THE CITY OF MOUNT CLEMENS – CALENDAR YEAR 2023
ANNUAL DRINKING WATER QUALITY REPORT

City of Mount Clemens – 1750 Clara Street – Mount Clemens, MI 48043 – 586.469.6800 ext. 601 – www.mountclemens.gov

RIGHT TO KNOW RULE

The City of Mount Clemens provides your drinking water and is pleased to present you with this annual water quality report, in accordance with the regulations. Our goal is to provide you with a safe and dependable drinking water supply. This report will illustrate that we are achieving this goal.

MOUNT CLEMENS WATER FILTRATION PLANT

On July 1, 1929 the City of Mount Clemens Water Filtration Plant began filtering and pumping Lake St. Clair water to the City of Mount Clemens. It was soft water compared to the hard well and river water the citizens had been used to for many years. During the past 94 years the plant has pumped the equivalent contents of Lake St. Clair over 50 times!

The first public water supply in Mount Clemens was started in 1888. The water plant was built at present day Shadyside Park and used the Clinton River as its source. The City switched to wells in 1905. However, the well supply was not adequate for fire flows so untreated Clinton River water had to be pumped into the water system to help fight large fires.

Since its original construction in 1929, the Mount Clemens Water Filtration Facility has undergone many changes including doubling in size in 1959. In 2000 the plant was upgraded to include ozone treatment and in 2003 and 2012 the Michigan Section of the American Water Works Association awarded Mount Clemens Drinking Water the best tasting drinking water in the State! In 2004 the American Water Works Association named the Mount Clemens Water Filtration Plant a designated landmark.

Water Supply is always important to growth of any region. Providing a safe, abundant, reliable supply of drinking water has helped the City of Mount Clemens and adjacent townships develop tremendously since 1929.

WHERE DOES YOUR WATER COME FROM?

Your drinking water is drawn from Lake St. Clair. A 30-inch steel pipe extending over three-quarters of a mile into the lake transports the lake water to the treatment plant. The intake is equipped with zebra mussel control to prevent these troublesome mollusks from obstructing the pipeline. To ensure a reliable supply of water, the City has an emergency interconnection with the Detroit Water System.

Don't Forget To Use Your Water Meter To Detect Leaks!

A small leak, about the size of the head of a pin, dripping at one drop per second can add up to 7 gallons of water per day. A large leak, the kind most often found in toilets, can waste 200 gallons of water per day! Check your water meter when you suspect a leak. Make sure no water is being used inside or outside (no clothes washing filling, no shower running, no water outdoors, etc).

Find your water meter and look at the dial. If you have a meter with a dial face find the leak detector triangle on the meter dial. If all of your water sources are off and the leak detector is rotating, you may have a leak.

If you have a digital meter, (a rectangular box on the white dial face) look at the rectangular box with a flash light. A faucet icon that flashes or stays on continually means that you have a leak.

How to monitor your water use:

1) Read the odometer and write it down completely. Then write down the date you read it. After a period of time (we suggest 7 days) read the odometer again and write it down and write down the date. 2) Subtract the first reading from the second reading. This is your water use in cubic feet during the period. 3) Multiply the water use by 7.48. This is your water use in gallons during the period. 4) Divide the water use in gallons by the number of days between readings. This is your average gallons per day during the period.

The following information is mandatory language provided by the

HEALTH AND SAFETY INFORMATION

Environmental Protection Agency:

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily pose a health risk. The sources of both tap and bottled drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive materials, and can also pick up substances resulting from animal or 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 be the 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 and residential users.
- **Radioactive contaminants,** which are natural occurring or are the result of oil and gas production and mining activities.
- **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.

To ensure that tap water is safe, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration establishes limits for contaminants in bottled water, which must provide the same protection for public health. All of these contaminants were below the level of concern in Mount Clemens water.

Information for Vulnerable Populations: Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as 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. Federal guidelines on appropriate means to lessen the risk of infection from cryptosporidium and other microbiological contaminants are available from EPA's Safe Drinking Water Hotline, 800.426.4791.

Information about lead: 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 City of Mount Clemens 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 have a lead service line its recommended that you run your water for at least 5 minutes to flush water from both your home plumbing and the lead service line. 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.

