

Annual Drinking Water Quality Report for 2018

Drinking Water Source

Tate Monroe Water Association's (TMWA) drinking water is received from the Ohio River Valley Aquifer. Eleven (11) vertical wells and one (1) collector well are located along the Ohio River at Clermontville and near Moscow.

The aquifer that supplies drinking water to the TMWA has a high susceptibility to contamination, due to the nature of the aquifer in which the drinking water wells are located and the existing potential contaminant sources identified. This does not mean that this well field will become contaminated; only that conditions are such that the groundwater could be impacted by potential contaminant sources. Future contamination may be avoided by implementing protective measures. Please dispose of hazardous chemicals in the proper manner. Protecting our drinking water source is the responsibility of all area residents. By working together we can ensure an adequate safe supply for future generations.

The assessment report is available at:

<http://www.wapp.epa.ohio.gov/gis/swpa/OH1301312.pdf>

TMWA also has an emergency connection with Clermont County Water which is only used to supplement the supply if needed for drought conditions or when sections of the system are being repaired.

Substances in Source Water

The sources of drinking water (both tap water and bottled water) includes 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 include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- 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;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses;
- 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;
- 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, USEPA prescribes 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.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk. More information about the contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline at (1-800-426-4791)

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 and the Center for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

The EPA requires regular sampling to ensure drinking water safety. TMWA conducts sampling for bacteria, inorganic, radiological, synthetic organic, and volatile organic contaminants. Most of these contaminants were not detected in the TMWA water supply.

Also, 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. TMWA 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>.

We have a current, unconditioned license to operate our water system.

We want our members to be informed relative to their water utility. Regular meetings are held the second Tuesday of each month at 6:30 PM at the main office building located at 2599 S.R. 232. If you, as a member, wish to be placed on the agenda, call 734-2236 ext. 28 so that a time can be reserved.

For more information on your drinking water, contact Kevin Newberry, Plant Operations Manager at 513-734-2236 ext. 27 or knewberry@tatemonroe.com.

TMWA routinely monitors for contaminants in your drinking water according to Federal and State laws. The tables on the following page shows the results of our monitoring for the period of January 1st to December 31st, 2018

REGULATED CONTAMINANTS

Lead and Copper						
Contaminant (Units)	Action Level (AL)	Individual Results over AL	90% of test levels were less than	Violation	Year Sampled	Typical Source of Contaminants
Copper (ppm)	1.3	N/A	0.17	No	2016	Corrosion of Household Plumbing Systems; erosion of natural deposits; leaching of wood preservatives
	Zero out of 30 samples was found to have copper levels in excess of the copper action level of 1.3 ppm					
Lead (ppb)	15	17 ppb	BDL	No	2016	Corrosion of Household Plumbing Systems; erosion of natural deposits; leaching of wood preservatives
	One out of 30 samples was found to have lead levels in excess of the lead action level of 15 ppb					

Inorganic Contaminants							
Contaminant (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Year Sampled	Typical Source of Contaminants
Fluoride (ppm)	4	4	1.13	0.74 to 1.2	No	2018	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	1.01	0.23 to 1.01	No	2018	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Barium (ppm)	2	2	0.039	0.025 to 0.039	No	2017	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits

Volatile Organic Contaminants							
TTHMs (ppb) [Total Trihalomethanes]	0	80	27.35	16.1 to 38.6	No	2018	By-product of drinking water chlorination
HAA5 (ppb) [Haloacetic Acids]	0	60	6.3	BDL to 12.6	No	2018	By-product of drinking water chlorination

Residual Disinfectants							
Total Chlorine (ppm)	4	4	1.4	0.3 to 1.7	No	2018	Water additive used to control microbes

UNREGULATED CONTAMINANTS		
Contaminant	Average (ppb)	Range of Test Values (ppb)
Organic Contaminates¹ 2018		
Bromoform	2.05	1.6 to 2.5
Bromodichloromethane	9.2	5.3 to 13.1
Chloroform	8.6	4.5 to 12.7
Dibromochloromethane	7.5	4.7 to 10.3
Dibromoacetic acid	2.8	1.9 to 3.7
Dichloroacetic acid	3.25	1.6 to 4.9
Monobromoacetic acid	BDL	BDL
Monochloroacetic acid	BDL	BDL
Trichloroacetic acid	2	BDL to 4
UCMR3 Compliance² 2015		
Chlorate	205	BDL to 870
Chromium (Total)	0.04	BDL to 0.24
Chromium-6	0.007	BDL to 0.037
1,4-Dioxane	0.09	BDL to 0.31
Molybdenum	1.6	BDL to 2.5
Strontium	146	97 to 180

Table Definitions:

ppm = parts per million corresponding to one minute in two years.

ppb = parts per billion corresponding to one minute in 2,000 years.

AL = Action Level, the concentration of a contaminate, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL = Maximum Contaminant Level, the highest level of contaminate that is allowed in drinking water.

MCLG = Maximum Contaminate Level Goal, the level of a contaminate in drinking water below which there is no known or expected risk to health.

BDL - Below Detection Limit

< Less than symbol

1-Unregulated contaminants do not have a set MCL or MCLG limit. The unregulated contaminants listed in the table above are unregulated separately but are included in the first table as TTHMs and HAAs. The typical source for the listed unregulated contaminates, as noted in the first table, is a by-product of drinking water chlorination.

2-The Third Unregulated Contaminant Rule (UCMR3) for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

The data presented in this report are from the most recent testing done in accordance with the regulations. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentration of these contaminants do not change frequently.

MCLs are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect. Please call our office if you have questions.