

## City of Lavonia 2020 Water Quality Report

Environmental Protection Division SID # - GA1190003

Last year the City of Lavonia Water Treatment Plant treated 529,610,000 gallons of water. We obtain our raw water from 2 surface water sources. (Lake Hartwell and the Crawford Creek Reservoir) both are in the Savannah River Basin and located in Franklin County.

*The sources of drinking water (both tap and bottled) include rivers, lakes, streams, 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 that can be naturally occurring or result from urban stormwater 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 stormwater 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 stormwater runoff, agricultural application, and septic systems. **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities. In order to ensure tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants provided by public water systems. Food and Drug Administration 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).*

*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/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).*

**Terms and units Defined:**

**Maximum Contaminant Level (MCL):** The highest level of a 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 a 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 level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbiological contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water 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.

**Action Level (AL):** The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

**NTU:** Nephelometric turbidity units    **ppm:** Parts per million or milligram per liter    **ppb:** Parts per billion or micrograms per liter

**TT:** Treatment technique – A required process intended to reduce the level of a contaminant in drinking water.

**n/d:** not detected    **n/a:** not applicable

**(a):** Fluoride is added in treatment to bring the natural level to the EPA optimum of 0.7 part per million.

**(b):** Turbidity is a measure of the cloudiness of water. We monitor turbidity because it is a good indicator of water quality and the effectiveness of our filtration system.

**QC:** Quality Control    **LRAA:** locational running annual average

**Drinking Water Analysis (January 1<sup>st</sup>, 2020 to December 31<sup>st</sup>, 2020)**

Disinfectants Table						
Substance tested and detected	MCDL	MRDLG	Amount detected	Range of detection	Violation	Probable source
Chlorine (ppm)	4	4	2.15	1.43 – 2.71	NO	Disinfection
Inorganic Contaminants Table						
Substance tested and detected	MCL	MCLG	Amount detected	Range of detection	Violation	Probable source
Fluoride, ppm (a)	4	4	0.66	0.35 – 0.90	NO	Water additive that promotes strong teeth
Nitrate/Nitrite (ppm)	10.0/1	10.0/1	n/d		NO	Agricultural practices
Sodium (ppb)			2600		NO	Erosion of natural deposits
Aluminum (ppb)			n/d		NO	Metallic salts
Iron (ppm)		0.30	0.02	0.00 -- 0.05	NO	Naturally present in environment
Manganese (ppm)		0.05	0.01	0.00 -- 0.11	NO	Naturally present in environment

Filtered Turbidity Table								
Turbidity, NTU (b)	0	TT=1NTU TT= % of	0.03 <0.3 NTU	0.02 – 0.23 100%	NO	Soil runoff		
Microbiological Contaminants Table								
Substance tested and detected	MCL	MCLG	Amount detected		Violation	Probable source		
Total Coliform (bacteria)	0	0	0		NO	Naturally present in environment		
Lead and Copper Contaminants Table								
Substance tested and detected	AL	MCLG	90 <sup>th</sup> percentile	Range of detection	Violation	Probable source		
Copper (ppb)	1300	1300	n/a	n/a	NO	Corrosion of household plumbing		
*Lead (ppb)	15	15	n/a	n/a	NO	Corrosion of household plumbing		
Volatile Organic Contaminants Table								
Substance tested and detected	MCL	Amount detected		Range of Detection	Violation	Probable source		
Chloroform (ppb)	n/a	8.8		n/a	NO	By-product of chlorination		
Bromodichloromethane (ppb)	n/a	2.1		n/a	NO	By-product of chlorination		
Chlorodibromomethane (ppb)	n/a	n/d		n/a	NO	By-product of chlorination		
Organics Contaminants Table								
Stage 2 Total Trihalomethanes (TTHMs) Table								
Substance tested and detected	MCL	min	-	max	LRAA	Violation	Probable Source	
TTHMs (ppb)	Site # 501	80	19.4	-	34.5	27.9	NO	By-product of chlorination
	Site # 502	80	19.5	-	31.6	24.9	NO	By-product of chlorination
Stage 2 Haloacetic Acids (HAA5) Table								
Substance tested and detected	MCL	min	-	max	LRAA	Violation	Probable Source	
HAA5 (ppb)	Site # 501	60	23.0	-	41.0	30.4	NO	By-product of chlorination
	Site # 502	60	21.2	-	27.0	23.5	NO	By-product of chlorination
Total Organics Carbon Table								
Substance tested and detected	min		-	max	Average	Violation	Probable Source	
Total Organic Carbon (TOC) (ppm)	0.68		-	1.60	0.90	NO	Naturally present in environment	

As authorized by Georgia EPD, our system has reduced monitoring requirements for certain contaminants to less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year.

The City of Lavonia was also issued a Drinking Water Chemical Monitoring Waiver Certificate for the below listed synthetic organic compounds from **January 1, 2020 to midnight December 31, 2022.**

**SYNTHETIC ORGANIC COMPOUNDS:** Alachlor, Aldicarb Sulfone, Aldicarb Sulfoxide, Atrazine, Benzo (A) Pyrene, Carbofuran, Chloradane, Dalapon, Di (2-Ethylhexyl) Adipate, Dibromochloropropane (DBCP), Dinoseb, Diquat, Di (2-Ethylhexyl) Phthalate, Endothall, Endrin, Ethylene Dibromide (EDB), Glyphosate, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Oxymyl (Vydate), Pentachlorophenol, Picloram, Polychlorinated Biphenyls (PCBs), Simazine, 2,4-D, Toxaphene, 2,4,5-TP (Silvex), 2,3,7,8-TCDD (Dioxin).

The City of Lavonia was also issued a chemical monitoring waiver for inorganic compounds from **January 1, 2020 to December 31, 2022.**

**INORGANIC COMPOUNDS:** Asbestos, Cyanide

**\* Lead in drinking water:** *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 Lavonia water system 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 or at <http://www.epa.gov/safewater/lead>.*

The Vulnerability Assessment/Source Water Assessment prepared for the water system by GRWA, NOV 2009, shows this system's raw and distributed water to not be in a high potential pollution risk situation.

The City of Lavonia Water Department is operated under the direction of the City of Lavonia's Mayor and City Council. The regularly scheduled monthly meetings are at 5:30 PM on the first Monday of each month. The meetings are open to the public and are held in the courtroom in City Hall at 12221 Augusta Road, Lavonia, GA 30553. The water department's business office is open Monday through Friday, 8:30 AM to 4:30 PM. The customer service telephone number is 706-356-8781. For emergencies after 4:30 PM call 706-356-8333 or 911. If you would like a copy of this report or any additional information please contact Martin D. Eckles Sr., Lavonia Water Plant Manager, 1491 Pleasant Hill Rd., Martin Ga. 30557 or call the office at (706-356-8333).