



**CITY OF DEARBORN**

# Annual Water Quality Report for 2022

**PWS ID: 01730**



# About Your Water



This report covers the drinking water quality for the City of Dearborn for the 2022 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2022. Included are details about where your water comes from, what it contains, and how it compares to United States Environmental Protection Agency (U.S. EPA) and state standards.

## Where Your Drinking Water Comes From

The City of Dearborn receives water from the Springwells Treatment Plant located on Warren Ave. and from the Southwest Treatment Plant located in Allen Park. We are connected to these plants by large transmission mains that range from 24" to 72" in diameter and assure us an adequate supply of filtered water throughout the year.

## We Protect the Source

Drinking water quality is important to our community and the region. The City of Dearborn and the Great Lakes Water Authority (GLWA) are committed to meeting state and federal water quality standards including the Lead and Copper Rule. With the Great Lakes as our water source and proven treatment technologies, the GLWA consistently delivers safe drinking water to our community. The City of Dearborn operates the system of water mains that carry this water to your home's service line. This year's Water Quality Report highlights the performance of GLWA and the City of Dearborn water professionals in delivering some of the nation's best drinking water. Together, we remain committed to protecting public health and maintaining open communication with the public about our drinking water.

## What Is in 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 can dissolve naturally occurring minerals and, in some cases, radioactive materials, and can pick up substances resulting from the presence of animals or from 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 result from urban storm water runoff, industrial or domestic wastewater discharge, 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 the water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for human 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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency’s Safe Drinking Water Hotline (800-426-4791).

**Sampling and Testing**

We take more than 96 samples across our water system per month. We’re looking for bacteria, metals, and chemicals to make sure the water you receive continues to be safe to drink.

**Bacteria**

We look for bacteria regularly, as required by law, and there are 24 locations within the water system where we take samples for analysis. More thorough testing, evaluation, and action is required if bacteria is found in even a small percentage of tests.

**Disinfection by-products (Trihalomethane (TTHM) or Haloacetic Acids (HAA5))**

Four times per year we look for byproducts of the disinfection process. When chlorine, the disinfectant we use to protect against the water of bacteria and viruses, starts to break down in the water, it can form new compounds. These compounds, trihalomethanes (THM) and haloacetic acid (HAA), have been known to cause cancer at high levels. The legal limit for drinking water is 80 parts per billion and 60 parts per billion respectively. We test for these compounds at four different locations in the water system.

**Lead and Copper**

In 2022 we took 102 water samples from 51 different homes in our system to test them for lead and copper. More information about lead and copper can be found on page 4 and 11.

**City of Dearborn Lead Service Lines**

| Estimated Number of Service Connections by Service Line Material  |                      |                              |                     |   |
|---|----------------------|------------------------------|---------------------|---|
| A service line includes any section of pipe from the water main to the building plumbing at the first shut-off valve inside the building, or 18 inches inside the building, whichever is shorter. |                      |                              |                     |   |
| Number of Known Lead Services Lines   | Unknown              |                              |                     | Total Number of Service Lines in Our Supply |
|   | Likely Contains Lead | Likely Does NOT Contain Lead | Material(s) Unknown |   |
| 4,421   | 4545                 | 15652                        | 144                 | 32,690                                      |

Here, we would like to highlight a few substances that we pay close attention to in our water because of their potential effects on public health:

| Lead<br>Lead and Copper Monitoring at the Customer's Tap in 2022  |                   |
|---|-------------------|
| <b>Amount We Found</b>  | <b>0 – 19 ppb</b> |
| Ideal Goal (MCLG)   | 0 ppb             |
| 90 <sup>th</sup> Percentile   | 8.5 ppb           |
| Action Level  | 15 ppb            |
| Highest Amount Detected   | 17.3 ppb          |
| Lead services lines, corrosion of household, plumbing including fittings and fixtures; erosion of natural deposits. | DW                |
| <b>Violation</b>  | <b>No</b>         |

