## 2022 Water Quality Report for Village of Almont

This report covers the drinking water quality for the Village of Almont for the 2022 calendar year. This information is a snapshot of the quality of the water that we provided to you in 2022. 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 the Lake Huron Water Treatment Plant located five miles north of the City of Port Huron. The water arrives at the plant via a deep tunnel with the intake offshore under 45 feet of water. The water is pumped from the water treatment plant to the Village of Almont. Your source water comes from the lower Lake Huron watershed; the watershed includes numerous short, seasonal streams that drain to Lake Huron .Michigan Environment ,Great Lakes, Energy (EGLE) in partnership with U.S. Geological Survey, The Great Lakes Water Authority, and the Michigan Public Health Institute performed a source water assessment in 2004 to determine the susceptibility of potential contaminant. The susceptibility rating is on a seventiered scale from very low to very high based primarily aeologic sensitivity, water chemistry, contaminant sources. The Lake Huron water treatment plant has historically provided satisfactory treatment of this source water to meet drinking water standards. The Village of Almont also has a groundwater well located at 121 West St. Clair Street. We use this well only in emergencies, for example, if the Lake Huron plant or the pipeline is out of service. The State will be performing an assessment of our source water. We will inform you on how to get a copy of the assessment report when it becomes available. If you would like to know more about this report please contact your local water department at (810)798-8528.

- 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 stormwater 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 stormwater 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.

#### Water Quality Data

The table below lists all the drinking water contaminants that we detected during the 2022 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, 2022. 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:

- <u>Maximum Contaminant Level Goal (MCLG)</u>: 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.
- <u>Maximum Contaminant Level (MCL)</u>: 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.
- <u>Maximum Residual Disinfectant Level (MRDL)</u>: 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): means the level of a 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.
- <u>N/A</u>: Not applicable <u>ND</u>: 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).
- <u>Action Level (AL)</u>: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Stand by Well #3 " Saint Clair Street", used for emergencies only

Regulated Contaminant	MCL, TT, or MRDL	MCLG or MRDLG	Level Detected	Range	Year Sampled	Violation Yes / No	Typical Source of Contaminant					
Inorganic Contami	Inorganic Contaminants											
Arsenic (ppb)	10	0	2	N/A	2014	no	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes					
Barium (ppm)	2	2	0.02	N/A	2014	no	Discharge of drilling wastes; Discharge of metal refineries; Erosion of natural deposits					
Fluoride (ppm)	4	4	0.70	N/A	2020	no	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.					
Sodium <sup>1</sup> (ppm)	N/A	N/A	48	N/A	2020	no	Erosion of natural deposits.					
Radioactive Conta	minants											
Alpha emitters (pCi/L)	15	0					Erosion of natural deposits					
Combined radium (pCi/L)	5	0	0.33	N/A	2014	no	Erosion of natural deposits					

Sodium is not a regulated contaminant.

**Information 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. Village of Almont 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 have a service line that is lead, galvanized previously connected to lead, or unknown but likely to be lead, it is recommended that you run your water 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, 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 1-800-426-4791 or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

<sup>90</sup> percent of the samples collected were at or below the level reported for our water.

The Village of Almont has proactively been investigating older areas of the infrastructure since 2018 to verify if any lead service lines exist within its water system and homes.

There are approximately a total of 1066 water services within the village of which 27 are of unknown materials.

Monitoring and Reporting to the Department of Environmental Quality (EGLE) Requirements: The State of Michigan and the U.S. EPA require us to test our water on a regular basis to ensure its safety. We met all the monitoring and reporting requirements for 2022.

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 Village offices and published in the tri City Times and available on the Villages web site and Facebook Page This report will not be sent to you.

For more information, please contact Mr. Bryan Treat, Village of Almont, 817 North Main Street, Almont, MI, 48003 at 810-798-8528 extension 4015.

Monitoring and Reporting to the EGLE 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 2019. We are committed to providing you safe, reliable, and healthy water. We are pleased to provide you with this information to keep you fully informed about your water. We will be updating this report annually, and will also keep you informed of any problems that may occur throughout the year, as they happen.

We invite public participation in decisions that affect drinking water quality. You are invited to attend the Village Council meetings held the first and third Tuesday of each month at 7:30 p.m. at the Almont Municipal Building. For more information about your water, or the contents of this report, contact Bryan Treat at (810) 798-8528. For more information about safe drinking water, visit the U.S. Environmental Protection Agency at <a href="www.epa.gov/safewater/">www.epa.gov/safewater/</a>.

