# South Amherst Public Water Systems (PWS) Drinking Water Consumer Confidence Report For the 2022 Calendar Year



#### <u>Introduction</u>

The South Amherst PWS has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water, and water system contacts.

#### **Source Water Information**

South Amherst PWS receives its drinking water from Avon Lake Regional Water (AVON LAKE PWS) via Rural Lorain County Water Authority. Avon Lake Regional Water receives its drinking water from Lake Erie. In Avon Lake, there are two separate intakes to ensure our ability to pump from this virtually endless source of quality raw water.

Avon Lake Regional Water treats water to meet EPA drinking water quality standards. A Source Water Assessment Report was prepared for Avon Lake Regional Water by Ohio EPA. Copies of the complete source water assessment report prepared for Avon Lake are available by contacting Greg Yuronich at (440) 933-3229.

#### Excerpt from Drinking Water Source Assessment for the City of Avon Lake 6.0 SUSCEPTIBILITY ANALYSIS:

For the purposes of source water assessments, all surface waters are considered to be susceptible to contamination. By their nature surface waters are accessible and can be readily contaminated by chemicals and pathogens with relatively short travel times from source to intake. Based on the information compiled for this assessment, the Avon Lake Water System drinking water source protection area (CAZ) is susceptible to contamination from municipal waste water treatment discharges, industrial waste water discharges, air contamination deposition, combined sewer overflows, runoff from residential, agricultural and urban areas, oil and gas production and transportation, and accidental releases and spills from rail and vehicular traffic as well as from commercial shipping operations and recreational boating.

It is important to note that this assessment is based on available data, and therefore may not reflect current conditions in all cases. Water quality, land uses and other activities that are potential sources of contamination may change with time. While the source water for the City of Avon Lake is considered susceptible to contamination, historically, the Avon Lake Public Water System has effectively treated this source water to meet drinking water quality standards.

#### What are sources of contamination to drinking water?

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.

Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; (D) 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 Strom water runoff, and septic systems; (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 Federal Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

#### Who needs to take special precautions?

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 system disorders, some elderly, and infants can be particularly at risk from infection. 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 (1-800-426-4791).

#### About your drinking water

The EPA requires regular sampling to ensure drinking water safety. The South Amherst PWS conducted sampling for microbiological contaminants, disinfectants and disinfection byproducts, inorganic contaminants (tested by wholesaler at their entry point-Avon Lake Regional Water), and lead and copper during 2022. Samples were collected for a total of ten different contaminants, most of which were not detected in the South Amherst PWS water supply. The Ohio EPA requires us to monitor for

some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

#### **Monitoring & Reporting Violations and Enforcement Actions**

During the month of January 2022, South Amherst PWS failed to submit the professional operator of record minimum staffing times for the facility. Also during January 2022, South Amherst PWS was in violation for failure to submit the Monthly Operating Report (MOR) as required by the Ohio Administrative Code (OAC). Both violations were corrected by submitting the required documents.

During the month of August 2022, South Amherst PWS failed to submit the professional operator of record minimum staffing times for the facility. The violation was corrected by submitting the required report.

Cyanobacteria Screening monitoring requirements not met for **AVON LAKE PWS**.

AVON LAKE PWS is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the monitoring periods of 11/13/202-11/26/2022 and 11/27/2022-12/03/2022 they did not monitor for Cyanobacteria Screening and therefore cannot be sure of the quality of your drinking water during that time.

You do not need to take any action in response to this notice.

Upon being notified of this violation, the water supply was required to have the drinking water analyzed for total Cyanobacteria Screening according to their current monitoring schedule. The water supplier will take steps to ensure that adequate monitoring will be performed in the future.

A sample was to be collected on 6/02/2023.

Sample results and additional information may be obtained by contacting AVON LAKE PWS at:

Contact Person: Jason Gibboney Phone Number: (440) 933-6226

Mailing Address: 201 Miller Road, Avon Lake, OH 44012

PWSID: OH4700311 Facility ID: 4755816
Date Distributed: Included on CCR

#### **Table of Detected Contaminants**

Listed below is information on those contaminants that were found in the South Amherst PWS.

