

Monroe Township Water & Sewer District

4 East Main Street

Tipp City, Ohio 45371

937-667-7242

**Annual Drinking Water Quality Consumer Confidence
Report for Monroe Township
Public Water Systems**

PWS ID# OH-5553614



District President Scott Vagedes

www.mtwsd.com

INTRODUCTION

Monroe Township Water and Sewer District has prepared this report to provide information to you, the consumer, on the quality of our drinking water. This report includes general health information, water quality test results, water source and contact information.

GENERAL INFORMATION

Monroe Township Water and Sewer District has a current unconditional license to operate its Public Water System issued by the OEPA on January 1, 2021. This report is a requirement of the Safe Drinking Water Act Amendments of 1996.

This water quality report is for the year **2020**.

WATER SOURCE INFORMATION

The Monroe Township Water and Sewer District serves you with water we purchase from the NAWA Tipp City, Ohio water plant located at 525 S. 1st Street, Tipp City, Ohio. NAWA obtains its public drinking water supply from buried valley sand and gravel aquifers associated with the Great Miami River. NAWA currently utilizes six (6) production wells to draw water from the aquifer for treatment at the water plant. Well water is pumped to the water treatment plant where it runs through sand filters for Iron and Manganese. Nano filtration membranes are used for the reduction or removal of hardness, viruses and other contaminants. Fluoride is added for dental health and Orthophosphate is added to minimize corrosion and scaling prior to being pumped to you, the consumer. Monroe Township water meets or exceeds all the standards that are set forth by the Ohio and United States Environmental Protection Agencies.

SUSCEPTIBILITY ANALYSIS

A susceptibility analysis was completed by NAWA. The assessment indicates that NAWA's source of drinking water has a high susceptibility to contamination due to the: Lack of a protective layer of clay overlying the aquifer; a shallow depth (less than 20 feet below ground surface) of the aquifer.; Presence of significant potential contaminant sources in the protection area; and the presence of manmade contaminants in treated water. Nitrates have been detected in NAWA's source of drinking water at concentrations above concern. The risk of future contamination can be minimized by implementing appropriate protective measures. This does not mean that the source waters are contaminated, just that they have a high susceptibility to contamination. You can obtain a copy of the complete report by contacting NAWA at 937-667-1890.

ADDITIONAL INFORMATION

For more information on your drinking water please contact Scott Vagedes, District President at the Monroe Township Water and Sewer District at 937-667-7242 or visit www.miamicountyohio.gov. Public participation and comments are encouraged by contacting Monroe Township Water and Sewer District.

E.P.A REQUIREMENTS

The OEPA requires regular sampling to ensure drinking water safety. Chlorine and bacteria sampling is performed on a regular routine basis, while tests for lead and copper and other contaminants are performed on a specified schedule in accordance with EPA regulations.

WHAT ARE THE SOURCES OF CONTAMINANTS IN DRINKING WATER?

The sources of drinking water, both tap 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; (farming, septic tanks, lawn chemicals, storm runoff, etc.)

Contaminants that may 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 discharge, oil and gas production, mining, or farming; (C) Pesticides and herbicides, which may come from 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; (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 results of oil and gas production and mining activities.

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. 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 unless the contaminant level exceeds the MCL established by the USEPA. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Hotline at 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 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* are available from the Safe Drinking Water Hotline at 1-800-426-4791.

LEAD EDUCATION

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. Monroe Township PWS 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 Hotline at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

Revised 2020 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	1.32 ppm	0.81-1.32 ppm	4 ppm	4 ppm	None	2020	Erosion of Natural Deposits
Barium	0.081 ppm	N/A	2 ppm	2 ppm	None	2018	Erosion of Natural Deposits
Total Chlorine	1.5 ppm	0.8-1.5 ppm	4 ppm	4 ppm	None	2020	Water Disinfection
Nitrate	8.6 ppm	0.6-8.6 ppm	10 ppm	10 ppm	None	2020	Runoff From Fertilizer Use

* See Special Comments

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	<5-5.7 ppb	15 ppb	0	None	2020	Household Plumbing
*Copper	0.95 ppm	.14-1.58 ppm	1.3 ppm	1	None	2020	Household Plumbing

*See Special Comments

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	17.41 ppb	0.0-17.41 ppb	80 ppb	0 ppb	None	2020	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	3.45 ppb	N.R.	N.R.	N.R.	None	2020	Components of Total Trihalomethanes
Chloroform	12.43 ppb	N.R.	N.R.	N.R.	None	2020	
Dibromochloromethane	1.53 ppb	N.R.	N.R.	N.R.	None	2020	

***Special Comments**

*This report lists the highest recorded concentrations of contaminants measured in 2020. The listed concentration for Copper during 2020 was 1.582 ppm. This sample was one of 10 samples collected on 7/29/2020 from residential users. The 90th Percentile Concentration for Copper was 0.95 ppm. The number of sites above the action level of 1.3 ppm = 1. 10 Lead samples were taken and samples showed no levels of Lead above the action level of 15 ppb. Copper and Lead sampling will be collected again in 2023. Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High Nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

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 Residual Disinfectant Level Goal (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of 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.
- Disinfectant Level Goal (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of 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.
- Level Goal (MRDLG): The level of drinking water disinfectant below which there is no known or expected risk to health.
- 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.
- USEPA: United States Environmental Protection Agency
- OEPA: Ohio Environmental Agency