# PERE MARQUETTE CHARTER TOWNSHIP

1699 SOUTH PERE MARQUETTE HWY.• LUDINGTON, MICHIGAN 49431
(231) 845-1277 • FAX (231) 843-3330


# 2024 Annual Water Quality Report

Water Supply Serial Number: 5267 **Purchased Water System**

This report covers the drinking water quality for Pere Marquette Charter 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 United States Environmental Protection Agency (U.S. EPA) and state standards.

## WHERE DOES YOUR WATER COME FROM?

Water is drawn through two intake structures in Lake Michigan to the Ludington water treatment plant. The primary intake is a below bottom infiltration bed about an acre in size and is connected to a 36-inch diameter pipe. The secondary intake is a wood crib style that is attached to a 24-inch diameter pipe and is used to supplement the buried intake capacity.

## HOW IS YOUR WATER TREATED?

The Ludington Water Treatment Plant is a conventional treatment plant that uses coagulation, flocculation, sedimentation, and filtration for its treatment. Chlorine bleach is added for disinfection and is carefully monitored throughout the distribution piping system to ensure the microbial safety of your water. In addition, a low dose of fluoride is also added to your drinking water for the prevention of tooth decay.

## DRINKING WATER QUALITY RESULTS

The City of Ludington's licensed water treatment operators routinely monitor for contaminates in your drinking water according to Federal and State laws. Results are gathered through their certified lab, as well as other independent laboratories including the State of Michigan Department of Environment, Great Lakes, & Energy (EGLE) lab. It is important to mention that not all contaminates are tested for every year because the concentrations of these contaminates are not expected to vary significantly from year to year as determined by our State regulatory agency (EGLE). Therefore, tests may be taken quarterly, annually, or every third year depending on the type of test and prior test results. **We are proud of the fact that your drinking water met or surpassed all Federal and State water quality and safety standards for 2024.** However, should there ever be an immediate health threat due to a water contaminant problem or violation we would promptly notify you by the best means possible. We perform numerous tests each day to monitor our source water, various water treatment stages and of course, the tap. The table inside this report represents the substances that were detected in Pere Marquette Township's water for the monitoring period of **January 1st to December 31st, 2024.**

**It should be noted that Pere Marquette Charter Township buys only a portion of its water from the City of Ludington.**

If you would like to know more about this report, please contact: John D. Healy, Assistant Superintendent of Pere Marquette Water/Sewer, 1699 S Pere Marquette Hwy, 231-845-1277, Dan@pmtwp.org.

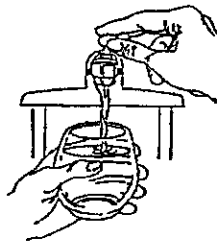
**Contaminants and their presence in water:** Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline (800-426-4791).

**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, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems 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. U.S. EPA/Center for Disease Control 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).

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

- **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 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 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 stormwater runoff, and septic systems.



In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the levels of certain contaminants in water provided by public water systems. Federal Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.

## Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2024 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 through December 31, 2024. 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 the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- **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 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.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.
- **N/A:** Not applicable
- **ND:** not detectable at testing limit
- **PPM:** parts per million or milligrams per liter
- **PPB:** parts per billion or micrograms per liter
- **Action Level** (All: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Level 1 Assessment:** A study of the water supply to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
- **Level 2 Assessment:** 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.

*IMonitoring Dotofor Regulated Contaminants*

| Regulated Contaminant | MCL, TT, or MRDL | MCLG or MRDLG | Level Detected | Range | Year Sampled | Violation Yes/No | Typical Source of Contaminant |
|---|---|---|---|---|---|---|---|
| TTHM Total Trihalomethanes (ppb) | 80 | 0 | 19 | 19 | 2024 | NO | Byproduct of drinking water disinfection |
| HAAS Haloacetic Acids (ppb) | 60 | 0 | 10 | 10 | 2024 | NO | Byproduct of drinking water disinfection |
| Floride (ppm) | 4 | 4 | .70 | 0.65-0.79 | 2024 | | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Chlorine[1] (ppm) | 4 | 4 | 0.99 | 0.25-1.57 | 2024 | NO | Water additive used to control microbes |
| Total Coliform | TT | N/A | N/A | 0 | 2024 | NO | Naturally present in the environment |
| E. coli in the distribution system (positive samples) | See E.coli note[2] | 0 | 0 | N/A | 2024 | NO | Human and animal fecal waste |
| Fecal Indicator - E. coli at the source (positive samples) | TT | N/A | 0 | N/A | 2024 | NO | Human and animal fecal waste |

| Inorganic Contaminant Subject to Action Levels (AL) | Action Level | MCLG | Your Water[3] | Range of Results | Year Sampled | Number of Samples Above AL | Typical Source of Contaminant |
|---|---|---|---|---|---|---|---|
| Lead (ppb) | 15 | 0 | 5 | 0-5 | 2023 | 0 | Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits |
| Copper (ppm) | 1.3 | 1.3 | 0.0 | 0.0-0.1 | 2023 | 0 | Corrosion of household plumbing systems; Erosion of natural deposits |

[1] The chlorine "Level Detected" was calculated using a running annual average.

