

2013 Drinking Water Quality Report

City of Greenville
(PWS ID# 0760004)

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Spanish (Español)

Este Informe contiene información muy importante sobre la calidad de su agua potable. Por favor lea este informe o comuníquese con alguien que pueda traducir la información.

Is my water safe?

Our Quality Assurance personnel collected approximately 700 individual samples from locations throughout the city during 2013. These samples were submitted to and tested by the Mississippi State Department of Health. We vigilantly safeguard our water supply but unfortunately have to report that our system violated a maximum contaminant level for disinfection byproducts. This report is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with this information because informed customers are our best allies.

Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 comes from twelve wells located throughout the city. All of these wells draw water from the Cockfield Aquifer at a depth of approximately 600 feet. All are interconnected through approximately 250 miles of large diameter distribution pipes. The distribution piping includes cast iron, ductile iron, galvanized steel, and Polyvinylchloride. We chlorinate and fluoridate the ground water prior to its injection into the distribution system at all well sites. At this time no other treatment is required under the Safe Drinking Water Act.

How much water is produced by the water system daily?

The combined total production of the water system varies with demand. The theoretical maximum production capacity is 22,320,000 gallons per day. A typical daily production is 7,500,000 gallons per day.

Why is our water brown?

The cockfield aquifer includes strata of prehistoric plant material that the water must travel through to reach our wells. These strata release tannins into the water in the form of dissolved solids. These solids are bound to the water molecules. This makes the color extremely difficult to remove.

Can the color be filtered out?

Homeowners can filter some of the color out with whole-house filters. These filters utilize activated carbon, zeolites, and/or other naturally occurring minerals. The City is investigating the feasibility of utilizing new emerging technologies to remove the color from the water.

Source water assessment and its availability:

Our source water assessment has been completed by the Mississippi State Department of Health. The report is available for review at the Office of the Public Works Director.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (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 the 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:

Microbial contaminants, such as viruses and bacteria, that 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 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 agricultural, 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 can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the results 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 contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

How can I get involved?

Our city council conducts its meetings on the first and third Tuesday of each month at 4:00 p.m. We encourage all citizens who have any questions or concerns regarding their water service or other public services that the city provides to meet with us. We ask that customers who have questions concerning their water bills or regarding disruptions in service to please first contact the City of Greenville Water Department at 378-1580. For other technical concerns as to water quality utilize the telephone numbers listed below. You may also e-mail any comments or questions to us at blanes@www.greenville.ms.us

How Does Our Water Compare to Others?

For 2013 the City of Greenville Water System scored a 4.0 out of 5.0 on its sanitary survey conducted by the Mississippi Department of Health.

Other information:

To comply with the "Regulation Governing Fluoridation of Community Water Supplies", the CITY OF GREENVILLE is required to report certain results pertaining to fluoridation of our water system. The number of months in the previous calendar year that average fluoride sample results were within optimal range of 0.7 - 1.3 ppm was 11. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.7 - 1.3 ppm was 78%. For general information about the City of Greenville, you can view our home page on the Internet at <http://www.greenville.ms.us>. Or you may want additional information about your drinking water. You may contact our certified waterworks operators listed below or you may prefer to log on to the Internet and obtain specific information about your system and its compliance history at the following address: <http://www.msdh.state.ms.us/watersupply/index.htm> information including current and past boil water notices, compliance and reporting violations, and other information pertaining to your water supply including "Why, When, and How to Boil Your Drinking Water" and "Flooding and Safe Drinking Water" may be obtained.

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 component associated with service lines and home plumbing. City of Greenville 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.

Water Quality Data Table

Contaminants	MCLG	MCL	Your	Range		Sample	Violation	Typical Source
	or	TT, or		Low	High			
	MRDLG	MRDL	Water			Date		
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)								
Haloacetic Acids (HAA5) (ppb)	NA	60	Average 13.5	12	15	2013	No	By-product of drinking water chlorination
THMs [Total Trihalomethanes] (ppb)	NA	80	Average 35.75	30.1	48.4	2013	No	By-product of drinking water disinfection
Chlorine (CL ₂) (ppm)	4.0	4.0	Average 0.40	0.17	0.60	2013	No	Chlorine is classified as a contaminant but is added to the water for disinfection purposes.
Inorganic Contaminants								
Antimony (ppb)	6	6	<0.5	NA		2013	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Arsenic (ppb)	0	10	<0.5	NA		2013	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	2	2	0.01116	NA		2013	No	Erosion of natural deposits
Cadmium (ppb)	5	5	<0.5	NA		2013	No	Corrosion of galvanized pipes, Erosion of natural deposits
Chromium (ppb)	100	100	2.713	NA		2013	No	Erosion of natural deposits
Fluoride (ppm)	4	4	0.9536	NA		2013	No	Erosion of natural deposits,
Mercury [Inorganic] (ppb)	2	2	<0.5	NA		2013	No	Erosion of natural deposits
Nitrate [measured as Nitrogen] (ppm)	10	10	0.08	NA		2013	No	Erosion of natural deposits
Nitrite [measured as Nitrogen] (ppm)	1	1	0.024	NA		2013	No	Erosion of natural deposits
Selenium (ppb)	50	50	2.6	NA		2013	No	Erosion of natural deposits

Contaminants	MCLG	AL	Your	Sample	# Samples	Exceeds	Typical Source
			Water	Date	Exceeding AL	AL	
Inorganic Contaminants							
Copper - action level at consumer taps (ppm)	1.3	1.3	0.324	2013	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppm)	0	0.015	0.001	2013	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

UNDETECTED CONTAMINANTS

The following contaminants were monitored for, but not detected, in your water.

Contaminants	MCLG	MCL	Your	Violation	Typical Source
	Or	Or	Water		
	MRDLG	MRDL			
Inorganic Contaminants					
Asbestos (MFL)	7	7	ND	No	Decay of asbestos cement water mains; Erosion of natural deposits

Unit Descriptions	
Term	Definition
Ppm	ppm: parts per million, or milligrams per liter (mg/L)
Ppb	ppb: parts per billion, or micrograms per liter (µg/L)
MFL	MFL: million fibers per liter, used to measure asbestos concentration
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

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

you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking, 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>.

Disinfection Byproducts Violation:

Test results we received showed that our system exceeded the standard, or maximum contaminant level (MCL), for trihalomethanes (THMs) in the first quarter of 2013 (01/01/2013 thru 03/31/2013). The standard or Maximum Contaminant Level (MCL) is 0.080 mg/l. That was the last violation our water system experienced. We have made adjustments in our chlorination process and system flushing to correct the problem. There is nothing you need to do. You do not need to boil your water or take other corrective actions. However if you have specific health concerns, consult your doctor. 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 provider about drinking this water. This is not an emergency. If it had been, you would have been notified immediately. However, some people who drink water containing trihalomethanes (THMs) in excess of the maximum contaminant level (MCL) over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of developing cancer. Since the violation our system has reduced the running annual average to 0.03575 mg/l or less than one-half (1/2) the maximum contaminant level.

Variations and Exemptions	Variations and Exemptions: State or EPA permission not to meet an MCL or a treatment technique level under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection 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	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.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level

For more information please contact:

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The Greenville Public Works Department maintains a presence on www.facebook.com. For up-to-date information go to www.facebook.com and search for Greenville, Mississippi Public Works Department.