### Key to the Detected Contaminants Table

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Symbol	Abbreviation	Definition/Explanation					
>	Greater than						
°C	Celsius	A scale of temperature in which water freezes at 0° and boils at					
	Ceisius	100° under standard conditions.					
		The concentration of a contaminant, which, if exceeded, triggers					
AL	Action Level	treatment or other requirements which a water system must					
		follow.					
		HAA5 is the total of bromoacetic, chloroacetic, dibromoacetic,					
HAA5	Haloacetic Acids	dichloroacetic, and trichloroacetic acids. Compliance is based on					
		the total.					
LRAA	Locational Running Annual Average	The average of analytical results for samples at a particular					
		monitoring location during the previous four quarters.					
		The highest level of a contaminant that is allowed in drinking					
MCL	Maximum Contaminant Level	water. MCLs are set as close to the MCLGs as feasible using the					
		best available treatment technology.					
MCLG	Maximum Contaminant Level Goal	The level of contaminant in drinking water below which there is no					
		known or expected risk to health.					
		The highest level of disinfectant allowed in drinking water. There					
MRDL	Maximum Residual Disinfectant Level	is convincing evidence that addition of a disinfectant is necessary					
		for control of microbial contaminants.					
		The level of a drinking water disinfectant below which there is no					
MRDLG	Maximum Residual Disinfectant Level	known or expected risk to health. MRLDG's do not reflect the					
	Goal	benefits of the use of disinfectants to control microbial					
I	not continue	contaminants.					
n/a	not applicable						
ND	Not Detected	Management the planting of contact					
NTU	Nephelometric Turbidity Units	Measures the cloudiness of water.					
pCi/L	Picocuries Per Liter	A measure of radioactivity					
ppb	Parts Per Billion (one in one billion)	The ppb is equivalent to micrograms per liter.					
	·	A microgram = 1/1000 milligram.					
ppm	Parts Per Million (one in one million)	The ppm is equivalent to milligrams per liter.					

		A milligram = 1/1000 gram.
RAA	Running Annual Average	The average of analytical results for all samples during the previous four quarters.
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
ттнм	Total Trihalomethanes	Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromoochloromethane and bromoform. Compliance is based on the total.
μmhos	Micromhos	Measure of electrical conductance of water

## 2022 Lake Huron Regulated Detected Contaminants Table

2022 Inorganic C	2022 Inorganic Chemicals - Annual Monitoring at Plant Finished Tap											
Regulated Contaminant	Test Date	Unit	Health Goal MCLG	Allowed Level MCL	Highest Level Detected	Range of Detection	Violation	Major Sources in Drinking Water				
Fluoride	7-12-2022	ppm	4	4	0.71	n/a	no	Erosion of natural deposit; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories.				
Nitrate	7-12-2022	ppm	10	10	0.51	n/a	no	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.				
Barium	05-16-2017	ppm	2	2	0.01	n/a	no	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.				

Lead and Cop	ead and Copper Monitoring at the Customer's Tap in 2022										
Regulated Contaminant	Unit	Year Sampled	Health Goal MCLG	Action Level AL	90 <sup>th</sup> Percentile Value*	Range of Individual Samples Results	Number of Samples Over AL	Major Sources in Drinking Water			
Lead	ppb	2022	0	15	O ppb	O ppb- 4ppb	0	Lead services lines, corrosion of household plumbing including fittings and fixtures; Erosion of natural deposits.			
Copper	ppm	2022	1.3	1.3	0.1 PPM	0 PPM- 0.3PPM	0	Corrosion of household plumbing systems; Erosion of natural deposits			

<sup>\*</sup> The 90<sup>th</sup> percentile value means 90 percent of the homes tested have lead and copper levels below the given 90<sup>th</sup> percentile value. If the 90<sup>th</sup> percentile value is above the AL additional requirements must be met.

2022 Disinfection Residual - Monitoring in the Distribution System										
Regulated Contaminant	I I I I I I I I I I I I I I I I I I I									
Total Chlorine Residual	2022	ppm	4	4	0.79	0.64-0.85	no	Water additive used to control microbes		

2022 Disinfection By-P	2022 Disinfection By-Products - Stage 2 Disinfection By-Products Monitoring in the Distribution System											
REGULATED CONTAMINANT  Test Date  Unit Date  Unit Date  Unit Date  Health Goal Level MCLG  MCLG  Highest Level Level LRAA  Range of Quarterly Results  Violation  Major Sources in Drinking Water												
(TTHM) Total Trihalomethanes	2022	ppb	n/a	80	0.0304	N/A	no	By-product of drinking water chlorination				
(HAA5) Haloacetic Acids	2022	ppb	n/a	60	0.017	N/A	no	By-product of drinking water chlorination				

2022 Turbidity - Monitored Every 4 Hours at the Plant Finished Water Tap											
Highest Single Measurement Cannot Exceed 1 NTU	Lowest Monthly % of Samples Meeting Turbidity Limit of 0.3 NTU (minimum 95%)	Violation	Major Sources in Drinking Water								
0.35 NTU	98.4%	no	Soil Runoff								
Turbidity is a measure of the c filtration system.	loudiness of water. We monitor it because it is a go	ood indicator	of the effectiveness of our								

Regulated Contaminant	Treatment Technique	Typical Source of Contaminant
Total Organic Carbon ppm	The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. The TOC is measured each quarter and because the level is low, there is no requirement for TOC removal.	Erosion of natural deposits

