

What You Should Know About Your Drinking Water Supply

Published by LaVale Sanitary Commission

2021 Water Quality Report Public Water Supply ID – 0010016

In Accordance with the U.S. Environmental Protection Agency
National Primary Drinking Water Regulation 40CFR Parts 141 & 142

Introduction: The LaVale Sanitary Commission is pleased to present to you this year's Annual Water Quality Report detailing all contaminant information collected between January 1 and December 31, 2020. This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

LaVale Sanitary Commission analyzes its drinking water for all parameters outlined in the National Primary Drinking Water Regulation: Consumer Confidence Report 40 CFR Parts 141 and 142 unless a waiver has been granted by Maryland Department of the Environment. We also analyze for many unregulated chemical compounds. Parameters and compounds that were detected in treated water over the calendar year are displayed in the 2020 Water Quality Data Chart.

Where Does Your Drinking Water Originate: The water for LaVale Sanitary Commission is taken from Two Springs and Three Wells in the Green Brier Limestone formation and Two Wells in the Pocono formation at our Red Hill Water Complex, located on the North side of Rt. # 40 at the Western end of LaVale.

Water Treatment: Surface water treatment facilities like LaVale are designed and operated to take a raw water source of variable quality and produce consistent high-quality drinking water. Multiple treatment processes are provided in series and each process represents a barrier to prevent the passage of particulate matter, cysts and other microbial contaminants. Our Water Treatment Facility utilizes barriers which include clarification, filtration, and disinfection. In our continuing efforts to maintain a safe and dependable water supply, the Commission has installed a Diatomaceous Earth Pressure Filtering System at our Red Hill Water Complex.

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:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil, and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- 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.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

General Drinking Water Information: 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 (EPA) **Safe Drinking Water Hotline (800-426-4791)**.

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 infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

In order to insure 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. LaVale Sanitary Commission's water is treated in accordance with all State and Federal regulations. See the 2020 Water Quality Data Chart that summarizes water testing results for the 2020 calendar year.

Water Conservation: Our water resources are not unlimited – they are affected everyday by precipitation, population growth, economic development, and pollution. The most cost-effective way to protect your water resources is through conservation. For more information on water usage and conservation practices, please contact the LaVale Sanitary Commission at 301.729.1638. Visit <http://www.epa.gov/watersense/> for water conservation tips, facts, information, and online activities for you and your family.

Did you know? The average U.S. household uses approximately 350 gallons of water per day. Luckily, there are many low-cost or no-cost ways to conserve water. Water your lawn at the least sunny times of the day. Fix toilet and faucet leaks. Take short showers - a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath. Turn the faucet off while brushing your teeth and shaving - 3-5 gallons go down the drain per minute. Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water consumption.

Additional Information Regarding Lead: In 1992 EPA created new standards for acceptable levels of lead and copper in drinking water. 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.

LaVale Sanitary Commission is responsible for providing high quality drinking water but cannot control the variety of materials used in home 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 or at <http://www.epa.gov/safewater/lead>.

FOR MORE INFORMATION OR QUESTIONS: Please contact LaVale Sanitary Commission at 301.729.1638 for additional information regarding the information in this report. This information is also available at the direct URL link http://lavalosanitary.com/uploads/client_123/files/2021%20Water%20Quality%20Report.pdf on the website www.lavalosanitary.com and at the office of LaVale Sanitary Commission. Upon request individuals can receive copies via mail. The Commission meets the 2nd Thursday of every month at 9:00 a.m.

Other water distribution systems in your area include: The City of Cumberland at 301.759.6604 and Allegany County Sanitary Districts at 301.777.5942.

A Source Water Assessment is available by contacting LaVale Sanitary Commission, or at https://mde.maryland.gov/programs/Water/water_supply/Source_Water_Assessment_Program/Documents/075%20-%20Final%20LaVale%20SWPP.pdf.

Two thirds of our water are bought from the City of Cumberland. A complete copy of the City of Cumberland 2020 Water Quality Report may be obtained by calling the City Utilities Division at 301.759.6427, the City Environmental Technician at 301.759.6604 or on LaVale Sanitary Commission's website at www.lavalosanitary.com.

Definitions

(The following tables contain scientific terms and measures, some of which may require explanation)

Avg – Regulatory compliance with some MCLs is based on running annual average of monthly samples.		
Level 1 Assessment – A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.		
Level 2 Assessment – A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.		
Maximum Contaminant Level or MCL – 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		
Maximum Contaminant Level Goal or MCLG – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.		
Maximum Residual Disinfectant Level or 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 or MRDLG – The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.		
Action Level or AL – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.		
Treatment Technique or TT – A required process intended to reduce the level of a contaminant in drinking water.		
Waiver, Variance, or Exemptions – State or EPA permission not to meet an MCL or a treatment technique under certain conditions.		
ppb – micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water		
ppm – milligrams per liter or parts per million – or one ounce in 7,350 gallons of water		
n/a – not applicable		
mrem – millirems per year (a measure of radiation absorbed by the body)		
P/A – Presence/Absence	S.U. – Standard Units	NTU – Nephelometric Turbidity
pCi/L – Picocuries per liter (a measure of radioactivity)		LRAA – Locational Running Annual Average
*Not more than one (1) positive sample if less than 40 samples collected		

