Water Quality Report

For Period Ending December 2009



Anniston Water Works & Sewer Board

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Este informe contiene la información! Si usted no entiende este informe, pida que alguien lo traduzca usted.

The Dawn of the "Replacement Age" in Anniston

A couple of months ago the national headlines recounted that over one third of the people of Boston were temporarily out of water because a large pipeline coupling had failed. Just a few months before a large portion of a Baltimore subdivision was flooded and people had to be rescued from their cars because of a large water main break. That's just a couple of examples of a phenomenon that is occurring all across the Untied States.

Much of our water and sewer infrastructure was installed in three time frames; the late 1800's, the 1920's and just after World War II when the nation's population was growing at an unprecedented rate. That portion of our water infrastructure is now due for replacement and needs to be done generally, within the next thirty years. Some of our pipelines in Anniston are old. In fact, a ten inch pipeline installed in 1873 before Anniston was founded is still in use. All that is to say, that much of our water infrastructure is at the end of its useful life and must be replaced. If not we will face increasing incidents of service interruptions as failures occur and the costs for property damage and repairs will erode our ability to fund replacements creating what might be called a "downward spiral."

At the same time the EPA and ADEM are considering more regulations that will drive increases in the cost of treating water and waste water. It is important for you as our customer to know that the Anniston Water Works and Sewer Board like most water works across the country is a "not-for-profit" enterprise and is supported by the rates its customers pay for water and sewer services. We do not get any tax dollars.

But infrastructure replacement and meeting new regulations are both essential elements of our business and are simply unavoidable. The best we can do is to spend rate payer dollars wisely and get the best value for the money we spend. Over the past ten years the AWWSB has reduced our employee headcount by over 40% and by using the latest in technology has reduced operating expenses significantly. But under the best of circumstances funding water and sewer main replacements plus doing upgrades to our system required by regulatory agencies will be challenging and expensive.

We are meeting those challenges by being smart in how we spend rate payer dollars. Over the past five years we have tracked the lines that leak the most and each year we replace from one to three water mains that have had the most leaks in recent history. That may ultimately get the job done. The advantage is that we can self-fund the work and perform it with our construction crews without borrowing money. The worry is whether or not that will get the job done <u>fast enough</u>. That is a question yet to be answered.

Recently, there has been a good bit in the press about the Watermark Tower Project. Much like replacing our own water mains, playing a role in the redevelopment of the Ten Story building in downtown has allowed us to spread the cost of new office space out over several years minimizing any impact to the rates our customers pay. At the same time we are helping to redevelop the core business district downtown, preserve a historic landmark and clear the way for a federal courthouse when federal funds become available for that project. A healthy local economy both downtown and in all other areas we serve is essential to keeping water and sewer rates low. For more facts we invite you to visit our website at <u>www.awwsb.org</u>. Jim Miller, General Manager

Drinking water supplied to customers of the Anniston System comes from two sources. Our primary water source is the Coldwater Spring located 7 miles west of Anniston on Tom Burkhart Drive. The Alabama Department of Environmental Management classifies Coldwater Spring as groundwater under the influence of surface water. Water from the spring is treated at the Paul B. Krebs Water Treatment Plant. The statement "under the influence," in this case, refers to the uncovered spring pool, which is almost two acres in size.

Our secondary source of water is the Hillabee Creek Reservoir located 7 miles southeast of Anniston on Jennifer Lane. Hillabee Reservoir is classified as a surface water source. Water from the reservoir is treated at the Earl C. Knowlton Water Treatment Plant located just to the north of the reservoir.

The Sam H. Hamner Reservoir is located 7 miles east of Anniston near the White Plains Community. Although no water is currently taken from Hamner it is included with Coldwater Spring and Hillabee Reservoir in our Source Water Protection Plan. The current ranking of our source waters by the Alabama Department of Environmental Management is "Low Susceptibility", meaning our water sources are well protected from elements likely to cause contamination. Anniston Water Works completed an update of the plan for Hillabee Reservoir in 2007.



List of Non-Detect Contaminants (Anniston Water Works tested for the following contaminants in 2009 but none were detected.)

