Augusta Utilities

DRINKING WATER QUALITY REPORT

2019

English, Korean, and Spanish versions of this CCR, as well as previous years, are located at: *www.augustaga.gov/751/Consumer-Reports*

Descargar este informe en Español.

Español

한국어 다운로드

한국어

Printed Copies

To request a printed copy of the CCR, contact us at (706) 821-4237.

Water Quality Questions?

Call our water quality lab Monday-Friday from 7 A.M. to 3 P.M. at (706) 821-4237 or after hours and weekends at (706) 842-3060.

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A Message from the Director

I am pleased to present our annual Consumer Confidence Report covering the 2019 calendar year. We once again achieved total compliance with our operating permits, demonstrating the high quality of water we provide to our customers.

The Augusta Utilities Department continues to pursue a proactive capital improvements program (CIP) while transitioning to an internally financed CIP model, rather than issuing additional debt. Some of the highlights of our CIP this year are:

- Startup of a new turbine and pump at the Raw Water Pumping Station This project has provided an additional 50 million gallons/day of capacity, using renewable energy (water power). The project includes public restrooms for those enjoying the Augusta Canal.
- Work is nearing completion at the Highland Avenue Water Treatment Plant to refurbish two of the original filters and construct a permanent feed for Powdered Activated Carbon (PAC). PAC is one of the products that allows us to address water taste and odor issues caused by algae blooms that may show up in the spring in our source water.
- Construction will begin soon on a major transmission line that will serve as a redundant feed to the downtown area.

As this report is being finalized we are all dealing with the impacts of the COVID-19 virus on our community. We are very proud of our staff who have not wavered during this time in their commitment to provide a reliable source of safe drinking water to our community for consumption and sanitation. For information about what we are doing during this unusual time see our website at *https://www.augustaga.gov/2771/Utilities.*

The staff of Augusta Utilities is highly qualified and dedicated to its mission of providing outstanding water and wastewater services to Augusta's citizens and visitors. Feel free to contact me at (706) 312-4160 or *tomw@augustaga.gov* if you have any comments or questions.

Tom Wiedmeier, P.E.

Director, Augusta Utilities

Important Health Information

To ensure that tap water is safe to drink, the Georgia Environmental Protection Division (GaEPD) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminates in water provided by public water systems. The Food and Drug Administration and GaEPD regulations establish limits for contaminants in bottled water that must provide the same protection for public health. All drinking water, including bottled water, may 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 are available by calling the EPA's Safe Drinking Water Hotline (800) 426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as those with cancer undergoing chemotherapy, who have undergone organ transplants, and who have HIV/AIDS or other immune system disorders; as well as some elderly and some infants may be particularly at risk from infections. People who may be concerned about their vulnerability should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on lowering the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

SUBSTANCES FOUND IN SOURCE WATER

Drinking water (both tap and bottled water) sources 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. It 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 and bacteria, which 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.

Radioactive contaminants: which can be naturally occurring or the result of oil and gas production and mining activities.

- 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)

• Minimizing the Potential for Lead Exposure

- 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. Augusta 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*.

• Source Water Information

- Augusta-Richmond County customers are fortunate because we enjoy an abundant water supply from 2 sources. The Highland Avenue Water Treatment Plant draws water from the Savannah River. The water is pumped via the Historic Augusta Canal Pumping Station to our reservoirs, which hold about 125 million gallons of water. The Max Hicks Plant gets water from the Savannah River as well, and provides 15 million gallons of water to our customers in South Richmond County. Our second water source comes from wells pulling water from the Crutaceous Aquifer hundreds of feet below ground in South Augusta. Combined, our treatment facilities provide about 15.5 billion gallons of drinking water every year.

Source Water Assessment

The Federal Safe Drinking Water Act was amended in 1996 and required states to develop and implement source water assessment programs to analyze existing and potential threats to the quality of public drinking water throughout the state. Parsons Engineering Science, Inc. was contracted by Augusta Utilities Department to assess susceptibility of the source water intake in 2001.