South	TABLE OF DETECTED CONTAMINANTS 2022
AMHERST PWS	TABLE OF BETECTED CONTAMINANTS 2022

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
MICROBIOLOGICA	L CONTAMINANT	S					
Turbidity (NTU)	NA	П	0.16	0.02 to 0.16	No	2022	Soil Runoff
Turbidity (% samples meeting standard)	NA	тт	100%	100%	No	2022	Soil Runoff
Total Organic Carbon (TOC)	NA	П	1.24	1.00 to 1.60	No	2022	Naturally present in the environment
DISINFECTANTS AN	ID DISINFECTION	Byproducts					
Total Chlorine (ppm)	MRDLG = 4	MRDL = 4	0.63	0.42 to 0.70	No	2022	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	25.4	17.8 to 25.4	No	2022	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	NA	80	74.0	54.7 to 74	No	2022	By-product of drinking water disinfection
INORGANIC CONTA	AMINANTS (TEST	ED BY WHOLESALE	R AT THEIR I	ENTRY POINT-AVO	N LAKE REGI	ONAL WATE	R)
Barium (ppm)	2	2	0.02	NA	No	2022	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.75	0.75 to 1.24	No	2022	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	0.92	<0.1 to 0.92	No	2022	Run off from fertilizer use, Leaching from septic tanks, sewage; Erosion of natural deposits

Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Violation	Sample Year	Typical source of Contaminants
15 ppb	NA	<3 ug/L	No	2022	Corrosion of household plumbing systems; erosion of natural deposits
Zero out of 10	samples were found to have	ve lead levels in exce	ss of the lead	action leve	el of 15 ppb.
1.3 ppm	NA	113.2 ug/L	No	2022	Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing systems
	(AL)  15 ppb  Zero out of 10	15 ppb NA  Zero out of 10 samples were found to have	(AL) the AL were less than  15 ppb NA <3 ug/L  Zero out of 10 samples were found to have lead levels in excess	the AL were less than Violation  15 ppb NA <3 ug/L No  Zero out of 10 samples were found to have lead levels in excess of the lead	the AL were less than Violation Year  15 ppb NA <3 ug/L No 2022  Zero out of 10 samples were found to have lead levels in excess of the lead action levels.

#### **Turbidity**

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month and shall not exceed 1 NTU at any time. As reported above, the South Amherst PWS's highest recorded turbidity result for 2022 was 0.16 NTU and lowest monthly percentage of samples meeting the turbidity limits was 0.02 NTU.

#### **Lead Educational Information**

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. South Amherst PWS 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 800-426-4791 or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

#### **License to Operate (LTO) Status Information**

In 2022, South Amherst had an unconditioned license to operate the public water system. PWS ID: OH4701411 Facility: 4755825

#### How do I participate in decisions concerning my drinking water?

Public participation and comment are encouraged at regular meetings of the South Amherst Board of Public Affairs (SABPA) which meets the 1<sup>st</sup> and 3<sup>rd</sup> Mondays of each month at the Village of South Amherst Town Hall located at 103 West Main St., South Amherst, Ohio. Meetings are open to the public. You may call our water clerk at 440-986-2222, Ext 1 for further meeting information or for more information on your drinking water. SABPA meetings schedule, agendas, minutes, Consumer Confidence Reports and other Village information can also be found on our website https://villageofsouthamherst.com/.

#### Definitions of some terms contained within this report.

- 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 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 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.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
- Contact Time (CT) means the mathematical product of a "residual disinfectant concentration" (C), which is determined before or at the first customer, and the corresponding "disinfectant contact time" (T).
- Cyanobacteria: Photosynthesizing bacteria, also called blue-green algae, which naturally occur in marine and freshwater ecosystems, and may produce cyanotoxins, which at sufficiently high concentrations can pose a risk to public health.
- Cyanotoxin: Toxin produced by cyanobacteria. These toxins include liver toxins, nerve toxins, and skin toxins. Also sometimes referred to as "algal toxin".
- Parts per Million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
- Parts per Billion (ppb) or Micrograms per Liter (μg/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
- The "<" symbol: A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.



## Rural Lorain County Water Authority PWS ID #4701803

2022 Drinking Water Consumer Confidence Report

#### **Our Drinking Water is Regulated**

Rural Lorain County Water Authority is pleased to share this year's Annual Water Quality Report with you. This report is a summary of the quality of the water we provide our customers. The analysis covers January 1 through December 31, 2022. Rural Lorain County Water Authority strives to comply with the strict regulations of both the State of Ohio and the U.S. Environmental Protection Agency (EPA), which requires all water suppliers to prepare reports like this each year.