1,1 - Dichloropropene	Bromomethane	P-Chlorotoluene	1,2-Dichloropropane	Vinyl Chloride	Foaming Agents	N-nitroso-pyrrolidine	alachlor ESA
1,1,2,2-Tetrachloroethane	Chloroethane	P-Isopropyltoluene	Benzene	Xylenes	Silver	2,2',4,4',5,5'-hexabromobiphenyl	alachlor OA
1,1-Dichloroethane	Chloromethane	Sec - Butylbenzene	Carbon Tetrachloride	Antimony	Zinc	2,2',4,4',6-pentabromodiphenyl ether	metolachlor ESA
1,2,3 - Trichlorobenzene	Dibromomethane	Tert - Butylbenzene	Chlorobenzene	Beryllium	Bromoform	2,2',4,4',5,5'-hexabromodiphenyl ether	metolachlor DA
1,2,3 - Trichloropropane	Dichlorodifluoromethane	Trichlorfluoromethane	cis-1,2-Dichloroethylene	Cadmium	Monochloracetic Acid	2,2',4,4'-tetrabromodiphenyl ether	acetochlor
1,2,4 - Trimethylbenzene	Hexachlorobutadiene	1,1,1,2-Tetrachloroethane	Dichloromethane	Cyanide	Dibromoacetic Acid	2,2',4,4',5-pentabromodiphenyl ether	alachlor
1,3 - Dichloropropane	Isopropylbenzene	Trans 1,3 Dichloropropene	Ethylbenzene	Lead	Monobromoacetic Acid	dimethoate	metolachlor
1,3 - Dichloropropene	M-Dichlorobenzene	O-Dichlorobenzene	p-Dichlorobenzene	Mercury	N-nitroso-di-n-butylamine	terbufos sulfone	
1,3,5 - Trimethylbenzene	MTBE	1,1,1-Trichloroethane	Styrene	Nickel	N-nitroso-diethylamine	1,3-dinitrobenzene	
2,2 - Dichloropropane	N - Butylbenzene	1,1,2-Trichloroethane	Tetrachloroethylene	Nitrate	N-nitroso-dimethylamine	hexahydro-1,3,5-trinitro-1,3,5-triazine	
Bromobenzene	Naphthalene	1,1-Dichloroethylene	Toluene	Nitrite	N-nitroso-di-n-propylamine	2,4,6-trinitrotoluene	
Bromochloromethane	N-Propylbenzene	1,2,4-Trichlorobenzene	trans-1,2-Dichloroethylene	Selenium	N-nitroso-methylethylamine	acetochlor ESA	
Bromoform	O-Chlorotoluene	1,2-Dichloroethane	Trichloroethylene	Thallium	N-nitroso-methylethylamine	acetochlor DA	

