

2019 Annual Drinking Water Quality Report
City of Flowood
PWS#: 0610044 & 0610075
May 2020

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is from wells drawing from the Cockfield Formation and Sparta Sand Aquifer.

The source water assessment has been completed for our public water system to determine the overall susceptibility of its drinking water supply to identified potential sources of contamination. A report containing detailed information on how the susceptibility determinations were made has been furnished to our public water system and is available for viewing upon request. The wells for the City of Flowood have received lower to moderate susceptibility rankings to contamination.

If you have any questions about this report or concerning your water utility, please contact Ken Tucker at 601.939.3186. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first and third Monday of each month at 6:30 PM at the Flowood City Hall located at 2101 Airport Road, Flowood, MS.

We routinely monitor for contaminants in your drinking water according to Federal and State laws. This table below lists all of the drinking water contaminants that were detected during the period of January 1st to December 31st, 2019. In cases where monitoring wasn't required in 2019, the table reflects the most recent results. As water travels over the surface of land or underground, it dissolves naturally occurring minerals and, in some cases, radioactive materials and can pick up substances or contaminants from the presence of animals or from human activity; microbial contaminants, such as viruses and bacteria, that 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 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 that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily indicate that the water poses a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL) - The "Maximum Allowed" (MCL) is 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 "Goal"(MCLG) is 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 to control microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG) - The level of a drinking water disinfectant below which there is no known or expected risk of health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

PWS ID # 0610044		TEST RESULTS						
Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL	Unit Measure -ment	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants								
10. Barium	N	2019	.0065	.0058 - .0065	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
13. Chromium	N	2019	1.6	1.2 - 1.6	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper	N	2017/19	.7	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
16. Fluoride	N	2019	.892	.833 - .892	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

17. Lead	N	2017/19	1	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Disinfection By-Products								
81. HAA5	N	2016*	27	5 - 27	ppb	0	60	By-Product of drinking water disinfection.
82. TTHM [Total trihalomethanes]	N	2019	23.11	No Range	ppb	0	80	By-product of drinking water chlorination.
Chlorine	N	2019	1.3	.6 - 2.8	mg/l	0	MDRL = 4	Water additive used to control microbes
Unregulated Contaminants								
Sodium	N	2019	110000	No Range	PPB	NONE	NONE	Road Salt, Water Treatment Chemicals, Water Softeners and Sewage Effluents.

PWS ID # 0610075				TEST RESULTS				
Contaminant	Violation Y/N	Date Collected	Level Detected	Range of Detects or # of Samples Exceeding MCL/ACL	Unit Measure -ment	MCLG	MCL	Likely Source of Contamination
Radioactive Contaminants								
5. Gross Alpha	N	2019	2.8	1.6 - 2.8	pCi/L	0	15	Erosion of natural deposits
6. Radium 226 Radium 228	N	2019	.89 1.3	.34 - .89 .60 - 1.3	pCi/L	0	5	Erosion of natural deposits
Inorganic Contaminants								
10. Barium	N	2019	.0055	.0011 - .0055	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
13. Chromium	N	2019	1.5	.6 - 1.5	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper	N	2017/19	.4	0	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
16. Fluoride	N	2019	1.39	.164 - 1.39	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead	N	2017/19	4	0	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Disinfection By-Products								
81. HAA5	N	2019	36	4 - 29	ppb	0	60	By-Product of drinking water disinfection.
82. TTHM [Total trihalomethanes]	N	2019	45	0 - 41.8	ppb	0	80	By-product of drinking water chlorination.
Chlorine	N	2019	1.7	.5 - 3.8	mg/l	0	MRDL = 4	Water additive used to control microbes
Unregulated Contaminants								
Sodium	N	2019	120000	77000 - 120000	PPB	NONE	NONE	Road Salt, Water Treatment Chemicals, Water Softeners and Sewage Effluents.

* Most recent sample. No sample required for 2019.

** Fluoride level is routinely adjusted to the MS State Dept of Health's recommended level of 0.6 - 1.2 mg/l.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected however the EPA has determined that your water IS SAFE at these levels.

We are required to monitor your drinking water for specific contaminants on a monthly basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. We did complete the monitoring requirements for bacteriological sampling that showed no coliform present. In an effort to ensure systems complete all monitoring requirements, MSDH now notifies systems of any missing samples prior to the end of the compliance period.

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. Our water system is responsible for providing high quality