

Where does my water come from?

The Utilities Board of the City of Cullman owns and operates one treatment plant receiving water from Lake Catoma. The treatment is a conventional surface treatment process with a total capacity of 24 MGD. Cullman County purchases water from the City of Cullman. A copy of the Source Water Assessment is available at the Cullman Water Plant please call David Freeman at (256) 739-0266 to view.

How do I read this Chart?

It's easy! The column labeled MCL (mg/L) provides you with the maximum Contaminant Level as established by USEPA and or ADEM for each compound. The testing parameters are categorized as primary or secondary, with the required MCL. These are the standards all drinking water suppliers must meet.

Definitions

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 Goal or 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 contaminants.

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.

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.

90th Percentile: 90% of samples are equal to or less than the number in the chart.

NTU (or Nephelometric Turbidity Units): A measure of clarity.

HARA: Highest Annual Rolling Average; based on seven quarters of testing.

NA: Not applicable.

Su: Standard Unit.

ND: Not detectable at testing limits.

PPB (or parts per billion): micrograms per liter (ug/l).

PPM (or parts per million): milligrams per liter (mg/l).

pCi/L (or picocuries per liter): a measure of radioactivity.

FDA: Food and Drug Administration.

EPA: Environmental Protection Agency.

ADEM: Alabama Department of Environmental Management.

CDC: Center for Disease Control

Variances & Exemptions: Variances and Exemptions - The Department or EPA permission

not to meet an MCL or a treatment technique under certain conditions

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 lines and home plumbing Cullman County Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been sitting for several hours, you can minimize the potential for lead exposure by flushing you tap for 30 seconds to 2 minutes before using water for cooking or drinking. 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>.

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive or other immune system disorders, some elderly, and infants can be particularly at risk from infections. People at risk 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations. While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Based on a study conducted by the Department with the approval of the EPA a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for any of these contaminants was not required.

All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. MCL's, defined in a List of Definitions in this report, are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Table of Detected Contaminants

CONTAMINANT	MCLG	MCL	Range			City of Cullman Amount Detected		Likely Source of Contamination
YEAR		YEAR 2016						
Turbidity	0	TT				0.10	NTU	Soil runoff
Radiological		YEAR 2016						
Beta/photon emitters	0	4				ND	mrem/yr	Decay of natural and man-made deposits
Gross Beta In Liquids	0	15				ND	pci/l	Naturally occurring Radioactive elements
Radium-228 (2016)	0	5				3.4 +/-0.5	pci/l	Naturally occurring Radioactive elements
Inorganic Chemicals		YEAR 2016						
Barium	2.0	2.0	ND	-	0.0260	0.0260	ppm	Discharge of drilling wastes; discharge from metals refineries; erosion of natural deposits
Copper (2016)	1.3	AL=1.3	All 30 samples below action level. Last tested in 2016. Tested every three years.			0.060	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	0.7	4.0	0.00	-	1.08	1.08	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (2016)	0	AL=15	All 30 samples below action level. Last tested in 2016. Tested every three years.			2.00	ppb	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate	1	10	0.00	-	1.30	1.30	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Organic Chemicals		YEAR 2016						
TTHM	0	80	24.0	-	71.4	41.8	ppb	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	0	60	15.0	-	32.0	23.9	ppb	By-product of drinking water chlorination
Total Organic Carbon	0	TT	1.51	-	2.38	2.38	ppm	Naturally present in the environment
Chlorine	MRDLG=4	MRDL=4	1.50	-	3.00	3.00	ppm	Water additive used to control microbes
Non-Compliance		Microbiological (LT2ESWTR)						
Cryptosporidium	0	TT	ND	-	ND	0.00	oocysts/L	Wildlife and /or human activity
E.coli (Raw)	0	TT	0.00	-	16	16	#/100 mL	Wildlife and /or human activity
Giardia	0	TT	0.00	-	0.09	0.09	cysts/L	Wildlife and /or human activity

Table of Primary Contaminants

At high levels some primary contaminants are known to pose a health risks to humans. This table provides a quick glance of any primary contaminant detections.

