

# Annual Water Quality Report

## January through December 2008

### MUNICIPAL UTILITIES BOARD OF ALBERTVILLE

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

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 "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.

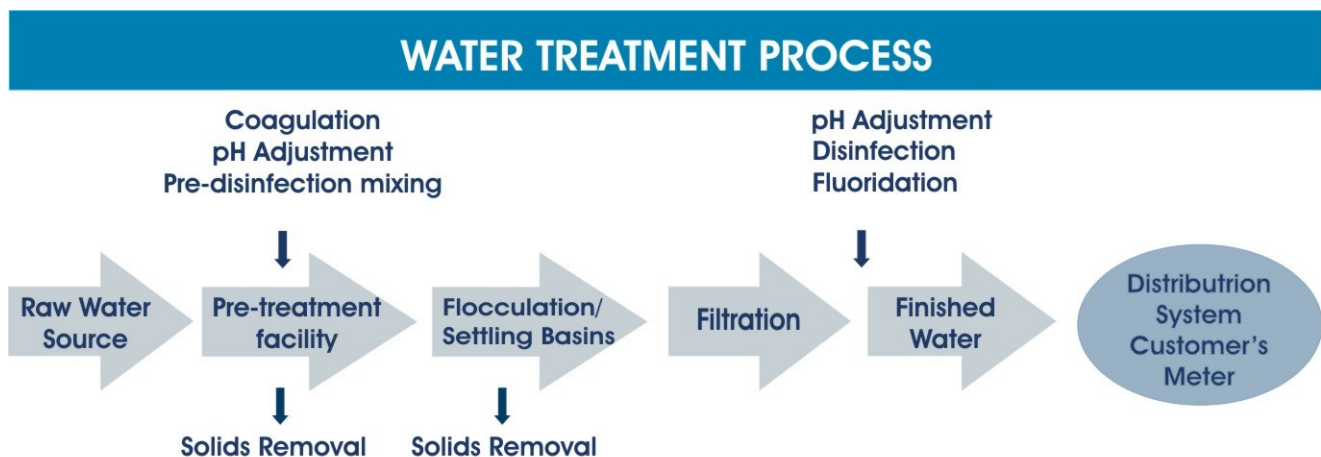
#### Safe Drinking Water Act

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.

#### 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.



## Annual Water Quality Report (cont'd)

### MUNICIPAL UTILITIES BOARD OF ALBERTVILLE



 <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>Storage Capacity:</b>	9 tanks with a total capacity of 11.6 million gallons
 <b>Distribution System:</b>	Approximately 400 miles of water mains
 <b>Number of Customers:</b>	Approximately 9800
 <b>Water Systems Served:</b>	Albertville, Boaz, Collinsville, Sardis, Guntersville, Asbury, and Northeast Water System (Other systems may receive our water from one of these systems)
 <b>Public Fire Hydrants:</b>	700
 <b>Municipal Utility Board:</b>	James E. (Jim) Gentry Paul McAbee Harold Chitwood
 <b>Board Meetings:</b>	3rd Tuesday of each month at 6:30 a.m. at the MUB office
 <b>Water Supply Board:</b>	Bill Woodham Larry Simmons Richard Cole
 <b>Board Meetings:</b>	4 <sup>th</sup> Thursday of each month at 11:30 a.m. at the MUB office
 <b>Office Hours:</b>	7:30 a.m. - 4:30 p.m., Mon. through Fri.
 <b>General Manager/CEO:</b>	Elden Chumley
 <b>Water Superintendent:</b>	Ronnie McCullars

***Our water source has proven to be a quality water source. Please help us protect it.***

## Annual Water Quality Report (cont'd)



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 amount 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 immunocompromised, a guidance document developed jointly by the Environmental Protection Agency and the Center for Disease Control is available online at [www.epa.gov/safewater/crypto.html](http://www.epa.gov/safewater/crypto.html) or from the Safe Drinking Water Hotline at 800-426-4791. This language does not indicate the presence of cryptosporidium in our drinking water. All test results were well within state and federal standards.

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.

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. 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).

## Annual Water Quality Report (cont'd)

This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule. **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. The EPA has determined that your water IS SAFE at these levels. We are pleased to report that our drinking water is safe and meets federal and state requirements.