| Copper<br>Lead and Copper Monitoring at the Customer's Tap in 2022                                     |                        |
|--|------------------------|
| <b>Amount We Found</b>   | <b>0.00 – 0.55 ppm</b> |
| Ideal Goal (MCLG)  | 1.3 ppm                |
| 90 <sup>th</sup> Percentile  | 0.2 ppm                |
| Action Level   | 1.3 ppm                |
| Highest Amount Detected  | 0.3491 ppm             |
| Corrosion of household plumbing system; Erosion of natural deposits; leaching from wood preservatives. | DW                     |
| <b>Violation</b>   | <b>No</b>              |

| Total Trihalomethanes <sup>1</sup><br>2022 Disinfection By-Products - Stage 2 Disinfection By-Products Monitoring in the Distribution System |                    |
|--|--------------------|
| <b>Amount We Found</b>   | <b>14 – 65 ppb</b> |
| Ideal Goal (MCLG)  | n/a ppb            |
| Highest Level Allowed (MCL)  | 80 ppb             |
| Lowest Amount Detected   | 14 ppb             |
| Highest Amount Detected  | 65 ppb             |
| By-product of drinking water chlorination  | DW                 |
| <b>Violation</b>   | <b>No</b>          |

| Total Haloacetic Acids<br>2022 Disinfection By-Products - Stage 2 Disinfection By-Products Monitoring in the Distribution System |                         |
|--|-------------------------|
| <b>Amount We Found</b>   | <b>&lt;1.0 – 22 ppb</b> |
| Ideal Goal (MCLG)  | n/a ppb                 |
| Highest Level Allowed (MCL)  | 60 ppb                  |
| Lowest Amount Detected   | <1.0 ppb                |
| Highest Amount Detected  | 22 ppb                  |
| By-product of drinking water chlorination  | DW                      |
| <b>Violation</b>   | <b>No</b>               |

*MCLG: 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.*

*MCL - Maximum Contaminant Level: This is the highest level allowed of a pollutant in drinking water. MCLs are set as close as possible to the goal using the best available technology.*

*PPM: Part Per Million = 1 drop of water in a hot tub*

*PPB - Part Per Billion = 1 drop of water in an Olympic size swimming pool*

<sup>1</sup> Compliance is based on the running annual average at each location (LRAA). The Highest LRAA reflects the highest average at any location and the Range Detected reflects all samples used to calculate the running annual averages.

# Your Role in Water Quality

## Check Your Home or Business' Plumbing for Lead and Copper

We work hard to provide high quality water when it arrives on your property. Once the water we provide passes through the meter on your property however, it is exposed to a whole new environment in your home that we have no control over. But you do.



Some of the things that can change the water quality on your property include your plumbing and pipe material, how long you go without running the water, and whether or how you connect outdoor hoses to your home's water supply. 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. City of Dearborn is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact [the City of Dearborn Water Quality at \(313\) 943-4468](tel:3139434468). Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead> (opens in a new window).

Safe drinking water is a shared responsibility. The water that GLWA delivers to our community does not contain lead. Lead can leach into drinking water through home plumbing fixtures, and in some cases, customer service lines. Corrosion control reduces the risk of lead and copper from leaching into your water. Orthophosphates are added during the treatment process as a corrosion control method to create a protective coating in service pipes throughout the system, including in your home or business. The City of Dearborn performs required lead and copper sampling and testing in our community. Water Consumers also have a responsibility to maintain the plumbing in their homes and businesses, and can take steps to limit their exposure to lead.

## Run Water After Vacation

Another factor that affects water quality in your home is how "stale" the water is. When you leave your home or business for a long time, as you may when you take a vacation, the water in the pipes and plumbing doesn't move. When water has been sitting in the pipes for days, bacteria can grow, and if you have lead or copper plumbing, those metals can start to seep into the water. The best thing to do when you get back from being away after a long time is to run the water on full blast for 30 seconds to two minutes before using it for drinking or cooking. And always use cold water for cooking, to draw in fresh water from the outside.





## Safely Connect Outdoor Hoses

A third factor that can influence water quality in your home are connections to your water outside your home. The outdoor spigot connection to a hose provides a potential way for pollutants to enter your plumbing. If you use the hose to spray chemicals on your yard by connecting the nozzle to a spray bottle, or if you have a sprinkler system connected, there is the potential for chemicals from the bottle or the lawn to be accidentally sucked back into your internal plumbing.

