2024Water Quality Report for Harbor Beach Water Treatment Plant

This report covers the drinking water quality for the City of Harbor Beach Water Treatment Plant for the calendar year ***2024.*** This information is a snapshot of the quality of the water provided to you in 2024. Included are details about where the water comes from, what it contains, and how it compares to EPA and State standards.

The Harbor Beach Water Treatment Plant (HBWTP) obtains water from Lake Huron, one of the highest quality sources of fresh water in the world. The State performed an assessment of our source water in 2004. The source water area for the Harbor Beach intake includes 17 potential contaminant sources. These contaminant sources, combined with the highly sensitive intake, leads to a highly susceptible determination for the Harbor Beach water supply intake. The final assessment report is available for review at the water plant.

- **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 (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 who have undergone organ transplants, undergoing chemotherapy, 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.

- **Sources of Drinking Water:** The sources of drinking water (Both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As previously stated, our water comes from Lake Huron. 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 humans.

- **Contaminants that may be present in source water include:**

    - **Microbial:** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife
    - **Inorganic:** such as salts and metals, which can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming
    - **Pesticides and herbicides:** which may come from a variety of sources such as agriculture and residential use
    - **Radioactive:** which can be naturally occurring or be the result of oil and gas production and mining activities
    - **Organic chemicals:** including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can come from gas station, urban storm water runoff, 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. FDA regulations establish limits for contaminants in bottled water which provide the same protection for public health.

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 – 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 may be 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 MCGLs as feasible using the best available treatment technology
- Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contamination.
- Maximum Residual Disinfectant Level Goal (MRDLG): 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
- N/A: Not Applicable ND: Not Detectable at testing limit ppb: parts per billion ppm: parts per million or milligrams per liter pCi/l: picocuries per liter (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
- Treatment Techniques (TT): A treatment technique is a required process intended to reduce the level of a contaminant in drinking water
- Nephelometric Turbidity Unit (NTU): nephelometric turbidity unit is a measure of the clarity of water. Turbidity of 0.5 NTU is just noticeable to the average person visually
- Reporting Limit (RL): The concentration of a contaminant which, if exceeded, triggers a reportable value above non-detect

Regulated Chemical Contaminants	MCL	MCLG, MRDL	Our Water	Sample Date	Violation Yes/No	Typical Source of contaminants
Nitrate (ppm)	**10**	**0**	**0.8**	**2/20/24**	**NO**	**Erosion of natural deposits**
Nitrite (ppm)	**1**	**0**	**ND**	**2/20/24**	**NO**	**Erosion of natural deposits; Discharge of drilling wastes**
Fluoride (ppm)	**4**	**4**	**0.48**	**2/20/24**	**NO**	**Erosion of natural deposits**
Arsenic (ppm)	**10**		**ND**	**12/14/20**	**NO**	**Erosion of natural deposits**
Cyanide (ppm)	**0.2**		**ND**	**2/20/24**	**NO**	**Erosion of natural deposits**

Individual Community Free Chlorine Samples

Community	MCLG, MRDL	Low/high Month Concentration	Highest Running Average	Sample Frequency	Violation Yes/No	Typical Source of contaminants
City of Harbor Beach	4.0	0.33 - 1.11 ppm	0.82ppm	Monthly	NO	Disinfection added to microbes
Sand Beach Township	4.0	0.50–1.00 ppm	0.79 ppm	Monthly	NO	Disinfection added to microbes
Huron Township	4.0	0.02 - 0.13 ppm	0.05ppm	Monthly	NO	Disinfection added to microbes
Village of Forestville	4.0	0.21–.42 ppm	0.33 ppm	Monthly	NO	Disinfection added to microbes
Port Hope Gore-Rubicon Utility	4.0	0.06–1.01 ppm	0.49 ppm	Monthly	NO	Disinfection added to microbes
Forester Township	4.0	0.80–1.16 ppm	0.98ppm	Monthly	NO	Disinfection added to microbes

WTP Samples Plant Tap

Unregulated Chemical Contaminants	Our Water	Sample Date	Violation Yes/No	Typical Source of contaminants
Sodium (ppm)	5.8	2/20/24	NO	Erosion of natural deposits

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

WTP Samples Plant Tap

Regulated Parameter	Violations	Range NTU	MCL NTU	MCLG NTU	Typical Source of contaminants
Turbidity	NO	0.057 - 0.120	0.3 NTU	N/A	Organic and inorganic matter suspended in water

Turbidity is a measure of the cloudiness of water and serves as an indication of the effectiveness of filtration.

WTP Samples Plant Tap

Regulated Parameter	Violations	RL	Result mg/l	MCL/AL mg/l	Typical Source of contaminants
Bromodichloromethane	NO	0.0005	0.0043	0.080	including synthetic and volatile types from industrial processes, petroleum production, gas stations, stormwater runoff, and septic systems.
Chlorodibromomethane	NO	0.0005	0.0013	0.080	including synthetic and volatile types from industrial processes, petroleum production, gas stations, stormwater runoff, and septic systems.
Chloroform	NO	0.0005	0.0047	0.080	including synthetic and volatile types from industrial processes, petroleum production, gas stations, stormwater runoff, and septic systems.