Constituent Monitored	Date Monitored
Inorganic Contaminants	2008
Lead/Copper	2007
Microbiological Contaminants	current
Nitrates	2008
Radioactive Contaminants	2003
Synthetic Organic Contaminants (including pesticides and herbicides)	2008
Volatile Organic Contaminants	2008
Disinfection By-products	2008
Cryptosporidium	2008

TABLE OF DETECTED DRINKING WATER CONTAMINANTS						
Contaminants	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Chlorine	NO	Avg. 2.60 2.50-3.00	ppm	MRDLG=4	MRDL=4	Water additive used to control microbes
Turbidity	Not Required	Highest 0.09 100% <0.5NTU	NTU	n/a	TT	Soil runoff
Total Organic Carbon	NO	1.5-2.8	ppm			Soil runoff
Barium	NO	0.06 0.05-0.06	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper	NO	0.134* 0 > Action Level	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	NO	0.68 0.50-0.68	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	NO	2.96 2.93-2.96	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHM [Total trihalomethanes]	NO	Avg. 51.6 29.2-87.2	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	NO	Avg. 23.5 12.1-58.0	ppb	0	60	By-product of drinking water chlorination
<b>Unregulated Contaminants</b>						
Chloroform	NO	Avg. 13.9 9.75-18.1	ppb	n/a	n/a	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Bromodichloromethane	NO	Avg. 4.81 4.39-5.22	ppb	n/a	n/a	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Chlorodibromomethane	NO	Avg. 0.68 0.62-0.73	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	Avg. 12.5 12.4-12.6	ppm	n/a	250	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Hardness	NO	Avg. 48.5 46.8-50.1	ppm	n/a		Naturally occurring in the environment or as a result of treatment with water additives
pH	NO	Avg. 7.05 7.04-7.05	S.U.	n/a	n/a	Naturally occurring in the environment or as a result of treatment with water additives
Sulfate	NO	Avg. 24.0 23.7-24.3	ppm	n/a	250	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Total Dissolved Solids	NO	Avg. 104 100-108	ppm	n/a	500	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff

\*90<sup>th</sup> percentile = 0.134 ppb and # of sites above action level (1.3 ppm) = 0

## Annual Water Quality Report (cont'd)

Initial Distribution System Evaluation Feb. 2008 – Aug. 2008 (4 Qtrs)						
TTHM [Total trihalomethanes]	NO	Range 34.6-148	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	NO	Range 12.1-85.3	ppb	0	60	By-product of drinking water chlorination

### DEFINITIONS

In this report you may find terms and abbreviations with which you might not be familiar.

To help you better understand these terms we've provided the following definitions:

*Action Level* - the concentration of a contaminant that, if exceeded, triggers treatment or other requirements which a water system must follow.

*Coliform Absent (ca)* - Laboratory analysis indicates that the contaminant is not present.

*Disinfection byproducts* – are formed when disinfectants used in water treatment plants react with bromide and/or natural organic matter (i.e., decaying vegetation) present in the source water. Different disinfectants produce different types or amounts of disinfection byproducts. Disinfection byproducts for which regulations have been established include trihalomethanes (TTHM), haloacetic acids (HAA5), bromate, and chlorite.

*Initial Distribution System Evaluation (IDSE)* - a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

*Maximum Contaminant Level* - (mandatory language) The Maximum Allowed (MCL) is 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* - (mandatory language) The Goal (MCLG) is 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.

*Millirems per year (mrem/yr)* - 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.

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.

*Not Required (NR)* - laboratory analysis not required due to waiver granted by the Environmental Protection Agency for the State of Alabama.

*Parts per billion (ppb) or Micrograms per liter* - one part per billion 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)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

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

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

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

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

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).

**If you have any questions about this report or concerning your water utility, please call Ronnie McCullars at our office at (256) 878-3761.**

Below is a list of contaminants for which our water system routinely monitors. These contaminants were *not* detected in your drinking water unless they are listed in the *Table of Detected Drinking Water Contaminants*.