#### Where Do We Get Our Drinking Water?

Our water source is purchased water from Avon Lake Regional Water, the Village of New London and the City of Ashland. All three sources treat your water using disinfection and filtration to remove or reduce harmful contaminants in the source water. Avon Lake relies on surface water from Lake Erie, which is located north of our service area. The Village of New London pumps water into the New London Reservoir from Buck Creek, a branch of the Vermilion River. The reservoir has a surface area of 220 acres, when full, and has a volume of 1.4 billion gallons. The City of Ashland pumps groundwater from 12 wells in the Jerome Fork basin. These ground water wells range in depth from 70 to 300 feet.

The average daily production of safe drinking water for 2022 was 5,386,000 gallons.

In 2022, we had an unconditioned license to operate our water system.

Rural Lorain County Water Authority has a backflow prevention program to ensure water quality to all customers, and this requires an on-site survey of individual service connections. Sometime in the near future, you may be contacted to schedule an appointment to perform an on-site survey. Physical cross connections between RLCWA and a private water system are prohibited.

#### Source Water Assessment

The Ohio EPA conducted a source water assessment based on the Critical Assessment Zone (CAZ) for the City of Avon Lake water system, which draws surface water from Lake Erie. Although surface water is considered to be susceptible to contamination, Lake Erie was determined by the Ohio EPA to have no direct source of pollution due to its vast size and dilution capabilities.

The Ohio EPA compiled a Drinking Water Source Assessment Report for the Village of New London with the assistance of John Chapin, former Supt. Of Water, intended to identify drinking water protection areas and provide information on how to reduce the risk of contamination of the water within those areas. A copy of this report may be obtained by contacting the Village of New London (419) 929-4091.

The Ohio EPA has completed a study of the City of Ashland's drinking water, to identify potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the aquifer (water-rich zone) that supplies water to the City of Ashland has a high susceptibility to contamination. This determination is based on the following:

- 1. The thin discontinuous clay layer does not provide much protection to the aquifer.
- 2. Shallow depth to water.
- 3. Presence of significant contaminant sources in the protection area.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is relatively high. This likelihood can be minimized by implementing appropriate protective measures. The City of Ashland has developed an Ohio EPA approved protection plan. This plan will help protect the health of the community residents, protect the community's water supply investment, and preserve the ground water resource for the future. If you would like a copy of these assessments, please call our office at (440) 355-5121.

#### What are Sources of Contamination to Drinking Water?

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.

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#### Who Needs to take Special Precautions?

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 system disorders, some elderly, and infants can be particularly at risk from infection. 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 (1-800-426-4791).

#### Lead and 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. Rural Lorain County Water Authority is responsible for providing high quality drinking water, but cannot control the variety of materials used in customer plumbing components. When your water has been sitting in the home piping 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 or at www.epa.gov/safewater/lead.

#### **Revised Total Coliform Rule**

All water systems were required to begin compliance with a new rule, the Revised Total Coliform Rule, on April 1, 2016. The new rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of total coliform bacteria, which includes

E. coli bacteria. The U.S. EPA anticipates greater public health protection under the new rule, as it requires water systems that are vulnerable to microbial contamination to identify and fix problems. As a result, under the new rule, there is no longer a maximum contaminant level violation for multiple coliform detections. Instead, the new rule requires water systems that exceed a specified frequency of total coliform occurrences to conduct an assessment to determine if any significant deficiencies exist.

#### **PFAS**

Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which are used mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still ongoing. In 2020, the Village of New London and the City of Ashland were sampled as part of the State of Ohio's Drinking Water Per- and Polyfluoroalkyl Substances (PFAS) Sampling Initiative. Six PFAS compounds were sampled, and none were detected in our finished drinking water. For more information about PFAS, please visit pfas.ohio.gov.

#### **About Cryptosporidium**

Avon Lake and New London water is regularly tested for organisms that could be harmful to people – including Cryptosporidium (Crypto), which is a microscopic organism that, when ingested, can result in diarrhea, fever and other gastrointestinal symptoms. Crypto comes from animal waste in the watershed and may be found in source water. While it is sometimes found in rivers and streams, Cryptosporidium has NEVER been found in our finished water.

#### **Public Participation Opportunities**

We want our valued customers to be informed about their water utility. You can attend regular public meetings of RLCWA's Board of Trustees on the second Wednesday of each month at 42401 State Route 303, Lagrange, OH 44050. Find out more on the Internet at www.rlcwa.com.

#### **Protecting Our Water From Backflow**

Homes with underground irrigation systems and most non-residential buildings are required by the Division of Water to have a backflow prevention device. These backflow devices protect the public water system from any potentially contaminated water flowing into the public system from a customers' plumbing. Some examples requiring backflow systems include: swimming pools, restaurants, medical facilities, laboratories, car washes, automotive shops, industrial sites, and property with a well or pond.

