

# Avon Lake Regional Water 2020 DRINKING WATER CONSUMER CONFIDENCE REPORT

For the 2019 calendar year

## The Board of Municipal Utilities

The Avon Lake Board of Municipal Utilities (the Board) is an independent board 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. The Board functions independently of Avon Lake City Council, but cooperates with the Council and City on major projects.

Here are the individuals that served on the Board in 2019:

**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.



## A Critical Health and Safety Provider for the Region

How many of the following activities do you do in a day?

- Shower
- Laundry
- Cook
- Drink a glass of water
- Flush the toilet
- Wash your hands

What do these activities have in common? Water. Each and every one of these activities requires water and wastewater services. The Avon Lake Board of Municipal Utilities (the Board) and the Avon Lake Regional Water staff take great pride in being able to provide these critical public health and safety services to the region. Our team works 24/7, 365 days a year to provide water services to over 200,000 residents living in the

seven-county area surrounding Avon Lake and sanitary sewer services to about 30,000 residents living in Avon Lake and parts of Lorain County.

As you will be seeing throughout this issue, your Board has been forward-looking in its investments and has now completed the bulk of \$120 million in infrastructure improvements that will serve for generations to come, so you and your family can count on your water and wastewater services to remain reliable, wholesome and seamless.

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

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. 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.



**Avon Lake  
Regional Water**

Serving the region,  
protecting our resource.

# The Year in Review

## Eliminating Combined Sewers in Avon Lake

In 2019, Avon Lake Regional Water successfully eliminated all combined sewers in Avon Lake making Avon Lake the 17th community of 88 Ohio combined sewer communities to achieve compliance with its Long-Term Control Plan.

Elimination of the combined sewers in Avon Lake has been 15 years in the making. Avon Lake Regional Water achieved this milestone for the Avon Lake community with the continued support from you, our customers, and especially those customers that live within project areas and/or separated their clean water sources from their laterals. Below is how Avon Lake Regional Water achieved this milestone in 15 years.

### Establishing the Long-Term Control Plan

In 2004, Avon Lake Regional Water, the City of Avon Lake, and Ohio EPA came to agreement that all combined sewers in Avon Lake would be separated by December 31, 2019. This agreement launched the Avon Lake Combined Sewer Separation Program where: (1) the Avon Lake Board of Municipal Utilities authorized Avon Lake Regional Water to separate all sanitary sewers from storm water sewers in the right-of-way, and (2) required Avon Lake homes in combined sewer areas to remove clean water sources from their lateral so only sanitary water goes to the lateral.

### Working Towards the Deadline

Between 2004 – 2019, Avon Lake Regional Water and the City of Avon Lake accelerated efforts to complete its remaining combined sewer separation projects. In 2019, Avon Lake Regional Water completed its largest sewer separation project, the Stop 45 Area Combined Sewer Separation Project, and the Avondale Combined Sewer Separation Project.

In conjunction with separating the combined sewers in Avon Lake's streets, Avon Lake property owners removed clean water sources from their laterals. Avon Lake Regional Water identified 3,089 properties in formerly combined and combined sewer areas that needed to perform an inspection to determine what, if any, work needed to be performed to remove clean water sources. Of those properties, over half needed to complete lateral separation work.

Thanks to the support and dedication of these property owners to keeping Lake Erie clean, Avon Lake Regional Water achieved 100% compliance with the Avon Lake properties that needed to remove clean water sources from their sanitary lateral.



Eliminating all combined sewers in Avon Lake would not have been possible without the forward thinking and progressive nature of the Avon Lake Board of Municipal Utilities; the Board's commitment to protecting Lake Erie from combined sewer overflows; and all Avon Lake Regional Water customers, particularly those customers that completed lateral separation work. This work has protected Lake Erie and our drinking water for all residents in the region.

# Eliminating Combined Sewers in Avon Lake cont.

## Meeting the December 31, 2019 Deadline

In December 2019, Avon Lake Regional Water staff performed the final conversion steps on the combined sewers, thus eliminating all remaining combined sewers in Avon Lake. Avon Lake Regional met its deadline and eliminated the possibility of fines from Ohio EPA.

Now, per the Long-Term Control Plan, Avon Lake Regional Water moves into a monitoring period of the former combined sewer outfalls. During this monitoring period, Avon Lake Regional Water will evaluate the best possible solutions to eliminate any possible overflows during heavy rain events.



## Source Water Information

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 Greg Yuronich at (440) 933-3229 or by viewing this webpage: <http://www.wapp.epa.ohio.gov/gis/swpa/OH4700311.pdf>

### West Ridge Interconnect

Avon Lake Regional Water also has an emergency connection with the City of Elyria. During 2019, 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 43 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](mailto: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).



### Monitoring Beach Bacteria Counts

Lorain County Public Health collects water samples at the beach front of Veterans' Memorial Park. Avon Lake Regional Water tests the water sample to determine whether there is an unsafe level of E.coli bacteria<sup>1</sup> in the water. An unsafe level of E.coli bacteria is 235 organism/100 mL, which means it's not recommended for swimming.

Samples are taken Monday to Thursday. Once Avon Lake Regional Water receives a sample, our lab analysts at the Water Filtration Plant run the test, which takes 24 hours for the results. Results of the previous day's sample are posted Tuesday to Friday on our Facebook page, [facebook.com/AvonLakeWater/](https://facebook.com/AvonLakeWater/).

<sup>1</sup>Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

## License to Operate (LTO) Status Information

In 2019, Avon Lake had an unconditioned license to operate our water system.

# Table of Detected Contaminants

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

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
<b>Microbiological Contaminants</b>							
Turbidity (NTU) <sup>1</sup>	NA	TT	0.21	0.03 to 0.21	No	2019	Soil runoff
Turbidity (% samples meeting standard)	NA	TT	100%	100%	No	2019	Soil runoff
Total Organic Carbon (TOC) <sup>2</sup>	NA	TT	1.37	1.00 to 2.21	No	2019	Naturally present in the environment
<b>Disinfectants and Disinfection Byproducts<sup>3</sup></b>							
Total Chlorine (ppm)	MRDLG = 4	MRDL = 4	1.18	1.05 to 1.43	No	2019	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb) <sup>4</sup>	NA	60	15.23	10.0 to 18.2	No	2019	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb) <sup>4</sup>	NA	80	36.83	20.90 to 36.90	No	2019	By-product of drinking water disinfection
<b>Inorganic Contaminants</b>							
Barium (ppm)	2	2	0.032	NA	No	2019	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.96	0.77 to 1.10	No	2019	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (ppm)	10	10	1.06	<0.10 to 1.06	No	2019	Run off from fertilizer use, Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Lead and Copper</b>							
	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	92.4	<3.0	No	2019	Corrosion of household plumbing systems; erosion of natural deposits	
<b>One out of 62 samples were found to have lead levels in excess of the lead action level of 15 ppb.</b>							
Copper (ppm)	1.3 ppm	NA	0.05	No	2019	Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing systems	
<b>Zero out of 62 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.</b>							



## 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.
- **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 to increase the pH of our finished water in order to maintain compliance with the lead and copper rule.
- **VOC:** Volatile Organic Chemicals
- **WTP:** Water Treatment Plant
- **The “<” Symbol:** A symbol that 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>.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes

in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

In 2019 Avon Lake had a current, unconditioned license to operate our water system from the Ohio EPA.

<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 2019 was 0.21 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 2018 & 2019.

<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. For more information on your drinking water, contact Greg Yuronich at (440) 933-3229.

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## 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, follow us on Twitter or Instagram ([avonlakewater](#)) or visit our website at [avonlakewater.org](#).

