

**ANNUAL WATER QUALITY REPORT FOR 2019
HORN LAKE WATER ASSOCIATION CCR
MS0170010
June 2, 2020**

Horn Lake Water Association is proud to report that our system has not violated a maximum contaminant level or any other water quality standard. Last year, we conducted tests for many contaminants, detecting 17 of these contaminants with none at a level higher than the EPA allows for. This report is a snapshot of our last year's water quality.

Our water source consists of two water plants with five wells pumping from the Sparta aquifer from an average depth of approximately 450 feet. Three of our wells were ranked **LOWER**; two were ranked **MODERATE** in terms of susceptibility to contamination. If you have any questions about this report or concerning your water utility, please contact Connie Bunting at 662-393-0140. If you want to learn more, please attend our monthly meetings on the third Thursday of each month and/or our annual meeting, which takes place on the third Thursday in July. All meetings begin at 7:00 pm and take place at our office located at 1543 Dancy Blvd.

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 Drinking Water Hotline (800-426-4791).

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA and the Mississippi State Department of Health require us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of the data, though representative, may be more than one year old. In this table you will find terms and abbreviations you might not be familiar with. To help you better understand these terms, we have provided the following definitions and terms:

- Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- 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 Disinfection 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 microbial contaminants.
- Maximum Residual Disinfection 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 microbial contaminant.
- Ppm** – Parts per million, or milligrams per liter (MG/L)
- Ppb** – Parts per billion, or micrograms per liter.
- N/A** – Not applicable
- pCi/L** – Picocuries per liter (a measure of radioactivity).
- ug/L** – A unit of measurement. (1000 ug/L is equal to 1 mg/L or 1 Ppm)
- MFL** – Million fibers per liter, used to measure asbestos concentration
- N/D** – non detect

To comply with the "Regulation Governing Fluoridation of Community Water Supplies", MS0170010 is required to report certain results pertaining to fluoridation of our water system. The number of months in the previous calendar year in which average fluoride sample results were within the optimal range of 0.6-1.2 ppm was 4. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.6-1.2 ppm was 56%.

Contaminants (Units)	MCLG or MRDLG	MCL, TT, or MRDL	Your Water	Low	High	Sample Date	Violation Yes/No	Typical Source
Disinfectants & Disinfectant By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)								
Chlorine (as Cl ₂) (MG/L)	4	4	1.10	0.90	1.30	2019	No	Water additive used to control microbes
HAA5 (ppb) (Total Haloacetic Acids)	N/A	60	0.28	0.0	0.28	2019	No	By-Product of drinking water disinfection
TTHMs (ppb) (Total Trihalomethanes)	N/A	80	4.0	N/A	N/A	2019	No	By-product of drinking water disinfection
Inorganic Contaminants								
Asbestos (MFL)	7	7	N/D	N/A	N/A	2019	No	Decay of asbestos cement mains; erosion of natural deposits
Barium (ppm)	2	2	0.0214	0.229	0.23	2019	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	100	100	5.5	N/A	N/A	2019	No	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride (ppm)	4	4	0.1	0.1	1.08	2019	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (ppm) (measured as Nitrogen)	10	10	0.39	0.39	0.39	2019	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium(ppb) (optional)	N/A	N/A	18000	15000	18000	2019	No	Road salt; water treatment chemicals; water softeners; sewage effluents.
Radioactive Contaminants								
Alpha emitters (pCi/L)	0	15	1.9	N/A	N/A	2018	No	Erosion of natural deposits.
Radium (pCi/L) (combined 226/228)	0	5	0.85	0.25	0.60	2018	No	Erosion of natural deposits.
Inorganic Contaminants								
	MCLG	AL	Your Water	# Samples Exceeding AL	Sample Date	Exceeds AL		
Lead – action level at consumer taps (ppb)	0	15	0.0	0	2018	No		Corrosion of household plumbing systems; erosion of natural deposits
Copper – action level at consumer taps (mg/L)	1.3	1.3	0.0	0	2018	No		Corrosion of household plumbing systems; erosion of natural deposits

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.

Unregulated Contaminants (units)								
	MCLG Or MRLDG	MCL TT, or MRDL	Your Water	Low	High	Sample Date	Violation Yes/No	
HAA9 (ug/L)	N/A	N/A	0.28	0.00	0.28	2019	No	
Manganese (ug/L)	N/A	N/A	0.73	0.00	0.73	2019	No	
Radium-226 (pCi/L)	N/A	N/A	0.25	N/A	N/A	2018	No	
Radium-228 (pCi/L)	N/A	N/A	0.60	N/A	N/A	2018	No	

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. Horn Lake Water Association 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 Mississippi State Department of Health Laboratory offers lead testing. Please contact 601-576-7582 if you wish to have your water tested.

Additional Information for Nitrates

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.