

# Pere Marquette Township 2018 Annual Water Quality Report

**For our Ground Water System (The portion of our township supplied with water produced by Pere Marquette Charter Township)**

We are pleased to present this year's Annual Water Quality Report to our valued customers. This report, as required by the United States Environmental Protection Agency (EPA) under the Safe Drinking Water Act re-authorization, is designed to inform the consumer about where your water comes from, what it contains and how it compares to standards set forth by regulatory agencies. Our constant goal is to provide our customers with a safe and dependable drinking water supply. We continually strive to improve the water treatment process and distribution system. We appreciate the confidence our customers have placed in us and continually value your trust.

## WHERE DOES YOUR WATER COME FROM?

In 2006, Pere Marquette Charter Township began construction of our Business, Technology, and Industrial (BTI) Park on First St., Between PM Highway and Meyers Rd. As part of that project, a municipal well field and a 500,000-gallon elevated storage tank were constructed. The well field and storage enable the Township to provide increased water volumes to our customers. The water for this system is supplied by three (3) 12-inch diameter wells, each one being over 220 feet deep. The water travels through several miles of piping to serve businesses and residences in the general area bounded by the Lincoln River on the North, Meyers Rd. on the East, Conrad Rd. on the South, and Washington Ave on the West. The Michigan Department of Environmental Quality (MDEQ) performed an assessment of our source water in 2006 to determine the susceptibility or the relative potential of contamination. The susceptibility rating is reported using a seven-tiered scale ranging from "very low" to "very high" based primarily on geologic sensitivity,

water chemistry, and contaminant sources. Our source water susceptibility was rated as LOW.

In September of 2008, Pere Marquette Charter Township began operation of our new Ground Water (municipal well) system.

## DRINKING WATER QUALITY RESULTS

Pere Marquette Charter Township's licensed water treatment operators routinely monitor for contaminants in your drinking water according to Federal and State laws. Results are gathered through certified labs, such as The City of Ludington's WTP lab and the State of Michigan Department of Environmental Quality (MDEQ) lab. It is important to mention that not all contaminants are tested for every year because the concentrations of these contaminants are not expected to vary significantly from year to year as determined by our State regulatory agency, (MDEQ). 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 2018.** 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 tests each day to monitor our source water. The table inside this report represents the substances that were detected in Pere Marquette Township's Ground Water System for the monitoring period of **January 1st to December 31st, 2018.**

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

## PUBLIC PARTICIPATION

Interested citizens are welcome to attend the Pere Marquette Township Board meetings to hear more about current projects involving the Township's water system. Meetings are held the second and fourth Tuesday of each month at 6:30 p.m. at the Pere Marquette Township Hall, 1699 South Pere Marquette Highway.

## QUESTIONS? COMMENTS?

The Township's utility department is on call around the clock to provide quality water to residents and businesses. If you have any questions or comments, or would like to receive more specific information about Township's water system, please feel free to call Andy Larr, Superintendent of Utilities & Public Works, at 231-845-7640 from 6:00 am to 4:30 pm M-Th.

**For More Information,  
Please Contact:  
Andy Larr  
Superintendent of  
Utilities & Public Works  
231-845-7640**

## HEALTH & SAFETY INFORMATION

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily pose a health risk. The sources of both tap and bottled drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive materials, and can also pick up substances resulting from animal or 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 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, septic systems, and urban or agricultural runoff (i.e., pesticides and herbicides); or **Radioactive contaminants**, which can be naturally occurring or the result of oil and gas production and mining activities.

To ensure that tap water is safe, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

**Information for Vulnerable Populations:** Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons 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 from their health care providers. More information on potential effects of specific contaminants can be obtained by contacting the EPA's Safe Drinking Water Hotline at **1 (800) 426-4791** or their website at <http://www.epa.gov/safewater/dwhealth.html>.

**Lead and Drinking Water:** 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. Pere Marquette Charter Township 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 at **1 (800) 426-4791** or at <http://www.epa.gov/safewater/lead>.

