



Lyon Township Water Department  
58000 Grand River Ave  
New Hudson, MI 48165

248-437-2240 Fax 248-437-2336  
[dpw@lyontwp.org](mailto:dpw@lyontwp.org)



## CONSUMER CONFIDENCE REPORT



# 2024 Water Quality

## Keeping Water Customers Informed



## 2024 Water Quality Report for Lyon Township

This report covers the drinking water quality for Lyon Township for the 2024 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2024. Included are details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards.

Your water comes from three groundwater wells located within the township limits. A Wellhead Protection Program report has been compiled for our well fields and copies are available at the Lyon Township Hall at 58000 Grand River Ave, New Hudson.

The State performed an assessment of our source water in 2003 to determine the susceptibility or the relative potential for contamination. The susceptibility rating is on a six-tiered scale from “very low” to “high” based primarily on geologic sensitivity, water chemistry, and contaminant sources. The susceptibility of our source is “moderately sensitive.”

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies of this report are available at the Lyon Township Hall located at 58000 Grand River Ave, New Hudson. We invite public participation in decisions that affect drinking water quality. You may attend any regular Township Board of Trustees meeting which are held the first Monday of each month at 6:00pm in the Township Hall. For more information about your water, or the contents of this report, contact the DPW Coordinator at 248-437-2240. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at [www.epa.gov/safewater/](http://www.epa.gov/safewater/).

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

At the Lyon Township Water Department, we work around the clock to provide top quality water to every tap. We ask all our customers to help us protect our water sources. Our water is the heart of our community, our way of life, and our children’s future.

### What is in Water?

**Contaminants and their presence in water:** 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. More information about contaminants and potential health effects can be obtained by calling the EPA’s 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 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 uses.
- Radioactive contaminants, which can be naturally occurring or be 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 to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which provide the same protection for public health.

### Sources of Drinking Water

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. Our water comes from 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 human activity.

### Wellhead Protection

Lyon Township's Wellhead Protection Program is designed to protect public water supply wells. The goals are: to prevent contaminants from entering the wells, avoid the need to clean up contaminated ground water, and to ensure the community has a long-term source of clean water. It is everyone's responsibility to protect our water system. You can help protect the Lyon Twp community resources by proper recycling or disposal of household chemicals. To volunteer for the Township Wellhead Protection Committee or for more information, contact the water department.

### Information on Lead

Lead can cause serious health effects in people of all ages, especially pregnant people infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Lyon Township is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes 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 and wish to have your water tested, contact Lyon Township, Melanie Schlacht, DPW Coordinator, 248-437-2240 or [dpw@lyontwp.org](mailto:dpw@lyontwp.org) for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at Information on lead in drinking water is available from the Safe Drinking Water Hotline at (800) 426-4791 or online at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

### Vulnerability of Sub-Populations

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, have undergone organ transplants, with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk. 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.

### Lyon Township Water:

#### Safe, Reliable and Secure

The Lyon Township Water Department strives to protect our water source to insure the continuous delivery of a safe water supply to our customers. The idea is to address the water system in a three-way plan; make the water safe, reliable, and secure.

#### Safe

The health and safety of water is crucial. The township performs bacterial analysis a minimum of 10 samples per month. The department samples at 5 different locations within the water distribution system. A bacteria test is performed at the township lab and results are forwarded to the State of Michigan each month. Along with the township testing, the State of Michigan Department of Environment, Great Lakes and Energy (EGLE) requires yearly testing on such things as arsenic, lead, copper, radiological elements, and organics. These samples are taken and forwarded to the state lab and are then analyzed and reported yearly in this consumer confidence report. The department's goal is not only to meet state

requirements, but to also deliver the highest quality of water.

### Reliable

Reliable is a measure of consistency and quality of the water system. The Lyon Township water department works very hard at maintaining and upgrading the current pumping facilities. Along with yearly maintenance schedules on our current wells, we continually maintain and upgrade our iron removal system and filtration process. At any given time, the system has holding capacity of more than a million gallons so safe water can be distributed to the homeowners and businesses of our community. We are committed to daily reliability of the water system.

### Secure

Security concerns have become an everyday occurrence since September 11. Water departments across the country now concern themselves not only with safe water and reliability, but also with guarding the security of pumping and storage facilities. Lyon Township is leading the way in these areas. Not only have security measures been put into place, but also public programs such as the Wellhead Protection Program are ongoing with input from both the private and public sectors.

Our Wellhead Protection Program is designed to protect the public water supply. The goal is to prevent contaminants from entering wells from local homeowners and businesses and to avoid the need for costly cleanup of contaminated groundwater. The result is to ensure the community has a long-term source of clean water.

The quality of a community water system is based upon confidence earned within the community. The water department works daily to earn the confidence and respect of its users.