A cross-connection is a physical connection between a possible source of contamination and the drinking water system piping. If the pressure of the source of contamination is greater than the water system pressure, contaminated water may backflow into the drinking water system. Pressure drops in the public water system caused by water line breaks, pump failures, and fire-fighting can also cause a backflow situation. If our rules and regulations require a backflow preventer, it must be tested annually by a tester you hire who is approved by our office. For more information about backflow prevention and cross-connection control please visit our website at www.rlcwa.com or https://epa.ohio.gov/Portals/28/documents/pws/PWS-02-003%20brochure.pdf

Please report suspected cross-connections to the Rural Lorain County Water Authority Backflow Department at 440-355-5121.

#### We routinely monitor for contaminants in your drinking water according to Federal and State laws.

The test results table shows the results of our monitoring for the period of January 1st to December 31st, 2022. In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms we've provided the following definitions:

#### **Definitions**

Action Level (AL)	the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.	mrem	millirems per year (a measure of radiation absorbed by the body).
Action Level Goal (ALG)	the level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.	N/A	not applicable.
Avg.	regulatory compliance with some MCLs is based on running annual average of monthly samples.	N/D	not detected.
HARA	highest annual running average	NTU (Nephelometric Turbidity Units)	a measure of clarity.
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.	Parts per billion (ppb)	a unit of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
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.	Parts per million (ppm)	a unit of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
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.	Treatment technique (TT)	a required process intended to reduce the level of a contaminant in drinking water.
Maximum Residual Disinfectant Level Goal (MRDLG)	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.	90th percentile	90% of samples are equal to or less than the number on the chart.

#### Regulated Contaminants Monitoring for Avon Lake Municipal Utilities, City of Ashland and Village of New London

			Avon La	ike Municipal Util.	City	City of Ashland Village of New London					
CONTAMINANTS	MCLG	MCL	LEVEL	RANGE OF	LEVEL	RANGE OF	LEVEL	RANGE OF		SAMPLE	
(UNITS)	[MRDLG]	[MRDL]	FOUND	DETECTIONS	FOUND	DETECTIONS	FOUND	DETECTIONS	VIOLATION	YEAR	TYPICAL SOURCE OF CONTAMINANTS
MICROBIOLOGICAL CONTAMINANTS											
TURBIDITY (NTU)	N/A	TT	0.16	0.02 - 0.16	N/A	N/A	0.18	0.05 - 0.18	NO	2022	SOIL RUNOFF
TURBIDITY (% SAMPLES MEETING STANDARD)	N/A	тт	100%	100%	N/A	N/A	100%	100%	NO	2022	SOIL RUNOFF
TOTAL ORGANIC CARBON (TOC)	N/A	тт	1.24	1.0 - 1.6	N/A	N/A	1	1.00 - 1.40**	NO	2022	NATURALLY PRESENT IN THE ENVIRONMENT
INORGANIC CONTAMINA	INORGANIC CONTAMINANTS										
BARIUM (PPM)	2	2	0.02	N/A	0.0169	N/A	0.0325	N/A	NO	2022	DISCHARGE OF DRILLING WASTES; DISCHARGE FROM METAL REFINERIES; EROSION OF NATURAL DEPOSITS
FLUORIDE (PPM)	4	4	0.75	0.75 - 1.24	1.08	0.67 - 1.36	1.12	0.85 - 1.25	NO	2022	EROSION OF NATURAL DEPOSITS; WATER ADDITIVE WHICH PROMOTES STRONG TEETH; DISCHARGE FROM FERTILIZER AND ALUMINUM FACTORIES
NITRATE (PPM)	10	10	0.92	<0.1 - 0.92	0.189	N/A	0.47	0.17 - 0.47	NO	2022	RUN OFF FROM FERTILIZER USE, LEACHING FROM SEPTIC TANKS, SEWAGE; EROSION OF NATURAL DEPOSITS
SYNTHETIC ORGANIC CONTAMINANTS											
Atrazine (PPB)	3	3	N/A	N/A	N/A	N/A	0.12	0.1 - 0.12	NO	2022	RUNOFF FROM HERBICIDE USED ON ROW CROPS
RADIOACTIVE CONTAMINANTS											
Radium (combined 226/228) (pCi/L)	0	5	N/A	N/A	0.189***	N/A	5.4	N/A	NO	2018	EROSION OF NATURAL DEPOSITS
Alpha Emitters (pCi/L) <sup>3</sup>	0	15	N/D	N/A	N/A	N/A	1.04	N/A	NO	2018	EROSION OF NATURAL DEPOSITS