The susceptibility matrix showed more than half of the potential pollutant sources in the study area are ranked low priority. Based on the potential pollutant source rankings developed according to the EPA guidelines and engineering principles, the overall susceptibility of the intake was determined to be low. In addition, the water quality samples collected as part of the information collection rule (ICR) indicated the source water is free of biological contaminants. This ranking means that according to protocol set by the EPA, the intake has an overall low susceptibility to the sources of pollution documented. Considering potential for contamination by various pollutant sources, this is the most favorable ranking that the intake can receive.

GaEPD required Augusta Utilities to start sending source water samples to them for cryptosporidium testing, which started in January of 2012 and ended in September of 2013. During the 21 month monitoring period, we are happy to announce that there were no cryptosporidium found in our source waters coming from the Augusta Canal and the Savannah River. If you are interested in examining the results, please contact the Water Quality Manager by calling (706) 828-7107.

WATER QUALITY CONCERNS?

Please call our water quality lab at (706) 821-4237 between the hours of 7 A.M. and 3 P.M. Monday through Friday, or call dispatch after hours and weekends at (706) 842-3060 if you are experiencing any water quality problems. We are here to help.

Bring Down Your Bill by Stopping Leaks

Unseen or unfixed, leaks can drip hundreds, even thousands, of gallons of water wastefully down the drain. A little detective work several times a year can catch these water thieves in the act and put them out of circulation. This detective work can also result in money in your pocket. A small (0.5 gallons per minute) leak can result in additional water and sewer costs of $240 per month.

Faucets: Most leaks result from worn washers in household faucets and showerheads. These faucets, as well as seldom used taps in the basement or storage rooms, should be checked periodically. Worn washers or "O" rings usually cause faucet leaks. Repairing faucet leaks is easy: turn off the supply line to the faucet, replace the washer, and turn on the line again.

Toilets: The toilet is one of the most common water wasters. To determine if your toilet is leaking, look at the toilet bowl after the tank has stopped filling. If water is still running into the bowl, or if water can be heard running, your toilet is leaking.

Most toilet leaks occur at the overflow pipe or at the plunger ball inside the tank. To locate a toilet leak, remove the tank lid and flush. The water level should come up to about half an inch or so below the overflow pipe. Adjust the float level control screw, if necessary, so the valve shuts off the water at that level. If the valve itself is leaking, you may need a plumber to fix it.

Although water may not be seen or heard running, your toilet may have a silent leak. To test for a silent leak, drop a small amount of food coloring into the tank. DO NOT FLUSH! Wait for about five minutes. If the food coloring appears in your toilet bowl, your toilet has a silent leak. It is probably located around or in the plunger ball or flapper valve at the bottom of the tank. These leaks are also easy to fix with parts from your hardware store.

Outside Taps and Irrigation Systems: Check the outside taps for leaking water, particularly during the summer sprinkler season. A hose mistakenly left dribbling away in the grass or garden can waste thousands of gallons of water over the course of a summer. Remember to close outside faucets tightly every time you shut off the water.

Automatic sprinkler systems require special consideration. Adjust the sprinkler heads so that water is directed to areas that require watering. Grass cannot grow on driveways! Also know how to override timers so sprinklers don't run during a rainstorm or for several days thereafter. A healthy lawn can withstand several weeks of less than normal rainfall. You can also check your water meter to see if water is entering the irrigation system when it shouldn't. Small leaks in the underground system can result in many gallons of wasted water.

