# 2023 Annual Drinking Water Quality Report – Lawrence Water Utility

Contacte por favor a Hispano Servicios en (920) 465-9491 si ayuda es necesitada a traducir esta carta.

Yog haistias koj tsis toaub diam ntawv no thiab xav tau kev pab txhais, thov hu rau Koomhaum Hmoob ntawm (920) 437-4550.

The Town of Lawrence is pleased to present to you this year's Annual Water Quality Report. The report is designed to inform you about the water quality 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 treatment process and protect our water resources. We are committed to ensuring the quality of your water. In August 2007, the Town began receiving Lake Michigan water from Manitowoc via the Central Brown County Water Authority pipeline to our meter station. We are still required to monitor the water quality of our well under an agreement with the DNR, even though it will be only used for emergency purposes.

This report shows our water quality and what it means. We want our valued customers to be informed about their water utility. If you have any questions about this report, the water utility, or wish to obtain a copy of the source water assessment, please contact our office at Lawrence Town Hall, 2400 Shady Court or call (920) 336-9131. If you want to learn more, or if you have questions, the Town of Lawrence Town Board meets on the second and fourth Mondays each month at 6:00pm at the Town Hall located at 2400 Shady Court, De Pere, WI. At the meeting, there is an agenda item where the public can ask questions or speak on any subject matter. You may also visit the Town of Lawrence website at www.lawrencewi.gov.

The Lawrence Water Utility routinely monitors for potential contaminants in your drinking water according to State and Federal laws. This report shows the results of our monitoring for the period of January 1 to December 30, 2023. Our ultimate goal and objective is to provide our residents with the safest high-quality water possible.

#### Source of Water

| Source ID | Source   | Status |
|-----------|--|--------|
| 2 and 3   | Purchased surface water from PWS ID 43603645 Manitowoc Waterworks through PWS ID 43602878 Central Brown County Water Authority | Active |

# **Health Information**

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 at 1-(800) 426-4791.

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, persons with HIV/AIDS or other immune system disorders, some elderly, or 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 Environmental Protection Agency's safe drinking water hotline 1-(800)426-4791.

#### **Education Information**

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.

Contaminants that may be present in source water include:

<u>Microbial contaminants</u> such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

<u>Inorganic contaminants</u> such as salts and metals, which can be naturally occurring or result from urban stormwater 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 stormwater runoff and residential uses.

<u>Organic chemical contaminants</u> including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater 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 that limit the amount of certain contaminants in the water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.



# **Distribution System Results**

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following tables list only those contaminants which were detected in your water. If a contaminant was detected last year, it would appear in the following tables without a sample date. If the contaminant was not monitored last year but was detected within the last five (5) years, it will appear in the next table along with the sample date.

# **Disinfection Byproducts**

| Contaminant<br>(Units) | Site    | MCL | MCLG | Level<br>Found | Range   | Violation | Typical Source of Contaminant             |
|------------------------|---------|-----|------|----------------|---------|-----------|---|
| HAA5 (ppb)             | IDSESM3 | 60  | 60   | 7              | 7       | No        | By-product of drinking water chlorination |
| TTHM (ppb)             | IDSESM3 | 80  | 0    | 29.8           | 29.8    | No        | By-product of drinking water chlorination |
| TTHM (ppb)             | IDSESM8 | 80  | 0    | 29.1           | 29.1    | No        | By-product of drinking water chlorination |
| HAA5 (ppb)             | IDSESM8 | 60  | 60   | 16             | 7 to 16 | No        | By-product of drinking water chlorination |

#### Inorganics

| Contaminant<br>(units) | Action<br>Level | MCLG | 90 <sup>th</sup> Percentile<br>level found | <u># of Results</u>                               | Violation | Typical Source of Contaminant  |
|------------------------|-----------------|------|--|---|-----------|--|
| COPPER (ppm)           | AL-1.3          | 1.3  | 0.698                                      | 0 of 20 results<br>were above the<br>action level | No        | Corrosion of household plumbing systems;<br>Erosion of natural deposits; Leaching from<br>wood preservatives |
| LEAD (ppb)             | AL=15           | 0    | 0  | 0 of 20 results<br>were above the<br>action level | No        | Corrosion of household plumbing systems;<br>Erosion of natural deposits                                      |

#### Additional Health Information

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 material and components associated with service lines and home plumbing. Lawrence Waterworks 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 www.epa.gov/safewater/lead.

