Village of LaGrange
Drinking Water Consumer Confidence Report
For2017

The Village of LaGrange 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.
The Village of LaGrange receives its drinking water from Rural Lorain County Water Authority. Rural Lorain County Water Authority receives its drinking water from the City of Avon Lake. The Avon Lake water treatment facility draws its water from Lake Erie. There are two separate pump stations and three intake cribs to insure their ability to pump from this endless source of quality raw water. The raw water is then treated with alum to aid in the removal of turbidity (dirt) after which it goes through flocculation, sedimentation and filtration. Once the turbidity is removed the water is treated with chlorine for disinfection and fluoride for dental health prior to being pumped to your tap. The Avon Lake Water Filtration facility is staffed around the clock with approximately
150 tests run on the drinking water every day and over 50,000 each year.

Source water assessment and its availability- A source water assessment was conducted by the Ohio EPA for the City of Avon Lake water system in 2002. The City uses surface water drawn from an intake in Lake Erie. For the purposes of source water assessments, in Ohio all surface waters are considered to be susceptible to contamination. Due to the vast size and dilution capabilities of Lake Erie, Ohio EPA evaluated Avon Lake's contamination potential based on a Critical Assessment Zone (CAZ) for which it determined there was no direct source of pollution. Ohio EPA further determined that with Avon Lake's source water analysis and emergency operation plan that undetected contamination would be minimized and that no water quality violations have been recorded. The City of Avon Lake's public water system treats the water to meet drinking water quality standards. Implementing measures to protect Lake Erie and the Black River can further decrease the potential for water quality impacts. More detailed information is provided in the Drinking Water Source Assessment report, which can be obtained by calling Greg Yuronich at 440-933-3229.

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

About yourdrinking water.
The EPA requires regular sampling to ensure drinking water safety. The Village of LaGrange conducted sampling for bacteria; TTHM/HAA5;during 2017. Samples were collected for a total of 80 different contaminants most of which were not detected in theVillage of LaGrangewater 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, is more than one year old.

Who needsto 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).

Additional Information for 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. The Village of LaGrange 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 fromthe Safe Drinking Water Hotline at 800-426-4791or at http://www.epa.gov/safewater/lead.

What is not in *Your* Drinking Water?
The Village of LaGrange drinking water, in addition to the contaminants listed in the table (located inside this brochure), is tested for the presence of 45 other contaminants, which do not appear in any detectable amounts.

How hard is your water?
Water hardness is expressed as a concentration of calcium carbonate, the concentration in your water averaged 120 mg/l in 2016. The historical objection to hardness has been its effect on soap. Although modern detergents counteract many of the problems of hard water, some consumers may seek softer water. Excessively soft water can cause corrosion in pipes, which can shorten the service life of pipes and household appliances and can result in toxic materials, such as lead and copper, being dissolved indrinking water.

Soft	Moderately Hard	Hard	Very Hard
0 - 75 mg/l CaCO3	75 - 150 mg/l CaCO3	150 - 300 mg/l CaCO3	Over 300 mg/l CaCO3

Source water monitoring
The USEPA has required public water systems that use surface water to monitor for Cryptosporidium, E. coli and turbidity based on system size and filtration type. The Avon Lake water plant has always monitored Lake Erie water for E. coli and turbidity as part of the treatment process. Avon Lake Water Filtration Plant monitored for cryptosporidium in the source water in 2016. Cryptosporidium was detected in 1 sample of 12 collected from the raw water from Lake Erie. It was not detected in the finished water. Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes cryptosporidium the most commonly used filtration methods cannot guarantee 100% removal. Monitoring source water indicates the presence of these organisms. Current test methods do not enable us to determine if the organisms are dead or if they are capable of causing disease. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease. However, immune-compromised people are at greater risk of developing life-threatening illness. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease and it may be spread through means other than drinking water.

How can you learn more?
Please contact Mr. Greg Yuronich – Avon Lake Regional Water, Water Plant Manager at 440-933-3229 or
Ted Popiel – Avon Lake Regional Water, Lab Manager, 440-933-3229

Physical Address: Avon Lake Filtration Plant, 33370 lake Road, Avon Lake, OH 44012
Mailing Address: Avon Lake Regional Water, 201 Miller Rd, Avon Lake, Oh 44012

How do I participate in decisions concerning my drinking water?
Please contact Mr. Walter Sukey, Village Manager at 355-5555 or
Robert Hulec, Superintendent at 355-6045 for additional information.
In addition, the public is welcome to attend the regularly scheduled meeting of the LaGrange Village Council on the second and fourth Thursday of each month at 7:30PM at the LaGrange Village Hall,355 South Center Street.