Water Conservation Tips

Water conservation measures are an important first step in protecting our water supply. These tips really help to conserve our water supply source; and save you money by reducing your water bill. Here are a few suggestions:

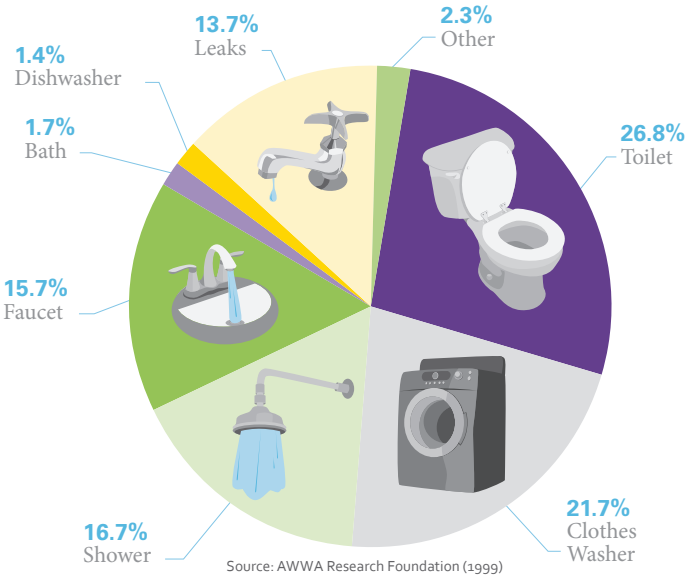
INDOOR CONSERVATION TIPS:

- Fix leaky faucets, pipes, toilets, etc.
- Replace old fixtures with water saving devices
- Wash full loads of laundry
- Throw trash in the can, not the toilet
- Take shorter showers
- Turn off the faucet while brushing teeth

OUTDOOR CONSERVATION TIPS:

- Use mulch around drought-tolerant plants and shrubs
- Repair leaks in faucets, hoses, and sprinklers
- Install a rain sensor if you have an in-ground irrigation system
- Connect to reclaimed water for irrigation

PERCENTAGES OF TYPICAL WATER USE



Augusta Water Conservation Plan

Citizens in Georgia can now water any day of the week regardless of your address between the hours of 4 P.M. and 10 A.M. There is NO watering between 10 A.M. and 4 P.M. These new time limitations are ONLY for landscape irrigation use.

The odd/even schedule remains in place for all other outdoor uses such as power washing and car washing. Even-numbered addresses (those ending in 0,2,4,6, and 8) may use water outdoors on Tuesdays, Thursdays, and Saturdays. Odd-numbered addresses (those ending in 1,3,5,7, and 9) may use water outdoors on Wednesdays, Fridays, and Sundays.

There are no restrictions on drip irrigation, irrigation with soaker hoses, hand watering, and the watering of personal food gardens.

Definitions

AL (Action Level): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that 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.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of drinking water disinfectant below which there is no known or expected health risk. Does not reflect the benefits of the use of disinfectants to control microbial contaminants.

MRDL (Maximum Residual Disinfectant Level): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRL(Maximum Reporting Levels): A number, if exceeded must be reported so EPA can get enough data to regulate a contaminate, if needed.

N/A: Not Applicable.

N/D: Not Detected and indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Unit): Measure of the clarity of water. Turbidity in excess of five NTU is just noticeable to the average person. *Turbidity has no health effects, but can interfere with disinfection and provide a medium for microbial growth.

pCi/L (picocurie per liter): Measure of the radioactivity in water.

ppb (parts per billion) **or µg/L** (micrograms per liter): One part by weight of analyte to one billion parts by weight of the water sample.

ppm (parts per million) **or mg/L** (milligrams per liter): One part by weight of analyte to one million parts byweightweight of the water sample.