To prevent this from happening, Michigan plumbing code requires that you have an anti-frost hose connection vacuum breaker (ASSE #1011 or 1019 Approved) device installed to prevent that from happening.

## Look Out for Special Populations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as person 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 microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

## Additional Resources

- Information on lead in drinking water: [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead) (opens in a new window)
- Requirements of the Water Quality Report (also known as the Consumer Confidence Report): [http://www.epa.gov/sites/default/files/201405/documents/guide\\_qrg\\_ccr\\_2011.pdf](http://www.epa.gov/sites/default/files/201405/documents/guide_qrg_ccr_2011.pdf) (opens in a new window)
- The Safe Drinking Water Act: [www.epa.gov/sdwa](http://www.epa.gov/sdwa) (opens in a new window)
- CDC Guide to Understanding your CCR: [http://www.cdc.gov/healthywater/drinking/public/understanding\\_ccr.html](http://www.cdc.gov/healthywater/drinking/public/understanding_ccr.html) (opens in a new window)
- American Water Works Association: <http://www.awwa.org> (opens in a new window)
- Water Environment Federation: <http://www.wef.org> (opens in a new window)
- Groundwater Information: <https://waterdata.usgs.gov/nwis> and <http://www.epa.gov/ground-water-and-drinking-water/> (opens in a new window)
- Michigan Department of Health & Human Services: <https://www.michigan.gov/mdhhs>

# 2022 Southwest Regulated Detected Contaminants Table

The samples were taken in 2022 unless noted otherwise.

## Inorganic Chemicals (IOC) – Annual Monitoring at Plant Finished Tap

| Regulated Contaminant | Test Date | Unit | Health Goal MCLG | Allowed Level MCL | Highest Level Detected | Range of Detection | Violation | Major Sources in Drinking Water  |
|-----------------------|-----------|------|------------------|-------------------|------------------------|--------------------|-----------|--|
| Fluoride              | 7/12/2022 | ppm  | 4                | 4                 | 0.71                   | n/a                | no        | Erosion of natural deposit; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate               | 7/12/2022 | ppm  | 10               | 10                | 0.82                   | n/a                | no        | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.                               |
| Barium                | 5/16/2017 | ppm  | 2                | 2                 | 0.01                   | n/a                | no        | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.                                |

*MCL - Maximum Contaminant Level: This is the highest level allowed of a pollutant in drinking water. MCLs are set as close as possible to the goal using the best available technology.*

*MCLG - Maximum Contaminant Level Goal: The goal level of a pollutant in drinking water. Below this amount, there is no known or expected health effect.*

*PPB - Part Per Billion = 1 drop of water in an Olympic size swimming pool*

*PPM - Part Per Million = 1 drop of water in a hot tub*

## Total Chlorine Residual - 2022 Disinfection Residual - Monitoring in the Distribution System

| Test Date | Unit | Health Goal MRDLG | Allowed Level MRDL | Highest Level RAA | Range of Quarterly Results | Violation | Major Sources in Drinking Water         |
|-----------|------|-------------------|--------------------|-------------------|----------------------------|-----------|---|
| 2022      | ppm  | 4                 | 4                  | 0.61              | 0.61 – 0.70                | no        | Water additive used to control microbes |

*PPM - Part Per Million = 1 drop of water in a hot tub*

## 2022 Turbidity - Monitored Every 4 Hours at the Plant Finished Water Tap

| Highest Single Measurement Cannot Exceed 1 NTU | Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%) | Violation | Major Sources in Drinking Water |
|--|--|-----------|---------------------------------|
| 0.14 NTU                                       | 100%   | no        | Soil Runoff                     |

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

*NTU - Nephelometric Turbidity Units: Turbidity is measured with an instrument called a nephelometer. Measurements are given in nephelometric turbidity units.*