## Annual Water Quality Report (cont'd)

STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS					
Contaminant	MCL	Unit of Msmt	Contaminant	MCL	Unit of Msmt
<b>Bacteriological Contaminants</b>			o-Dichlorobenzene	600	ppb
Total Coliform Bacteria	<5%	present or absent	p-Dichlorobenzene	75	ppb
Fecal Coliform and E. coli	0	present or absent	1,2-Dichloroethane	5	ppb
Turbidity	TT	NTU	Nitrite	1	ppm
<b>Radiological Contaminants</b>			Total Nitrate and Nitrite	10	ppm
Beta/photon emitters	4	mrem/yr	Selenium	50	ppb
Alpha emitters	15	pCi/l	Thallium	2	ppb
Combined radium	5	pCi/l	<b>Organic Contaminants</b>		
Uranium	30	pCi/l	2,4-D	70	ppb
<b>Inorganic Chemicals</b>			2,4,5-TP(Silvex)	50	ppb
Antimony	6	ppb	Acrylamide	TT	
Arsenic	10	ppb	Alachlor	2	ppb
Asbestos	7	MFL	Benzo(a)pyrene [PAHs]	200	ppt
Barium	2	ppm	Carbofuran	40	ppb
Beryllium	4	ppb	Chlordane	2	ppb
Cadmium	5	ppb	Dalapon	200	ppb
Chromium	100	ppb	Di (2-ethylhexyl)adipate	400	ppb
Copper	AL=1.3	ppm	Di (2-ethylhexyl)phthalate	6	ppb
Cyanide	200	ppb	Dinoseb	7	ppb
Fluoride	4	ppm	Diquat	20	ppb
Lead	AL=15.0	ppb	Dioxin [2,3,7,8-TCDD]	30	Picograms/l
Mercury	2	ppb	Chloramines	4	ppm
Nitrate	10	ppm	Chlorite	1	ppm
Endothall	100	ppb	HAA5 [Total haloacetic acids]	60	ppb
Endrin	2	ppb	1,1-Dichloroethylene	7	ppb
Epichlorohydrin	TT		cis-1,2-Dichloroethylene	70	ppb
Glyphosate	700	ppb	trans-1,2-Dichloroethylene	100	ppb
Heptachlor	400	Nanograms/l	Dichloromethane	5	ppb
Heptachlor epoxide	200	Nanograms/l	1,2-Dichloropropane	5	ppb
Hexachlorobenzene	1	ppb	Ethylbenzene	700	ppb
Hexachlorocyclopentadiene	50	ppb	Ethylene dibromide	50	ppt
Lindane	200	Nanograms/l	Styrene	100	ppb
Methoxychlor	40	ppb	Tetrachloroethylene	5	ppb
Oxamyl [Vydate]	200	ppb	1,1,1-Trichloroethane	200	ppb
Oxamyl [Vydate]	200	PCBs	1,1,2-Trichloroethane	5	ppb
Pentachlorophenol	1	ppb	Trichloroethylene	5	ppb
Picloram	500	ppb	TTHM [Total trihalomethanes]	80	ppb
Simazine	4	ppb	Toluene	1	ppm
Toxaphene	3	ppb	Vinyl Chloride	2	ppb
Benzene	5	ppb	Xylenes	10	ppm
Carbon tetrachloride	5	ppb	Chlorine	4	ppm
Chlorobenzene	100	ppb	Chlorine Dioxide	800	ppb
Dibromochloropropane	200	ppt	Bromate	10	ppb
<b>UNREGULATED CONTAMINANTS</b>					
1,1 – Dichloropropene	Bromodichloromethane	Metolachlor	Dieldrin		
1,1,1,2-Tetrachloroethane	Bromofom	Metribuzin	Hexachlorobutadiene		
1,1,1,2,2-Tetrachloroethane	Bromomethane	N - Butylbenzene	Isopropylbenzene		
1,1-Dichloroethane	Butachlor	Naphthalene	M-Dichlorobenzene		
1,2,3 - Trichlorobenzene	Carbaryl	N-Propylbenzene	Methomyl		
1,2,3 - Trichloropropane	Chloroethane	O-Chlorotoluene	MTBE		
1,2,4 - Trimethylbenzene	Chloroform	P-Chlorotoluene	Metolachlor		
1,3 – Dichloropropane	Chloromethane	P-Isopropyltoluene	Metribuzin		
1,3 – Dichloropropene	Dibromochloromethane	Propachlor	N - Butylbenzene		
1,3,5 - Trimethylbenzene	Dibromomethane	Sec - Butylbenzene	Naphthalene		
2,2 – Dichloropropane	Dicamba	Tert - Butylbenzene	N-Propylbenzene		
3-Hydroxycarbofuran	Dichlorodifluoromethane	Trichlorfluoromethane	O-Chlorotoluene		
Aldicarb	Dieldrin	Chloroform	P-Chlorotoluene		
Aldicarb Sulfone	Hexachlorobutadiene	Chloromethane	P-Isopropyltoluene		
Aldicarb Sulfoxide	Isopropylbenzene	Dibromochloromethane	Propachlor		
Aldrin	M-Dichlorobenzene	Dibromomethane	Sec - Butylbenzene		
Bromobenzene	Methomyl	Dicamba	Tert - Butylbenzene		
Bromochloromethane	MTBE	Dichlorodifluoromethane	Trichlorfluoromethane		