

What You Should Know About Your Drinking Water Supply
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2018 Water Quality Report
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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, 2017. The report is designed to inform you about the quality water services delivered to you every day. Our goal is to provide you with a safe and dependable drinking water supply. We want you to be aware of the efforts we make to continually improve the water treatment process and to protect our water resources.

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 2017 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.

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 2018 Water Quality Data Chart that summarizes water testing results for the 2017 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://lavalesanitary.com/uploads/client_123/files/2018%20Water%20Quality%20Report.pdf, on the website www.lavalesanitary.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.

Definitions

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

Avg – Regulatory compliance with some MCLs are 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
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		

2017 Water Quality Data Chart LaVale Sanitary Commission

Parameter Regulated	Units	LaVale Water Filtration Plant	Ideal Goals (EPA's MCLG)	Highest Level Allowed (EPA's MCL)	Typical Sources of Contaminant
Turbidity (max. monthly avg.)	NTU	0.123	N/A	TT	Soil runoff
Turbidity (max. reported)	NTU	0.96	N/A	1	
Stage II					
Total Trihalomethanes (LRAA)	ppb	37	N/A	80	By-product of drinking water disinfection
Total Trihalomethanes (range)	ppb	18.6 - 48.9	N/A	80	
Haloacetic Acids (LRAA)	ppb	38	N/A	60	
Haloacetic Acids (range)	ppb	21.6 - 51.7	N/A	60	
Barium (2016)	ppm	0.084	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nitrate (measured as nitrogen)	ppm	1.4	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Coliform Bacteria	P/A	A	0	0	Naturally present in the environment
Copper (2016)	ppm	0.24	1.3	1.3	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (2016)	ppb	< 5	0	15	Corrosion of household plumbing systems; Erosion of natural deposits
Chlorine (avg)	ppm	1.79	MRDLG - 4	MRDL - 4	Water additive used to control microbes
Chlorine (range)	ppm	1.7 - 1.96	MRDLG - 4	MRDL - 4	
Chlorine (avg) Distribution System	ppm	0.9	MRDLG - 4	MRDL - 4	
Chlorine (range) Distribution System	ppm	0.8 - 0.9	MRDLG - 4	MRDL - 4	
Unregulated					
pH (range)	S.U	7.6 - 7.9	N/A	N/A	Naturally Occurring in the Environment
Hardness	ppm	91	N/A	N/A	Naturally Occurring in the Environment

No monitoring or water quality violations occurred during 2017; however, a reporting violation was issued for Nitrate (EPA code 03).

Violation Explanation: A Violation was issued due to a failure to report Nitrate Analysis by December 31, 2017. All testing analysis for Nitrate were performed and all results were below EPA's Action Level. Analysis was done January 19, 2017 and reported May 2018.

Two thirds of our water is bought from the City Of Cumberland. A complete copy of the City of Cumberland 2018 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.lavalesanitary.com.

2017 Water Quality Data Chart City of Cumberland

Regulated Parameters	Units	Cumberland Water Filtration Plant	Ideal Goal's (EPA's MCLG)	Highest Level Allowed (EPA's MCL)	Typical Sources of Contaminant
Regulated Parameters	Units	Cumberland Water Filtration Plant	Ideal Goal's (EPA's MCLG)	Highest Level Allowed (EPA)	
Turbidity (max. monthly avg.)	NTU	0.04	N/A	TT	Soil Run-Off
Turbidity (max. reported)	NTU	0.06	N/A	1.0	
Total Coliform Bacteria	P/A	A	0	*	Naturally Present in the Environment
Barium	ppm	0.0425	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of Natural Deposits
Nitrate	ppm	0.41	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Gross Alpha (2015)	pCi/L	2.96	0	15	Erosion of natural deposits
Total Organic Carbon	N/A	met TT **	N/A	TT	Naturally occurring in the environment
**Total Organic Carbon Treatment Technique (TT) compliance was achieved through a waiver 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					
Maryland Distribution System					
Chloramines (avg)	ppm	2.1	MRDL 4	MRDL 4	Water additive used to control microbes
Chloramines (range)	ppm	1.6-2.5	MRDL 4	MRDL 4	
Fluoride	ppm	0.9	4	4.0	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Copper (2017)	ppm	0.171	1.3	1.3 (AL)	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (2017)	ppb	0.9	0	15 (AL)	
Total Trihalomethanes (LRAA)	ppb	45	N/A	80	By-product of drinking water disinfection
Total Trihalomethanes (range)	ppb	27-60			
Haloacetic Acids (LRAA)	ppb	38	N/A	60	By-product of drinking water disinfection
Haloacetic Acids (range)	ppb	16-42			
Pennsylvania Distribution System					
Chloramines (avg)	ppm	2.5	MRDL 4	MRDL 4	Water Additive used to control microbes
Chloramines (range)	ppm	2.3 – 2.7	MRDL 4	MRDL 4	
Fluoride (average)	ppm	0.59	4	4.0	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Fluoride (max reported)	ppm	0.90	4	4.0	
Copper (2016)	ppm	0.0879	1.3	1.3 (AL)	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (2016)	ppb	0.00283	0	15 (AL)	
Total Trihalomethanes (avg)	ppb	57	N/A	80	By-product of drinking water disinfection
Haloacetic Acids (avg)	ppb	34	N/A	60	
Unregulated Parameters – Maryland & Pennsylvania					
Sodium	ppm	7.1	N/A	N/A	
*No monitoring or water quality violations occurred during 2017; however, a reporting violation was issued for the Lead and Copper Rule (LCR)					
Violation	Violation Explanation				
Follow-up or Routine Tap M/R (LCR)	A violation was issued due to reporting results that were due 10/10/2017 were received by the State Agency on 11/01/17. All required 2017 testing and analysis for the LCR were performed and all results were below EPA's Action Level.				