Garrettsville Water Department

2017 WATER QUALITY REPORT

The Village of Garrettsville Water Department is pleased to provide you with its nineteenth annual water quality report. This publication is required of all water utilities to provide each customer with an overview of the quality of water served.

Garrettsville's water comes from two municipal wells sunk approximately 175 feet into an underground aquifer that have hardness levels of approximately 300 mg/l. Water pumped from these wells is treated to remove iron and manganese then disinfected to protect against microbial contaminants. Last year, the Village of Garrettsville conducted sampling for bacteria, nitrate, inorganics, radiological, lead, copper disinfection byproducts, and volatile organic chemicals during 2016 most of which were below detectable limits. For the fifth year in a row the Village sampled one of its production wells along with 16 area residential wells to establish a water quality baseline in the Village's watershed. Anyone interested in this information contact the Village offices at 330-527-4424.

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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

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 (800-426-4791).

A Water Source Assessment Report was prepared by the Ohio EPA in 2002. This report concluded that the aquifer that supplies drinking water to the Village has a moderate susceptibility to contamination, due to the moderate sensitivity of the aquifer location and the existence of potential contaminant sources within the protection zone. This does not mean that this well-field will become contaminated; only that conditions are such that the ground water could be impacted by potential contaminant sources. Future contamination may be avoided by implementing protective measures. More information is available by calling 1-330-963-1292.

The sources of drinking water (both tap water and bottled water) include rivers, 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 before treatment include:

- *Microbial contaminants,* such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agriculture livestock operations and wildlife.

- *Inorganic contaminants,* such as salts and metals, which can be naturally occurring or result from urban stormwater run-off, 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 and residential uses.

- *Radioactive contaminants,* which can be naturally-occurring or be the results of oil and gas production and mining activities.

- *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 stormwater run-off and septic systems.

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 Garrettsville 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.

WATER QUALITY DATA

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Garrettsville Water Department treats the water according to EPA's regulations. The table below lists all the drinking water contaminants that were detected and their testing date. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The data presented in this table includes testing done up to December 31, 2016. The state requires the Village to monitor for certain contaminants less than annually because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

Terms & abbreviations used below:

- **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 a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- **Action Level** (AL): the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **N/A**: not applicable • **nd**: not detectable at testing limit • **ppb**: parts per billion or micrograms per liter
- **ppm**: parts per million or milligrams per liter

Inorganic Contaminants	MCL	MCLG	Garrettsville Water	Range of detections	Sample Date	Typical Source of Contaminant
Total Chlorine (mg/l)	4.0	4.0	1.04	0.83 - 1.20	Daily	Water additive used to control microbes.
Barium (ppm)	2	2	0.058	0.058 - 0.058	1/05/16	Erosion of natural deposits
Barium (ppm)	2	2	0.058	0.058 - 0.058	2/07/13	Erosion of natural deposits
Fluoride (ppm)	4	4	0.155	0.155 - 0.155	1/05/16	Erosion of natural deposits
Fluoride (ppm)	4	4	0.139	0.139 - 0.139	2/07/13	Erosion of natural deposits
Lead	**AL**	**MCLG**	**Garrettsville Water**	**# of sites found above the AL**		
Lead (ppb)	15	0	5.2	0	2016	Corrosion of household plumbing systems
Lead (ppb)	15	0	4.5	0	2013	Corrosion of household plumbing systems
Copper (ppb)	1300	1300	160	0	2016	Corrosion of household plumbing systems
Copper (ppb)	1300	1300	130	0	2013	Corrosion of household plumbing systems
Volatile Organic Contaminants						
Total trihalomethanes (ppb)	80	N/A	17.1	15.0 - 19.1	2016	By-product of drinking water chlorination
Total trihalomethanes (ppb)	80	N/A	13.2	11.3 - 15.0	2015	By-product of drinking water chlorination
Total trihalomethanes (ppb)	80	N/A	13.6	12.4 - 14.7	2014	By-product of drinking water chlorination
Total trihalomethanes (ppb)	80	N/A	7.8	3.4 - 10.7	2013	By-product of drinking water chlorination
Radiological Contaminants						
Radium-228 (PCI/L)	5	N/A	1.51	1.51	2/07/13	Erosion of natural deposits

Garrettsville Water Information

The Garrettsville Water Department pumped almost 69 million gallons to its customers in 2016. Its staff performs daily testing of free and total chlorine residuals at both the water plant and within the distribution system to help monitor and ensure safe and efficient use of its disinfection procedures.

Iron is an abundant and widespread constituent of rocks and soils in Ohio. At sufficient concentrations, iron can adversely affect the taste of water and can leave rust-colored stains on laundry and plumbing fixtures. Manganese is a similar naturally occurring constituent of Ohio waters and can cause brown or black discoloration.

Results from weekly testing of iron and manganese helps the staff monitor filter operations and offer its customers the highest quality water possible.

Iron and manganese levels below are yearly averages.

	MCL	Garrettsville Water	Typical Source of Contaminant
Iron	0.3 Mg/L	<0.08 Mg/L	Naturally occurring.
Manganese	0.05 Mg/L	0.03 Mg/L	Naturally occurring.

The Board of Public Affairs (which administers over the Water Department) meets on the Monday before the second Wednesday each month at 6:30 pm in the Village Municipal Building. Please feel free to participate in these meetings.

In 2016 the Garrettsville Water Department had no water quality violations and met or exceeded all state and federal standards and has a current, unconditioned license to operate a water system. For more information on the Garrettsville Drinking Water System, call (330) 527-2080 or e-mail Jeff Sheehan at ***gvillewater@frontier.com***. Other Village related information is available online at ***www.garrettsville.org***.

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