

# Mt. Orab Water Supply

Consumer Confidence Report for  
2014

## What is a Consumer Confidence report?

In 1996, Congress amended the Safe Drinking Water Act. It added a provision requiring that all community water systems deliver to their customers a brief annual water quality report. Consumer Confidence Reports (CCR's) summarize information that the water system already collects to comply with regulations. Every community water system that has at least 15 service connections serving year round residents must prepare and distribute a report. These systems typically include cities, towns, homeowners associations, and trailer parks. Each water system must deliver its annual report to consumers by July of the following year. Although the Village of Mt. Orab analyzes for many contaminants, only those contaminants that were detected are listed within the table. This report is based on data collected in the 2014 calendar-year unless otherwise noted. Not all contaminants are required to be analyzed each year. The table lists those contaminants detected most recently within the past five years. For additional information, please call the Mt. Orab Water Treatment Plant at 937-444-2657 or attend a Board of Public Affairs meeting. Meetings are held on the first and third Mondays at 9:00 a.m. in the Municipal Building located at 211 South High Street.



## THE SOURCE OF YOUR WATER:

The Village of Mt. Orab operates a surface water treatment plant located at 116 W. Main St. in Mt. Orab. There are two up-ground raw water reservoirs supplied with surface water from Sterling Run Creek. From there, the treatment plant purifies the water through conventional means utilizing a combination of coagulation, settling, and filtration. An additional stage of treatment was added in the fall of 2005 whereby the filtered water is further treated with Granular Activated Carbon for organic contaminant removal. Ohio EPA recently conducted a Source Water Assessment of the watershed associated with Mt. Orab's water intake on Sterling Run. Surface waters are by nature susceptible to contamination and certain land uses along their banks make them more so. The protection area around Sterling Run is classified as having a high susceptibility due largely in part to the agricultural fields in the watershed. High levels of atrazine, a pesticide commonly applied to agricultural fields, are found seasonally in Sterling Run. The Village of Mt. Orab public water system frequently samples Sterling Run and avoids pumping water into the reservoirs when the quality lessens. The potential for water quality impacts can be further decreased by implementing measures to protect Sterling Run. More detailed information is provided in the Village of Mt. Orab's Drinking Water Source Assessment report which can be obtained by calling the water treatment plant at 937-444-2657.

### \* *Why are there contaminants in my water?*

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. Food and Drug Administration regulations establish limits for contaminants in bottled water which shall 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 at 800-426-4791.

### \* *Is our water meeting other rules that govern our operation?*

The Ohio EPA requires us to test our water for various parameters on a regular basis to ensure its safety. The Village of Mt. Orab water supply had no reporting, monitoring, nor water quality violations in 2014.

### \* *Do I need 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 infections. 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.

### \* *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.

### \* *A word about Lead:*

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 Mt. Orab water supply 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 or at <http://www.epa.gov/safewater/lead>.

### \* *Turbidity Values:*

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the daily samples and shall not exceed 1 NTU at any time. As reported in the table, the Village of Mt. Orab's highest recorded turbidity result for 2014 was 0.32 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100.

### \* *IDSE TTHM & HAA5:*

Under the Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), our public water system was required by USEPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution system with elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning in 2012. 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 THMs and HAAs.

### \* *TOC Values:*

The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest ratio between percent of TOC actually removed to the percentage of TOC required to be removed. A value of greater than one (1) indicates that the water system is in compliance with TOC removal requirements. A value of less than one (1) indicates a violation of the TOC removal requirements.

Contaminant	Violation Y/N	Level Found	Units	MCLG	MCL	Range	Possible source of contamination
<b>Inorganic Contaminants</b>							
<b>Fluoride</b>	No No	0.95 (0.95)	ppm	4	4	0.60 - 1.19 (0.82 - 1.09)	Water additive which promotes strong teeth
<b>Nitrate</b>	No No	0.39 (1.7)	ppm	10	10	<0.10 - 0.39 (BDL - 1.7)	Runoff from fertilizer use; Leaching from septic tanks
<b>Lead 2012</b>	No	< 5.00	ppb	15	15 Action Level	NA	Corrosion of household plumbing systems
<b>Copper 2012</b>	No	0.176	ppm	1.3	1.3 Action Level	NA	Corrosion of household plumbing systems
<b>Microbiological Contaminants</b>							
<b>Turbidity - NTU Standard Met</b>	No No	0.322 100	NTU %	NA NA	TT TT	0.02 - 0.32 NA	Soil runoff
<b>Total Organic Carbon</b>	No	1.43	Removal Ratio	NA	TT	1.27 - 2.76	Naturally present in the environment
<b>Residual Disinfectants</b>							
<b>Total Chlorine</b>	No	1.72	mg/l	MRDLG = 4	MRDL = 4	1.20 - 1.98	Additive to control microbes
<b>Volatile Organic Contaminants</b>							
<b>Total Trihalomethanes</b>	No No	69.17 (28)	ppb	NA	80	16.0 - 65.4 (22.1 - 30.7)	By-product of drinking water chlorination
<b>Haloacetic Acids</b>	No No	50.63 (< 6.0)	ppb	NA	60	6.1 - 62.5 (< 6.0)	By-product of drinking water chlorination
<b>IDSE TTHM's 2010</b>	No	NA	ppb	NA	NA	18.1 - 44.6	By-product of drinking water chlorination
<b>IDSE HAA5's 2010</b>	No	NA	ppb	NA	NA	15.3 - 48.4	By-product of drinking water chlorination
<b>Unregulated Contaminants</b>							
<b>Bromodichloromethane</b>	No No	9.48 (4.3)	ppb	NA	NA	5.5 - 13.7 (2.9 - 6.8)	By-product of drinking water chlorination
<b>Bromoform</b>	No No	0.15 (10)	ppb	NA	NA	BDL - 0.59 (6.1 - 16.8)	By-product of drinking water chlorination
<b>Chloroform</b>	No No	25.65 (1.18)	ppb	NA	NA	5.70 - 50.0 (0.65 - 2.4)	By-product of drinking water chlorination
<b>Dibromochloromethane</b>	No No	2.64 (10.2)	ppb	NA	NA	1.2 - 4.3 (7.0 - 16.7)	By-product of drinking water chlorination
<b>Chloroacetic Acid</b>	No	0.25	ppb	NA	NA	BDL - 2.0	By-product of drinking water chlorination
<b>Dibromoacetic Acid</b>	No	0.46	ppb	NA	NA	BDL - 1.3	By-product of drinking water chlorination
<b>Dichloroacetic Acid</b>	No	13.36	ppb	NA	NA	3.6 - 26.9	By-product of drinking water chlorination
<b>Trichloroacetic Acid</b>	No	15.16	ppb	NA	NA	1.2 - 35.6	By-product of drinking water chlorination

The Village of Mt. Orab Water Supply has a current, unconditioned license to operate its water system.

Water is purchased occasionally from Brown County Rural Water Association. Their results in the above table are in parentheses.

## Contaminant Monitoring Definitions:

- **Maximum Contaminant Level Goal (MCLG):** The level of 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 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.
- **Parts per Million (ppm):** Units of measure for concentration of a contaminant. A part per million corresponds to 1 second in just over 11.5 days.
- **Parts per Billion (ppb):** Units of measure for concentration of a contaminant. A part per billion corresponds to 1 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. **The “>” Symbol:** A symbol which means greater than. **The “=” Symbol:** A symbol which means equal to.
- **The “NA” Symbol:** An abbreviation which means not applicable.
- **Action Level (A.L.):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **BDL:** Below Detectable Limit.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

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