<sup>\*\*</sup> Testing was completed in 2020

<sup>\*\*\*</sup> Testing was completed in 2014

Testing Results for Rural Lorain County Water Authority										
Substance (Units)	ACTION LEVEL (AL)	INDIVIDUAL RESULTS OVER THE AL	90% OF TEST LEVELS WERE LESS THAN	VIOLATION	YEAR SAMPLED		TYPICAL SOURCE OF CONTAMINANTS			
LEAD AND COPPER										
LEAD (PPB)	15 PPB	NA	<3.0	NO	2022	CORROSION OF HOUSEHOLD PLUMBING SYSTEMS; EROSION OF NATURAL DEPOSITS				
ZERO OUT OF 32 SAMPLES WERE FOUND TO HAVE LEAD LEVELS IN EXCESS OF THE LEAD ACTION LEVEL OF 15 PPB										
COPPER (PPM)	1.3 PPM	NA	0.035	NO	2022	EROSIONS OF NATURAL DEPOSITS; LEACHING FROM WOOD PRESERVATIVES; CORROSIONS OF HOUSEHOLD PLUMBING SYSTE				
	ZERO OUT OF 32 SAMPLES WERE FOUND TO HAVE COPPER LEVELS IN EXCESS OF THE COPPER ACTION LEVEL OF 1.3 PPM									
CONTAMINANTS (UNITS)	MCLG	MCL	LEVEL FOUND	RANGE OF DETECTIONS	VIOLATION	SAMPLE YEAR TYPICAL SOURCE OF CONTAMINANTS				
DISINFECTANTS AND DISINFECTION	BYPRODUCTS	Г	T		T					
TOTAL CHLORINE (PPM)	MRDLG=4	MRDL=4	0.85	0.55 - 1	NO	2022	WATER ADDITIVE USED TO CONTROL MICROBES			
HALOACETIC ACIDS (HAA5) (PPB)	NA	60	36	7.2 - 43.2	NO	2022	BY-PRODUCT OF DRINKING WATER DISINFECTION			
TOTAL TRIHALOMETHANES (TTHM) (PPB)	NA	80	59.4	26.3 - 83.2	NO	2022	BY-PRODUCT OF DRINKING WATER DISINFECTION			

#### **Village of New London Drinking Water Notice**

In order to ensure disinfection, water in the treatment plant must be in contact with chlorine for a minimum amount of time. On February 15th of 2023, the Village of New London did not meet the required chlorine contact time. The duration that the water did not have required contact time was 3 hours. Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. People with severely compromised immune systems, infants, and some elderly people may be at increased risk. These people should seek advice about drinking water from their health care providers. The Village of New London has taken the following steps to correct this violation and prevent future violations from occurring: Alarm set points were reviewed to prevent clearwell levels from dropping to a level that is too low. We enhanced our SOP's and had a meeting with our operators to discuss the issue, and how to prevent this violation from happening again.

#### **Avon Lake Municipal Utilities Drinking Water Notice**

Cyanobacteria Screening monitoring requirements not met for Avon Lake public water system.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the weeks of 11/13/22 - 11/26/22 and 11/27/22 - 12/03/22 we did not monitor for Cyanobacteria Screening and therefore cannot be sure of the quality of our drinking water during that time.

#### What should I do?

This notice is to inform you that Avon Lake public water system did not monitor, and report results for the presence of Cyanobacteria Screening in the public drinking water system during the weeks of 11/13/22 - 11/26/22 and 11/27/22 - 12/3/22 monitoring period, as required by the Ohio Environmental Protection Agency. You do not need to take any action in response to this notice.

#### What is being done?

Upon being notified of this violation, the water supply was required to have the drinking water analyzed for total Cyanobacteria Screening according to their current monitoring schedule. The water supplier will take steps to ensure that adequate monitoring will be performed in the future.

A sample will be collected on 6/2/23 and sample results or additional information may be obtained by contacting Avon Lake at: Avon Lake Water System, (440)-933-6226, 201 Miller Road, Avon Lake, OH 44012.

PWSID: OH4700311 Facility ID: 4755816

#### Rural Lorain County Water Authority Drinking Water Notice

Monitoring requirements were not met for Rural Lorain County Water Authority.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During June 2022, we "did not monitor or test" or "did not complete all monitoring or testing" for total coliform bacteria, and therefore, cannot be sure of the quality of your drinking water during that time.

