City of Detroit PWS 1940003

2020 Consumer Confidence Report for Public Water System CITY OF DETROIT

This is your water quality report for January 1 to December 31, 2020

CITY OF DETROIT provides surface water and ground water from **PAT MAYSE LAKE, LAKE CROOK** located in **LAMAR COUNTY**.

For more information regarding this report contact:

Name RICHARD SHIPP

Phone 903-674-4573

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (903) 674-4573.

Definitions and Abbreviations

Definitions and Abbreviations	The following tables contain scientific terms and measures, some of which may require explanation.
Action Level:	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Level 1 Assessment:	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment:	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Maximum Contaminant Level or MCL:	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 or MCLG:	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.
Maximum residual disinfectant level or MRDL:	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.
Maximum residual disinfectant level goal or MRDLG:	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.
MFL	million fibers per liter (a measure of asbestos)
mrem:	millirems per year (a measure of radiation absorbed by the body)
na:	not applicable.
NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)

Definitions and Abbreviations

ppb:	micrograms per liter or parts per billion
ppm:	milligrams per liter or parts per million
ppq	parts per quadrillion, or picograms per liter (pg/L)
ppt	parts per trillion, or nanograms per liter (ng/L)
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Information about your Drinking Water

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

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. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

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, EPA 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.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (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. We are responsible for providing high quality drinking water, but we 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.

Information about Source Water

CITY OF DETROIT purchases water from LAMAR COUNTY WATER SUPPLY DISTRICT. LAMAR COUNTY WATER SUPPLY DISTRICT provides purchase surface water from **PAT MAYSE LAKE, LAKE CROOK** located in **LAMAR COUNTY.**

DATA BELOW FROM LAMAR COUNTY WATER SUPPLY DISTRICT

Regulated in the Distribution System

Constituent	Highest Monthly Number of Positive Samples	MCL	MCLG	Possible Source
Total Coliform	0	>5%/Month*	0	Human and animal fecal wastes; naturally present in the environment.

*LCWS typically submits 25 samples per month for Coliform testing. An MCL violation occurs when two (2) or more samples are Coliform positive in a single month or more than 5% of samples if 40 or more samples are collected in a single month.

Constituent	Average	Minimum	Maximum	MCL	MCLG	Source
Chloramine (ppm)	2.76	0.60	3.98	4.0	<4.0	Disinfectant used to control microbes.

Chloramine residuals are collected in the distribution system daily.

Constituent	Average of All Quarterly Samples	Range of Detected Levels	MCL	MCLG	Possible Source
Total Trihalomethanes (ppb)	56	44.1 to 75.8	80*	0	Byproduct of drinking water chlorination.
Total Haloacetic Acids (ppb)	39	28.1 to 57.3	60*	0	Byproduct of drinking water chlorination.

*MCL of 80 ppb is violated when the average of four (4) consecutive quarterly samples exceeds 80.

*MCL of 60 ppb is violated when the average of four (4) consecutive quarterly samples exceeds 60.

Regulated in the Distribution System

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Regulated at the Tap

Constituent	90th Percentile of Sampling Event	Action Level	Number of Sites Exceeding Action Level	Possible Source
Lead (ppb)	0.005 (2020 data)	15	0	Corrosion of household plumbing; erosion of natural deposits.
Copper (ppm)	0.18 (2020 data)	1.3	0	Corrosion of household plumbing; erosion of natural deposits; leaching from wood preservatives.

LCWS is on reduced monitoring for Lead and Copper due to historically low concentrations. Monitoring is performed every three years.
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. Our water supply 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 have your water tested for a fee. 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.

Non-Regulated and Secondary Constituents

Chloride	8	mg/L	<milligrams/Liter
Sulfate	40	mg/L	<milligrams/Liter
Conductivity	202		micromhos/centimeter
Total Dissolved Solids	119	mg/L	<milligrams/Liter
Sodium	16.5	mg/L	<milligrams/Liter
Total Alkalinity	37.8	mg/L	<milligrams/Liter
Hardness	56.7	mg/L	<milligrams/Liter
Calcium	19.4	mg/L	<milligrams/Liter
Aluminum	0.045	mg/L	<milligrams/Liter
Magnesium	1.98	mg/L	<milligrams/Liter
Potassium	3.12	mg/L	<milligrams/Liter

TCEQ completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system is based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system contact **Richard Shipp 903-674-4573**

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/12/2018	1.3	1.3	0.48	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	09/12/2018	0	15	1.9	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

2020 Water Quality Test Results

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2020	47	26 - 64.5	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

*The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year

Total Trihalomethanes (TTHM)	2020	75	48.3 - 83.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

*The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2020	0.27	0.27 - 0.27	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfectant Residual

A blank disinfectant residual table has been added to the CCR template, you will need to add data to the fields. Your data can be taken off the Disinfectant Level Quarterly Operating Reports (DLQOR).

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chloramine	2020	1.6	0.5 – 2.8	4	4	ppm	N	Water additive used to control microbes.

Violations

Chlorine

Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR).	07/01/2020	09/30/2020	We failed to file the quarterly report which notes our tests of our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. The monthly reports during this time indicated that all levels were within tolerance.