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

2019 Water Testing Results

				GROUNDWATER PLANTS AMOUNT		HIGHLAND PLANT AMOUNT		HICKS PLANT AMOUNT			
SUBSTANCE	UNITS	MCL	MCLG	LOW	HIGH	LOW	HIGH	LOW	HIGH	VIOLATION	SOURCE
Fluoride	ppm	4	4	0.66	0.82	0.66	0.76	0.68	0.82	no	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Chlorine	ppm	MRDL 4	MRDLG 4	1.72	1.84	1.35	1.80	1.71	1.82	no	Water additives used to control microbes
Nitrates	ppm	10	10	N/D	1.9	N/D	0.22	N/D	N/D	no	Runoff from fertilizer; leaching from septic tanks; sewage; erosion of natural deposits
Total Organic Carbon	ppm	TT	N/A	N/D	N/D	0.98	1.3	0.9	1.5	no	Naturally present in the environment
Total Trihalomethanes	ppb	80		30	40	20	70	20	40	no	By-product of drinking water disinfection
Total Haloacetic Acids	ppb	60	N/A	30	40	20	50	20	50	no	By-product of drinking water disinfection
Turbidity* See definition for NTU	NTU	TT		N/A	N/A	0.07	0.09	0.04	0.05	no	Soil runoff
Total Coliform	per 100 mLs	> 5%	0	0	0	0	0	0	0	no	Commonly present in the environment; human and animal waste

2019 Tap Water Samples*

SUBSTANCE	UNITS	ACTION LEVEL	MCLG	AMOUNT DETECTED (90TH PERCENTILE)	HOMES ABOVE ACTION LEVEL	VIOLATION	SOURCE
Copper	ppb	1,300	1,300	160	0	No	Corrosion of household plumbing systems; erosion of natural deposits leaching from wood preservatives
Lead	ppb	15	0	1.6	0	No	Corrosion of household plumbing systems; erosion of natural deposits leaching from wood preservatives

*Collected for lead and copper analysis from 50 homes throughout the service area. Done once every 3 years.

2007-2008 Initial Distribution System Evaluation (IDSE)

We conducted IDSE monitoring in 2007-2008, and the results of the analysis appear in the table below. This evaluation and sampling was required by the EPA to determine the range of total trihalomethanes and haloacetic acids in the system for future regulations. The samples are not used for compliance, and may have been collected under non-standard conditions. The EPA requires that the data be reported. Please contact the Water Quality Manager at (706) 821-4237 with questions.

CONTAMINANT	UNITS	AVERAGE LEVEL	MINIMUM LEVEL	MAXIMUM LEVEL
Total Haloacetic Acids	ppb	34	N/D	78
Total Trihalomethanes	ppb	22	N/D	51

2016 Radiological Testing*

SUBSTANCE	UNITS	ACTION LEVEL	MCLG	RESULT	VIOLATION	SOURCE
Alpha Emitters	pCi/L	15	0	<2	No	Erosion of natural deposits of certain radioactive materials
Radium 226 & 228	pCi/L	5	0	<2	No	Decay of natural manmade deposits of certain radioactive materials

*Radiological monitoring is done every 9 years.

2013 UCMR Testing

EPA mandated that large water systems begin their Unregulated Contaminant Monitoring Regulation or UCMR testing in February of 2013. There is a vast range of contaminants that may be in water, but as of yet are not regulated by federal or state environmental agencies. This is the third time our water has been tested for these contaminates. UCMR sampling was last conducted by Augusta Utilities department during 2008, results of which were non-detects. Some contaminants were found in our water in the 2013 round of UCMR testing. These were found only at some sites and not every contaminate was found at all sites. The purpose of monitoring these contaminants is to help EPA decide whether some contaminants should have a limit.

The next round of UCMR testing will be in 2020. If you are interested in examining some results, please contact the Water Quality Manager at (706) 821-4237.

ANALYTE IN PPB (PARTS PER BILLION)	LOWEST	HIGHEST	AVERAGE	MRL
Chlorate	47.0	310.0	107.0	20.0
Chromium	0.21	2.4	0.95	0.2
Hexavalent Chromium (dissolved)	0.039	0.15	0.083	0.03
Molybdenum	1.0	5.0	2.1	1.0
Strontium	11.0	230.0	49.0	0.3
Vanadium	0.2	2.9	0.6	0.2

Common Tests

When someone calls and complains about the quality of the water they receive in their home or business, one of the first things the lab technician does is run tests on the water.