#### What should I do?

There is nothing you need to do at this time. You do not need to boil your water or take other corrective actions. This notice is to inform you that Rural Lorain County Water Authority did not monitor and report results for the presence of total coliform bacteria in the public drinking water system during the June 2022 time period, as required by the Ohio Environmental Protection Agency.

#### What is being done?

Upon being notified of this violation, the water supply was required to have the drinking water analyzed for the above-mentioned parameters. The water supplier will take steps to ensure that adequate monitoring will be performed in the future.

For more information, please contact Joseph Waldecker at 440-355-5121 or at 42401 State Route 303, Lagrange, OH 44050.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

PWSID: OH4701803

#### **Questions About This Report?**

If you have any questions about this report or concerning your water utility, please contact Rural Lorain County Water Authority by calling (440) 355- 5121 or by writing to this address: 42401 State Route 303, Lagrange, OH 44050.

In 2022, we had an unconditioned license to operate our water system.

# Avon Lake Regional Water 2022 DRINKING WATER CONSUMER CONFIDENCE REPORT

For the 2021 calendar year

### The Board of Municipal Utilities

The Avon Lake Board of Municipal Utilities (the Board) is an independent board, that functions separately from Avon Lake City Council, that is composed of five members elected by the citizens of Avon Lake to serve four-year terms. The Board establishes policy and oversees the water and wastewater treatment operations of Avon Lake Regional Water. These private citizens, fellow Avon Lakers, represent you in determining the future of Avon Lake Regional Water.

Here are the individuals that served on the Board in 2021:

John Dzwonczyk (Chair), Anthony Abram, Randy Phillips, Timothy Rush, Dana Schnabel

The Board meets twice a month, the first and third Tuesdays, at 6:30 p.m. at 201 Miller Road, Avon Lake, Ohio 44012. Meetings are open to the public and livestreamed on Facebook Live via our Facebook page, facebook.com/AvonLakeWater.





The top priority of the Avon Lake Board of Municipal Utilities (the Board) is to ensure our customers (you) have clean, safe drinking water through seamless high-quality services.

As always, your drinking water in Avon Lake meets and exceeds U.S. and Ohio EPA standards. Each year, our Water Filtration Plant (WFP) operators and our Ohio EPA certified lab team perform over 100,000 water quality tests.

To continue to meet and exceed U.S. and Ohio EPA standards, the Board approves investments into your water service. These investments may include planned maintenance, replacement of critical infrastructure such as water lines, and/or making new water line connections for future demand.

For 2022 work, the Board approved the 2022 Project Bundle, which is several water line and water valve replacement

projects throughout the City of Avon Lake (the City). The Bundle Project makes upgrades to our critical water line infrastructure and will reduce the potential for unexpected water service disruptions to customers that live in the project areas. Also, in some project areas like Armour Rd. and Avon Point Ave., Avon Lake Regional Water is partnering with the City on storm sewer and/or road rehabilitation.

Avon Lake Regional Water

The Board and staff of Avon Lake Regional Water take great pride in being able to provide Avon Lake and the region with clean, safe drinking water.

On behalf of the entire Board, we thank you for your continued support.

Sincerely, John Dzwonczyk, Chairman of the Avon Lake Board of Municipal Utilities

Avon Lake Regional Water has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Your drinking water met all Ohio EPA standards. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. Also, the articles throughout the report show how Avon Lake Regional Water focused on keeping your water safe and planning for the future.

#### What Is The Source Of Your Drinking Water?

Avon Lake Regional Water (Avon Lake City PWS) receives its drinking water from Lake Erie. In Avon Lake, there are two separate intakes to ensure our ability to pump from this virtually endless source of quality raw water.

Avon Lake Regional Water treats water to meet EPA drinking water quality standards. A Source Water Assessment Report was prepared for Avon Lake Regional Water by Ohio EPA. Copies of the complete source water assessment report prepared for Avon Lake are available by contacting John Christopher at (440) 933-3229.

#### **West Ridge Interconnect**

Avon Lake Regional Water also has an emergency connection with the City of Elyria. During 2021, we used zero gallons from this connection. This report does not contain information on the water quality received from the City of Elyria. You can contact Samuel F. Jacob, Water Plant Superintendent, City of Elyria, who has prepared this report. Mr. Jacob has over 44 years of experience in Water Treatment, and Class IV Water Plants. He currently holds an Ohio EPA Class IV Water Certificate. If you have any questions, concerns or would like additional information, please contact him at 440-324-7669 or 440-244-4310 extension 6201 or email him at sjacob@cityofelyria.org.

