

Muskingum County Water Department

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2016
*Drinking Water
Consumer Confidence Report
- Northwest System -*

The Muskingum County Water Department 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, and how to participate in decisions concerning your drinking water and water system contacts.

Major improvements to the Treatment Plant, Well Field and Distribution System encompassing 3 phases totaling more than 3 Million dollars began in 2014. Phase 1 of the improvements involved the installation of a water line for the North River Road/North Linden Road area which included a river crossing that has connected our north and south systems to one common source. Work on Phase 1 is in its final stages with the installation of a pressure vault and the final separation of a common county/city water line near Maple Ave. is expected to reach completion in the summer of 2017. In Phase 2, the development of an additional water well has been completed, and went online in November of 2015; increasing the departments pumping capacity to 4 million gallons per day. Phase 3 kicked off the last week of December, 2015 and saw an extensive 1.1 Million dollar upgrade to the Water Treatment Plant, increasing the treatment capacity by an additional 2 million gallons per day. The plant project was completed in 5 months and become fully operational in May of 2016. Our distribution crew completed a water line extension to Burnt Mill Road and has begun work on Vroom Road.

What's the Source of Your Drinking Water?

The MCWD receives its drinking water from the City of Zanesville. The Zanesville water supply is extracted from wells drilled in the eastern flood plain of the Muskingum River along Lewis Drive (S.R. 666). This location is better known in present times as Riverside Park. This source was first developed in 1917, and has been their only source ever since. The water plant is located adjacent to the well field. The Ohio Environmental Protection Agency, on behalf of the State of Ohio, has issued to the Muskingum County Water Department a current, unconditional license for the operations of this system.

For more information on the City of Zanesville's Drinking Water, please contact Paul Mills, Water Superintendent, at (740) 455-0631.

The Ohio EPA recently completed a study of the City of Zanesville'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 that supplies water to the City of Zanesville has a high susceptibility to contamination. This determination is based on the following: (a) the lack of a protective layer of clay/shale/or other impervious materials overlying the aquifer, (b) a shallow depth (less than 20 feet below ground) of the aquifer, (c) the presence of significant contaminant sources in the protection area, and (d) the past presence of manmade contaminants in treated water.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is relatively high. 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 the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Protecting our drinking water source from contamination is the responsibility of all area residents. Please dispose of hazardous chemicals in the proper manner and report polluters to the proper authorities. Only by working together can we ensure an adequate safe supply of water for future generations.

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 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.

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. 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's 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. 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 for 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 Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Lead in your 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. Muskingum County Water 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 <http://www.epa.gov/safewater/lead>.

Customers who wish to check their homes for lead exposure:

Lead testing sample kits are available at our main office at a cost of \$13 per test to cover lab fees. Samples will be analyzed by an independent laboratory in Dublin, Ohio. Call our office at 740-453-0678 for more information.

Sampling Requirements and Results

The EPA requires regular sampling to ensure drinking water safety. The MCWD is required to conduct 10 bacteria samples a month, which equals 120 samples a year. In 2016, 125 bacteria samples were collected and all tested negative for coliform bacteria. The chlorine residual for disinfection is also checked daily throughout the system. The supplier is responsible for all other testing required by the EPA.

The Ohio EPA requires the water supplier to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though accurate, is more than one year old.

Water Monitoring Results (PWS: 6000503)

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
Inorganic Contaminants							
Fluoride (ppm)*	4	4	1.21	0.57 – 1.17	No	2014	Erosion of natural deposits: Water additive which promotes strong teeth: Discharge from fertilizer and aluminum factories
Nitrate (ppm)*	10	10	0.90	NA	No	2014	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Lead (ppb)	0	AL=15	< 5.0	NA	No	2015	Corrosion of household plumbing systems; Erosion of natural deposits
	Zero out of 5 samples was found to have lead levels in excess of the Action Level of 15 ppb						
Copper (ppm)	1.3	AL=1.3	0.950	NA	No	2015	Corrosion of household plumbing systems; Erosion of natural deposits: Leaching from wood preservatives
	Zero out of 5 samples was found to have copper levels in excess of the Action Level of 1.3 ppm						
Volatile Organic Contaminants							
Trihalomethanes (ppb)	NA	80	76.3	31.4 – 99.4	No	2016	By-product of drinking water chlorination
Haloacetic Acids (ppb)	NA	60	20.6	11.7 – 25.1	No	2016	By-product of drinking water chlorination
Disinfectant Residuals							
Total Chlorine Residual (ppm)	4	4	1.90	1.02 – 2.08	No	2016	Water additive used to control microbes

*Denotes monitoring results collected by the City of Zanesville

Public participation and comments are encouraged. For more information on your drinking water, please contact Don Madden, General Manager at 740-453-0678 or Debbie Ralph, Water Plant Supervisor, at 740-674-6614.

DEFINITIONS OF SOME TERMS CONTAINED WITHIN THIS REPORT:

The “<” symbol: A symbol which means less than the detectable level.

ACTION LEVEL (AL): The concentration, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

MAXIMUM CONTAMINANT LEVEL GOAL (MCLG): The level of a contaminant in drinking water below, which is no known or expected risk to health. MCLG’s allow for a margin of safety.

MAXIMUM CONTAMINANT LEVEL (MCL): 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 treatment available.

PARTS PER MILLION (ppm) OR MILLIGRAMS PER LITER (mg/L): Unit of measure for the 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 (µg/L): Unit of measure for the concentration of a contaminant. A part per billion corresponds to one second in 31.7 years

MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary to control 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. MRDLG’s do not reflect the benefits of the use of disinfectant to control microbial contaminants.

TTHM: Trihalomethanes, A bi-product of drinking water chlorination.

HAA5: Haloacetic Acids, A by-product of drinking water chlorination.