2022 Thomson/McDuffie Water Quality Report

HIGH WATER QUALITY

This is the twenty-third annual report required by new Federal regulations on the quality of the drinking water provided to customers of the Thomson-McDuffie County and Dearing Water System. This brochure summarizes the laboratory data taken during the past year and reflects the hard work of our professional drinking water department employees to bring you water that is safe to drink and use.

Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. Your Drinking Water Department is committed to providing you with valuable information about your water supply, because customers who are well informed are our best allies in supporting our efforts to maintain the highest drinking water standards.

SOURCE DESCRIPTION

Thomson-McDuffie County customers are very fortunate to have two separate sources for their water supply. The original source can withdraw 1.5 million gallons per day from Usry's Pond, a small spring and surface fed impoundment. In 1991, after the severe drought and water use restrictions in the mid-80's, an intake and new water treatment plant were constructed on the Big Creek branch of the Clarks Hill Reservoir, north of the City of Thomson. This second source can withdraw 3.1 million gallons per day from Clarks Hill Reservoir.

To better protect our drinking water reservoirs, both the City of Thomson and McDuffie County have passed watershed protection ordinances. With everyone's cooperation and help, these ordinances will prevent or limit those activities that lead to increased biological or chemical contaminants entering the small streams that flow into Usry's Pond. The Corps of Engineers has similar limits on undesired activities around Clarks Hill Reservoir.

After treatment, the water from both facilities is pumped into the same distribution system, composed of underground pipes and elevated storage tanks, for delivery to the customers. Thus, either intake/treatment plant can supply all the water needs of our customers for several days depending on the rainfall and together. The combined sources will serve our community's needs in the future.

WHAT ARE SOURCES OF CONTAMINATION TO DRINKING WATER?

As described above, the sources of drinking water (both tap water and bottled water) can include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves and picks up naturally occurring minerals and substances resulting from natural processes including human and animal activity.

Contaminants that may be present in source water include: (A) microbial contaminants such as viruses and bacteria, which can be introduced by sewage treatment plants, septic systems, livestock and wildlife.; (B) inorganic contaminants such as salts and metals, which can be naturally occurring or as a result of urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming; (C) pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff or residential uses; (D) organic chemical contaminants including synthetic and volatile organic chemicals which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems; (E) radioactive contaminants, which can be natural occurring or be the result oil and gas production and mining activities.

In order to assure that tap water is safe to drink, the Environmental Protection Agency (EPA) and the Georgia Environmental Protection Division (EPD) prescribe regulations which limit the amount of certain substances in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for substances in bottled water, which must provide the same protection for public health as that served at your tap.

"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 Safe Drinking Water Hotline [(800) 426-4791].

WHO NEEDS TO TAKE SPECIAL PRECAUTIONS?

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 [(800) 426-4791]. (*Center for Disease Control)

"Some people who drink water containing trichloromethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer." (EPA Required Notice.)

ADDITIONAL LANGUAGE 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. The Thomson-McDuffie 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.

Routine monitoring for lead and copper consists of taking drinking water samples at designated homes throughout our community once every three years. For more information on lead and copper, you may call Charles Cumber, Water Director, at 706-595-1262.

Billing Information: (706) 595-1781
Water Plant: (706) 595-1312 / (706) 595-1262

FOR RULES ON OUTDOOR WATERING, VISIT
www.gaepd.org/documents/outdoorwater.html

2022 Table of Detected Contaminants

Contaminant	MCLG	MCL	Highest Level Found	Range of Detections	Violation	Year Sampled	SOURCES OF SUBSTANCES
Microbiological Contaminants							
TOTAL COLIFORM	N/A	N/A	0	N/A	N	2022	Naturally present in the environment
Inorganic Contaminants							
MANGANESE	.050 ppm		.030	0.0 -.030	No	2022	
IRON	.3ppm		.06	0.0 -.06	No	2022	Natural Geology
LEAD (ppb)	0	AL=15	4.9	0.0 -4.9	No	2022	Corrosion of household plumbing
COPPER (ppm)	1.3	AL=1.3	.100	0.0 -.100	No	2022	Corrosion of household plumbing
Residual Disinfectants							
RESIDUAL CHLORINE (ppm)	4.0	4.0	2.14	.26-2.14	No	2022	Added for disinfection
Volatile Organic Compounds							
HALOACETIC ACIDS (ppb)	60	60	29.00	8.5-29.0	No	2022	By-products of chlorination
Chloroform (ppb)	NA	NA	**120.0**	24.0-120.0	Yes	2022	

The "<": A symbol which means 'less than'. A result of "<5" means that the lowest level of detection is 5 and the sample contained less than that.

NA= not applicable

ppb = One part per billion, or micrograms per liter *(ug/l)*

ppm = One part per million

AL = Action Level, the concentration of a substance that triggers additional treatment or other requirements for the water system

*MCLs = Maximum Contaminant Level: "The highest level of a substance that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology."

**MCLGs = Maximum Contaminant Level Goal: "The level of a substance in drinking water below which there is no known or expected risk to human health.

MCLGs allow for a margin of safety.

TT = Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

TTHM MCL	**0.080 ppm**
MCL in CCR Units	**80 ppb**

Location	2022 TTHM Results (ppb)			
	1St Quarter	**2nd Quarter**	**3rd Quarter**	**4th Quarter**
Site 501	**75.7**	120.6	101.7	81.7
Site 501 LRAA	**78.375**	89.925	**92.15**	94.925
Site 502	37.7	120.7	93.4	50.1
Site 502 LRAA	42.625	57.225	70.45	75.475
Site 503	27.6	120.4	82.4	48.9
Site 503 LRAA	30.6	50.25	63.5	69.825
Site 504	**67.6**	**131.2**	**115.8**	84.9
Site 504 LRAA	**67.575**	87.225	95.3	**99.075**

- **Highlighted numbers represent the average, range and highest LRAA in this table.**

Contaminant (CCR Units)	MCL	MCLG	Average	Range	Sample Date	Violation	Typical Source
TTHM (ppb)	80	N/A	89.925 (2nd Quarter at Site 501)	70.6-120.6	2022	Yes	Byproduct of Disinfection
TTHM (ppb)	80	N/A	87.225 (2nd Quarter at Site 504)	66.6-131.2	2022	Yes	Byproduct of Disinfection
TTHM (ppb)	80	N/A	92.15 (3rd Quarter at Site 501)	70.6-120.6	2022	Yes	Byproduct of Disinfection
TTHM (ppb)	80	N/A	95.3 (3rd Quarter at Site 504)	66.6-131.2	2022	Yes	Byproduct of Disinfection
TTHM (ppb)	80	N/A	94.925 (4th Quarter at Site 501)	75.7-120.6	2022	Yes	Byproduct of Disinfection
TTHM (ppb)	80	N/A	99.075 (4th Quarter at Site 504)	67.575-131.2	2022	Yes	Byproduct of Disinfection

Under Stage 2 DBP Rule, for TTHM and HAA5, systems with only one location with an exceedance, must report the highest LRAA and the range of quarterly results (for all locations) in their main detected contaminant table.

In order to reduce TTHM levels the system is taking the following measures: running drinking water through granular activated carbon (GAC) filter elements; flushing treated water more frequently in water lines with lower numbers of customers, thereby reducing opportunities for TTHMs to develop; and beginning water treatment plant improvements in 2023 – among these improvements are modifications aimed specifically to reduce or eliminate TTHMs in drinking water.

Charles M. Cumber
Director of Water Production
Thomson-McDuffie Water System