#### **Excerpt from Drinking Water Source** Assessment for the City of Avon Lake

6.0 SUSCEPTIBILITY ANALYSIS

For the purposes of source water assessments, all surface waters are considered to be susceptible to contamination. By their nature surface waters are accessible and can be readily contaminated by chemicals and pathogens with relatively short travel times from source to the intake. Based on the information compiled for this assessment, the Avon Lake Water System drinking water source protection area (CAZ) is susceptible to contamination from municipal waste water treatment discharges, industrial waste water discharges, air contamination deposition, combined sewer overflows, runoff from residential, agricultural and urban areas, oil and gas production and transportation, and accidental releases and spills from rail and vehicular traffic as well as from commercial shipping operations and recreational boating.

It is important to note that this assessment is based on available data, and therefore may not reflect current conditions in all cases. Water quality, land uses and other activities that are potential sources of contamination may change with time. While the source water for the City of Avon Lake is considered susceptible to contamination, historically, the Avon Lake Public Water System has effectively treated this source water to meet drinking water quality standards.



What Are Sources Of Contamination

**To Drinking Water?** 

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.

Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) 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; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses: (D) 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; (E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production

and mining activities.



In order to ensure that tap water is safe to drink, USEPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 Federal Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

#### **Backflow Prevention Devices Save Lives**

Did you know that backflow prevention devices, such as the one shown above, protect our water quality? Backflow prevention devices are critical tools in preventing a backflow situation at a cross-connection to our public water supply. A backflow situation occurs when water flows backwards into the building's water system and/or the public water system. It happens where there is a cross-connection and a change in pressure causing the water to go backwards. A cross-connection is where a possible source of water contamination and the property and/or the public water system connect.

Common backflow hazards include hose connections to chemical solution aspirators to feed lawn and shrub herbicides, pesticides, or fertilizers; lawn irrigation systems; chemically treated heating systems; hose connections to a water outlet or laundry tub; and swimming pools, hot tubs, and spas. Backflow prevention devices, required where there is a cross-connection to the public water supply like those listed above, stop contaminants from backflowing into a water pipe directly connected to the public water system.

Annual testing and inspection of these backflow prevention devices is critical to ensuring our public water supply is protected for all.

#### License to Operate (LTO) **Status Information**

#### **About Your Drinking Water**

The EPA requires regular sampling to ensure drinking water safety. Avon Lake Regional Water conducted sampling for bacteria, inorganic, radiological, and volatile organic contaminant sampling during 2021. Samples were collected for a total of 61 different contaminants most of which were not detected in the Avon Lake Regional Water water supply. The Ohio EPA requires us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

How to read the table: EPA establishes the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The table shows the concentrations of detected substances in comparison to regulatory limits. Substances that were tested for, but not detected, are not included in this table.

Listed below is information on those contaminants that were found in the Avon Lake Regional Water drinking water.

#### **Table of Detected Contaminants**

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants	
Microbiological Contamin	ants	•	•	•	•			
Turbidity (NTU) <sup>1</sup>	NA	TT	0.25	0.03 to 0.25	No	2021	Soil runoff	
Turbidity (% samples meeting standard)	NA	TT	100%	100%	No	2021	Soil runoff	
Total Organic Carbon (TOC) <sup>2</sup>	NA	TT	1.19	1.0 to 1.58	No	2021	Naturally present in the environment	
Disinfectants and Disinfect	tion Byproduc	ts³						
Total Chlorine (ppm)	MRDLG = 4	MRDL = 4	1.33	1.19 to 1.45	No	2021	Water additive used to control microbes	
Haloacetic Acids (HAA5) (ppb) <sup>4</sup>	NA	60	12.60	9.9 to 14.6	No	2021	By-product of drinking water disinfection	
Total Trihalomethanes (TTHM) (ppb) <sup>4</sup>	NA	80	27.38	15.0 to 39.6	No	2021	By-product of drinking water disinfection	
Inorganic Contaminants								
Barium (ppm)	2	2	0.02	NA	No	2021	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Fluoride (ppm)	4	4	0.93	0.09 to 1.09	No	2021	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
Nitrate (ppm)	10	10	0.92	0.02 to 0.92	No	2021	Run off from fertilizer use, Leaching from septic tanks, sewage; Erosion of natural deposits	
Lead and Copper								
	Action Level (AL)	Individual Results over the AL	90% of test levels were less than	Violation	Year Sampled	Typical Source of Contaminants		
Lead (ppb)	15 ppb	NA	<3.0	No	2021	Corrosion of household plumbing systems; erosion of natural deposits		
	Zero out of	32 samples we	re found to ha	ve lead levels in	excess of t	he lead ac	tion level of 15 ppb.	
Copper (ppm)	1.3 ppm	NA	0.02	No	2021	Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing systems		
	Zero out of 3	32 samples we	re found to ha	ve copper level	s in excess	of the copp	per action level of 1.3 ppm.	