## TERMINOLOGY

**Maximum Contaminant Level (MCL)**- The MCL is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible, using the best available treatment technology. MCL's are set at very stringent levels by the State and Federal government. To understand the possible health effects, a person would have to drink about two liters (quarts) of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the associated health effect.

**Maximum Contaminant Level Goal (MCLG)** - The MCLG is the level of a contaminant in drinking water below, which there is no known or expected health risk. MCLGs provide a margin of safety.

**Parts per million (ppm) and parts per billion (ppb)** - One ppm can be equated to a single penny in \$10,000. One ppb is a single penny in \$10,000,000.

**Maximum Residual Disinfection Level (MRDL)** -The highest level of disinfectant allowed in drinking water.

**Maximum Residual Disinfection Level Goal (MRDLG)** - The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Action Level (AL)** - The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.

(NA) - Not Applicable

**Running Annual Average (RAA)**- The arithmetic average of analytical results for samples taken during the previous four calendar quarters.

Listed in the table below are the contaminants/ substances that were detected in the section of Pere Marquette Township's Water System that is supplied by the Township's Well Field for the year 2018.

**ALL DETECTED CONTAMINATES/SUBSTANCES ARE BELOW ALLOWED LEVELS.**

**Not listed are the hundreds of other contaminants tested for, but not detected in the Township's Water.**

## 2018 WATER QUALITY RESULTS

Regulated Monitoring at the Well House.								
Substance	Units	Our Water	MCL	MCLG	Violations	Year Sampled	Possible Sources of Contaminant	
Alpha Emitters	pCi/L	0.64	15	0	No	2018	Erosion of Natural deposits.	
Combined Radium	pCi/L	0.76	5	0	No	2018	Erosion of Natural deposits.	
Fluoride	ppm	0.73	4	4	No	2018	Erosion of natural deposits. Discharge from fertilizer and aluminum factories	
Regulated Monitoring in the Distribution System								
Substance	Units	Range Detected	Our Water	MCL	MCLG	Violations	Year Sampled	Possible Sources of Contaminant
(HAA5) Haloacetic Acids [5]	ppb	20-27	RAA = 17	60	0	Yes	2018	Byproduct of drinking water disinfection
Free Chlorine Residual	ppm	0.36 - 0.82	RAA=0.7	MRDL=4	MRDLG=4	No	2018	Water additive used to control microbes
(TTHM) Total Trihalomethanes [3]	ppb	43-97	RAA = 63	80	0	Yes	2018	Byproduct of drinking water disinfection
Regulated Monitoring at Customer's Tap (compliance is determined using the 90th percentile, where nine out of ten samples must be below the Action Level).								
Substance	Range Detected	90th Percentile	Date Sampled	Action Level (AL)	MCLG	# of Samples Above(AL)	Year Sampled	Possible Sources of Contaminant
Lead (ppb)	ND - 5	5	7/13/16	15.0	0	0	2018	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	ND - 0.17	0.145	7/13/16	1.3	1.3	0	2018	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Unregulated Monitoring *								
Substance	Units	Range Detected	Our Water	MCL	MCLG	Violations	Year Sampled	Possible Sources of Contaminant
Sodium	ppm	NA	39.0	NA	NA	No	2018	Erosion of natural deposits.
PFAS	ppt	ND	ND	NA	NA	No	2018	Man made chemicals used in manufacturing and firefighting.
Microbial Contaminants		MCL		MCLG		Violation Yes / No		Typical Sources Of Contaminants
Total Coliform Bacteria		1 positive monthly sample (5% of monthly samples positive)		0		No		Naturally present in the environment
Fecal Coliform and E. coli		Routine and repeat samples are total coliform		0		No		Human and animal fecal waste

\* Unregulated contaminants are those for which EPA has not established drinking water standards. Monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

**Violation:** During November 2018 we failed to take our quarterly samples for total trihalomethanes and haloacetic acids. This violation did not pose a threat to the quality of the drinking water. We took the quarterly samples in February 2019 and returned to compliance.