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DETECTED SUBSTANCES TABLE FOR PERIOD JANUARY DECEMBER 2009							
Water Source Coldwater Spring Hillabee Reservoir							
Primary Inorganic Substances	Units	MCL	MCLG	Highest Level	Last 12 Months	Violation (Yes/No)	Source of Substance
Arsenic	ppb	50	-	0.59	<0.5	No	Runoff from orchards; natural deposits; runoff from glass and electronics production wastes
Barium	ppb	2000	2000	25	10.8	No	Discharge of drilling wastes; discharge from metals refineries; erosion of natural deposits
Chromium	ppb	100	100	5.02	1.2	No	Discharge from steel and pulp mills; erosion of natural depositis
Fluoride	ppb	4	4	0.6	0.7	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Sulfate	ppm	500		2	15.4	No	Erosion of natural deposits
Secondary Inorganic Substances	Units	MCL	MCLG	Highest Level	Last 12 Months	Violation (Yes/No)	Source of Substance
Alkalinity, Total	ppm			176	46.4	No	Erosion of natural deposits
Aluminum	ppb	200		12	112	No	Water additive for removing organics; Erosion of natural deposits
Calcium	ppm			21.5	15.4	No	Erosion of natural deposits
Carbon Dioxide	ppm			2.64	<1.0	No	Erosion of natural deposits
Chloride	ppm	[250]		3.00	5.50	No	An inorganic constituent in water affecting taste
Copper	ppb	1300	1300	38.3	1.18	No	Corrosion of household plumbing systems; Erosion of natural deposits
Hardness, Total (As CaCO ₃)	ppm			97.7	57.8	No	Erosion of natural deposits
Iron	ppb	300		15.2	9.71	No	Erosion of natural deposits
Magnesium	ppm			10.7	4.7	No	Erosion of natural deposits
Manganese	ppm	50		3.01	6.38	No	Erosion of natural deposits
pH	ppm			7.62	7.85	No	An indicator of acidity or alkalinity levels of water
Sodium	pob			1.15	1.82	No	Erosion of natural deposits
Total Dissolved Solids	ppm	[500]		125	48.8	No	Erosion of natural deposits
Disinfection By-Products (at the Plants)	Units	MCI	MCLG	Highest Level	ast 12 Months	Violation (Ves/No)	Source of Substance
Total Trihalomethanes (TTHM's)	nnh	80	0	0.7	53	No	By-product of drinking water chlorination
Haloaretic Acids (HAA5's)	nnh	60	0	<6.0	57	No	By product of drinking water chlorination
Disinfaction By Broducts (in Distribution System)	Unite	MCL	MCLG	Highost Loval	ast 12 Months	Violation (Vee/Ne)	Source of Substance
Tatal Tabalamethanes (TTHM/s)	Units	NICL 90	Involus Inigriesi Lever Lasi 12 montures Violation (Yes/No) Source of Substance		Bu product of diaking water oblaigation		
	ppu	60	0	4.2	24	No	By product of drinking water chlorination
Haloacetic Acids (HAA:s s) ppb 60 0 1.9 22 No By-product of drinking water chlorination							
Haloacetic A	Acids (HAA5)	s) are the su	m of the cond	centrations of dibromoacetic acid, dich	loroacetic acid, monobromacetic acid,	and trichloroacetic acid	MCL equal to or less than 60 ppb.
Regulated Volatile Chemicals	Units	MCL	MCLG	Highest Level	Last 12 Months	Violation (Yes/No)	Source of Substance
TCE (Trichloroethylene)	ppb	5	0	Less than 0.5	Less than 0.5	No	Discharge from metal degreasing sites and other factories
cis-1.2-Dichloroethylene	ppb	70	70	Less than 0.5	Less than 0.5	No	Discharge from industrial chemical factories
Non-Regulated Contaminants Table	Non-Regulated Contaminants Table Units MCL MCLG Highest Level Last 12 Months Violation (Yes/No Source of Substance		Source of Substance				
VTBE (Methyl tertiary-Butyl Ether) ppb Not Regulated Not Detected No Petroleum products		Petroleum products					
Total Organic Carbon	ppb	Not Re	gulated	Not Detected	1.5	No	Natural sources
Radionuclides	Units	MCL	MCLG	Water Sources: Coldwater S	Spring and Hillabee Reservoir	Violation (Yes/No	Source of Substance
Gross Alpha	pCi/l	15	0	Sampling not r	equired in 2009	No	Erosion of natural deposits
Turbidity	Units	MCL	MCLG	Highest Level Last 12 Months	Highest Level Last 12 Months	Violation (Yes/No	Source of Substance
Turbidity	NTU	0.3	NS	0.08	0.14	No	Erosion of natural deposits and soil runoff
100% of samples were below the turbidity limits							
Lead & Copper Monitoring	Units	MCL	MCLG	Distribution Sy	stem Violations	Violation (Yes/No	Source of Substance
Lead	ppb	15	0		D	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper	er ppb 1300 1300 0 No Corrosion of household plumbing systems; erosion of natural deposits			Corrosion of household plumbing systems; erosion of natural deposits			
Federal and state regulations require that 90% of the distribution samples be below the MCL. During the last 12 month period 100% of Anniston's distribution samples were below the MCL. Lead and copper are metals found in natural deposits as ores containing other elements. They are sometimes used in household plumbing materials or in water service lines used to bring water from the main to the home. Lead can cause a variety of adverse health effects when people are exposed to it at levels above the action level for relatively short periods of time. These effects may include interference							
with red blood cell chemistry, delays in normal physical and mental development in babies and young children, slight deficits in the attention span, hearing, and learning abilities of children, and slight increases in the blood pressure of some adults. Lead has the potential to cause the following effects from a lifetime exposure at levels above the action level: stroke and kidney disease; cancer.							

Copper is an essential nutrient, required by the body in very small amounts. However, EPA has found copper to potentially cause the following health effects when people are exposed to it at levels above the Action Level. Short periods of exposure can cause gastrointestinal disturbance including nausea and vomiting. Use of water that exceeds the Action Level over many years could cause liver or kidney damage. People with Wilsons disease may be more sensitive than others to the effect of copper contamination and should consult their health care provider.

State and local government agencies that can be contacted include: Anniston Water Works at 256-236-3429 can provide you with information about your facility's water supply; and the Calhoun County Health Department at 256-237-7523 can provide you with information about the health effects of lead and how you can have your child's blood tested. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at http://www.epa.gov/lead or contact your health care provider.