## 2022 Southwest Regulated Detected Contaminants Table - continued

### 2022 Special Monitoring

| Contaminant | Test Date | Unit | MCLG | MCL | Highest Level Detected | Source of Contaminant       |
|-------------|-----------|------|------|-----|------------------------|-----------------------------|
| Sodium      | 7/12/2022 | ppm  | n/a  | n/a | 6.2                    | Erosion of natural deposits |

| Regulated Contaminant    | Treatment Technique  | 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 is measured each quarter and because the level is low, there is no requirement for TOC removal. | Erosion of natural deposits   |

### Radionuclides – Monitored at the Plant Finished Tap in 2014

| Regulated Contaminant              | Test Date | Unit  | MCLG | MCL | Level Detected | Violation | Major Sources in Drinking Water |
|------------------------------------|-----------|-------|------|-----|----------------|-----------|---------------------------------|
| Combined Radium Radium 226 and 228 | 5/13/2014 | pCi/L | 0    | 5   | 0.65 ± 0.54    | no        | Erosion of natural deposits     |

*These tables are based on tests conducted by GLWA in the year 2022 or the most recent testing done within the last five calendar years. GLWA conducts tests throughout the year only tests that show the presence of a substance or require special monitoring are presented in these tables. 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. The data is representative of the water quality, but some are more than one year old.*

## COMMUNITIES RECEIVING WATER FROM THE SOUTHWEST WATER TREATMENT PLANT AND COMMUNITIES SERVED BY SPRINGWELLS WATER PLANT

Your source water comes from the Detroit River, situated within the Lake St. Clair, Clinton River, Detroit River, Rouge River, Ecorse River, watersheds in the U.S. and parts of the Thames River, Little River, Turkey Creek, and Sydenham watersheds in Canada. The Michigan Department of Environmental Quality in partnership with the U.S. Geological Survey, the Detroit Water and Sewerage Department, and the Michigan Public Health Institute performed a source water assessment in 2004 to determine the susceptibility of GLWA's Detroit River source water for potential contamination. The susceptibility rating is based on a seven-tiered scale and ranges from very low to very high determined primarily using geologic sensitivity, water chemistry, and potential contaminant sources. The report described GLWA's Detroit River intakes as highly susceptible to potential contamination. GLWA's Southwest water treatment plant that draws water from the Detroit River has historically provided satisfactory treatment and meets drinking water standards.

GLWA has initiated source-water protection activities that include chemical containment, spill response, and a mercury reduction program. GLWA participates in the National Pollutant Discharge Elimination System permit discharge program and has an emergency response management plan. GLWA has An updated Surface Water Intake Protection plan for the Fighting Island Intake. The plan has seven elements that include: roles and duties of government units and water supply agencies, delineation of a source water protection areas, identification of potential sources of contamination, management approaches for protection, contingency plans, siting of new water sources, public participation, and public education activities. If you would like to know more information about the Source Water Assessment Report, please contact GLWA at (313 926-8127).



## 2022 Springwells Regulated Detected Contaminants Table

The samples were taken in 2022 unless noted otherwise.

### 2022 Inorganic Chemicals – Annual Monitoring at Plant Finished Tap

| Regulated Contaminant | Test Date | Unit | Health Goal MCLG | Allowed Level MCL | Highest Level Detected | Range of Detection | Violation | Major Sources in Drinking Water  |
|-----------------------|-----------|------|------------------|-------------------|------------------------|--------------------|-----------|--|
| Fluoride              | 7/12/2022 | ppm  | 4                | 4                 | <b>0.60</b>            | n/a                | no        | Erosion of natural deposit; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate               | 7/12/2022 | ppm  | 10               | 10                | <b>0.54</b>            | n/a                | no        | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.                               |
| Barium                | 5/16/2017 | ppm  | 2                | 2                 | <b>0.01</b>            | n/a                | no        | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.                                |

*MCL - Maximum Contaminant Level: This is the highest level allowed of a pollutant in drinking water. MCLs are set as close as possible to the goal using the best available technology.*

*MCLG - Maximum Contaminant Level Goal: The goal level of a pollutant in drinking water. Below this amount, there is no known or expected health effect.*