Microbial Contaminants	MCL	MCLG	Positive Samples	Violation Yes/No	Typical Source of Contaminants

City of Harbor Beach

Total Coliform Bacteria	1 positive monthly sample (5% of monthly samples positive)	0	0	NO	Naturally present in the environment
Fecal Coliform and *E. coli*	Routine and repeat samples are total coliform positive, and is also fecal or *E. coli* positive	0	0	NO	Human and animal waste

Sand Beach Township

Total Coliform Bacteria	1 positive monthly sample (5% of monthly samples positive)	0	0	NO	Naturally present in the environment

Fecal Coliform and *E. coli*	**Routine and repeat samples are total coliform positive, and is also fecal or *E. coli* positive**	**0**	**0**	**NO**	**Human and animal waste**

Huron Township

Total Coliform Bacteria	**1 positive monthly sample (5% of monthly samples positive)**	**0**	**1**	**YES**	**Naturally present in the environment**
Fecal Coliform and *E. coli*	**Routine and repeat samples are total coliform positive, and is also fecal or *E. coli* positive**	**0**	**0**	**NO**	**Human and animal waste**

Village of Forestville

Total Coliform Bacteria	**1 positive monthly sample (5% of monthly samples positive)**	**0**	**0**	**NO**	**Naturally present in the environment**
Fecal Coliform and *E. coli*	**Routine and repeat samples are total coliform positive, and is also fecal or *E. coli* positive**	**0**	**0**	**NO**	**Human and animal waste**

Port Hope-Gore-Rubicon Utilities Authority

Total Coliform Bacteria	**1 positive monthly sample (5% of monthly samples positive)**	**0**	**0**	**NO**	**Naturally present in the environment**
Fecal Coliformand *E. coli*	**Routine and repeat samples are total coliform positive, and is also fecal or *E. coli* positive**	**0**	**0**	**NO**	**Human and animal waste**

Forester Township

Total Coliform Bacteria	**1 positive monthly sample (5% of monthly samples positive)**	**0**	**0**	**NO**	**Naturally present in the environment**
Fecal Coliform and *E. coli*	**Routine and repeat samples are total coliform positive, and is also fecal or *E. coli* positive**	**0**	**0**	**NO**	**Human and animal waste**

Individual Community Regulated Lead and Copper Testing (Samples at Individual Taps)

Regulated Chemical Contaminants	Action Level	MCLG	Range	90th Percentile	Number of Samples Above Action Level	Sample Date
City of Harbor Beach						
Lead (ppb)	15	0	0 -8	0	0	6/26,27-7/19 2023
Copper (ppb)	1300	1300	0 - 0	0	0	6/26,27-7/19 2023
Sand Beach Township						
Lead (ppb)	15	0	0 - 3	2	0	6/13,14,21, 2023
Copper (ppb)	1300	1300	0-100	100	0	6/13,14,21, 2023
Village of Forestville						
Lead (ppb)	15	0	0 - 5	3	0	9/6,7,8 2023
Copper (ppb)	1300	1300	0-900	400	0	9/6,7,8 2023
Huron Township						
Lead (ppb)	15	0	0 - 2	2	0	8/10/22
Copper (ppb)	1300	1300	0 - 200	200	0	8/10/22
Port Hope-Gore- Rubicon Utilities Authority						
Lead (ppb)	15	0	0 - 8	8	0	6/26/23
Copper (ppb)	1300	1300	0 –140	140	0	6/26/23
Forester Township						
Lead (ppb)	15	0	0 - 4	0	0	6/20/22
Copper (ppb)	1300	1300	0 - 400	200	0	6/20/22

Typical Source of Lead Contaminant: Lead service lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits
Typical Source of Copper Contaminant: Corrosion of household plumbing systems; Erosion of natural deposits

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. Harbor Beach Water Treatment Plant (HBWTP) 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 and making baby formula, flush 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: HBWTP at (989) 479-9510 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.

Stage 2 Disinfectants/Disinfection Byproducts Rule

Individual Community Disinfectants/Disinfection Byproduct Rule Samples

City of Harbor Beach

Total Trihalomethane (TTHM) (ppb)					
Site ID	**Date**	**MCL**	**Sample Concentration (ppb)**	**Violation Yes/No**	**Typical Source of Contamination**
SM-1	**8/12/24**	**80**	**35**	**NO**	**Byproduct of drinking water disinfection**
HaloaceticAcid 5 (HAA5) (ppb)					
Site ID	**Date**	**MCL**	**Sample Concentration (ppb)**	**Violation Yes/No**	**Typical Source of Contamination**
SM-1	**8/12/24**	**60**	**9**	**NO**	**Byproduct of drinking water disinfection**