[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.*

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

**Information about 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. Pere Marquette Charter Township 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 John D. Healy, Pere Marquette Township, 1699 S. Pere Marquette Hwy. Dan@pmtwp.org for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.*

Our water supply has 0 lead service lines and 11 service lines of unknown material out of a total of 132 service lines. If you would like to know more about this report, please contact: *John D. Healy, Pere Marquette Township, 1699 S. Pere Marquette Hwy. Dan@pmtwp.org*

Monitoring and Reporting to the Department of Environment, Great Lakes, and Energy (EGLE) Requirements: The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2024.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at Pere Marquette Township Hall 1699 S. Pere Marquette Hwy. This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. The Pere Marquette Township board meetings are held at the Pere Marquette Town Hall building at 1699 S. Pere Marquette Highway every second Tuesday of the month at 4:00pm and the last Tuesday of the month at 6:00pm. For more information about your water, or the contents of this report, contact John D. Healy (231) 845-1277. For more information about safe drinking water, visit the U.S. EPA at http://www.epa.gov/safewater.

For addition information on the City of Ludington water system and water quality; see Ludington's CCR at https://www.ludington.mi.us/waterquality

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# 2024 Annual Water Quality Report

Water Supply Serial Number: 5268 **Ground Water System**

This report covers the drinking water quality for Pere Marquette Charter 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 United States Environmental Protection Agency (U.S. EPA) and state standards.

## WHERE DOES YOUR WATER COME FROM?

Your water comes from 3 groundwater wells, each over 200 feet deep. The State performed an assessment of our source water to determine the susceptibility or the relative potential of contamination. The susceptibility rating is on a seven-tiered scale from "very-low" to "very-high" based on geologic sensitivity, well construction, water chemistry and contamination sources. The susceptibility of our source is low.

## HOW IS YOUR WATER TREATED?

Your water is treated with a small amount of chlorine to ensure that it is properly disinfected.

## DRINKING WATER QUAILITY RESULTS

Pere Marquette Townships licensed water operators routinely monitor for contaminates in your drinking water according to Federal and State laws. Results are gathered through Ludington Water Treatment Plant along with other independent laboratories. It is important to mention that not all contaminates are tested for every year because the concentrations of these contaminates are not expected to *vary* significantly from year to year as determined by our State regulatory agency (EGLE). Therefore, tests may be taken quarterly, annually, or every third year depending on the type of test and prior test results.

**We are proud of the fact that your drinking water met or surpassed all Federal and State water quality and safety standards for 2024.** There are no significant sources of contamination in our water supply. We are making efforts to protect our sources by the installation of cameras at various locations, and a S.A.F.E. inspection by the state of Michigan Police to point out any deficiencies in our security.

If you would like to know more about this report, please contact: John D. Healy, Pere Marquette Township, 1699 S. Pere Marquette Hwy. Dan@pmtwp.org

**Contaminants and their presence in water:** 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 U.S. EPA's Safe Drinking Water Hotline (800-426-4791).

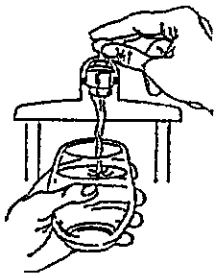
**Vulnerability of sub-populations:** Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune systems 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. U.S. EPA/Center for Disease Control 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).

**Sources of drinking water:** The sources of drinking water (both tap water 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 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 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 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 stormwater runoff, and septic systems.



In order to ensure that tap water is safe to drink, the U.S. EPA prescribes regulations that limit the levels of certain contaminants in water provided by public water systems. Federal Food and Drug Administration regulations establish limits for contaminants in bottled water which provide the same protection for public health.

## Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2024 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 through December 31, 2024. 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 the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- 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.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- N/A: Not applicable
- ND: not detectable at testing limit
- PPM: parts per million or milligrams per liter
- PPM: parts per billion or micrograms per liter
- Action Level (All: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- Level 1 Assessment: A study of the water supply to identify potential problems and determine (if possible) why total coliform bacteria have been found In our water system.
- Level 2 Assessment: 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.

| Unregulated Contaminant Name | Average Level Detected | Range | Year Sampled | Comments |
|---|---|---|---|---|
| Sodium (ppm) | 60 | 60 | 2022 | Erosion of natural deposits. |

