



CITY OF NORTH RIDGEVILLE

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DRINKING WATER CONSUMER CONFIDENCE REPORT FOR 2019

The City of North Ridgeville 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. The City of North Ridgeville has a current, unconditional license to operate the City's public water system.

SOURCE WATER INFORMATION

During the year 2019, the City of North Ridgeville purchased its water from three (3) suppliers at the following percentages:

SUPPLIER	PERCENTAGE AMOUNT
Avon Lake Utilities Department (MOR)	87.91%
Rural Lorain County Water Authority (RLCWA)	0.06%
Elyria Utilities Department	12.03%

Most water consumers in our City receive a "blend" of water from our three (3) suppliers based on their proximity to these sources, while less than 5% receive their water from one (1) supplier or another. *Avon Lake and Elyria have water treatment plants and both* receive their water from intakes in Lake Erie, a surface water supply. Rural Lorain County Water Authority receives their water from Avon Lake Utilities Department. Both Avon Lake and Elyria have susceptibility to contamination due to their intakes being in surface waters. The Drinking Water Source Assessment Report for Avon Lake can be found at <http://wwwapp.epa.ohio.gov/gis/swpa/OH4700311.pdf>. The required information is located in the "Susceptibility Analysis" section on page 5. The Drinking Water Source Assessment Report for Elyria can be found at <http://wwwapp.epa.ohio.gov/gis/swpa/OH4700411.pdf>. The required information is located in the "Susceptibility Analysis" section on page 5.

WHAT ARE SOURCES OF CONTAMINATION TO DRINKING WATER?

The sources of drinking water (both tap 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.

Implementing measures to protect Lake Erie can improve our water quality. Several key ways are; Remove trash and debris from storm sewers and ditches; Dispose of household wastes such as fertilizers, pesticides, paints, paint thinners, motor oils and pet wastes properly; Prevent soil erosion by planting trees, grass and shrubs along streams and rivers (but not in them); and support local watershed groups and other organizations dedicated to protecting the environment. To become active in the Black River Watershed, contact Donald C. Romancak, Black River Watershed Coordinator at 440-328-2323.

In order to ensure that tap water is safe to drink, EPA 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.

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

ABOUT YOUR DRINKING WATER

The EPA requires regular sampling to ensure drinking water safety. The City of North Ridgeville conducted sampling for bacteria during **2019**. In addition, samples were collected for several dozen different contaminants by Avon Lake, RLCWA and Elyria most of which were not detected in their 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.

WHAT IS THE LATEST INFORMATION ON DISINFECTION

Disinfection is an absolutely essential component in the treatment of drinking water. One of the by-products of chlorinating water containing organic matter is trihalomethanes (TTHMs). There are some health concerns related to higher levels of TTHMs; The EPA and water agencies nationwide are looking into new treatment options to minimize this risk and still maintain sufficient disinfection. Chlorine is added after most of the organic matter has settled out or been filtered out of the process to minimize the production of TTHMs.

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. The City of North Ridgeville is responsible for providing high quality drinking water, but can not 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>.

NORTH RIDGEVILLE PWS TABLE OF DETECTED CONTAMINANTS 2019

Contaminants (Units)	Avon Lake Regional Water				City of Elyria		Violation	Sample Year	Typical Source of Contaminants
	MCLG	MCL	Amount Detected	Range	Amount Detected	Range			
Microbiological Contaminants (Tested by wholesaler at their entry point)									
Turbidity (NTU) ¹	NA	TT	0.21	0.03 to 0.21	0.13	0.05 to 0.13	No	2019	Soil Runoff
Turbidity (% samples meeting standard)	NA	TT	100%	100%	100%	100%	No	2019	Soil Runoff
Total Organic Carbon (TOC) ²	NA	TT	1.37	1.00 to 2.21	1.26	1.00-1.79	No	2019	Naturally present in the environment
Disinfectants and Disinfection Byproducts³									
Total Chlorine (ppm)	MRDLG = 4	MRDL = 4	1.04	0.81 to 1.13	1.36	1.06-1.53	No	2018-2019	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb) ⁴	NA	60	16.80	8.9 to 24.3	29.7	9.7-40.2	No	2019	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb) ⁴	NA	80	35.33	17.0 to 44.5	44.975	22.0-68.3	No	2019	By-product of drinking water disinfection
Inorganic Contaminants (Tested by wholesaler at their entry point)									
Barium (ppm)	2	2	0.032	NA	0.019	0.019	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	1.0845	0.81-1.3	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	1.17	0.0-1.17	No	2019	Run off from fertilizer use, Leaching from septic tanks, sewage; Erosion of natural deposits
Lead and Copper (City of North Ridgeville)									
	Action Level (AL)	Individual Results over the AL					Violation	Year Sampled	Typical source of Contaminants
Lead (ppb)	15 ppb	NA					No	2019	Corrosion of household plumbing systems; erosion of natural deposits
Zero out of 30 samples were found to have lead levels in excess of the lead action level of 15 ppb.									
Copper (ppm)	1.3 ppm	NA					No	2019	Erosions of natural deposits; leaching from wood preservatives; Corrosions of household plumbing systems
Zero out of 30 samples were found to have copper levels in excess of the copper action level of 1.3 ppm.									

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 2019 North Ridgeville PWS had a current, unconditioned license to operate our water system from the Ohio EPA.

¹Turbidity 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%.

²The 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.

³These contaminants level found is the highest compliance value based on a running annual average. This average includes results from 2018 & 2019.

⁴Disinfection 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."

Unregulated Contaminant Monitoring Rule Part 4 (City of North Ridgeville)									
Contaminants (Units)	Year Sampled	Average Level Found	Range of Detections	Sample Location					Typical source of Contaminants
1-Butanol	2019	9.45	6.4-13	Entry Point					
HAA5 (mg/L)	2019	13.48	8.8-21.7	Distribution					By-product of drinking water disinfection
HAA6 (mg/L)	2019	9.54	6.13-14.5	Distribution					By-product of drinking water disinfection
HAA9 (mg/L)	2019	22.43	15.0-30.6	Distribution					By-product of drinking water disinfection
Manganese	2019	14.38	0.718-53.1	Entry Point					

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. In 2018 both Avon Lake Regional Water and North Ridgeville participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). For a copy of the results please call Greg Yurionich at 440-933-3229 or Brian O'grady at 440-353-0814.

DEFINITIONS

1. Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
2. Contaminant: Any physical, chemical, biological, or radiological substance or matter in water.
3. 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.
4. 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.
5. 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.
6. 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.
7. NA: Not Applicable
8. ND: Not Detected
9. NTU: Nephelometric Turbidity Units
10. 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.
11. 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.
12. 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.
13. Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water. For example Avon Lake Regional Water adds lime to increase the pH of our finished water in order to maintain compliance with the lead and copper rule.
14. VOC: Volatile Organic Chemicals
15. WTP: Water Treatment Plant
16. 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.