Water Conservation Tips
Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways toconserve water. Small changes can make a big difference – try one today and soon it willbecome second nature.
· Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50gallons for a bath.

· Shut off water while brushing your teeth, washing your hair and shaving and save up to500 gallons a month.

· Use a water-efficient showerhead. They're inexpensive, easy to install, and can save youup to 750 gallons a month.

· Run your clothes washer and dishwasher only when they are full. You can save up to1,000 gallons a month.

· Water plants only when necessary.· Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a fewminutes to replace. To check your toilet for a leak, place a few drops of food coloring inthe tank and wait. If it seeps into the toilet bowl without flushing, you have a leak.Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons amonth.

· Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil canabsorb it and during the cooler parts of the day to reduce evaporation.

· Teach your kids about water conservation to ensure a future generation that uses waterwisely. Make it a family effort to reduce next month's water bill!

· Visit www.epa.gov/watersense for more information.

LaGrange **Table of Detected Contaminants in 2017**

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation?	Year Sampled	Typical Source of Contaminants
Microbiological Contaminants							
[1]Turbidity (NTU)	NA	TT	0.25	0.03-0.25	NO	2017	Soil Runoff
Turbidity (% samples meeting standard)	NA	TT	100.0%	100%	NO	2017	
[2]Total Organic Carbon (ppm)	NA	TT	1.11	1.11-1.72	NO	2017	Naturally present in the environment
Inorganic Contaminants							
[3]Barium (ppm)	2	2	0.029	0.029	NO	2017	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Copper (ppm)	1.3	AL=1.3	0.05	NA	NO	2016	Corrosion of household plumbing
90th percent sample result	**Zero out of thirty samples was found to have copper levels in excess of the copper action level of 1.3 ppm.**						
Lead (ppb)	0	AL=15	<3.0	NA	NO	2016	Corrosion of household plumbing
90th percent sample result	**Zero out of thirty samples was found to have lead levels in excess of the lead action level of 15 ppb.**						
Fluoride (ppm)	4	4	1.02	0.14-1.31	NO	2017	Water additive which promotes strong teeth
Nitrate (ppm)	10	10	1.02	0.11-1.02	NO	2017	Natural deposits, fertilizers, sewage
Volatile Organic Contaminants							
[4]Haloacetic Acids (ppb)	NA	60	26.0	16.8-38.3	NO	2016-17	By-product of drinking water disinfection
[4]Total Trihalomethanes(ppb)	NA	80	58.6	32.9-75.7	NO	2016-17	By-product of drinking water disinfection
Residual Disinfectants	**MRDLG**	**MRDL**					
[3]Chlorine (ppm)	4	4	1.40	1.1-1.5	NO	2016-17	Water additive to control microbes
Radiological Contaminants (Alpha & Beta)							
[5]Gross Alpha (pCi/l)	0	15	7.94	NA	NO	2015	Erosion of natural deposits

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LaGrange has a current, unconditioned license to operate our water system from the Ohio EPA

[1]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 daily samples and shall not exceed 1 NTU at any time. As reported above the Avon Lake WTP highest recorded turbidity result for 2017 was 0.25 NTU and lowest monthly percentage of samples meeting the turbidity limits was 100%.

[2]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.

[3]These contaminants level found is the highest compliance value based on a running annual average. This average includes results from 2016 & 2017.

[4] 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."

[5] Gross Alpha particles - Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

DEFINITIONS

1. AL = Action level – The concentration of a contaminant that, if exceeded, triggers a treatment or other requirement that a water system must follow.
2. Contaminant – Any physical, chemical, biological, or radiological substance or matter in water.
3. MCL = Maximum Contaminant Level – The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's. as feasible using the best available treatment technology.
4. MCLG = Maximum Contaminant Level Goal – The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
5. MRDL = Maximum Residual Disinfectant Level
6. MRDLG = Maximum Residual Disinfectant Level Goal
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. pCi/l = picoCuries per liter (A common measure of radioactivity)
13. TOC = Total Organic Carbon 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.
14. TT = Treatment technique – A required process intended to reduce the level of a contaminant in drinking water. For example we add lime to increase the pH of our finished water in order to maintain compliance with the lead and copper rule.
15. VOC = Volatile Organic Chemicals
16. WTP = Water Treatment Plant
17. "<" Symbol = A symbol that means 'less than'. A result of '<3.0 ppb means that the lowest detectable level is 3.0ppb and the contaminant was not

detected in those samples.