

# 2021 Annual Water Quality Report

Testing performed January through December 2021



PWSID # AL0000933  
 210 West Main Street  
 Albertville, AL 35950  
 256-878-3761



This publication is our commitment to keep you, our customer, informed on issues related to water service. A key component of this communication is the Annual Water Quality Report, also called the “Consumer Confidence Report”, which is required by the Safe Drinking Water Act. This report provides information concerning the source of water, treatment techniques, and testing results.

We are committed to providing a quality drinking water that meets or exceeds all state and federal drinking water standards. The United States Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems to ensure that tap water is safe to drink.

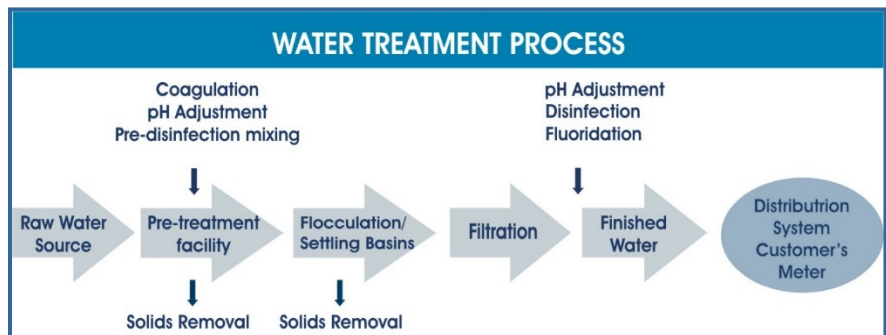
## Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was signed into law on December 16, 1974. The purpose of the law is to assure that the nation’s water supply systems serving the public meet minimum national standards for the protection of public health. The SDWA directed the U. S. Environmental Protection Agency (EPA) to establish national drinking water standards. The 1996 Amendments to the SDWA created a need for Consumer Confidence Reports (Annual Water Quality Reports) to reveal to consumers the detected amounts of contaminants in their drinking water.

<b>Water Source</b>	Surface water from the Short Creek portion of Lake Guntersville
<b>Treatment Plants</b>	One 12-MGD and one 9-MGD (million gallons/day)
<b>Other Water Systems Served</b>	Albertville, Boaz, Collinsville, Sardis, Guntersville, Asbury, and Northeast Alabama (Other systems may receive our water from one of these systems)
<b>Distribution System</b>	≈ 400 miles of water mains
<b>Number of Customers</b>	≈ 10,000
<b>General Manager/CEO</b>	Elden Chumley
<b>Water Superintendent</b>	Ronnie McCullars
<b>Storage Capacity</b>	9 tanks, total capacity of 11.6 million gallons
<b>Public Fire Hydrants</b>	≈ 700
<b>Municipal Utility Board</b>	Paul McAbee - Chairman Kasey Crochet Culbert - Board member Keith McGee - Board member
<b>Board Meetings</b>	3 <sup>rd</sup> Tuesday of each month at 9:00 a.m. at the MUB office
<b>Office Hours</b>	7:00 a.m. - 4:00 p.m., Mon. through Fri.

*If you have any questions about this report or your water utility, please call Ronnie McCullars at our office at 256-878-3761. If you want to learn more, please attend any of our regularly scheduled board meetings. They are held on the third Tuesday of the month at 9 a.m. at the office at 210 West Main Street.*

More information about contaminants to drinking water and potential health effects can be obtained by calling the EPA’s Safe Drinking Water Hotline at (1-800-426-4791).



## Source Water Assessment

In compliance with the Alabama Department of Environmental Management (ADEM), the Municipal Utilities Board of Albertville has completed a Source Water Assessment plan that will assist in protecting our water sources. This plan provides additional information such as potential sources of contamination. It includes a susceptibility analysis, which classifies potential contaminants as high, moderate, or non-susceptible to contaminating the water source. Public notification has been completed, and the plan has been approved by ADEM.

A copy of the report is available in our office for review during normal business hours, or you may purchase a copy upon request for a nominal reproduction fee. For further information regarding the Source Water Assessment, please call or come by our office.



