2021 Water Quality Report for Osceola Township

This report covers the drinking water quality for Osceola Township for the 2021 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2021. 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 2 groundwater wells located near Portage Lake, southwest of the tennis court. The wells are screened in glacial drift and are screened to 60 feet deep. The wells produce about 350gpm each. The State performed an assessment of our source water in 2003 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, and water chemistry and contamination sources. The susceptibility of our source is high.

There are no significant sources of contamination included in our water supply. We are making efforts to protect our sources by daily monitoring and monthly testing as well as distribution of the Drinking Water Protection Plan pamphlet and School Education.

If you would like to know more about the report, please contact Bob Mattfolk at (906) 281-5578 or Osceola Township PO Box 437, Dollar Bay, MI 49922, (906) 482-8578.

- **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 **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. 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).

- **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 storm water 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 storm water runoff, and septic systems.

In order 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 regulations establish limits for contaminants in bottled water which provide the same protection for public health.

Statement 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. Osceola 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 drinking 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 in available from the Safe Drinking Water Hotline at 1-800-426-4791 or at http://water.epa.gov/drink/info/lead.

Monitoring and Reporting to the DEQ Requirements: The State and EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2021.

We invite public participation in decisions that affect drinking water quality. Osceola Township Board Meetings are the 2nd Wednesday of each month, starting at 6:15 p.m.

Water Quality Data

Lead above Action Level*:* 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 this water over many years could develop kidney problems or high blood pressure.

Copper above Action Level: Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.
For more information about safe drinking water, visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/.

Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2021 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 – December 31, 2021. 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 of the data is representative of the water quality, but some are more than one year old.

Terms and abbreviations used below:

- Maximum Contaminant Level Goal (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.
- 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.
- N/A: Not applicable; ND: not detectable at testing limit; ppb: parts per billion or micrograms per liter; ppm: parts per million or milligrams per liter; pCi/L: picocuries per liter (a measure of radioactivity).
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Regulated Contaminant	MCL	MCLG	Level Detected		Year Sampled	Violation Yes/No	# Of Samples Taken	Typical Source of Contaminant
Inorganic Contaminant								
Barium (ppm)	2000	2000	0.034 ppm		2019	No		Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits
Cyanide			ND		2018	No		Erosion of Natural deposits
Fluoride (ppm)	4	4	0.034		2018	No		Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (ppm)	10	10	2.3		2021	No		Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Unregulated Contaminants								
Sodium (ppb)			12		2021	No		Erosion of natural deposits. Not a regulated contaminate
Chloride			21 mg/L		2020	No		
Sulfate			7.6 mg/L		2020	No		
Radioactive Contaminants								
Alpha emitters (pCi/L)	15	0	1.1		2015	No		Erosion of natural deposits
Combined radium (pCi/L)	5	0	0.2		2015	No		Erosion of natural deposits
Inorganic Contaminant Subject to Action Level (AL)	**Action Level**	**90th Percentile Value**	**Range of Individual Results**	**# Of Samples Above Action Level**	**Year Sampled**	**Violation Yes/No**	**# Of Samples Taken**	**Typical Source of Contaminant**
Lead (ppb)	15 ppb	4 ppb	0 ppb–6 ppb	0	2021	No	10	Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Copper (ppm)	1.3 ppm	0.2 ppm	0.0 ppm-0.8 ppm	0	2021	No	10	Corrosion of household plumbing systems; Erosion of natural deposits
Regulated Contaminant	**MCT, TT, or MRDL**	**MCLG or MRDLG**	**Level Detected**			**Violation Yes/No**	**# Of Samples Taken**	**Typical Source of Contaminant**
Perfluorohexanoic acid (PFHxA) (ppt)	400,000	N/A	2.3 mg/L		2020	No		Firefighting foam; discharge and waste from industrial facilities
Total Coliform Bacteria	TT	N/A	N/A		2021	Yes	12	Naturally present in the environment

CCR 2020 correction: The 90th percentile value listed in the CCR for copper was incorrect. The 90th percentile for copper should have been 0.8 parts per million (ppm)