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| Regulated Contaminant | MCL, TT, or MRDL | MCLG or MRDLG | Level Detected | Range | Year Sampled | Violation Yes/No | Typical Source of Contaminant |
|---|---|---|---|---|---|---|---|
| Fluoride (ppm) | 4 | 4 | 0.81 | 0.66-0.92 | 2024 | NO | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| TTHM Total Trihalomethanes (ppb) | 80 | 0 | 10 | 10 | 2024 | NO | Byproduct of drinking water disinfection |
| HAAS Haloacetic Acids (ppb) | 60 | 0 | ND | N/A | 2024 | NO | Byproduct of drinking water disinfection |
| Chlorine[1] (ppm) | 4 | 4 | 0.35 | 0.10-0.77 | 2024 | NO | Water additive used to control microbes |
| Total Coliform | TT | N/A | **N/A** | **N/A** | 2024 | NO | Naturally present in the environment |
| E. coli in the distribution system (positive samples) | See E.coli note[2] | 0 | 0 | N/A | 2024 | NO | Human and animal fecal waste |
| Fecal Indicator - E. coli at the source (positive samples) | TT | **N/A** | 0 | **N/A** | 2024 | NO | Human and animal fecal waste |
| Nitrate (ppm) | 10 | 10 | ND | **N/A** | 2024 | NO | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |
| Uranium (ppb) | 30 | 0 | ND | **N/A** | 2024 | NO | Erosion of natural deposits |
| Arsneic (ppm) | 0.010 | 2 | 0.005 | 0.005 | 2020 | NO | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes |
| Barium (ppm) | 2 | 2 | 0.020 | 0.020 | 2020 | NO | Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits |

[1] The chlorine "Level Detected" was calculated using a running annual average.

[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.*

| Per- and polyfluoroalkyl substances (PFAS) | | | | | | | |
|---|---|---|---|---|---|---|---|
| Regulated Contaminant | MCL, TT, or MRDL | MCLG or MRDLG | Level Detected | Range | Year Sampled | Violation Yes/No | Typical Source of Contaminant |
| Hexafluoropropylene oxide dimer acid (HFPO-DA) (ppt) | 370 | ND | ND | 0 | 2024 | NO | Discharge and waste from industrial facilities utilizing the Gen X chemical process |
| Perfluorobutane sulfonic acid (PFBS) (ppt) | 420 | ND | ND | 0 | 2024 | NO | Discharge and waste from industrial facilities; stain-resistant treatments |
| Perfluorohexane sulfonic acid (PFHxS) (ppt) | 51 | ND | ND | 0 | 2024 | NO | Firefighting foam; discharge and waste from industrial facilities |
| Perfluorohexanoic acid (PFHxA) (ppt) | 400,000 | ND | ND | 0 | 2024 | NO | Firefighting foam; discharge and waste from industrial facilities |
| Pertluorononanoic acid (PFNA) (ppt) | 6 | ND | ND | 0 | 2024 | NO | Discharge and waste from industrial facilities; breakdown of precursor compounds |
| Perfluorooctane sulfonic acid (PFOS) (ppt) | 16 | ND | ND | 0 | 2024 | NO | Firefighting foam; discharge from electroplating facilities; discharge and waste from industrial facilities |
| Perfluorooctanoic acid (PFOA) (ppt) | 8 | ND | ND | 0 | 2024 | NO | Discharge and waste from industrial facilities; stain-resistant treatments |
| Inorganic Contaminant Subject to Action Levels (AL) | Action Level | MCLG | Your Water[3] | Range of Results | Year Sampled | Number of Samples Above AL | Typical Source of Contaminant |
| Lead (ppb) | 15 | 0 | ND | 0 | 2024 | NO | Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits |
| Copper (ppm) | 1.3 | 1.3 | 0.1 | 0.095-0.11 | 2024 | NO | Corrosion of household plumbing systems; Erosion of natural deposits |

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

**Information about 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. Pere Marquette Charter Township 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 John D. Healy, Pere Marquette Township, 1699 S. Pere Marquette Hwy. Dan@pmtwp.org for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead.*

Our water supply has 0 lead service lines and 7 service lines of unknown material out of a total of 454 service lines. If you would like to know more about this report, please contact: *John D. Healy, Pere Marquette Township, 1699 S. Pere Marquette Hwy. Dan@pmtwp.org*

Monitoring and Reporting to the Department of Environment, Great Lakes, and Energy (EGLE) Requirements: The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2024.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies are available at Pere Marquette Township Hall 1699 S. Pere Marquette Hwy. This report will not be sent to you.

We invite public participation in decisions that affect drinking water quality. The Pere Marquette Township board meetings are held at the Pere Marquette Town Hall building at 1699 S. Pere Marquette Highway every second Tuesday of the month at 4:00pm and the last Tuesday of the month at 6:00pm. For more information about your water, or the contents of this report, contact John D. Healy (231) 845-1277. For more information about safe drinking water, visit the U.S. EPA at http://www.epa.gov/safewater.

Temporary water connection from 9/12/24 to 11/13/24 – During this time we connected to the City of Ludington through 3 interconnects while our water tower was down for service. If you would like more information about the City of Ludington's water, you can find this information listed on their CCR on the link here https://www.ludington.mi.us/waterquality