### General Information

All drinking water, including bottled drinking 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.

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 activity. Contaminants that may be present in source water include:

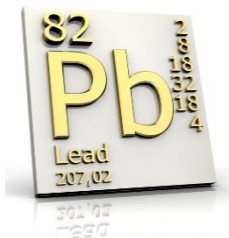
- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water run-off, industrial 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, storm water run-off, 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, urban storm water runoff, 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 which limit the levels of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water.

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. People at risk should seek advice about drinking water from their health care providers.

This water system also tests our source water for pathogens, such as *Cryptosporidium* and *Giardia*. These pathogens can enter the water from animal or human waste. For people who may be immuno-compromised, a guidance document developed jointly by the EPA and the CDC is available online at <http://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=200024LD.txt> or from the Safe Drinking Water Hotline at 800-426-4791. All test results were well within state and federal standards. *Cryptosporidium* and *Giardia* have not been detected in our finished drinking water.

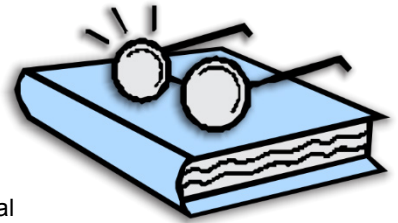
### Information about Lead



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. Your 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.

Use *only* water from the cold-water tap for drinking, cooking, and especially for making baby formula. They will probably be effective in reducing lead levels because most of the lead in household water usually comes from the plumbing in your house, not from the local water supply. 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Definitions



**Action Level:** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Coliform Absent (ca):** laboratory analysis indicates that the contaminant is not present.

**Detected contaminant:** any regulated or unregulated contaminant detected at or above its method detection limit.

**Disinfection byproducts (DBPs):** formed when disinfectants react with bromide and/or natural organic matter (i.e., decaying vegetation) present in the source water.

**Locational Running Annual Average (LRAA):** yearly average of all the DPB results at each specific sampling site in the distribution system. The LRAA and a range of detections is reported in the Table of Detected Contaminants.

**Maximum Contaminant Level (MCL):** 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:** 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):** highest level of a disinfectant allowed in drinking water

**Micrograms per liter (ug/L):** equivalent to parts per billion (ppb).

**Milligrams per liter (mg/L):** equivalent to parts per million

**Millirems per year (mrem/yr):** a measure of radiation absorbed by the body.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**90th Percentile:** The values reported for lead and copper represent the 90th percentile. The 90th percentile is equal to or greater than 90% of the lead and copper values detected at your water system.

**Not Detected (ND):** laboratory analysis indicates that the constituent is not present above detection limits of lab equipment.

**Parts per billion (ppb) or Micrograms per liter (µg/l):** corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

**Parts per quadrillion (ppq) or Picograms per liter (picograms/l):** corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000.

**Parts per trillion (ppt) or Nanograms per liter (nanograms/l):** corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

**Picocuries per liter (pCi/L):** a measure of the radioactivity in water.

**Regulated Contaminants:** contaminants for which the EPA has established drinking water standards.

**Standard Units (S.U.):** pH of water measures the water's balances of acids and bases and is affected by temperature and carbon dioxide gas. Water with less than 6.5 could be acidic, soft, and corrosive. A pH greater than 8.5 could indicate that the water is hard.

**Treatment Technique (TT):** a required process intended to reduce the level of a contaminant in drinking water.

**Unregulated Contaminant Monitoring Rule Contaminants (UCMR):** contaminants for which the EPA has not established drinking water standards

**Variances & Exemptions (V&E):** State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

## Monitoring Schedule

This report contains test results from the most recent monitoring which was performed in accordance with the regulatory schedule set forth by the EPA and ADEM. The regulations allow monitoring of some contaminants less than once per year because the concentrations of these contaminants do not change frequently.

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 these contaminants was not required.