Radionuclides - Monitored at the Plant Finished Tap in 2014										
Regulated Test Ontaminant Date Unit MCLG MCL Level Detected Violation Major Sources in Drinking Water										
Combined Radium Radium 226 and 228	5/13/14	PCI/L	0	5	0.86 <u>+</u> 0.55	NO	Erosion of natural deposits			

2022 Special Monitoring										
Contaminant Test Date Unit MCLG MCL Highest Level Detected Source of Contaminant										
Sodium	7-12-2022	ppm	n/a	n/a	5.4	Erosion of natural deposits				

These tables are based on tests conducted by GLWA in the year 2022 or the most recent testing done within the last five calendar years. GLWA conducts tests throughout the year only tests that show the presence of a substance or require special monitoring are presented in these tables. 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. The data is representative of the water quality, but some are more than one year old.

## 2022 Lake Huron Tap Water Mineral Analysis

Parameter	Units	Max.	Min.	Avg.	Parameter	Units	Max.	Min.	Avg.
Turbidity	N.T.U.	0.44	0.04	0.11	Phosphorus	mg/L	0.48	0.39	0.43
Total Solids	mg/L	156	98	120	Free Carbon Dioxide	mg/L	7.3	4.5	5.7
Total Dissolved Solids	mg/L	142	108	120	Total Hardness (3), (4), (5)	mg/L	104	80	92
Aluminum	mg/L	0.072	0.011	0.033	Total Alkalinity (3)	mg/L	90	74	79
Iron	mg/L	0.4	0.2	0.3	Carbonate Alkalinity (3)	mg/L	0	0	0
Copper	mg/L	0.008	ND	0.001	Bi-Carbonate Alkalinity (3)	mg/L	90	74	79
Magnesium	mg/L	8.4	7.2	7.6	Non-Carbonate Hardness (3)	mg/L	30	0	13
Calcium	mg/L	27.2	24.3	25.5	Chemical Oxygen Demand	mg/L	6.6	ND	4.3
Sodium	mg/L	5.3	4.5	4.9	Dissolved Oxygen	mg/L	14.0	9.2	11.6
Potassium	mg/L	1.1	0.9	1.0	Nitrite Nitrogen	mg/L	ND	ND	0.0
Manganese	mg/L	0.001	ND	0.000	Nitrate Nitrogen	mg/L	0.51	0.30	0.37
Lead	mg/L	ND	ND	ND	Fluoride	mg/L	0.79	0.62	0.69
Zinc	mg/L	0.070	ND	0.009	рН		7.60	7.36	7.45
Silica	mg/L	2.5	1.6	2.2	Specific Conductance @ 25 °C.	µmhos	228	159	204
Sulfate	mg/L	24.0	18.2	21.3	Temperature	°C	22.2	5.6	13.0
Chloride	mg/L	10.6	8.3	9.5					

# Key to the Detected Contaminants Table

0	<b>,</b>	Definition / Fundamental
Symbol	Abbreviation	Definition/Explanation
AL	Action Level	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.
°C	Celsius	A scale of temperature in which water freezes at 0° and boils at 100° under standard conditions.
>	Greater than	
HAA5	Haloacetic Acids	HAA5 is the total of bromoacetic, chloroacetic, Dibromoacetic, dichloroacetic, and trichloroacetic acids. Compliance is based on the total.
Level 1	Level 1 Assessment	A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in the water system.
LRAA	Locational Running Annual Average	The average of analytical results for samples at a particular monitoring location during the previous four quarters.
MCL	Maximum Contaminant Level	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.
MCLG	Maximum Contaminant Level Goal	The level of contaminant in drinking water below which there is no known or expected risk to health.
MRDL	Maximum Residual Disinfectant Level	The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG	Maximum Residual Disinfectant Level Goal	The level of a drinking water disinfectant below which there is no known or expected risk to health.  MRLDG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
n/a	not applicable	
ND	Not Detected	
NTU	Nephelometric Turbidity Units	Measures the cloudiness of water.
pCi/L	Picocuries Per Liter	A measure of radioactivity
ppb	Parts Per Billion (one in one billion)	The ppb is equivalent to micrograms per liter.  A microgram = 1/1000 milligram.
ppm	Parts Per Million (one in one million)	The ppm is equivalent to milligrams per liter. A milligram = 1/1000 gram.
RAA	Running Annual Average	The average of analytical results for all samples during the previous four quarters.
SMCL	Secondary Maximum Contaminant Level	An MCL which involves a biological, chemical or physical characteristic of water that may adversely affect the taste, odor, color or appearance (aesthetics), which may thereby affect public confidence or acceptance of the drinking water.
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
TTHM	Total Trihalomethanes	Total Trihalomethanes is the sum of chloroform, bromodichloromethane, dibromochloromethane and

		bromoform. Compliance is based on the total.
µmhos	Micromhos	Measure of electrical conductance of water

The Village of Almont and the Great Lakes Water Authority are committed to safeguarding our water supply and delivering the highest quality drinking water to protect public health. Please contact us with any questions or concerns about your water at (810) 798-8528.