Whiteford Township
Annual Water Quality Report
2021

Whiteford Township strives to produce the best quality drinking water possible. The purpose of this report is to provide you with information about your drinking water. The report explains to you where your water comes from and the treatment it receives before it reaches your tap. The report also lists all of the contaminants detected in your water and an explanation of all violations in the past year.

Where Does My Water Come From?

In late 2018 we completed phase one of the Whiteford Township Water System and began serving the public on January 15, 2019. The Whiteford Township Water Treatment Plant draws water from the two large wells adjacent to it. These 8-inch diameter wells are each 300 feet deep. Two (2) high service pumps bring up to 300,000 gallons per day from the wells to the plant. 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, water chemistry and contamination sources. Our source has a low susceptibility, given land uses, depth and potential contaminant sources within the source water area as well as the karst formation. The treatment plant has effectively treated this source water to meet drinking water standards. Information from this assessment is available at the Township Office 8000 Yankee Rd., Suite 100, Ottawa Lake, MI.

How Is My Water Treated And Purified?

The treatment process consists of a series of steps. First, raw water is drawn from the wells. Once the water reaches the treatment plant, sulfur is removed along with any metals, such as manganese and iron. Then the water is filtered to comply with the strictest Michigan Department of Environmental Quality (MDEQ) standards. The water is then filtered again with nano filters to remove hardness. Chlorine is then added for disinfection (we carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste). Finally, a corrosion inhibitor (used to protect inside house system piping) is added before the water is pumped to sanitized pipelines and into your home or business.

This report can be viewed on the Township website at http://www.whitefordtownship.org

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

Substances That Might Be in Drinking Water if using a well due to the Karst Formation in Whiteford Township and what our system removes.

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock and wildlife.
- Inorganic contaminants, such as salts and metals, which can be natural or may result from storm runoff, wastewater discharges, oil and gas production and farming.
- Organic chemicals, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also originate from agricultural practices, storm runoff and septic systems.
- Radioactive substances, which can be naturally occurring or be the result of oil and gas production and mining activities.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm runoff, and residential uses.

In order to ensure that tap water is safe, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems.

The Whiteford Township water plant staff collects and tests water samples throughout the distribution system. These tests ensure that the proper chemical levels are maintained and that any contaminants that cannot be removed by treatment are at safe levels.

If you would like more information about your water, please call Whiteford Township Water Plant 734-347-0139 or 419-467-0824
Email wt.plant208@gmail.com

WATER QUALITY DATA

During the past year we have taken hundreds of water samples in order to determine the presence of any biological, inorganic, volatile organic or synthetic organic contaminants. The table below lists all contaminants that were detected in 2021 The state allows us to monitor for certain contaminants less than annually because the concentrations are not expected to change frequently. The most recent results of these tests are also included in the table. Any violations are printed in **bold**, and an explanation of each violation is provided on page 3.

Terms and Abbreviations:

- **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 possible using the best available treatment technology.
- **Maximum Contaminant Level Goal (MCLG)**: The level of a contaminant in drinking water below which there is no known or expected health risk.
- **Maximum residual disinfectant level goal (MRDLG)** means the level of 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.
- **Maximum residual disinfectants level (MRDL)** means the highest level of disinfectant allowed in drinking **water.** There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.
- **Action Level (AL)**: The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **pCi/L** - picocuries per liter
- **ppb** – parts per billion or micrograms per liter
- **ND** – not detected
- **ppm** – parts per million or milligrams per liter
- **TT** – treatment technique (a required process intended to reduce the level of a contaminant in drinking water).
- **NTU** – Nephelometric Turbidity Units
- **N/A** – not applicable

Contaminant	MCL	MCLG	*Whiteford Water*	Range of Detections[1]	Sample Date	Violation	Typical Source of Contaminant
Turbidity (NTU)	0.3	TT	*0.02 - 0.08*	0.08 - 0.13	2021	NO	Soil Runoff
Fluoride (ppm)	4.0	4.0	0.56	0.32 - 1.35	2021	NO	Erosion of natural deposits; water additive that promotes strong teet discharge from fertilizer and aluminum factories
Sodium (ppm)	N/A		*19*	71 – 90	2021	NO	Naturally present in water
Chlorine (ppm)	4.0		*0.85-1.78*	.0.78-1.89	2021	NO	Water additive used to control microbes
Total Organic Carbon	TT		*2.1-2.6*		2020	NO	Naturally present in the environment
Total Trihalomethanes (TTHMs) (ppb)	80	N/A	*<0.5 – 2.7*	27- 58	2021	NO	By-product of drinking water disinfection
Haloacetic Acids (HAA5s) (ppb)	60	N/A	*<1.0*	14 - 30	2021	NO	By-product of drinking water disinfection
Lead and Copper Monitoring at the Consumer's Tap							
Copper (ppb)[2] June 2020	AL=1300	1300	0.1 [2]	0.0-0.1 [2]	2021	NO	Corrosion of household plumbing systems.
Lead (ppb)[2] June 2020	AL=15	0.0	3 [2]	00.0-6	2021	NO	Lead service lines, Corrosion of household plumbing including fittings and fixtures Erosion of natural deposits

[1] Lead and Copper results list the number of samples that exceeded the action level, rather than the range detected.
[2] 90th Percentile of Test Results.

INFORMATIONAL STATEMENTS ABOUT THE CHEMICALS DETECTED IN YOUR WATER:

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer 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 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)

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)

Information about lead in 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. Whiteford 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**

ABOUT OUR TURBIDITY: Turbidity in water is caused by the presence of suspended matter, such as clay, silt, finely divided organic matter, and other microscopic organisms. In 2019, we maintained an average turbidity level of 0.06 NTU. The MCL of turbidity is 1.0 NTU and 95% of samples in a given month are required to be below 0.3 NTU or there is a treatment technique violation

If you have any questions about the chemicals in your water, please call Whiteford Township Water Plant at 734-347-0139 This report can also be found at the township website at http://www.whitefordtownship.org.

Whiteford Township Water Plant had 1 VIOLATION NOTICE for not submitting the required Lead and Copper sampling plan form within the specified deadline. The violation was corrected with in the month.

The Township Board meets every 3rd Tuesday of the month at 7:30 p.m. Meetings are held at the Township Office. Please feel free to come and participate.

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