

2021 CERTIFICATION
Consumer Confidence Report (CCR)

CITY OF GREENVILLE
PRINT Public Water System Name

076 0004

List PWS ID #s for all Community Water Systems included in this CCR

2022 JUN 30 PM 12:44

CCR DISTRIBUTION (Check all boxes that apply)	DATE ISSUED
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CERTIFICATION
I hereby certify that the Consumer Confidence Report (CCR) has been prepared and distributed to its customers in accordance with the appropriate distribution method(s) based on population served. Furthermore, I certify that the information contained in the report is correct and consistent with the water quality monitoring data for sampling performed and fulfills all CCR requirements of the Code of Federal Regulations (CFR) Title 40, Part 141.151 - 156.

[Signature]
Name: OPERATOR AT RECORD
Title: _____
Date: 6-29-22

SUBMISSION OPTIONS (Select one method ONLY)
You must email or mail a copy of the CCR, Certification, and associated proof of delivery method(s) to the MSDH, Bureau of Public Water Supply.
Email: water.reports@msdh.ms.gov
Mail: (U.S. Postal Service)
MSDH, Bureau of Public Water Supply
P.O. Box 1700
Jackson, MS 39215

City of Greenville
2021 Drinking Water Quality Report
City of Greenville
(PWS ID# 0760004)

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 2021. These samples were submitted to and tested by the Mississippi State Department of Health. 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 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?

Customers 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 has investigated the feasibility of utilizing a variety of technologies to remove the color from the water. The capital cost of installing treatment systems at each well range from \$2.0 - \$2.7 million per well. Plus, a yearly maintenance cost of \$100,000 per well.

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 storm-water 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 storm-water 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 storm-water 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 contact the City of Greenville Water Department please first 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 trynolds@greenvillems.org.

How Does Our Water Compare to Others?

For 2021 the City of Greenville Water System scored a **2.7 out of 5.0** on its Annual Sanitary Survey conducted by the Mississippi Department of Health.

Other information:

For general information about the City of Greenville, you can view our home page on the internet at <http://www.greenvillems.org>. 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://apps.msdh.ms.gov/DWMV/>. 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.

Water Quality Data Table

Contaminants	MCLG	MCL	Your	Range		Sample
	or	TT, or		Low	High	
Disinfectants & Disinfection By-Products	MEDLG	MIDL	Water	Low	High	Typical Source

(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)

Haloacetic Acids (HAA5) (ppb)	NA	60	Average	9.07	29.7	2021	No	By-product of drinking water chlorination
TTHMs (Total Trihalomethanes) (ppb)	NA	58	Average	23	180	2021	Yes	By-product of drinking water disinfection
	4.0	4.0	Average	0.20	0.10	2021	No	Chlorine is classified as a contaminant but is added to the water for disinfection purposes.
Chlorine (CL2) (ppm)					1.70			

Inorganic Contaminants

Antimony (ppb)	6	6	<0.005	NA		2019	No	Discharge from erosion of natural deposits; Runoff from orchards;
Arsenic (ppb)	0	10	<0.001	NA		2019	No	Runoff from glass and electronics production wastes.

Asbestos (MFL)	7	7	ND					Decay of asbestos cement water mains; Erosion of natural deposits.
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Barium (ppm)	2	2	0.0048	NA		2019	No	Erosion of natural deposits
Cadmium (ppb)	5	5	<0.005	NA		2019	No	Corrosion of galvanized pipes, Erosion of natural deposits

Chromium (ppb)	100	100	0.0005	NA		2019	No	Erosion of natural deposits
Fluoride (ppm)	4	4	0.55	0.6	1.20	2020	No	Erosion of natural deposits
Mercury (Inorganic) (ppb)	2	2	0.0005	NA		2019	No	Erosion of natural deposits
Nitrate (measured as Nitrite) (ppm)	10	10	ND			2021	No	Erosion of natural deposits
Selenium (ppb)	50	50	0.0005	NA		2019	No	Erosion of natural deposits
Radium 226 Gross Alpha, INCL Radon			0.35	ND	0.04	2019	No	Erosion of natural deposits
			3.05	ND	2.60	2019	No	Erosion of natural deposits

Copper - action level at consumer taps (ppm)	1.3	1.3	.2	2020		2019	No	Corrosion of household plumbing systems; Erosion of natural deposits
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Lead - action level at consumer taps (ppm)	0	0.01	3	2020		2019	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Volatile Organic Contaminates									
Carbon Tetrachloride 2021	No		5	0				2.16 ppb	
			Discharge from chemical plants and other industrial activities						

Unit Descriptions

Term	Definition
Ppm	ppm: parts per million, or milligrams per liter (mg/L)
Ppb	ppb: parts per billion, or micrograms per liter (ug/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.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique 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

UNREGULATED CONTAMINANTS

MRDLG MRDL Water Low High Date Violation Typical Source
Disinfectants & Disinfection By-Products
 (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.)

Total Trihalomethanes (THMs) and Haloacetic acids (HAA5). Some people who drink water containing trihalomethanes and haloacetic acids in excess of the MCL over many years may experience problems with their liver, kidney, or central nervous systems, and may have increased risk of getting cancer.

Sodium monitoring results for the year 2019 ranged from low of 150,000 ppb to a high of 430,000 ppb. Our water is 430,000 ppb.

Manganese	9.3	0.61	9.3u	2019	No	Likely source is
Bromide	1790	261	1790	2019	No	Likely source is Naturally occurring
Total Organic Carbon	1340	116	1340	2019	No	Likely source is Naturally occurring
HAA5	22.6	12.0	22.6	2019	No	Likely source is Byproduct of chlorine disinfection
HAA6Br	28.4	4	28.4	2019	No	Likely source is Byproduct of chlorine disinfection
HAA9	44.2	15.3	44.2	2019	No	Likely source is Byproduct of chlorine disinfection

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 Greenville is responsible for providing high quality drinking water but cannot control the variety of materials used in home plumbing components, primarily found in buildings constructed before 1986. 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, 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>. You can also insist that your plumber use only Lead-Free fixtures, pipes, and solder.

Information for Fluoride

To comply with the "Regulation Governing Fluoridation of Community water Supplies", CITY OF GREENVILLE is required to report certain results pertaining to fluoridation of our water system. The number of months in the calendar year in which average fluoride sample results were within the optimal range of 0.6-1.2parts per million (ppm) was 11. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.6-1.2 ppm was 82%.

Monitoring and other Data Violations

4th Quarter 2021 our system had an MCL violation for total Trihalomethanes (TTHM) under the Disinfection Byproducts Rule. People who drink water containing trihalomethanes more than the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer. We are working to minimize the formation of TTHM while ensuring we maintain an adequate level of disinfectant and increased flushing of water lines to determine if or efforts have been effective.

Unregulated contaminants

Are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.