CONTAMINANT	MCL	2016 AMOUNT DETECTED	CONTAMINANT	MCL	2016 AMOUNT DETECTED
Bacteriological			Endothall	100	ND
Total Coliform Bacteria	< 5%	0	Endrin	2	ND
Turbidity	TT	0.10	Epichlorohydrin	TT	ND
Radiological			Glyphosate	700	ND
Beta/photon emitters (mrem/yr)	4	ND	HAA5 (ppb)	60	23.9
Alpha emitters (pci/l)	15	ND	Heptachlor	400	ND
Gross Beta in Liquids (pci/L)	15	ND	Heptachlor epoxide	200	ND
Inorganic			Hexachlorobenzene	1	ND
Antimony (ppb)	6	ND	Hexachloropentadiene	1	ND
Arsenic (ppb)	10	ND	Lindane	200	ND
Asbestos (MFL)	7	ND	Methoxychlor	40	ND
Barium (ppm)	2	0.0260	Oxamyl [Vydate]	200	ND
Beryllium (ppb)	4	ND	PCBs	500	ND
Cadmium (ppb)	5	ND	Pentachlorophenol	1	ND
Chromium (ppb)	100	ND	Picloram	500	ND
Copper (ppm)	AL=1.3	0.060	Simazine	4	ND
Cyanide (ppb)	200	ND	Toxaphene	3	ND
Fluoride (ppm)	4	1.08	Benzene	5	ND
Lead (ppb)	AL=15	2.0	Carbon Tetrachloride	5	ND
Mercury (ppb)	2	ND	Chlorobenzene	100	ND
Nitrate (ppm)	10	1.30	Dibromochloropropane	200	ND
Nitrite (ppm)	1	ND	o-Dichlorobenzene	600	ND
Selenium (ppm)	50	ND	p-Dichlorobenzene	75	ND
Thallium	2	ND	1,2-Dichloroethane	5	ND
Organic Chemicals			1,1-Dichloroethylene	7	ND
2,4-D (ppb)	70	0.30	Cis-1,2-Dichloroethylene	70	ND
2,4,5-TP (Silvex)	50	ND	trans-1,2-Dichloroethylene	100	ND
Acrylamide	TT	ND	Dichloromethane	5	ND
Alachlor	2	ND	1,2-Dichloropropane	5	ND
Atrazine	3	ND	Ethylbenzene	700	ND
Benzo(a)pyrene [PHAs]	200	ND	Ethylene dibromide	50	ND
Carbofuran	40	ND	Styrene	100	ND
Chlordane	2	ND	Tetrachloroethylene	5	ND
Chlorite (ppm)	1	0.54	1,2,4-Trichlorobenzene	70	ND
Chlorine Dioxide (ppb)	800	249	1,1,1-Trichloroethane	200	ND
Dalapon	200	ND	1,1,2-Trichloroethane	5	ND
Di-(2-ethylhexyl) adipate	400	ND	Trichloroethylene	5	ND
Di(2-ethylhexyl)phthlates	6	1.20	TTHM (ppb)	80	41.8
Dinoseb	7	ND	Toluene	1	ND
Diquat	20	ND	Vinyl Chloride	2	ND
Dioxin[2,3,7,8-TCDD]	30	ND	Xylenes	10	ND

Unregulated Contaminants Table (2016)