Here is a list of tests that are run on the samples. Some are run on-site, and others need to be brought back to the lab for analysis.

ON-SITE TESTS

Chlorine residual: the level of chlorine in the water is checked first. Chlorine is put into the water at the treatment plant, and must be at a high enough level so that there is at least a 0.2 ppm (parts per million) residual at the very end of our distribution system. If there is very low water usage in the house or even in the neighborhood, the chlorine residual will be very low. This is remedied by flushing the main, forcing fresh water into the lines.

pH: the water sample will be checked to see if it is neutral, or around a 7.0 pH. The water leaving the treatment plant is kept between 6.8 and 7.3 pH range.

If the pH of the water at your residence or business is lower (acidic) or higher (basic) than our range, there may be mineral buildup in your household lines.

Fluoride: the water leaving the plant has a fluoride level of around 0.7-1.0 ppm. The GaEPD mandates that we put fluoride in our water. This test comes in handy when we have to see if water coming up through the ground is treated water or groundwater. We do this test for general data, and it doesn't have any impact on water quality issues.

Phosphorus: the water leaving the plant is dosed with a very small amount of polyphosphates to inhibit corrosion in your household plumbing. If you live in a house that may have lead solder or copper pipes, this added chemical helps to keep these metals from leaching into your drinking water (For more information on lead and copper in older homes, visit *https://www.epa.gov/lead*)

LAB TESTS

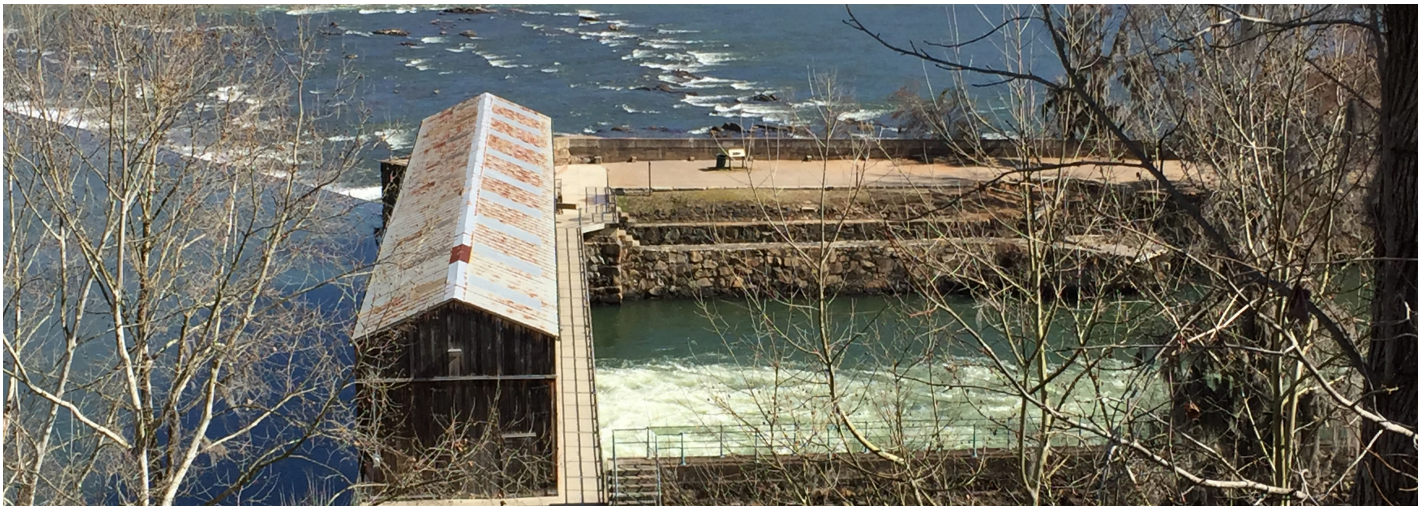
Iron (Fe): this test is run to see if you have a higher than normal iron content in your water that may promote discoloration or staining around faucets and such. The water leaving the plant has a very low iron content since it is basically surface water, but it meets a lot of iron on its way through the distribution system. You see higher iron readings in houses where there is very old plumbing and very low water usage. Iron and manganese levels may also increase during times in the spring and fall when the reservoir experiences "turnover."