2020 Water Quality Data Chart LaVale Sanitary Commission

Regulated Parameter	Collection Date	Highest Level Detected	Range of Levels	MCLG	MCL	Units	Violation	Likely Source of Contamination
Disinfectants and Disinfection By-Products								
Chlorine	2020	1.1	1 - 1.1	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes
Chlorine Distribution System	2020	1.19	0.87 - 1.19	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes
Total Coliform Bacteria	2020	A	P/A	0.0	0.0	P/A	N	Naturally present in the environment
Haloacetic Acids (HAA5)	2020	29	13.6 - 33	No goal for the total	60	ppb	N	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2020	29	0 – 42.35	No goal for the total	80	ppb	N	
Unregulated								
pH (range)	2020	7.7	7.4 - 7.7	N/A	N/A	S.U.	N	Naturally occurring in the Environment
Hardness	2020	91.00	91.00	N/A	N/A	ppm	N	
Inorganic Contaminants								
Barium	2020	0.058	0.058 - 0.058	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate (measured as nitrogen)	2020	2	1.75 – 1.75	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Copper	2019	0.275	0.007 - 0.572	1.3	1.3	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	2019	0.005	<0.005 - 0.007	0	15	ppb	N	
Turbidity								
	Limit (Treatment Technique)			Level Detected		Violation		Likely Source of Contamination
Highest single measurement	5 NTU			0.973 NTU		N		Soil runoff
Lowest monthly % meeting limit	1.0 NTU			100%		N		
Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.								

City of Cumberland

Maryland Public Water Service # 0010008 - Pennsylvania Public Water Service Identification # 4050028

Data for both MD and PA water distribution systems unless otherwise noted

2020 Water Quality Data Chart

Regulated Parameter	Units	RESULT	RANGE	MCLG	MCL	VIOLATION	Typical Sources of Contaminant
Water Treatment Facility (Point of Entry)							
Turbidity (max)	NTU	0.08	0.02 - 0.08	NA	1	NO	Soil run-off. Turbidity is a measurement of cloudiness of the water caused by suspended particles and is monitored as an indicator of water quality and effectiveness of filtration
Turbidity Samples <0.3	%	100	100	NA	<95	NO	
Barium	ppm	0.0382	0.0382	2	2	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (avg)	ppm	0.5	0.52 - 0.52	4	4*	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Gross Alpha (2015)	pCi/L	2.96	2.96	0	15	NO	Erosion of natural deposits
Total Organic Carbon	NA	TT	1.95 - 2.39	NA	TT**	NO	Naturally occurring in the environment
Nitrate (as N)	ppm	0.49	0.49	10	10	NO	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Maryland Distribution System							
Chloramines (as Chlorine)	ppm	1.8	1.7 - 1.8	4	4	NO	Water additive used to control microbes
Copper (2020)	ppm	0.155	<0.0125-0.254	1.3	1.3	NO	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (2020)	ppb	0.772	<0.5 - 54.3	0	15	NO	
Total Trihalomethanes (LRAA)	ppb	34	19 - 47	NA	80	NO	By-product of drinking water disinfection
Haloacetic Acids (LRAA)	ppb	31	13 - 44	NA	60	NO	
Total Coliform Bacteria	count	0	0	0	>1	NO	Naturally present in the environment
Pennsylvania Distribution System							
Chloramines (Chlorine)	ppm	2.6	2.4 - 3.0	4	4	NO	Water additive used to control microbes
Copper (2019)	ppm	0.0552	<0.005 - 0.355	1.3	1.3	NO	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (2019)	ppb	<5.00	<0.50 - <5.00	0	15	NO	
Total Trihalomethanes	ppb	44	44	NA	80	NO	By-product of drinking water disinfection
Haloacetic Acids	ppb	35	35	NA	60	NO	
Total Coliform Bacteria	count	0	0	0	>1	NO	Naturally present in the environment
Unregulated Parameters - Maryland & Pennsylvania							
Sodium	ppm	7.21	7.21	NA	NA	NO	
Source Water Supply (Lake Gordon)							
E. Coli (avg) 2018	mpn	88.3	<1.0 - 1986	0	NA	NA	Human and animal fecal waste
Cryptosporidium (avg) 2018	oocysts /L	0.042	0 - 0.5	0	NA	NA	Naturally present in the environment
UNREGULATED CONTAMINANT MONITORING RULE (Maryland Distribution System)							
Monochloroacetic Acid (2C)	ppb	3.71	ND - 3.71	NA	NA	NA	https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule
Monobromoacetic Acid	ppb	3.01	ND - 3.01	NA	NA	NA	
Dichloroacetic Acid (2C)	ppb	24.8	15.2 - 24.8	NA	NA	NA	
Trichloroacetic Acid (2C)	ppb	24.3	11.2 - 24.3	NA	NA	NA	
Bromochloroacetic Acid (2C)	ppb	1.56	1.12 - 1.56	NA	NA	NA	
Bromodichloroacetic Acid (2C)	ppb	1.77	1.28 - 1.77	NA	NA	NA	
Manganese	ppb	31.8	31.8	NA	NA	NA	

* PA DEP maximum contaminant level for Fluoride is 2 ppm

** Total Organic Carbon Treatment Technique (TT) compliance was achieved through a variance obtained from Maryland Department of the Environment and Pennsylvania Department of Environmental Protection. As per CFR 141.135(a)(2) an alternative Step 2 TOC removal requirement was provided in consistency with all other National Primary Drinking Water Regulations