Constituent Monitored	Date Monitored
Inorganic Contaminants	2021
Lead/Copper	2019
Microbiological Contaminants	current
Nitrates	2021
Radioactive Contaminants	2018
Synthetic Organic Contaminants (including pesticides and herbicides)	2020
Volatile Organic Contaminants	2021
Disinfection By-products	2021
Cryptosporidium	2017
Unregulated Contaminants Monitoring Rule 4 (UCMR4) Contaminants	2020

## Monitoring Results

As you can see by the tables below, our system had no violations. We have learned through our monitoring and testing that some constituents have been detected. We are pleased to report that our drinking water is safe and meets federal and state requirements.

Detected Drinking Water Contaminants							
Contaminants	Violation Y/N	Range of Detections		Unit Msmt	MCLG	MCL	Likely Source of Contamination
		12 MGD WTP	9 MGD WTP				
Chlorine	NO	1.5-2.5	1.5-2.5	ppm	MRDLG=4	MRDL=4	Water additive used to control microbes
Turbidity	NO	Highest 0.13 100% <0.5	Highest 0.12 100% <0.5	NTU	n/a	TT	Soil runoff
Total Organic Carbon	NO	0.84-1.6	0.85-1.6	ppm	n/a	TT	Soil runoff
Alpha emitters	NO	1.4	1.3	PCi/l	0	15	Erosion of natural deposits
Barium	NO	0.04	0.04	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	NO	0.120* 0 > AL		ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching of preservatives
Fluoride	NO	0.42	0.34	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer & aluminum factories
Nitrate (as Nitrogen)	NO	1.8	1.8	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHM -Total trihalomethanes	NO	LRAA Range 0.032-0.034		ppm	0	0.080	By-product of drinking water chlorination
HAA5 -Total haloacetic acids	NO	LRAA Range 0.039-0.040		ppm	0	0.060	By-product of drinking water chlorination
<b>Unregulated Contaminants</b>							
Chloroform	NO	7.9	6.9	ppb	n/a	n/a	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Bromodichloromethane	NO	1.8	1.8	ppb	n/a	n/a	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
<b>Secondary Contaminants</b>							
Chloride	NO	18.3	17.9	ppm	n/a	250	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Hardness	NO	27.6	26.8	ppm	n/a	n/a	Naturally occurring in the environment or as a result of treatment with water additives
pH	NO	7.2	7.0	S.U.	n/a	n/a	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	NO	9.7	9.2	ppm	n/a	n/a	Naturally occurring in the environment
Sulfate	NO	9.8	9.6	ppm	n/a	250	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Total Dissolved Solids	NO	77.0	109	ppm	n/a	500	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
<b>UCMR4 Contaminants</b>							
Manganese	NO	0.79-2.30	0.50-0.77	ppb	Erosion of natural deposits; leaching from pipes		
Total organic carbon (TOC)	NO	1910-3820	1850-1960	ppb	Soil runoff		
Bromide	NO	13.7-19.1	14.0-19.9	ppb	Naturally occurring in the environment or from discharge or runoff		
HAA5	NO	33.3-66.9		ppb	By-product of drinking water chlorination		
HAA6Br	NO	5.1-7.3		ppb	By-product of drinking water chlorination		
HAA9	NO	39.6-74.2		ppb	By-product of drinking water chlorination		

\*Figure shown is 90<sup>th</sup> percentile and # of sites above action level (1.3 ppm) = 0

Below is a list of *Primary Drinking Water Contaminants* and a list of *Unregulated Contaminant Monitoring Rule Contaminants (UCMR4)* for which our water system routinely monitors as required. These contaminants were *not* detected in your drinking water unless they are listed in the *Detected Drinking Water Contaminants* tables.

