2022 Water Quality Report for Port Austin Area Sewer and Water Authority

This report covers the drinking water quality for Port Austin Area Sewer and Water Authority (PAASWA) for the calendar year 2022. 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.

Port Austin purchases its water from the Huron Regional Water Authority (HRWA). HRWA's Water Treatment Plant obtains surface water from Lake Huron, one of the highest quality sources of fresh water in the world.

- **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 **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. Immunocompromised 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).
- **Sources of drinking water**:
  The sources of drinking water (both tap 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 from human activity.
  During 2003 a Source Water Assessment was prepared for Port Austin's source water by the U.S. Geological Survey, Water Resources Division, Michigan District and the Michigan Department of Environmental Quality, Water Division. The HRWA purchased and utilizes the source water intake this assessment was prepared for. The purpose of this assessment is to analyze the sensitivity and susceptibility of our community's source of drinking water. Sensitivity is determined from the natural setting of the source water and indicates natural protection afforded the source water. Susceptibility identifies factors within the source water area that may pose a risk to the water supply. Based on the category of sensitivity and potential contaminant sources in the area, our source has a moderately high susceptibility to potential contamination. The assessment further notes that the Port Austin Water Treatment Facility historically treated this source effectively to meet drinking water standards. The HRWA Treatment Facility continues to meet these stringent drinking water standards. Anyone interested in examining the Source Water Assessment Report can contact our office located at 8747 Hellems Rd., Port Austin or call (989) 738-8366.
- **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 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 naturally-occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants**, including synthetic and volatile chemicals, which are by-products of industrial processes and petroleum production, and can come from gas stations, urban storm water runoff, and septic systems.
- **Lead,** if present in elevated levels, 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. For example, lead was commonly used for soldering pipe joints, but can no longer be used per regulations. The Huron Regional Water Authority is responsible for providing high quality drinking water to the PAASWA distribution system that delivers this water to the individual consumers. However, neither HRWA nor PAASWA can control the variety of materials used in plumbing components. If you believe your home's water system used materials containing lead, you can take steps to minimize the lead exposure. If you haven't used water for several hours, allow the water to flush through the tap for 30 seconds to two minutes before using the water for drinking or cooking. If you are concerned about lead in your water, you may wish to have it 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 or at http://www.epa.gov/safewater/lead/index.cfm.

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. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water which proved the same protection for public health.

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 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 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.

- Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no know 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 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 contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- Treatment Technique (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.
- RAA: Running Annual Average

Samples collected at the HRWA Water Treatment Plant:

Regulated Chemical Contaminants	MCL	MCLG, MRDL	Our Water	Sample Date	Violation Yes/No	Typical Source of Contaminants
Fluoride (ppm)	4	4	.20	7-22-21	No	Erosion of natural deposits
Chlorodibromomethane (ppb)	80		3.3	7-23-21	No	
Chloroform (ppb)	80		13	7-23-21	No	
Bromodichloromethane (ppb)	80		7.6	7-23-21	No	
Free Chlorine Residual (ppm)		4	Highest running annual average 1.61	Daily	No	Disinfectant added to control microbes
Total Trihalomethanes (ppb)	80		24	7-23-21	No	Disinfection byproducts
Unregulated Contaminants	**MCL**	**MCLG, MRDL**	**Our Water**	**Sample Date**	**Violation Yes/No**	**Typical Source of Contaminants**
Sodium (ppm)	***N/A***	***N/A***	***7.6***	***7-23-21***	***N/A***	***Erosion of natural deposits***
Calcium (ppm)	N/A	N/A	26	7-23-21	N/A	
Hardness as CaCO3 (ppm)	N/A	N/A	113	7-27-21	N/A	
Chloride (ppm)	N/A	N/A	10	7-22-21	N/A	

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

	MCL	MCLG	Range (NTU)	Sample Date	Violation Yes/No	Typical Source of Contaminants
Turbidity	TT	N/A	Avg. 0.046 (0.035 - 0.117)	Daily	No	Organic and inorganic matter suspended in water

* Turbidity is a measurement of the cloudiness of water and serves as an indicator of the effectiveness of filtration

Microbial Contaminants	MCL	MCLG	Positive Samples	Violation Yes/No	Typical Source of Contaminants
Total Coliform Bacteria	N/A	0	0	No	Naturally present in environment
E.coli	Routine and repeat samples are total coliform positive, and one is also fecal or E.coli positive	0	0	No	Human and animal fecal waste

+ Samples for total coliform and E-coli bacteria analysis are taken daily at the treatment plant.

In addition to the above testing, the Water Plant also samples for a large number of other contaminants, including many volatile organic compounds (25+ with current MCLs). These were all "ND" and pose no threat to health. Even the analyses for radiological substances such as Radium-226, Radium-228, P1 Gross Alpha and P1 Gross Beta were "ND". Radiological results are measured in picocuries per liter (pCi/L) and were sampled on 02/13/2015.

Samples taken in the Distribution System:

Contaminants Subject to an Action Level	Action Level, MCL, MRDL, or MRDLG	Our Water	Range		Sample Date	Number of Samples Above MCL	Typical Source of Contaminants
			Low	High			
Lead (ppb)*	AL = 15	12	0	12	Aug - 20	0 of 10 samples	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppb)*	AL = 1300	290	46	290	Aug - 20	0 of 10 samples	Corrosion of household plumbing systems; Erosion of natural deposits; leaching from wood preservatives
Total Trihalomethanes (ppb)	MCL = 80	52	32	57	Feb - Nov 21	0 of 4 samples	Disinfection byproducts
Haloacetic Acids (ppb)	MCL = 60	33	16	34	Feb- Nov 21	0 of 4 samples	Disinfection byproducts
Free Chlorine Residual (ppm)	MRDL = 4.0 MRDLG = 4	Running annual average 1.27	0.9	1.85	Monthly	0 of 28 samples	Disinfectant added to control microbes

- 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 associated with service lines and home plumbing. Port Austin Area Sewer & Water Authority is responsible for providing high quality drinking water, but cannot control the variety of materials using 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://water/epa.gov/drink/infor/lead. All samples collected for Port Austin were below the Action Level established for lead.
- ***The Port Austin Area Sewer and Water authority has 742 total water service lines, 0 lead service lines and 637 service lines of unknown material***

Microbial Contaminants	MCL	MCLG	Positive Samples	Violation Yes/No	Typical Source of Contaminants
Total Coliform Bacteria**	N/A	0	0	No	Naturally present in environment
E.coli**	Routine and repeat samples are total coliform positive, and one is also fecal or E.coli positive	0	0	No	Human and animal fecal waste

****** The current requirement for Total Coliform and E-coli bacteria analysis is two samples monthly; all samples collected for the year were "Not Detected".

Monitoring and Reporting 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 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 our Wastewater Treatment Facility located at 8747 Hellems Road. A copy of this report can also be found on the Village of Port Austin's website (www.villageofportaustin.com). Simply click on the "***Water Department***" button under "more" on the homepage and then click on the "***Current PAASWA CCR***" on the next page.

We invite public participation in decisions that affect drinking water quality. Currently the Port Austin Area Sewer & Water Authority holds scheduled meeting the second Wednesday of each month at 3:00 PM in the Port Austin Visitor center. For more information about your water or the contents of this report, contact Dale Jimpkoski at (989)738-8366. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at http://www.epa.gov/safewater/.