*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.*

## Regulated Contaminants Table

| Contaminant   | Test Date | Units | Health Goal MCLG | Allowed Level MCL | Detected Level                       | Range Low                 | Range High   | Major Sources in Drinking Water  | Violation |
|---|-----------|-------|------------------|-------------------|--------------------------------------|---------------------------|--|--|-----------|
| <b>Regulated Inorganic and Volatile Organic Chemicals</b>                                 |           |       |                  |                   |                                      |                           |  |  |           |
| Arsenic   | 2023      | ppb   | 0                | 10                | ND                                   | ND                        | ND   | Erosion of natural deposits, runoff from glass and electronics production waste                                      | No        |
| Barium  | 2023      | ppm   | 2                | 2                 | 0.2                                  | 0.2                       | 0.2  | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits                           | No        |
| Cyanide   | 2024      | ppb   | 200              | 200               | ND                                   | ND                        | ND   | Discharge from steel/metal factories; discharge from plastic and fertilizer factories                                | No        |
| Fluoride  | 2023      | ppm   | 4                | 4                 | 0.4                                  | 0.4                       | 0.4  | Erosion of natural deposits, water additive, promotes strong teeth, discharge from fertilizer and aluminum factories | No        |
| <b>Radioactive Contaminants</b>   |           |       |                  |                   |                                      |                           |  |  |           |
| Alpha Emitters  | 2024      | pCi/L | 0                | 15                | 0.266                                | 0.266                     | 0.266  | Erosion of natural deposits  | No        |
| <b>Disinfectant Residuals and Disinfectant By-Products – Monitoring at Customers' Tap</b> |           |       |                  |                   |                                      |                           |  |  |           |
| Halogenic Acids (HAA5)  | 2024      | ppb   | NA               | 60                | 15                                   | 14                        | 16   | By-product of drinking water disinfection  | No        |
| Total Trihalomethanes (TTHM)  | 2024      | ppb   | NA               | 80                | 40                                   | 37                        | 43   | By-product of drinking water chlorination  | No        |
| Disinfectant (Chlorine)   | 2024      | ppm   | MRDLG 4          | MRDL 4            | RAA 0.749                            | 0.191                     | 1.229  | Water additive to control microbes   | No        |
| <b>Copper and Lead Monitoring at Customers' Tap</b>                                       |           |       |                  |                   |                                      |                           |  |  |           |
| Contaminant   | Test Date | Units | Health Goal MCLG | Allowed Level MCL | 90 <sup>th</sup> Percentile Value*   | Number of Samples Over AL | Major Sources in Drinking Water  | Violation  |           |
| Copper  | 2024      | ppm   | 1.3 ppm          | 1.3 ppm           | Jan-Jun 0.2 ppm<br>Jul - Dec 0.2 ppm | 0<br>0 ppb – 0.99 ppm     | Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives | No   |           |
| Range of Ind. Results   |           |       |                  |                   |                                      |                           |  |  |           |
| Lead  | 2024      | ppb   | 0 ppm            | 12 ppb            | Jan-Jun 0 ppb<br>Jul-Dec 3 ppb       | 0.0 ppb – 11 ppb          | Corrosion of household plumbing systems, erosion of natural deposits                                   | No   |           |
| Range of Ind. Results   |           |       |                  |                   |                                      |                           |  |  |           |

\*The 90th percentile value means 90 percent of the homes tested have copper and lead levels below the given 90th percentile value. If the 90th percentile value is above the AL, additional requirements must be met. There are no lead service lines in the water system, but older homes may have increased lead concentrations in their plumbing or fixtures. The two samples over the AL for lead were from homes built in 1925 and 1939.

Copper - Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over many years could develop kidney damage. People with Wilson's Disease should consult their personal doctor.

Lead - Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink water containing copper in excess of the action level over many years could develop kidney problems or high blood pressure. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline 800-426-4791.

**Action Level (AL):** the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

**Halogenic Acids (HAA5):** HAA5 is the total of bromoacetic, chloroacetic, dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.

**Maximum Contaminant Level (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 (MCLG):** the level of 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 (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 (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.

**Not Applicable (NA):**

**Not Detected (ND):** laboratory analysis indicates the contaminant is not present.

**Parts Per Billion (ppb):** the ppb is equivalent to microgram per liter. A microgram – 1/1000 milligram. A ppb is equivalent to one penny in \$10,000,000.

**Parts Per Million (ppm):** the ppm is equivalent to milligram per liter. A milligram – 1/1000 gram. A ppm is equivalent to one penny in \$10,000.

**Picocuries Per Liter (pCi/L):** a measure of radioactivity.

**RAA:** Running Annual Average

**Total Trihalomethanes (TTHM):** the sum of chloroform, bromodichloromethane, dibromochloromethane and bromoform. Compliance is based on the total.

**Unregulated Contaminants Table**

| Contaminant | Test Date | Units | Health Goal MCLG | Allowed Level MCL | Average Level | Range Low | Range High | Major Sources in Drinking Water                              |
|-------------|-----------|-------|------------------|-------------------|---------------|-----------|------------|--|
| Chloride    | 2024      | ppm   | NA               | NA                | 43.52         | 35        | 49         | Naturally occurring due to geological processes              |
| Hardness    | 2024      | ppm   | NA               | NA                | 270           | 270       | 270        |  |
| Sodium      | 2023      | ppm   | NA               | NA                | 18            | 17        | 19         |  |
| Sulfate     | 2024      | ppm   | NA               | NA                | 51.93         | 16        | 67         |  |
| Iron        | 2024      | ppm   | NA               | NA                | 0.14          | ND        | 0.84       | Taken from field test kit after treatment, from backup wells |