Huron Township

Total Trihalomethane (TTHM) (ppb)					
Site ID	**Date**	**MCL**	**Sample Concentration (ppb)**	**Violation Yes/No**	**Typical Source of Contamination**

SM-1	8/6/24	80	51	NO	Byproduct of drinking water disinfection
Halo aceticAcid 5 (HAA5) (ppb)					
Site ID	Date	MCL	Sample Concentration (ppb)	Violation Yes/No	Typical Source of Contamination
SM-1	8/6/24	60	11	NO	Byproduct of drinking water disinfection

Port Hope-Gore-Rubicon Utilities Authority

Total Trihalomethane (TTHM) (ppb)					
Site ID	Date	MCL	Sample Concentration (ppb)	Violation Yes/No	Typical Source of Contamination
SM-1	8/12/24	80	44	NO	Byproduct of drinking water disinfection
Halo aceticAcid 5 (HAA5) (ppb)					
Site ID	Date	MCL	SampleConcentration (ppb)	ViolationYes/No	Typical Sourceof Contamination
SM-1	8/12/24	60	12	NO	Byproduct of drinking water disinfection

Forester Township

Total Trihalomethane (TTHM) (ppb)					
Site ID	Date	MCL	Sample Concentration (ppb)	Violation Yes/No	Typical Source of Contamination
SM-1	8/7/24	80	30	NO	Byproduct of drinking water disinfection
Halo aceticAcid 5 (HAA5) (ppb)					

Site ID	Date	MCL	Sample Concentration (ppb)	Violation Yes/No	Typical Source of Contamination
SM-1	8/7/24	60	16	NO	Byproduct of drinking water disinfection

Village of Forestville

Total Trihalomethane (TTHM) (ppb)					
Site ID	Date	MCL	Sample Concentration (ppb)	Violation Yes/No	Typical Source of Contamination
SM-1	9/17/24	80	42	NO	Byproduct of drinking water disinfection
Halo aceticAcid 5 (HAA5) (ppb)					
Site ID	Date	MCL	Sample Concentration (ppb)	Violation Yes/No	Typical Source of Contamination
SM-1	9/17/24	60	11	NO	Byproduct of drinking water disinfection

Sand Beach Township

Total Trihalomethane (TTHM) (ppb)					
Site ID	Date	MCL	Sample Concentration (ppb)	Violation Yes/No	Typical Source of Contamination
SM-1	8/5/24	80	26	NO	Byproduct of drinking water disinfection
Halo aceticAcid 5 (HAA5) (ppb)					
Site ID	Date	MCL	Sample Concentration (ppb)	Violation Yes/No	Typical Source of Contamination
SM-1	8/5/24	60	11	NO	Byproduct of drinking water disinfection

Radionuclides							
Regulated Contaminate	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes/No	Type Source of Contaminant
Alpha emitters (pCi/L)	15	0	0.170	N/A	2024	No	Erosion of natural deposits
Combined radium (pCi/L)	5	0	0.520	N/A	2024	No	Erosion of natural deposits

Monitoring and Reporting Requirements: The State and EPA require us to test our water on a regular basis to ensure its safety. We have met allthe monitoring and reporting requirements for 2024.

Preliminary Distribution System Materials Inventory

The primary focus of the Preliminary Distribution System Materials Inventory (DSMI) is to identify lead service lines, galvanized steel previously connected to lead, or service lines of unknown material. This inventory will estimate the number of high-risk service lines and describe the reliability of existing records, thereby providing important information for planning service line verification and replacement efforts.

City of Harbor Beach

Estimated Number of Service Connections by Service Line Material

A service line includes any section of pipe from the water main to the building plumbing at the first shut-off valve inside the building, or 18 inches inside the building, whichever is shorter.

Any portion contains lead	Contains galvanized previously connected to lead*	Unknown			Contains neither lead, nor galvanized previously connected to lead	Total**
		Likely contains lead	Likely does NOT contain lead	Materials unknown		
0	9 est.	0	0	625	179	813

*If galvanized line is still connected to lead, it is a lead service line and must be counted in the first column.
**The total number should equal the total number of potable water service lines in your water supply (residential, commercial, industrial, other).

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 the Harbor Beach Water Treatment Plant, 101 Richie Drive, Harbor Beach, your township officials, or at the Harbor Beach websitewww.harborbeach.comanytime.

For more information about your water, or the contents of this report, contact the City of Harbor Beach Water Treatment Plant at 989-479-9510, and for more information about safe drinking water please visit the U.S. Environmental Protection Agency at www.epa.gov/safewater/lead.

For more information about individual distribution system water quality, please call one of the following contacts for each system:

Port Hope: Todd Maschke – 989-551-3913
Huron Township: Paul Kanaski – 989-553-3498
Sand Beach Township: Ryan Weber – 989-553-3159
Village of Forestville: Nick Roggenbuck – 989-553-3402
Forester Township: Ryan Weber – 989-553-3159