Were Less Than | Violation             | Action Level (AL) | Typical Source  |  |
| Lead (ppb)                         | 2021        | 0                          | 1.2                               | No                    | 15                | Corrosion of household plumbing systems; Erosion of natural deposits.                                   |  |
|                                    |             |                            |                                   |                       |                   | Zero out of 20 samples were found to have lead levels in excess of the lead action level of 15 ppb      |  |
| Copper (ppm)                       | 2021        | 0                          | .1                                | No                    | 1.3               | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |  |
|                                    |             |                            |                                   |                       |                   | Zero out of 20 samples were found to have copper levels in excess of the lead action level of 1.3 ppm   |  |

### SOURCE WATER ASSESSMENT

The Medina County Southern District is comprised of 4 water storage towers and 1 water storage tank, supplying the water storage for two water treatment plants, the Chippewa Water Treatment Plant and the Westfield Water Treatment Plant. The Chippewa Water Treatment Plant is supplied by three separate wells at one location. The Westfield Water Treatment Plant is supplied by three separate wells at two separate locations.

The Ohio EPA completed a study of the Southern District's wells to identify any potential contaminant sources and provide guidance on protecting the drinking water sources. According to this study, the Chippewa Water Treatment Plant's water sources have a moderate susceptibility to contamination. This susceptibility rating means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is moderate. The Westfield Water Treatment Plant has three sources of water at two locations, the Westfield well location and the Greenwich well's location. The Westfield Road well is less than 20 feet below ground surface with a relatively thin layer of clay overlying the aquifer and as such has a high susceptibility to contamination. Therefore, Medina County has developed a Wellhead Protection Plan to protect the ground water supply from potential contamination. The Greenwich Road wells location is more than 40 feet below ground surface and has a thick layer of clay overlying the aquifer and has a moderate susceptibility to 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.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426- 4791).

\*Disinfection byproducts are the result of providing continuous disinfection of your drinking water and form when disinfectants combined 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 residual disinfectant level allowed.

**MRDLG (Maximum Residual Disinfectant Level Goal):** The level of residual disinfectant below which there is no known or expected risk to health.

**NA:** Not applicable

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

**Ppb (parts per billion):** Units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.

**Ppm (parts per million):** Units of measure for concentration of a contaminant. A part per million corresponds to one second in approximately 11.5 days.

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

**The "<" symbol:** A symbol which means 'less than'. A result of "<5" means that the lowest level detected was 5 and the contaminant in that sample was not detected.