SOURCE WATER ASSESSMENT REPORT

Our Source Water Assessment was completed in 2004. The Mount Clemens source water is categorized as highly susceptible, given land uses and potential contaminant sources within the source water area. However, it is noted that historically, the Mount Clemens Water Treatment Plant has effectively treated this source water to meet drinking water standards. The City of Mount Clemens has instituted pollution prevention programs, but is cognizant of additional potential threats to its source of drinking water that are identified in the report. The report explains the background and basis for these determinations. More information is available at www.michigan.gov/deq

DEFINITIONS

***Parts per million (ppm)* and *parts per billion (ppb)* -** One ppm = parts per million, or milligrams per liter (mg/L), **ppb** = parts per billion, or micrograms per liter (ug/L).

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

Maximum Contaminant Level (MCL) – the 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.

Nephelometric Turbidity Unit (NTU) measures clarity.

Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Picocuries per Liter (pCi/L) – A measure of radioactivity.

"Maximum residual disinfectant level goal" or "MRDLG" means the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants**.**

"Maximum residual disinfectant level" or "MRDL" means the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MOUNT CLEMENS DRINKING WATER QUALITY DATA FOR 2023

The table below lists all the drinking water contaminants that we detected during the 2023 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 - December 31, 2023. The State allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old.

Regulated contaminant	**MCL**	**MCLG**	**Level Detected**	**Range of Detection**	**Sample Date**	**Violation Yes/No**	**Typical Source of Contaminant**
Fluoride (ppm)	**4**	**4**	ND	N/A	8/06/23	No	Erosion of natural deposits. Discharge from fertilizer and aluminum factories
Bromate (ppb)	**10**	**0**	6	ND-15	Quarterly	No	By-product of drinking water disinfection
Combined Radium (pCi/L)	**5**	**0**	1.31	N/A	8/26/20	No	Erosion of natural deposits.

Regulated Contaminant	**Treatment Technique**	**Running Annual Average**	**Monthly Ratio Range**	**Violation Yes / No**	**Typical Source of contaminant**
Total Organic Carbon (ppm)	The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC was measured quarterly and our system met all TOC removal requirements set by the state.			No	Naturally present in the environment.

Special Monitoring and Unregulated Contaminant**	**Level Detected**	**Sample Date**	**Typical Source of Contaminant**
Sodium (ppm)	14	8/06/23	Erosion of natural deposits

Inorganic Contaminant Subject to Action Levels (AL)	Action Level	MCLG	Your Water[1]	Range of Results	Year Sampled	Samples Above AL	Typical Source of Contaminant
Lead (ppb)	15	0	2.0	0-4	2023	0	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3	1.3	.2	0-.3	2023	0	Corrosion of household plumbing systems; Erosion of natural deposits

** Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants. The City of Mount Clemens tested a wide variety of unregulated contaminants in 2022. The unregulated contaminants test results are available to customers by contacting the Mount Clemens Utilities Department.

2023 Turbidity - Monitoring every 4 hours at Plant Finished Water Tap

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

Highest Single Measurement Cannot exceed 1 NTU	**Lowest Monthly % of samples meeting Turbidity Limit of 0.3 NTU (Min. 95%)**	**Violation Yes / No**	**Major Source in Drinking Water**
0.14 NTU	100%	No	Soil Runoff

Disinfection Residuals and Disinfection By-Products – Monitoring in Distribution System

Contaminant	**Test Date**	**Units**	**Health Goal MCLG**	**Allowed Level MCL**	**Level Detected**	**Range of Detection**	**Violation Yes / No**	**Major Source of Drinking Water**
Total Trihalomethanes (TTHM)	2023	ppb	N/A	80	35.2	6.4-100	Yes	By-product of drinking water chlorination
Haloacetic Acid (HAA5)	2023	ppb	N/A	60	21.1	4.3-43	No	By-product of drinking water disinfection
Disinfectant (Chlorine) Residual (ppm)	2023	ppm	MRDGL 4	4.0	.68	0.14-1.71	No	Water additive used to control microbes

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Typical Source of Contaminant
Total Coliform (total number or % of positive samples/month)	TT	N/A	N/A	N/A	2023	No	Naturally present in the environment
E. coli in the distribution system (positive samples)	See E. coli note[2]	0	0	N/A	2023	No	Human and animal fecal waste
Fecal Indicator – E. coli at the source (positive samples)	TT	N/A	0	N/A	2023	No	Human and animal fecal waste

[1] Ninety (90) percent of the samples collected were at or below the level reported for our water.