Primary Drinking Water Contaminants					
Contaminant	MCL	Unit of Msmt	Contaminant	MCL	Unit of Msmt
<b>Bacteriological Contaminants</b>			trans-1,2-Dichloroethylene	100	ppb
Total Coliform Bacteria	<5%	present/absent	Dichloromethane	5	ppb
Fecal Coliform and E. coli	0	present/absent	1,2-Dichloropropane	5	ppb
Fecal Indicators	0	present/absent	Di (2-ethylhexyl)adipate	400	ppb
Turbidity	TT	NTU	Di (2-ethylhexyl)phthalate	6	ppb
Cryptosporidium	TT	Calc.organisms/l	Dinoseb	7	ppb
<b>Radiological Contaminants</b>			Dioxin [2,3,7,8-TCDD]	30	ppq
Beta/photon emitters	4	mrem/yr	Diquat	20	ppb
Alpha emitters	15	pCi/l	Endothall	100	ppb
Combined radium	5	pCi/l	Endrin	2	ppb
Uranium	30	pCi/l	Epichlorohydrin	TT	TT
<b>Inorganic Chemicals</b>			Ethylbenzene	700	ppb
Antimony	6	ppb	Ethylene dibromide	50	ppt
Arsenic	10	ppb	Glyphosate	700	ppb
Asbestos	7	MFL	Heptachlor	400	ppt
Barium	2	ppm	Heptachlor epoxide	200	ppt
Beryllium	4	ppb	Hexachlorobenzene	1	ppb
Cadmium	5	ppb	Hexachlorocyclopentadiene	50	ppb
Chromium	100	ppb	Lindane	200	ppt
Copper	AL=1.3	ppm	Methoxychlor	40	ppb
Cyanide	200	ppb	Oxamyl [Vydate]	200	ppb
Fluoride	4	ppm	Polychlorinated biphenyls	0.5	ppb
Lead	AL=15	ppb	Pentachlorophenol	1	ppb
Mercury	2	ppb	Picloram	500	ppb
Nitrate	10	ppm	Simazine	4	ppb
Nitrite	1	ppm	Styrene	100	ppb
Selenium	.05	ppm	Tetrachloroethylene	5	ppb
Thallium	.002	ppm	Toluene	1	ppm
<b>Organic Contaminants</b>			Toxaphene	3	ppb
2,4-D	70	ppb	2,4,5-TP(Silvex)	50	ppb
Acrylamide	TT	TT	1,2,4-Trichlorobenzene	.07	ppm
Alachlor	2	ppb	1,1,1-Trichloroethane	200	ppb
Benzene	5	ppb	1,1,2-Trichloroethane	5	ppb
Benzo(a)pyrene [PAHs]	200	ppt	Trichloroethylene	5	ppb
Carbofuran	40	ppb	Vinyl Chloride	2	ppb
Carbon tetrachloride	5	ppb	Xylenes	10	ppm
Chlordane	2	ppb	<b>Disinfectants &amp; Disinfection Byproducts</b>		
Chlorobenzene	100	ppb	Chlorine	4	ppm
Dalapon	200	ppb	Chlorine Dioxide	800	ppb
Dibromochloropropane	200	ppt	Chloramines	4	ppm
o-Dichlorobenzene	600	ppb	Bromate	10	ppb
p-Dichlorobenzene	75	ppb	Chlorite	1	ppm
1,2-Dichloroethane	5	ppb	HAA5 [Total haloacetic acids]	60	ppb
1,1-Dichloroethylene	7	ppb	TTHM [Total trihalomethanes]	80	ppb
cis-1,2-Dichloroethylene	70	ppb			
<b>UCMR4 Contaminants</b>					
<b>Chemical Contaminants (Entry Point)</b>		<b>Cyanotoxins (Entry Point)</b>		<b>Distribution Samples</b>	
Germanium	Total permethrin (cis- & trans-)	Anatoxin-A	HAA5		
Manganese	Tribufos	Cylindrospermopsin	HAA6Br		
Alpha-hexachlorocyclohexane	1-butanol	Microcystin-LA	HAA9		
Chlorpyrifos	2-methoxyethanol	Microcystin-LF	Total organic carbon (TOC)		
Dimethipin	2-propen-1-ol	Microcystin-LR	Bromide		
Ethoprop	Butylated hydroxyanisole	Microcystin-LY			
Oxyfluorfen	O-toluidine	Microcystin-RR			
Profenofos	Quinoline	Microcystin-YR			
Tebuconazole		Nodularin			