

Cullman County Water 2020 Consumer Confidence Report



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.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and radioactive material, and it can pick up substances resulting from the presence of animals or from human activities.

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 (Environmental Protection Agency) /CDC (Center of Disease Control) 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). All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

Based on a study conducted by ADEM 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.

EPA is reviewing the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six 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 advice from your healthcare provider.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels in your home may be higher than at other homes in the community as a result of the materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

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 Water 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.

Definitions

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 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 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 that 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.

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

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

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

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

ND: Not detectable at testing limits.

FDA: Food and Drug Administration.

EPA: Environmental Protection Agency.

ADEM: Alabama Department of Environmental Management.

CDC: Center for Disease Control

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

Level 1 Assessment: A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in water in our system

Level 2 Assessment: Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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

NA: Not applicable.

Su: Standard Unit.

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

Variations & Exemptions: The Department or EPA permission not to meet an MCL or a treatment technique under certain conditions

Table of Detected Contaminants

CONTAMINANT	MCLG	MCL	Range			Cullman Water Plant Amount Detected		Likely Source of Contamination
YEAR 2020								
Turbidity	0	TT				0.10	NTU	Soil runoff
Radiological YEAR 2020								
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 (2019)	0	5				0.0926	pci/l	Naturally occurring Radioactive elements
Inorganic Chemicals YEAR 2020								
Barium	2.0	2.0	ND	-	0.0248	0.0248	ppm	Discharge of drilling wastes; discharge from metals refineries; erosion of natural deposits
Copper (2019)	1.3	AL=1.3	All 5 samples below action level. Last tested in 2019. Tested every three years.			0.265	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	0.7	4.0	0.50	-	.72	.72	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (2019)	0	AL=15	All 5 samples below action level. Last tested in 2019. Tested every three years.			ND	ppb	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate	1	10	0.00	-	0.1250	0.1250	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Organic Chemicals YEAR 2020								
TTHM	0	80	15.4	-	28.2	21.3	ppb	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	0	60	16.1	-	23.3	19.0	ppb	By-product of drinking water chlorination
Total Organic Carbon	0	TT	0.72	-	2.27	2.27	ppm	Naturally present in the environment
Chlorine	MRDLG=4	MRDL=4	1.60	-	3.00	3.00	ppm	Water additive used to control microbes

Secondary Contaminant Standards			YEAR 2020
Substance	Cullman Water		MCL
Chloride	7.16	PPM	250
Sodium	5.79	PPM	Corrosivity
Sulfate	14.2	PPM	250
Total Dissolved Solids	73	PPM	500
Calcium	13.3	PPM	Corrosivity
Magnesium	1.67	PPM	Corrosivity
Aluminum	ND	PPM	0.2
Manganese	ND	PPM	0.05
Iron	ND	PPM	0.3
Nickel	ND	PPM	0.1
Carbon Dioxide	ND	PPM	Corrosivity
Hardness	40	PPM	Corrosivity
Color	ND	Color Units	15
Silver	ND	PPM	0.1
Zinc	ND	PPM	5
pH	7.31	PPM	Corrosivity
Total Alkalinity	27.9	PPM	Corrosivity
Specific Conductance	121	umhos	Corrosivity
MBAS	ND	PPM	500

Table of Primary Contaminants

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

		2020		2020	
CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	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	19.0
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	0.0248	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	0.265	Simazine	4	ND
Cyanide (ppb)	200	ND	Toxaphene	3	ND
Fluoride (ppm)	4	0.72	Benzene	5	ND
Lead (ppb)	AL=15	ND	Carbon Tetrachloride	5	ND
Mercury (ppb)	2	ND	Chlorobenzene	100	ND
Nitrate (ppm)	10	0.125	Dibromochloropropane	200	ND
Nitrite (ppm)	1	ND	0-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	ND	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	0.61	1,2,4-Trichlorobenzene	70	ND
Chlorine Dioxide (ppm)	0.80	0.139	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)phthalates	6	1.20	TTHM (ppb)	80	21.3
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 2020

CONTAMINANT	Average	Range	CONTAMINANT	Average	Range
1,1 - Dichloropropene	ND	0.00 - 0.00	Chloroform (ppb)	17.9	112.7.8 - 23.6
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)	3.34	2.66 - 4.56	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

CULLMAN COUNTY COMMISSION:

Jeff Clemons, Chairman; Kerry Watson, Place 1; Garry Marchman, Place 2

The Cullman County Commission meets every third Tuesday night* at 6:00 pm on the first floor of the Cullman County Courthouse, Cullman, AL unless otherwise specified.

**Unless there is a preceding Monday Holiday, in which case the meeting will be held on Thursday.*

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