*PPB - Part Per Billion = 1 drop of water in an Olympic size swimming pool*

*PPM - Part Per Million = 1 drop of water in a hot tub*

## Total Chlorine Residual

### 2022 Disinfection Residual - Monitoring in the Distribution System

| Test Date | Unit | Health Goal MRDLG | Allowed Level MRDL | Highest Level RAA | Range of Quarterly Results | Violation | Major Sources in Drinking Water          |
|-----------|------|-------------------|--------------------|-------------------|----------------------------|-----------|--|
| 2022      | ppm  | 4                 | 4                  | <b>0.67</b>       | <b>0.61 – 0.73 ppm</b>     | no        | Water additive used to control microbes. |

*PPM - Part Per Million = 1 drop of water in a hot tub*

*MCL - Maximum Contaminant Level: This is the highest level allowed of a pollutant in drinking water. MCLs are set as close as possible to the goal using the best available technology.*

*PPB - Part Per Billion = 1 drop of water in an Olympic size swimming pool*

*PPM - Part Per Million = 1 drop of water in a hot tub*

## 2022 Special Monitoring

| Contaminant | Test Date | Unit | MCLG | MCL | Highest Level Detected | Source of Contaminant       |
|-------------|-----------|------|------|-----|------------------------|-----------------------------|
| Sodium      | 7/12/2022 | ppm  | n/a  | n/a | <b>5.6</b>             | Erosion of natural deposits |

| Regulated Contaminant           | Treatment Technique  | Typical Source of Contaminant |
|---------------------------------|--|-------------------------------|
| <b>Total Organic Carbon ppm</b> | The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC is measured each quarter and because the level is low, there is no requirement for TOC removal. | Erosion of natural deposits   |

*These tables are based on tests conducted by GLWA in the year 2022 or the most recent testing done within the last five calendar years. GLWA conducts tests throughout the year only tests that show the presence of a substance or require special monitoring are presented in these tables. 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. The data is representative of the water quality, but some are more than one year old.*

## 2022 Turbidity

### Monitored Every 4 Hours at the Plant Finished Water Tap

| Highest Single Measurement Cannot Exceed 1 NTU | Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%) | Violation | Major Sources in Drinking Water |
|--|--|-----------|---------------------------------|
| 0.25 NTU                                       | 100%   | no        | Soil Runoff                     |

*NTU - Nephelometric Turbidity Units: Turbidity is measured with an instrument called a nephelometer. Measurements are given in nephelometric turbidity units.*

*GLWA is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether our drinking water meets health standards. We routinely monitor your water for turbidity (cloudiness). This tells us whether we are effectively filtering the water supply.*

*\*Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. \* These symptoms are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.*

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail. This notice is being sent to you by GLWA.

For more information, please contact the Water Quality Manager, at 313 943-2308

# 2022 Additional Monitoring

## 2022 Disinfection By-Products

### Stage 2 Disinfection By-Products Monitoring in the Distribution System

| Regulated Contaminant           | Test Date | Unit | Health Goal MCLG | Allowed Level MCL | Highest Level LRAA | Range of Quarterly Results | Violation | Major Sources in Drinking Water           |
|---------------------------------|-----------|------|------------------|-------------------|--------------------|----------------------------|-----------|---|
| (TTHM)<br>Total Trihalomethanes | 2022      | ppb  | n/a              | 80                | 65                 | 14 – 65                    | no        | By-product of drinking water chlorination |
| (HAA5)<br>Haloacetic Acids      | 2022      | ppb  | n/a              | 60                | 22                 | <1.0 – 22                  | no        | By-product of drinking water chlorination |

TTHMs - Total Trihalomethanes

THAAs - Total Haloacetic Acids

## Lead and Copper Monitoring at the Customer's Tap in 2022

Tested throughout the City of Dearborn. Testing is done every year. Most recent tests were done in June, 2022.