MICROBIOLOGICAL SUBSTANCES TABLE FOR PERIOD JANUARY DECEMBER 2009						
Water Source			Coldwater Spring	Hillabee Reservoir		
Total Coliforms	MCL	MCLG	Highest Level Last 12 Months		Violation (Yes/No)	Source of Substance
Not more than 5% of the 70 monthly bacteriological samples taken during the month can test positive for total coliform. No sample can test positive for fecal coliform or E. Coli.	<5%	0	1.40%		No	Human and animal fecal waste

Important Information to Know about Water

- Substances that may be present in source water include: Microbial contaminates, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminates, such as salts and metals, which can be naturally occurring, or as result from urban run-off, industrial or domestic wastewater discharges, oil or gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water run-off, and residential uses, organic chemical contaminates, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm run-off, and septic tanks.
- Radioactive contaminates, 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, EPA prescribes regulations which limit the amount of certain contaminates in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminates in bottled water, which must provide the same protection for public health.
- 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. Those 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). This information is being provided in addition to other information or notices that may be required by law.

Anniston Water Works Board of Directors and Management Personnel						
James Miller, General Manager	Rodney Owens, Assistant General Manager					
Jimmy O'Dell, Chairman	James Carlisle, Director					
Jerome Freeman, Vice Chairman	Betty Merriweather, Director					
William Robison, Secretary-Treasurer	Ann Welch, Director					
Thomas Burkhart, Chairman Emeritus						

The Board of Directors of the Anniston Water Works consists of four directors appointed by the City of Anniston and three directors appointed by the Calhoun County legislative delegation. The Directors serve for a period of six years with reappointments being made on a staggered basis so all of the members are not replaced during the same year. Board meetings are held on the third Thursday of each month at three o'clock in the afternoon at the Main Office located at 131 West 11th Street, Anniston, Alabama. Questions concerning meetings or requests for additional information should be directed to the General Manager and/or Assistant General Manager during normal business hours (Monday-Friday, 7:30 a.m. to 4:30 p.m.) by calling 256-236-3429.

Water Treatment Process





	Definitions/Abbreviations Used in this Report						
	AL	Action Level	The concentration of a contaminant which triggers treatment or other requirements which a water system must follow.				
	MCL	Maximum Contaminant Level	The highest level of a contaminant that is allowed in drinking water.				
	MCLG	Maximum Contaminant Level Goal	The level of a contaminant in drinking water below which there is no known or expected health risk.				
	MRDL	Maximum Residual Disinfectant Level	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.				
	MRDLG	Maximum Residual Disinfectant Level Goal	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.				
	NS	None Set	No MCL has been set.				
	NTU	Nephelametric Turbidity Units	A measure of turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.				
	pCi/L	Picocuries Per Liter	A measure of radioactivity.				
	PPM Parts per Million or milligrams per liter (mg/L) PPB Parts per Billion or micrograms per liter (mg/L)		What is a PPM? Compares to 8 hours and 45 seconds out of a millennium (1000 years).				
			What is a PPB? Compares to 31 seconds out of a millennium (1000 years).				
	SU	Standard Unit	A measure of pH or acidity.				
	Π	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.				

OUR MISSION IS:

SERVICE — by providing high quality drinking water to our customers on demand while maintaining our plants and equipment to facilitate economic growth and development.

Mission Statement

PROTECTION OF THE ENVIRONMENT AND PUBLIC HEALTH — through responsible wastewater treatment and source water protection CONTINUOUS IMPROVEMENT — of our processes and personnel to achieve the highest standards of customer satisfaction and to meet or exceed all water and wastewater quality standards.

The Alabama Department of Environmental Management (ADEM), with the approval of the United States Environmental Protection Agency (EPA), issued a statewide waiver on monitoring for asbestos and dioxin. Accordingly, Anniston Water Works was not required to monitor for these during the reporting period. Due to the exceptional quality of raw water at Coldwater Spring, the treatment technique at the Paul B. Krebs Water Treatment Plant employs a variance of the filtration rule which was granted by ADEM.

This report is being furnished to you as required by the Safe Drinking Water Act. We are proud to report that your drinking water is safe and meets all requirements of state and federal regulations.

The United States Environmental Protection Agency maintains a Safe Drinking Water Hotline, 800-426-4791, where you can obtain more information about drinking water.