



Phenix City
Department of Public Utilities
1119 Broad Street
Phenix City, AL 36867



2013 Annual Drinking Water Quality Report

Water testing performed in 2012

2013 Annual Drinking Water Quality Report

Dear Customer,

This annual report is designed to keep you informed about the quality of water that is supplied to your home and/or business in Phenix City, Alabama. We also sell water to the Russell County Water Authority and the Fort Mitchell Water System. If you have any questions or comments about this report or concerning your water utility please contact Roger Conner, Utilities Director, at (334) 448-2880.

Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. Once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standard.

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from?

Our water source is surface water from the Chattahoochee River. Water is pumped almost continuously to the Water Filtration Plant for treatment and subsequent delivery to our approximately 14,000 taps.

How is my water treated?

We use a treatment process consisting of coagulation/flocculation, sedimentation, chlorination and filtration plus the addition of fluoride and a corrosion control agent. The water is then stored in one of our five tanks with a total capacity of 7.25 million gallons before reaching a tap. Please refer to the diagram beside the Water Quality Data Table.

How do I get involved?

If you want to learn more about this report or about our utility, please attend one of our regularly scheduled meetings. They are held at 9 a.m. on the first and third Tuesday of each month in the Council Chambers in the Public Safety Building at 1111 Broad Street, Phenix City, Alabama.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day?

Luckily small changes can make a big difference – try one today.

- Take short showers – a 5-minute shower uses four to five gallons of water compared to 50 gallons for a bath.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered, not sidewalks or driveways. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation uses water wisely. Make a family effort to reduce next month's water bill! Visit www.epa.gov/watersense for more information.

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides. They contain hazardous chemicals that can reach your drinking water source.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources.
- Dispose of chemicals properly (ie motor oil, household chemicals, paint).
- Remember that storm water drains dump directly into your local water body.

Total Trihalomethanes (TTHM) MCL Violation

Our water system recently violated a drinking water standard. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did (are doing) to correct this situation.

We routinely monitor for the presence of drinking water contaminants. Testing results from July-August 2012 show that our system exceeded the standard, or maximum contaminant level (MCL), for Trihalomethanes (TTHM). The standard for Total Trihalomethanes is 80 parts per billion (ppb). It is determined by averaging all samples collected by our system for the last 12 months. The level of TTHM averaged at our system for July-August 2012 for County Road 954 was 101.2. This exceedance only affected 57 customers at the North end of the city.

What should I do?

There is nothing you need to do. You do not need to boil your water or take other corrective actions. If a situation arises where the water is no longer safe to drink, you will be notified within 24 hours.

If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water.

What does this mean?

This is not an immediate risk. If it had been, you would have been notified immediately. MCL's are set at very stringent levels. To understand the possible health effects, a person would have to drink 2 liters of water every day at the MCL for a lifetime to have a one in a million chance of having an adverse health effect. However if you have specific health concerns, consult your doctor.

TTHMs are four volatile organic chemicals which form when disinfectants react with natural organic matter in the water.

What is being done?

The levels, as tested on February 5, 2013 by an independent testing lab, for County Road 248 was .0678 and for County Road 954 was .0687. The

test results as tested in April 2013 were .0553 for County Road 248 and .0465 for County Road 954. This reflects overall reductions from the prior report of 29% and 33% respectively and are now well below the MCL as set by the EPA. In early February the Water Filtration Plant completed a \$400,000 capital project consisting of a Chlorine Dioxide system and a new mixing system has been installed in our Glenwood water storage at a cost of approximately \$37,000.00. These will further contribute to improving our test results, keeping them below the EPA guidelines.

For more information, please contact Roger Conner, Utilities Director, at (334) 448-2880 or 1119 Broad Street, Phenix City, AL 36867.

This notice is being sent to you by Phenix City Department of Utilities. State Water System ID#0001142.

Date distributed: June 2013.

Additional Information for 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. City of Phenix City Utilities 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 <http://www.epa.gov/safewater/lead>.

Why are there contaminants in my drinking water?

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 the water poses a health risk. More information can be obtained by calling the U.S. Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791. The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

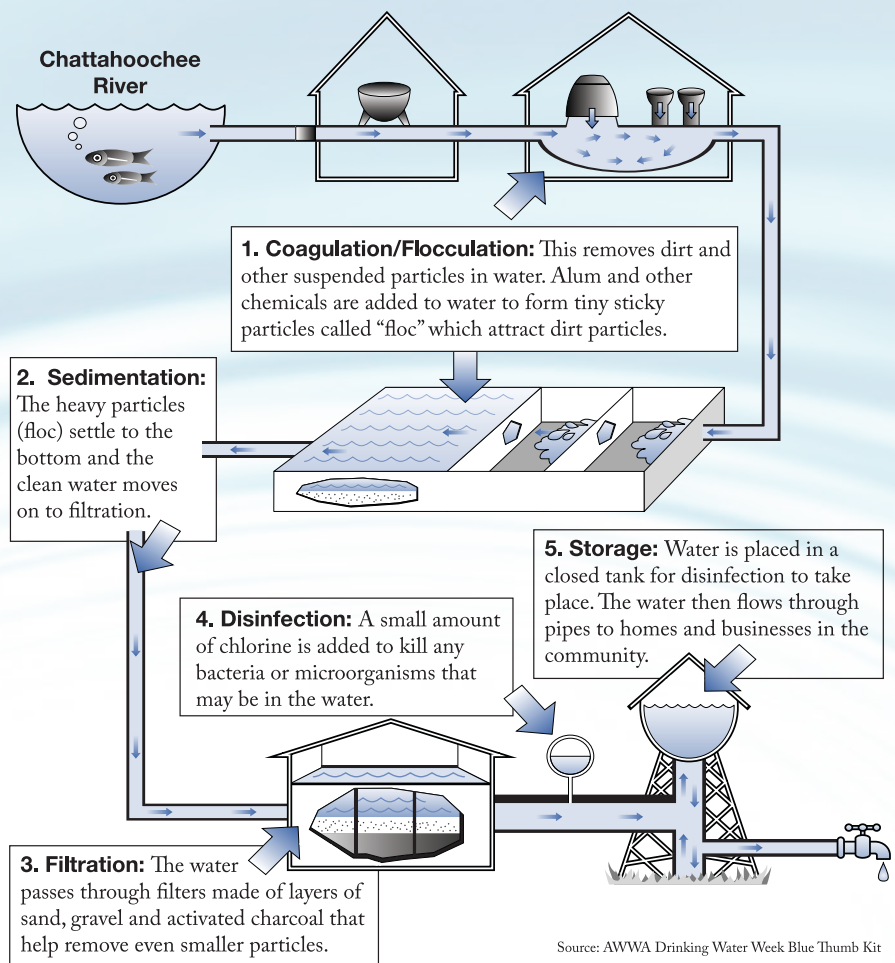
Contaminants that may be present in source water include:

- Microbial contaminants such as viruses, bacteria and protozoa, such as *Cryptosporidium*, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salt and metals that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- 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 the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contamination in water provided by public water systems.

Constituent Monitored	Phenix City
Inorganic Contaminants	2012
Lead/Copper*	2010
Microbiological Contaminants	2012
Nitrates	2012
Radioactive Contaminants*	2002
Synthetic Organic Contaminants (including pesticides and herbicides)	2012
Volatile Organic Compounds	2012
Disinfection By-products	2012

* The state allows us to monitor for 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.

Unit Descriptions

- ppm: parts per million or milligrams per liter (mg/L)
- ppb: parts per billion or micrograms per liter (µg/L)
- NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
- NA: Not applicable
- RAA: Running Annual Average. The test was run several times during the year and the RAA is the average of the quarterly averages.

Important Drinking Water Definitions

- 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.
- 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.
- TT: Treatment Technique – A required process intended to reduce the level of a contaminant in drinking water.
- 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.
- 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.
- AL: Action Level – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Water Quality Data Table

Water testing performed in 2012

The state and EPA require us to test our water on a regular basis to ensure its safety. The following table lists all of the drinking water contaminants detected during the calendar year of 2012. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. **Maximum Contaminant Levels (MCL)** are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL for a lifetime to have a one-in-a-million chance of having an adverse health effect.

Contaminants	MCLG or MRDLG	MCL, TT or MRDL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants and Disinfectant By-Products								
There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.								
Chlorine (as Cl ₂) (ppm)	4	4	2.23	1.21	2.23	2012	No	Drinking water disinfectant added for treatment
TTHMs [Total Trihalomethanes] (ppb)	NA	80	70.3 RAA	38.2	112	2012	No	By-product of drinking water disinfection
Haloacetic Acids (HAA5) (ppb)	NA	60	26.0 RAA	10.7	42.2	2012	No	By-product of drinking water chlorination
Inorganic Contaminants								
Fluoride (ppm)	4	4	3	ND	3	2012	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate [measured as nitrogen] (ppm)	10	10	0.97	NA	NA	2012	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Microbiological Contaminants								
Total Organic Carbon (% removal)	NA	TT > 15-35%	34.9%	30.4%	48.6%	2012	No	Various natural and manmade sources
* Turbidity (NTU)	NA	0.3	100%	NA	.11	2012	No	Soil runoff
* 100% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.11 NTU. Any measurement in excess of 1.0 is a violation unless otherwise approved by the state.								
Synthetic Organic Contaminants Including Pesticides and Herbicides								
2,4-D (ppb)	0.07	0.07	0.002	NA	NA	2012	No	Runoff from herbicide used on row crops
Secondary Contaminants								
Chloride (ppm)	250	250	18.6	NA	NA	2012	No	Various natural and manmade sources. Runoff from fertilizer use; Leaching from septic tanks
Total Dissolved Solids (ppm)	500	500	92	NA	NA	2012	No	Natural and manmade; Combined total of all inorganic and organic material in water
Sulfate (ppm)	250	250	17.8	NA	NA	2012	No	Erosion of natural deposits
Manganese (ppm)	0.05	0.05	0.01	0	0.03	2012	No	Erosion of natural deposits
pH	NA	6.5-8.5	8.42	NA	NA	2012	No	
Unregulated Contaminants								
Chloroform (ppb)	NA	NA	56.4 RAA	18.7	98.3	2009	No	Disinfection by-product
Bromodichloromethane (ppb)	NA	NA	8 RAA	3.99	12.8	2009	No	Disinfection by-product
Dibromochloromethane (ppb)	NA	NA	1.5 RAA	ND	2.19	2009	No	Disinfection by-product
Dichloroacetic acid (ppb)	NA	NA	14.4 RAA	5.88	26	2009	No	Disinfection by-product
Contaminant (Units)	Date Sampled	MCLG	AL	Your water (90th%)	# Sites Over AL	Violation	Likely Source of Contamination	
Tap Monitoring								
Copper at consumer tap (ppm)	2010	0	1.3	0.164	0 of 30	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservative.	