#### **Purchased Water Results**

Our water system purchases water from CENTRAL BROWN COUNTY WATER AUTHORITY. In addition to the detected contaminants listed above, these are the results from CENTRAL BROWN COUNTY WATER AUTHORITY.

# **Detected Contaminants**

| norganic Contaminants              |     |      |                |       |                                      |           |   |  |  |
|------------------------------------|-----|------|----------------|-------|--------------------------------------|-----------|---|--|--|
| Contaminant<br>(units)             | MCL | MCLG | Level<br>Found | Range | Sample Date<br>(if prior to<br>2023) | Violation | Typical Source of Contaminant   |  |  |
| ARSENIC (ppb)                      | 10  | N/A  | 1.0            | 1.0   |                                      | No        | Erosion of natural deposits, runoff from orchards;<br>Runoff from glass and electronics production<br>wastes  |  |  |
| BARIUM (ppm)                       | 2   | 2    | 0.02           | 0.02  |                                      | No        | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits  |  |  |
| FLUORIDE (ppm)                     | 4   | 4    | 0.7            | 0.7   |                                      | No        | Erosion of natural deposits; Water additive<br>which promotes strong teeth; Discharge from<br>fertilizer and aluminum factories                     |  |  |
| NICKEL (ppb)                       | 100 | 100  | 0.47           | 0.47  | 2/18/2020                            | No        | Nickel occurs naturally in soils, ground water,<br>and surface waters and is often used in<br>electroplating, stainless steel and alloy<br>products |  |  |
| NITRATE-NITRATE<br>(N03+N02) (ppm) | 10  | 10   | 0.28           | 0.28  |                                      | No        | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits   |  |  |
| NITRATE (N03-N)<br>(ppm)           | 10  | 10   | 0.44           | 0.44  | 2/26/2019                            | No        | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits   |  |  |



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# **Radioactive Contaminants**

| <u>Contaminant</u><br>(units) | MCL | <u>MCLG</u> | <u>Level</u><br>Found | <u>Range</u> | Sample Date<br>(if prior to<br>2023) | Violation | Typical Source of Contaminant |
|-------------------------------|-----|-------------|-----------------------|--------------|--------------------------------------|-----------|-------------------------------|
| RADIUM<br>(226+228) pCi/I)    | 5   | 0           | 0.46                  | 0.46         | 2/18/2020                            | No        | Erosion of natural deposits   |
| COMBINED<br>URANIUM (ug/I)    | 30  | 0           | 0.313                 | 0.313        | 2/18/2020                            | No        | Erosion of natural deposits   |

# Synthetic Organic Contaminants including Pesticides and Herbicides

| <u>Contaminant</u><br>(units) | MCL | <u>MCLG</u> | <u>Level</u><br>Found | <u>Range</u> | Sample Date<br>(if prior to<br>2021) | <u>Violation</u> | Typical Source of Contaminant           |
|-------------------------------|-----|-------------|-----------------------|--------------|--------------------------------------|------------------|---|
| ATRAZINE<br>(ppb)             | 3   | 3           | 0.02                  | 0.02         | 8/11/2020                            | No               | Runoff from herbicide used on row crops |

#### **Unregulated Contaminants**

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. EPA required us to participate in this monitoring.

