

2019 Water Quality Results for Monroe Township Water & Sewer District PWS

Substance	Highest Level Detected	Range of Detections	Highest Level Allowed (MCL)	Ideal Goals (MCLG)	Violations	Year Samples	Sources of Substances
Fluoride	1.22 ppm	0.81-1.22ppm	4 ppm	4 ppm	None	2019	Erosion of Natural Deposits
Barium	0.081 ppm	N/A	2 ppm	2 ppm	None	2018	Erosion of Natural Deposits
Total Chlorine	1.4 ppm	0.6-1.4 ppm	4 ppm	4 ppm	None	2019	Water Disinfection
Nitrate	0.702 ppm	N/A	10 ppm	10 ppm	None	2018	Runoff From Fertilizer Use

Regulated at the Customer's Tap

Substance	90 th Percentile	Range of Detection	Action Level (AL)	Individual Results over the AL	Violations	Year Samples	Sources of Substances
**Lead	5 ppb	0-119.15 ppb	15 ppb	1	None	2019	Household Plumbing
**Copper	0.0453 ppm	.008-0.0458	1.3 ppm	0	None	2019	Household Plumbing

****See Special Comments *5 Lead Samples taken on 8/6/2019 and 5 additional samples were taken on 8/28/2019 for a total of 10 Samples.**

Regulated in the Distribution System

Substance	Highest Level Detected	Range of Detections	Highest Level Allowed (MCL)	Ideal Goals (MCLG)	Violations	Year Samples	Sources of Substances
Total Trihalomethane	17.01 ppb	0.0-10.97 ppb	80 ppb	0 ppb	None	2019	By-Product of Drinking Water Chlorination

Unregulated Contaminants

Substance	Highest Level Detected	Range of Detections	Highest Level Allowed (MCL)	Ideal Goals (MCLG)	Violations	Year Samples	Sources of Substances
Bromodichloromethane	4.16 ppb	N.R.	N.R.	N.R.	None	2019	Components of Total Trihalomethanes
Chloroform	10.97 ppb	N.R.	N.R.	N.R.	None	2019	
Dibromochloromethane	1.88 ppb	N.R.	N.R.	N.R.	None	2019	

Special Comments

**This report lists the highest recorded concentrations of contaminants measured in 2019. The listed concentration for Lead during 2019 was 119.15 ppb. *This sample was one of 5 samples collected on 8/6/2019 from a residential user. An Action Level (AL) notice was issued on August 19, 2019 to all residents. An additional 5 samples were taken in the District on 8/28 and 8/29 2019 and those samples came back below detectable levels and the recalculated 90th percentile was reduced to below 15 ppb. The high lead sample was isolated and additional samples were taken at the residence and results showed no detectable levels of lead. A second letter was sent on September 11, 2019 to residents notifying them of the sampling error and that the no other action was necessary. Note a revised 2018 CCR for Copper and Lead was posted to <https://www.miamicountyohio.gov/CCR-Monroe> and submitted to the O.E.P. A. in February of 2020 to correct reporting inaccuracies and to Certify a correction to relieve a Notice of Violation issued on 2/6/2020. Copper and Lead sampling will be collected again in 2020.

Susceptibility Analysis

The aquifer that supplies drinking water to NAWA's wells has a high susceptibility to contamination due to the following:

1. Water quality results indicate impacts of nitrates.
2. The sand and gravel aquifer has a depth to water of 5-15 feet below the ground surface.
3. The sand and gravel aquifer material is continuous to the surface and the soil is sandy.
4. No confining layer exists which could act as a barrier between the ground surface and the aquifer.
5. Potential significant contamination sources exist with the protection area.

Ground Water Protection

The City of Tipp City developed and implemented a ground water protection program in 1996. Twelve (12) monitoring wells are currently used to study ground water quality up gradient of the well field area. This serves as an "early warning" device should dangerous contaminants threaten our well field. In 1994, Tipp City developed a Well Head Protection Program. This program served to inventory potential sources of ground water contamination within a 5-year "time of travel" zone around the wells. Special zoning regulations have been adopted to further reduce the risk of ground water contamination within a 1-year "time of travel" zone around the wells. Public information will play a key role in providing additional risk reduction to protect this very important resource. For further information regarding the Tipp City (NAWA) Well Head Protection Program or Source Water Assessment, please contact Lisa Hendricks at 937-506-3200.

DEFINITIONS OF TERMS AND ABBREVIATIONS USED IN THIS REPORT:

Maximum Contamination Level (MCL): The highest level of contamination that is allowed in drinking water.

Maximum Contaminate Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's are set by the USEPA and allow for a significant margin of safety.

Not Regulated (N.R.): USEPA has not established a MCL or MCLG.

Parts per Million (ppm) or Milligrams per Liter (mg/L): Units of measure for concentration of a contaminant. One part of a substance in one million parts of a substance.

Parts per Billion (ppb) or Micrograms per Liter (ug/L): Units of measure for concentration of a contaminant. One part of a substance in one billion parts of a substance.

Action Level: The concentrations of a contaminant that triggers the public water system to install other treatment technologies to reduce the concentration of the contaminant.

PicoCuries per liter: a measure of radioactivity in water.