

2022 Annual Drinking Water Quality Report

City of Manchester Water System ID #1990003

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water quality process and protect our water resources. We are committed to ensuring the quality of your water. The City of Manchester Water Treatment Plant pumps its water from Judge Joseph Turner Reservoir. A Source Water Assessment has been completed by the Three Rivers Regional Development Center. This report is available to our public at City Hall and will include information regarding potential sources of contamination in our watershed.

Drinking Water Source Information

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 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. Substances that may be present in source water include:

- Microbial substances, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic substances, such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic discharges, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm runoff and residential uses.
- Organic chemicals substances, including synthetic and volatile organic chemicals, which are by-products of industrial processes, and can, also come from gas stations, urban storm run-off, and septic systems.
- Radioactive substances, which can be naturally occurring or be the result of oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amounts of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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)**.

You may pick up a copy of this report at City Hall Monday-Friday from 8:00 am to 5:00 pm. This report shows our water quality and what it means. We are pleased to report our drinking water is safe and meets all federal and state requirements.

If you have any questions about this report or concerning your water utility, please contact Rick Jeffares at 678-432-7676. If you want to learn more, please attend any of **our regularly scheduled meetings. They are held on the 2nd Monday of each month at 6:00 p.m. at City Hall in Manchester. You may call 706-846-3141 for more information.**

The City of Manchester routinely monitors for contaminants in your drinking water according to Federal and State Law. This table shows the results of our monitoring for the period of January 1st to December 31st, 2022. 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.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Parts per million (ppm) or Milligrams per liter (mg/L) - one part per million corresponds to one minute in two years or one penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

Maximum Contaminant Level - The "Maximum Allowed" (MCL) is 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.

Maximum Contaminant Level Goal - The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Turbidity- A measure of the cloudiness of water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.

TT (Treatment Technique) - A required treatment technique or process known to be effective in reducing the health risks of contaminants in drinking water.

TOC: - Organic materials, measured as **Total Organic Carbon**.

THM (Trihalomethanes) and HAA (Haloacetic Acids)- Organic byproducts formed when disinfectants added to drinking water to kill germs, react with naturally-occurring organic matter in water.

NTU (Nephelometric Turbidity Unit) - Measurement of the clarity of water.

Detected Contaminants Table Regulated Contaminants

Substance	MCL	MCLG	CITY OF Manchester	DETECTED RANGE	NUMBER OF VIOLATIONS	SAMPLE DATA	TYPICAL SOURCES OF CONTAMINANT
-----------	-----	------	--------------------	----------------	----------------------	-------------	--------------------------------

Microbiological Monitoring Results Maximum

Total Coliform Bacteria	0 Positive	0 Positive	0 Positive	0 Positive	0	2022	Naturally Occurring
Turbidity	TT = .3 NTU	100% < .3	0.05 NTU	0.03 – 0.49	0	2022	Agriculture, Geology

Detected Inorganic Contaminants Maximum

Fluoride	4	4	1.05	0.70 – 1.11	0	2022	Additive which promotes strong teeth/naturally occurring
Nitrate	10.0	10.0	0.2	0 - 0.2	0	2022	Runoff from Fertilizer use

Detected Organic Contaminants Average

Chlorine (ppm)	4	4	1.6	1.30 – 2.50	0	2022	Added for Disinfection
THM	60 ppb	60 ppb	46.2 ppb	19.0 – 51.3	0	2022	Chlorine by product
HAA	60 ppb	60 ppb	26.0 ppb	16.1 – 31.5	0	2022	Chlorine by product
TOC	TT ≥ 1	TT ≥ 1	1.63 ppm	1.30 – 1.80	0	2022	Naturally present

Lead & Copper Monitoring Results

Substance	Action Level	MCLG	City of Manchester 90 th Percentile	Number of Samples above Action Level	Number of Violations	Sample Date	Typical Sources of Contaminant
Lead (ppb)	15	0	0.014	0	0	2022	Corrosion of Household plumbing systems
Copper (ppm)	1.3	1.3	0.031	0	0	2022	Erosion of natural deposits

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, 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.

Notice to Immuno-compromised people

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 microbiological contaminants are available from the **Safe Drinking Water Hotline (1-800-426-4791)**.

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 Manchester Water System 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>.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

We at the City of Manchester work around the clock to provide top quality water to every tap stated Mayor Mike Brening. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.