| Regulated Contaminant | Unit | Year Sampled | Health Goal MCLG | Action Level AL | 90 <sup>th</sup> Percentile Value* | Range of Individual Samples Results | Number of Samples Over AL | Major Sources in Drinking Water  |
|-----------------------|------|--------------|------------------|-----------------|------------------------------------|-------------------------------------|---------------------------|--|
| Lead                  | ppb  | 2022         | 0                | 15              | 8.5                                | 0 – 19                              | 2                         | Lead services lines, corrosion of household plumbing including fittings and fixtures; erosion of natural deposits. |
| Copper                | ppm  | 2022         | 1.3              | 1.3             | 0.2                                | 0 – 0.55                            | 0                         | Corrosion of household plumbing system; Erosion of natural deposits; leaching from wood preservatives.             |

\* The 90<sup>th</sup> percentile value means 90 percent of the homes tested have lead and copper levels below the given 90<sup>th</sup> percentile value. If the 90<sup>th</sup> percentile value is above the AL additional requirements must be met.

**MCL - Maximum Contaminant Level:** This is the highest level allowed of a pollutant in drinking water. MCLs are set as close as possible to the goal using the best available technology.

**MCLG - Maximum Contaminant Level Goal:** The goal level of a pollutant in drinking water. Below this amount, there is no known or expected health effect.

**PPB - Part Per Billion = 1 drop of water in an Olympic size swimming pool**

**PPM - Part Per Million = 1 drop of water in a hot tub**

**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 Dearborn 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 service line that is lead, galvanized previously connected to lead, or unknown but likely to be lead, it is 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 (800-426-4791) or at <http://www.epa.gov/safewater/lead>

"Infants and children who drink water containing lead could experience delays in their physical and mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure."

## Additional Monitoring

Unregulated contaminants are those for which the U.S EPA has not established drinking water standards. Monitoring helps the U.S EPA determine where certain contaminants occur and whether regulation of those contaminants is needed.

| Unregulated Contaminant Name   | Average Level Detected | Range       | Year Sampled | Comments   |
|--------------------------------|------------------------|-------------|--------------|--|
| HAA9 (ppb)                     | 19.7                   | 13.3 - 28.0 | 2019         | Results of monitoring are available upon request |
| Alpha-BHC (ppb)                | 0.00165                | 0 - 0.0033  | 2019         | Results of monitoring are available upon request |
| Chlorpyrifos (ppb)             | 0.00495                | 0 - 0.0099  | 2019         | Results of monitoring are available upon request |
| Dimethipin (ppb)               | 0.033                  | 0 - 0.066   | 2019         | Results of monitoring are available upon request |
| Ethoprop (ppb)                 | 0.00495                | 0 - 0.0099  | 2019         | Results of monitoring are available upon request |
| Merphos-Oxone (ppb)            | 0.0115                 | 0 - 0.023   | 2019         | Results of monitoring are available upon request |
| Oxyfluorfen (ppb)              | 0.0085                 | 0 - 0.017   | 2019         | Results of monitoring are available upon request |
| Permethrin (ppb)               | 0.0065                 | 0 - 0.013   | 2019         | Results of monitoring are available upon request |
| Profenofos (ppb)               | 0.0495                 | 0 - 0.099   | 2019         | Results of monitoring are available upon request |
| Tebuconazole (ppb)             | 0.033                  | 0 - 0.066   | 2019         | Results of monitoring are available upon request |
| Butylated Hydroxyanisole (ppb) | 0.005                  | 0 - 0.010   | 2019         | Results of monitoring are available upon request |
| Quinoline (ppb)                | 0.00335                | 0 - 0.0067  | 2019         | Results of monitoring are available upon request |
| O-Toluidine (ppb)              | 0.00115                | 0 - 0.0023  | 2019         | Results of monitoring are available upon request |

The Great Lakes Water Authority monitored for 20 unregulated contaminants quarterly in 2019. The following table lists the unregulated substance detected during the calendar year 2019 (only detected at the Southwest Water Treatment Plant).

| Unregulated Contaminant | Test Date | Unit | Highest Level Detected | Range of Detection | SMCL | Noticeable Effects above the SMCL                           | Major Sources in Drinking Water                         |
|-------------------------|-----------|------|------------------------|--------------------|------|---|---|
| Manganese               | 2019      | ppb  | .48                    | 0.0 - 0.48         | 4.36 | Black to brown color; black staining; bitter metallic taste | Erosion of natural deposits and corrosion of iron pipes |