| <u>Contaminant (units)</u> | <u>Level</u><br>Found | <u>Range</u> | Sample Date (If prior to 2023) |
|----------------------------|-----------------------|--------------|--------------------------------|
| MANGANESE (ppm)            | 0.7                   | 0.7          | 2018 MANITOWOC UCMR 4          |
| SODIUM (ppm)               | 7.6                   | 7.6          |                                |
| SULFATE (ppm)              | 21                    | 21           |                                |
| METOLACHLOR (DUAL) (ppb)   | 0.01                  | 0.01         | 8/11/2020                      |
| BROMODICHLOROMETHANE (ppb) | 3.5                   | 3.5          | 2/18/2020                      |
| CHLOROFORM (ppb)           | 2.6                   | 2.6          | 2/18/2020                      |

#### **Turbidity Monitoring**

In accordance with s. NR 810.29, Wisconsin Administrative Code, the treated surface water is monitored for turbidity to confirm the effectiveness of the Manitowoc Water filtration system. Turbidity is a measure of the cloudiness of water. During the year, the highest single, entry point turbidity measurement was 0.04 NTU.

| Term          | Definition  |
|---------------|---|
| AL            | Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.   |
| HAL           | Health Advisory Level is Concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice. Health Advisories are determined by US EPA.           |
| MCL           | Maximum Contaminant Level: 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          | Maximum Contaminant Level Goal: 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.                              |
| NTU           | Nephelometric Turbidity Units   |
| pCi/l         | Picocuries per liter (a measure of radioactivity)   |
| ppm           | Parts per million, or milligrams per liter (mg/l)   |
| ppb           | Parts per billion, or micrograms per liter (ug/l)   |
| ppt           | Parts per trillion, or nanograms per liter  |
| PHGS          | Public Health Groundwater standards are found in NR 140 Groundwater Quality. The concentration of contaminant which, if exceeded, poses a health risk and may require a system to post a public notice. |
|               | Recommended Public Health Groundwater Standards: Groundwater standards proposed by the Wisconsin  |
| <b>DDOUIC</b> | Department of Health Services. The concentration of a contaminant which, if exceeded, poses a health risk and may   |
| RPGHS         | require a system to post a public notice.   |
| SMCL          | Secondary drinking water standards or Secondary Maximum Contaminant Levels for contaminants that affect taste,  |
| SIVICE        | odor, or appearance of the drinking water. The SMCLs don not present health standards.  |

# PFAS Contaminants with a Recommended Health Advisory Level

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a large group of human-made chemicals that have been used in industry and consumer products worldwide since the 1950s. The following table lists PFAS contaminants which were detected in your water and that have a Recommended Public Health Groundwater Standard (RPHGS) or Health Advisory Level (HAL). There are no violations for detections of contaminants that exceed the RPHGS or HAL. The RPHGS are levels at which concentrations of the contaminant present a health risk and are based on guidance provided by the Wisconsin Department of Health Services.



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| <u>Typical Source of</u><br><u>Contaminant</u> | Drinking water is one way that people can be exposed to PFAS. In Wisconsin, two-thirds of people use groundwater as their drinking water source. PFAS can get in groundwater from places that make or use PFAS and release from consumer products in landfills. |                    |             |       |                                |  |  |  |  |  |  |
|--|---|--------------------|-------------|-------|--------------------------------|--|--|--|--|--|--|
| Contaminant (units)                            | Site  | RPHGS or HAL (ppt) | Level Found | Range | Sample Date (if prior to 2023) |  |  |  |  |  |  |
| PFBS (ppt)                                     |   | 450000             | 0.30        | 0.30  |                                |  |  |  |  |  |  |
| PFHXS (ppt)                                    |   | 40                 | 0.47        | 0.47  |                                |  |  |  |  |  |  |
| PFHXA (ppt)                                    |   | 150000             | 1.20        | 1.20  |                                |  |  |  |  |  |  |
| PFOS (ppt)                                     |   | 20                 | 1.10        | 1.10  |                                |  |  |  |  |  |  |
| PFOA (ppt)                                     |   | 20                 | 1.70        | 1.70  |                                |  |  |  |  |  |  |
| PFOA AND PFOS<br>TOTAL (ppt)                   |   | 20                 | 2.80        | 2.80  |                                |  |  |  |  |  |  |