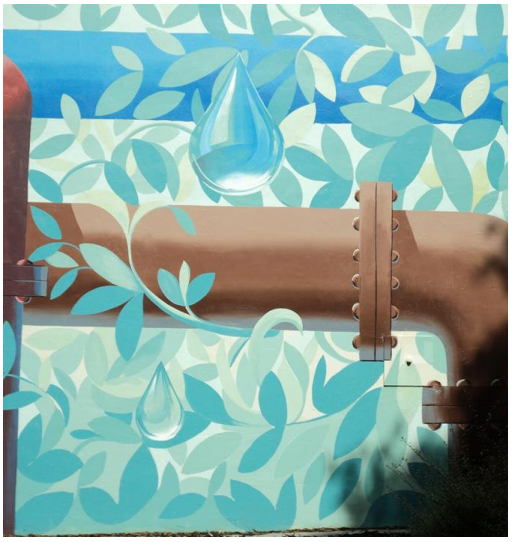
Manganese (Mn): iron and manganese are the twin nuisance metals of the drinking water world. Usually, when you have problems with one, you have problems with the other at the same time. Together, they can stain bathroom and kitchen fixtures as well as stain clothing. Our lab technicians can provide you with a stain removing product for your laundry.

Bacteriological tests: many times the lab may run a bacteriological test on your water to make sure there is no bacteria in the water or in your lines. Chlorine is put in the water at the plant to disinfect the water as well as the water mains and all the lines throughout the distribution system. The lab technicians also collect 120 samples per month from locations all over the county and run microbiological testing on the samples to make sure all the water meets state and federal standards.

If you want testing performed on your water just call (706) 821-4237 and speak with one of our lab technicians. They can set up an appointment Monday through Thursday, between the hours of 7 A.M. and 3 P.M. to come out to your house or business and have your water checked.

After hours, call dispatch at (706) 842-3060 to contact an on-call lab technician to check the water.





Awards

During 2019, the Highland Plant, the Max Hicks Plant and Groundwater Plants again won Georgia Association of Water Professionals (GAWP) Gold Awards for operating the entire year without a single regulatory violation. This is just another example of how our entire team works hard to provide you, our customers, with safe quality drinking water.

Useful Links

Augusta Utilities Resources

Augusta Georgia Official website:
www.augustaga.gov/699/utilities

Previous CCRs can be found at:
www.augustaga.gov/751/Consumer-Reports

Water Use, Conservation, and Education

Water Wiser website:
www.awwa.org/resources-tools/water-knowledge/water-conservation.aspx

Water Environment Federation: *www.wef.org*

Environmental Protection Agency (EPA): *www.epa.gov*

Georgia Environmental Protection Division (GaEPD): *www.gaepd.org*

Test results for water systems in Georgia:
www.gadrinkingwater.net

Water and Health Concerns

Centers for Disease Control and Prevention (CDC): *www.cdc.gov*

Augusta Utilities Contact

EMERGENCY CONTACT 24 HOURS
(706) 842-3060

CUSTOMER SERVICE
(706) 842-3050
Contact Customer Service to activate a new account, to obtain a new connection, or for billing questions.

AUGUSTA 311
Dial 311 to report issues regarding any service provided by the Augusta-Richmond County local government.

ADMINISTRATION & ENGINEERING OFFICE
452 Walker St., Suite 200
Augusta, GA 30901
(706) 312-4154
For additional assistance, contact the administration & engineering office.

MISSION STATEMENT

The mission of Augusta Utilities is to provide quality water and wastewater service in a highly efficient and environmentally-focused manner. We will accomplish this mission with the understanding that our fundamental purpose is to serve the Citizens of Augusta.