# Key to Detected Contaminants Table

| Symbol             | Abbreviation                                     | Definition/Explanation   |
|--------------------|--|--|
| AL                 | <b>Action Level:</b>                             | The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.  |
| °C                 | <b>Celsius:</b>                                  | A scale of temperature in which water freezes at 0° and boils at 100° under standard conditions.   |
| >                  | <b>Greater than</b>                              |  |
| HAA5               | <b>Haloacetic Acids:</b>                         | HAA5 is the total of bromoacetic, chloroacetic, di-bromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.   |
| Level 1 Assessment | <b>Level 1 Assessment:</b>                       | 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 | <b>Level 2 Assessment:</b>                       | 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. |
| LRAA               | <b>Locational Running Annual Average:</b>        | The average of analytical results for samples at a particular monitoring location during the previous four quarters.   |
| MCL                | <b>Maximum Contaminant Level:</b>                | 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.  |
| MCLG               | <b>Maximum Contaminant Level Goal:</b>           | 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.   |
| mg/L               |  | Number of milligrams in one liter of water   |
| MRDL               | <b>Maximum Residual Disinfectant Level:</b>      | 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.  |
| MRDLG              | <b>Maximum Residual Disinfectant Level Goal:</b> | This is the lowest amount of cleaning chemical drinking water should have, because it is the lowest amount needed to make sure bacteria and viruses can't live.  |
| n/a                | <b>Not applicable</b>                            |  |
| ND                 | <b>Not detected</b>                              |  |
| NTU                | <b>Nephelometric Turbidity Units:</b>            | Measures the cloudiness of water.  |
| pCi/L              | <b>Picocuries Per Liter:</b>                     | A measure of radioactivity   |
| ppb                | <b>Part Per Billion (one in one billion):</b>    | = The ppb is equivalent to micrograms per liter. A microgram = 1/1000 milligram.   |
| ppm                | <b>Parts Per Million (one in one million):</b>   | The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram.  |
| RAA                | <b>Running Annual Average:</b>                   | The average of all analytical results for all samples during the previous four quarters.   |
| SMCL               | <b>Secondary Maximum Contaminant Level</b>       |  |
| TT                 | <b>Treatment Technique:</b>                      | A required process intended to reduce the level of a contaminant in drinking water.  |
| TTHM               | <b>Total Trihalomethanes:</b>                    | Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane and bromoform. Compliance is based on the total.  |
| µmhos              | <b>Micromhos:</b>                                | Measure of electrical conductance of water.  |



# Stay Informed About Your Water

## Monthly Board Meetings

The GLWA Board of Water Commissioners meets each month. There are also hearings and meetings open to the public. To confirm dates and times, or for information on other activities of the department, please contact GLWA Public Affairs Group at (313) 964-9491.

For information on when the Dearborn City Council meets, please contact the Council Office at (313) 943-2025. We welcome your comments and questions about this report. Contact Sharon Stanek at (313) 943-2308.

## Projects and Rates

Infrastructure projects and our rates go hand in hand. We can't keep the system in top shape without your help, so we want you to be as informed as possible about what we need and why. Check out our website at [www.cityofdearborn.org](http://www.cityofdearborn.org) to learn about projects and ways you can have input to them.

## Other Monitoring

In addition to required testing, GLWA voluntarily tests for hundreds of additional substances and microscopic organisms to make certain our water is safe and of the highest quality. If you are interested in a more detailed report, contact the GLWA Water Quality Division at (313) 926-8102.

## In Closing

The City of Dearborn and the Great Lakes Water Authority are committed to safeguarding our water supply and delivering the highest quality drinking water to protect public health. Please contact us with any questions or concerns about your water.

This report contains important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.

يحتوي هذا التقرير على معلومات مهمة حول مياه الشرب الخاصة بك. اطلب من شخص ما ترجمتها لك أو تحدث مع شخص يفهمها ،