#### **Definitions**

- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Contaminant: Any physical, chemical, biological, or radiological substance or matter in water.
- Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal (MCLG): The level of contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- Maximum Residual Disinfectant Level (MRDL): The highest residual disinfectant level 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 residual 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.

- NA: Not Applicable
- · ND: Not Detected
- NTU: Nephelometric Turbidity Units
- Parts per billion (ppb) or Micrograms per Liter (ug/L) are units of measure for concentration of a contaminant. A part per billion corresponds to one second in 31.7 years.
- Parts per million (ppm) or Milligrams per Liter (mg/L) are units of measure for concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.
- PFAS: Per- and polyfluoroalkyl substances (PFAS) are a group of man-made chemicals applied to many industrial, commercial and consumer products to make them waterproof, stain resistant, or nonstick. PFAS are also used in products like cosmetics, fast food packaging, and a type of firefighting foam called aqueous film forming foam (AFFF) which are used

mainly on large spills of flammable liquids, such as jet fuel. PFAS are classified as contaminants of emerging concern, meaning that research into the harm they may cause to human health is still ongoing.

- Total Organic Carbon (TOC) has no health effects. However, TOC provides a medium when the water is disinfected for the formation of disinfection byproducts. TOC removal early in the treatment plant is required.
- Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water. For example Avon Lake Regional Water adds orthophosphate to maintain compliance with the lead and copper rule.
- VOC: Volatile Organic Chemicals
- WTP: Water Treatment Plant
- The "<" symbol: A symbol which means less than. A result of <5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

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. Avon Lake Regional Water

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 800-426-4791 or at http://www.epa.gov/safewater/lead.

In 2021 Avon Lake had a current, unconditioned license to operate our water system from the Ohio

- <sup>1</sup> Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of our filtration system. The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month and shall not exceed 1 NTU at any time. As reported above the Avon Lake WTP highest recorded turbidity result for 2021 was 0.25 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.
- <sup>2</sup>The value reported under "Level Found" for Total Organic Carbon (TOC) is the lowest ratio between percentage of TOC actually removed to the percentage of TOC required to be removed. This removal ratio is calculated as the ratio between the actual TOC removal and the TOC rule removal

requirements and other parameters. A value of at least one (1) indicates that the water system is in compliance with TOC removal requirements.

- <sup>3</sup>These contaminants level found is the highest compliance value based on a running annual average. This average includes results from 2020 &
- <sup>4</sup>Disinfection byproducts are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA sets standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both TTHMs and HAA5s.

#### Avon Lake Regional Water

201 Miller Road Avon Lake, Ohio 44012

# Who Needs To Take Special Precautions?

Although Avon Lake Regional Water's drinking water is better than all state and federal water quality standards, 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 system disorders, some elderly, and infants can be particularly at risk from infection. 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 (1-800-426-4791).

# **How Do I Participate In Decisions Concerning My Drinking Water?**

Public participation and comment are encouraged at regular meetings of the Avon Lake Board of Municipal Utilities which meets twice a month, the first and third Tuesdays, at 6:30 p.m. at 201 Miller Road, Avon Lake, Ohio 44012. If you would like to submit a comment to be read during the public comment portions of the meeting, please provide your comment via email to comments@avonlakewater.org or written letter to our office (Avon Lake Regional Water 201 Miller Road, Avon Lake, Ohio 44012) by 4:30 p.m. on the day of the meeting. For more information on your drinking water, contact John Christopher, Water Filtration Plant Manager at (440) 933-3229.

# Have Additional Questions About Avon Lake Regional Water?

During the day, Monday-Friday, you may reach a customer service representative from Avon Lake Regional Water at (440) 933-6226. Avon Lake residents: if you experience an emergency after hours, please call (440) 933-3229. Like us on Facebook (facebook.com/AvonLakeWater) or visit our website at avonlakewater.org.