



ANNUAL
WATER
QUALITY
REPORT

Water testing performed in 2008

Presented By:

THE WATER WORKS BOARD
OF THE CITY OF PRATTVILLE



PWS ID#: AL000017

Continuing Our Commitment

Once again we proudly present our annual water quality report. This edition covers all testing completed from January 1 through December 31, 2008. We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all of our water users.

For more information about this report or your water utility, please contact Bob Gray at (334) 361-0098.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may

be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

Where Does Our Water Come From?

Our water sources come from purchased water from the Five Star surface water plant and from deep wells that draw from the Tuscaloosa Aquifer, whose divisions are constituted by the Eutaw, Gordo, and Coker aquifers. Our system utilizes a Wellhead Protection Plan.

Lead and Drinking Water

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. Prattville Water Works Board 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.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

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. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, 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, urban stormwater runoff, and residential uses;

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Source Water Assessment

Our source water assessment is complete. We are pleased to report that our drinking water is safe and meets federal and state requirements. For a copy of this report, please contact Bob Gray at (334) 361-0098. Anyone wishing to view a copy of the Five Star Water District's water assessment report should contact the plant at (334) 567-1366.



Test Results

We constantly monitor for various contaminants in the water supply in order to meet all regulatory requirements. As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all federal and state requirements. We have learned through our monitoring and testing that some contaminants have been detected. The U.S. EPA has determined that your water is safe at these levels. Based on a study conducted by the Alabama Department of Environmental Management (ADEM) with the approval of the U.S. EPA, a statewide waiver for monitoring of asbestos and dioxin was issued. Thus, monitoring for these contaminants was not required.

TABLE OF PRIMARY CONTAMINANTS							
		Prattville	Five Star			Prattville	Five Star
Contaminant	MCL	Amount Detected	Amount Detected	Contaminant	MCL	Amount Detected	Amount Detected
Bacteriological				Endothall			
Total Coliform Bacteria	< 5 %	BDL	BDL	Endrin	100 ppb	BDL	BDL
Turbidity	TT	NA	0.08	Epichlorohydrin	2 ppb	BDL	BDL
Fecal coliform and E. coli	0	BDL	BDL	Glyphosate	TT	BDL	BDL
Radiological				Heptachlor			
Beta/photon emitters (mrem/yr)	4	BDL	BDL	Heptachlor epoxide	700 ppb	BDL	BDL
Alpha emitters (pCi/l)	15	0.5	2.69	Hexachlorobenzene	400 ppt	BDL	BDL
Combined radium (pCi/l)	5	BDL	BDL	Hexachlorocyclopentadiene	200 ppt	BDL	BDL
Uranium	30 pCi/L	BDL	BDL	Lindane	50 ppm	BDL	BDL
Inorganic Chemicals				Methoxychlor			
Antimony	6 ppb	BDL	BDL	Oxamyl [Vydate]	200 ppb	BDL	BDL
Arsenic	10 ppb	BDL	BDL	PCBs	500 ppt	BDL	BDL
Asbestos (MFL)	7	BDL	BDL	Pentachlorophenol	1 ppb	BDL	BDL
Barium	2 ppm	BDL	BDL	Picloram	500 ppb	BDL	BDL
Beryllium	4 ppb	BDL	BDL	Simazine	4 ppb	BDL	BDL
Cadmium	5 ppb	BDL	BDL	Toxaphene	3 ppb	BDL	BDL
Chromium	100 ppb	BDL	BDL	Benzene	5 ppb	BDL	BDL
Copper	1.3 ppm	BDL	BDL	Carbon tetrachloride	5 ppb	BDL	BDL
Cyanide	200 ppb	BDL	BDL	Chlorobenzene	100 ppb	BDL	BDL
Fluoride	4 ppm	1.6	1.15	Dibromochloropropane	200 ppt	BDL	BDL
Lead	15 ppb	BDL	BDL	o-Dichlorobenzene	600 ppb	BDL	BDL
Mercury	2 ppb	BDL	BDL	p-Dichlorobenzene	75 ppb	BDL	BDL
Nitrate	10 ppm	0.14	0.055	1,2-Dichloroethane	5 ppb	BDL	BDL
Nitrite	1 ppm	BDL	BDL	1,1-Dichloroethylene	7 ppb	BDL	BDL
Total Nitrate and Nitrite	10 ppm	BDL	BDL	cis-1,2-Dichloroethylene	70 ppb	BDL	BDL
Selenium	50 ppb	BDL	BDL	trans-1,2-Dichloroethylene	100 ppb	BDL	BDL
Thallium	2 ppb	BDL	BDL	Dichloromethane	5 ppb	BDL	BDL
Organic Chemicals				1,2-Dichloropropane			
2,4-D	70 ppb	BDL	BDL	Ethylbenzene	5 ppb	BDL	BDL
2,4,5-TP (Silvex)	50 ppb	BDL	BDL	Ethylene dibromide	700 ppb	BDL	BDL
Acrylamide	TT	BDL	BDL	Styrene	50 ppt	BDL	BDL
Alachlor	2 ppb	BDL	BDL	Tetrachloroethylene	100 ppb	BDL	BDL
Benzo(a)pyrene [PAHs]	200 ppt	BDL	BDL	1,1,1-Trichloroethane	5 ppb	BDL	BDL
Carbofuran	40 ppb	BDL	BDL	1,1,2-Trichloroethane	200 ppb	BDL	BDL
Chlordane	2 ppb	BDL	BDL	Trichloroethylene	5 ppb	BDL	BDL
Dalapon	200 ppb	BDL	BDL	TTHM	5 ppb	BDL	BDL
Di (2-ethylhexyl) adipate	400 ppb	BDL	BDL	Toluene	80 ppb	35.5	46.2
Di (2-ethylhexyl) phthalates	6 ppb	BDL	BDL	Vinyl Chloride	1	BDL	BDL
Dinoseb	7 ppb	BDL	BDL	Xylenes	2 ppb	BDL	BDL
Diquat	20 ppb	BDL	BDL	TOC	10 ppm	BDL	BDL
Dioxin [2,3,7,8-TCDD]	30 ppq	BDL	BDL	Chlorine	TT	NA	2.82
Chloramines	4 ppm	BDL	BDL	Chlorine dioxide	4 ppm	2.2	2.29
Chlorite	1 ppm	BDL	BDL	Bromate	800 ppb	BDL	BDL
HAA5	60 ppb	6.01	11.1		10 ppb	BDL	BDL