[2] *E. coli* MCL violation occurs if: (1) routine and repeat samples are total coliform-positive and either is *E. coli*-positive, or (2) the supply fails to take all required repeat samples following *E. coli*-positive routine sample, or (3) the supply fails to analyze total coliform-positive repeat sample for *E. coli*.

What are Per-and polyfluoroalkyl substances (PFAS) and why are they Harmful?

Per- and polyfluoroalkyl substances (PFAS), sometimes called PFCs, are a group of chemicals that are resistant to heat, water, and oil. PFAS have been classified by the United States Environmental Protection Agency (U.S. EPA) as an emerging contaminant on the national landscape. For decades, they have been used in many industrial applications and consumer products such as carpeting, waterproof clothing, upholstery, food paper wrappings, fire-fighting foams, and metal plating. They are still used today. PFAS have been found at low levels both in the environment and in blood samples from the general U.S. population.

These chemicals are persistent, which means they do not break down in the environment. They also bioaccumulate, meaning the amount builds up over time in the blood and organs. Although our understanding of these emerging contaminants is constantly evolving, elevated levels of PFAS have the potential to cause increased cholesterol, changes in the body's hormones and immune system, decreased fertility, and increased risk of certain cancers. Links to these health effects in humans are supported by epidemiologic studies and by laboratory studies in animal models.

The City of Mount Clemens is pleased to inform you that in 2023 our source water and plant tap was tested for PFAS. The sample results came back very low or "ND" which means the analyte was not detected. Final PFAS rule took effect August,3 2020. These rules establish MCLs and sampling requirements for the 7 PFAS compounds listed below. To view complete PFAS Rule please visit PFAS Drinking Water Rules (michigan.gov)

Regulated contaminant	MCL	MCLG	Level Detected	Range of Detection	Sample Year	Violation Yes/No	Typical Source of Contaminant
Hexafluoropropylene oxide dimer acid (HFPO-DA) (ppt)	**370**	**N/A**	ND		2023	NO	Discharge and waste from industrial facilities utilizing the Gen X chemical process
Perfluorobutane sulfonic acid (PFBS) (ppt)	**420**	**N/A**	ND		2023	No	Discharge and waste from industrial facilities; stain-resistant treatments
Perfluorohexane sulfonic acid (PFHxS) (ppt)	**51**	**N/A**	ND		2023	No	Firefighting foam; discharge and waste from industrial facilities
Perfluorohexanoic acid (PFHxA) (ppt	**400,000**	**N/A**	ND		2023	NO	Firefighting foam; discharge and waste from industrial facilities
Perfluorononanoic acid (PFNA) (ppt)	**6**	**N/A**	ND		2023	No	Discharge and waste from industrial facilities; breakdown of precursor compounds
Perfluorooctane sulfonic acid (PFOS) (ppt)	**16**	**N/A**	2.0		2023	No	Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial facilities
Perfluorooctanoic acid (PFOA) (ppt)	**8**	**N/A**	ND		2023	No	Discharge and waste from industrial facilities; stain-resistant treatments

Who can I call if I have questions about PFAS in my drinking water?

If any resident has additional questions regarding this issue, Please call the City of Mount Clemens water filtration plant. Representatives may be reached to assist with your questions Monday through Friday, 8:00 AM to 4:30 PM.

What other ways could I be exposed to PFOA, PFOS and other PFAS compounds?

PFAS are used in many consumer products. They are used in food packaging such as fast food wrappers and microwave popcorn bags; waterproof and stain resistant fabrics such as outdoor clothing, upholstery, and carpeting; nonstick coatings on cookware and cleaning supplies including some soaps and shampoos. People can be exposed to these chemicals in house dust, indoor and outdoor air, food, and drinking water. There is still uncertainty regarding these routes of exposure and more research is necessary.

Questions or Comments

City Staff works year-round to provide quality water to residents and businesses. Monitoring results from early 2023 are available upon request. If you have any questions, comments, or would like to receive more specific information about the Mount Clemens Water System, please feel free to call the Utilities Director at (586) 469-6889 Ext 601.

Public Participation

Interested citizens are welcome to attend City Commission meetings to hear more about the Mount Clemens Water System. Meetings are held the first and third Monday of each month at 7:00 pm at City Hall, located at One Crocker Boulevard.

Lead and Copper Service lines

As of December, 2023 the City of Mount Clemens has 66 confirmed Lead service lines, 2651 service lines of unknown material and a total of 6490 service lines. We will be doing a more detailed inventory of our service lines throughout 2023 and will report those findings on our 2023 CCR.