CONTAMINANT	Average	Range	CONTAMINANT	Average	Range
1,1 - Dichloropropene	ND	0.00 - 0.00	Chloroform (ppb)	34.8	18.5 - 64.2
1,1,1,2-Tetrachloroethane	ND	0.00 - 0.00	Chloromethane	ND	0.000 - 0.000
1,1,2,2-Tetrachloroethane	ND	0.00 - 0.00	Dibromochloromethane	ND	0.000 - 0.000
1,1-Dichloroethane	ND	0.00 - 0.00	Dibromomethane	ND	0.000 - 0.000
1,2,3 - Trichlorobenzene	ND	0.00 - 0.00	Dicamba	ND	0.000 - 0.000
1,2,3 - Trichloropropane	ND	0.00 - 0.00	Dichlorodifluoromethane	ND	0.000 - 0.000
1,2,4 - Trimethylbenzene	ND	0.00 - 0.00	Dieldrin	ND	0.000 - 0.000
1,3 - Dichloropropane	ND	0.00 - 0.00	Hexachlorobutadiene	ND	0.000 - 0.000
1,3 - Dichloropropene	ND	0.00 - 0.00	Isoprylbenzene	ND	0.000 - 0.000
1,3,5 - Trimethylbenzene	ND	0.00 - 0.00	M-Dichlorobenzene	ND	0.000 - 0.000
2,2 - Dichloropropane	ND	0.00 - 0.00	Methomyl	ND	0.000 - 0.000
3-Hydroxycarbofuran	ND	0.00 - 0.00	MTBE	ND	0.000 - 0.000
Aldicarb	ND	0.00 - 0.00	Metolachlor	ND	0.000 - 0.000
Aldicarb Sulfone	ND	0.00 - 0.00	Metribuzin	ND	0.000 - 0.000
Aldicarb Sulfoxide	ND	0.00 - 0.00	N - Butylbenzene	ND	0.000 - 0.000
Aldrin	ND	0.00 - 0.00	Naphthalene	ND	0.000 - 0.000
Bromobenzene	ND	0.00 - 0.00	N-Propylbenzene	ND	0.000 - 0.000
Bromochloromethane	ND	0.00 - 0.00	O-Chlorotoluene	ND	0.000 - 0.000
Bromodichloromethane (ppb)	6.34	4.60 - 8.40	P-Chlorotoluene	ND	0.000 - 0.000
Bromoform	ND	0.00 - 0.00	P-Isopropyltoluene	ND	0.000 - 0.000
Bromomethane	ND	0.00 - 0.00	Propachlor	ND	0.000 - 0.000
Butachlor	ND	0.00 - 0.00	Sec - Butylbenzene	ND	0.000 - 0.000
Carbaryl	ND	0.00 - 0.00	Tert - Butylbenzene	ND	0.000 - 0.000
Chloroethane	ND	0.00 - 0.00	Trichlorfluoromethane	ND	0.000 - 0.000

Secondary Contaminant Standards			YEAR 2016
Substance	Cullman Water		MCL
Chloride	6.44	PPM	250
Sodium	2.97	PPM	Corrosivity
Sulfate	18.0	PPM	250
Total Dissolved Solids	83	PPM	500
Calcium	14.4	PPM	Corrosivity
Magnesium	1.74	PPM	Corrosivity
Aluminum	0.0124	PPM	0.2
Manganese	0.00210	PPM	0.05
Iron	ND	PPM	0.3
Nickel	ND	PPM	0.1
Carbon Dioxide	4.4	PPM	Corrosivity
Hardness	48.3	PPM	Corrosivity
Color	ND	Color Units	15
Silver	ND	PPM	0.1
Zinc	ND	PPM	5
pH	6.8	PPM	Corrosivity
Total Alkalinity	19.4	PPM	Corrosivity
Specific Conductance	129	umhos	Corrosivity
MBAS	ND	PPM	500

Add to definitions

(umhos) Numerical expression (expressed in micromhos per centimeter). The ability of a water to conduct an electric current.

Mailing Address

Cullman County Water Dept.
P.O. Box 1084
Cullman, AL 35056

Physical Address

Cullman County Water Dept.
Customer Service
2020 Beech Avenue
Cullman, AL 35055

The Cullman County Commission meets every second and fourth Tuesday, except in cases where the meeting date falls on a holiday, in which case the meeting is moved to the following day. Meetings are scheduled for 10 AM in the commission office conference room, First Floor, Cullman County Courthouse, Cullman, AL, unless otherwise specified.

Cullman County Commission

- **Kenneth Walker, Chairman**
- **Kerry Watson, Place 1**
- **Gary Marchman, Place 2**