TABLE OF DETECTED CONTAMINANTS

Regulated Substances

				Prattville		Five Star		
Contaminant	Year Sampled	MCL	MCLG	Amount Detected	Range	Amount Detected	Range	Likely Sources
Turbidity ¹ (NTU)	2008	TT	NA	NA	NA	0.08	0.02-0.08	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2008	TT	NA	NA	NA	100%	NA	Soil runoff
Alpha emitters (pCi/l)	2004	15	0	0.5	ND-0.5	2.69	ND-2.69	Erosion of natural deposits
Fluoride (ppm)	2008	4	4	1.6	ND-1.6	1.15	0.82-1.15	Water additive which promotes strong teeth, erosion of natural deposits, and discharge from fertilizer and aluminum factories
Nitrate (ppm)	2008	10	10	0.14	ND-0.14	0.055	ND-0.055	Runoff from fertilizer use, leaching from septic tanks, sewage, and erosion of natural deposits
Haloacetic Acids [HAA] (ppb)	2008	60	NA	6.01	ND-6.01	11.1	6.8-17.7	By-product of drinking water disinfection
Chlorine (ppm)	2008	4	4	2.2	0.90-2.2	2.29	0.80-2.29	Water additive used to control microbes
TTHMs [Total Trihalomethanes] (ppb)	2008	80	NA	35.5	ND-35.5	46.2	38.3-58.3	By-product of drinking water chlorination
TOC [Total Organic Carbon] (ppm)	2008	TT	NA	NA	NA	2.82	1.42-2.82	Naturally present in the environment

Unregulated Substances

				Prattville		Five Star		
Contaminant	Year Sampled	Amount Detected	Range	Year Sampled	Amount Detected	Range	Likely Sources	
Bromoacetic Acid (ppb)	2008	5.45	ND-5.45	NA	NA	NA	By-product of chlorination	
Bromodichloromethane (ppb)	2008	4.08	ND-4.08	2008	8.15	4.10-11.7	By-product of chlorination	
Chloroform (ppb)	2008	0.96	ND-0.96	2008	33.88	18.5-60.3	By-product of chlorination	
Dibromochloromethane (ppb)	NA	NA	NA	2008	1.74	0.57-2.57	By-product of chlorination	
Dibromoacetic Acid (ppb)	NA	NA	NA	2008	0.27	ND-2.87	By-product of chlorination	
Dichloroacetic Acid (ppb)	2008	3.16	ND-3.16	2008	4.41	ND-11.2	By-product of chlorination	
Trichloroacetic Acid (ppb)	2008	2.85	ND-2.85	2008	4.98	0.63-10.5	By-product of chlorination	

Lead and Copper

				Prattville		Five Star		
Contaminant	Year Sampled	Amount Detected	Sites Above Action Level	Year Sampled	Amount Detected	Sites Above Action Level	Likely Sources	
Lead (ppm)	2007	BDL	0	2007	0.001	0	Corrosion of household plumbing systems and erosion of natural deposits	
Copper (ppm)	2007	BDL	0	2007	0.241	0	Corrosion of household plumbing systems, erosion of natural deposits, and leaching from wood preservatives	

Footnote: _____
¹Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

Definitions

AL (Action Level): The concentration of a contaminant which, if exceeded, 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. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (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.

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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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

