

## JACKSON COUNTY UTILITY AUTHORITY

Serving the People...Protecting the Environment

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# 2018 Consumer Confidence Report JCUA East Regional System 0300166

Spanish (Español)

Este reporte contiene información importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

#### Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with 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. 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?

Your water distribution system is supplied by multiple sources. Our groundwater supply wells are located in several areas and are typically the supply source for our customers north of Whispering Pines Golf Course. Whispering Pines Golf Course, and all connections to the south (including Helena Utility District Customers) are typically receiving surface water treated by our East Jackson County Potable Water Supply Facility. All groundwater wells withdraw water from the Miocene Aquifer System of the Pascagoula Formation and all surface water is withdrawn from the Pascagoula River.

#### Source water assessment and its availability

Your water system receives an annual inspection to evaluate technical, managerial, and financial operational performance by the Mississippi State Department of Health and other state and federal agencies. The annual inspection for 2018 was conducted on January 10, 2018 and the system was found to be in full compliance and received a perfect rating of 5.0.

#### 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 (EPA) Safe Drinking Water Hotline (800-426-4791). 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, 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 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 can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be 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 contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

#### How can I get involved?

As a reminder, the Jackson County Utility Authority is governed by the Board of Directors which convenes open meetings on the second and fourth Mondays of each month beginning at 4:00 PM at our Administration Building Conference Room located at 1225 Jackson Avenue, Pascagoula, MS 39567. Additionally, we periodically schedule water, wastewater, laboratory, agricultural, and wildlife activities throughout the year and upon request. Weekly conservation activities are scheduled by the local chapter of the Audubon Society at our 1,500 acre land treatment facility. Our customer service number is (228) 266-2225. Visit our web page at www.jcua-ms.us.

#### **Description of Water Treatment Process**

Your water is treated in a "treatment train" (a series of processes applied in a sequence) that includes coagulation, flocculation, sedimentation, filtration, and disinfection. Coagulation removes dirt and other particles suspended in the source water by adding chemicals (coagulants) to form tiny sticky particles called "floc," which attract the dirt particles. Flocculation (the formation of larger flocs from smaller flocs) is achieved using gentle, constant mixing. The heavy particles settle naturally out of the water in a sedimentation basin. The clear water then moves to the filtration process where the water passes through sand, gravel, charcoal or other filters that remove even smaller particles. A small amount of chlorine or other disinfection method is used to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water before water is stored and distributed to homes and businesses in the community.

#### **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, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. 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 that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit <u>www.epa.gov/watersense</u> for more information.

#### **Cross Connection Control Survey**

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and insuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

#### **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.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a
  message next to the street drain reminding people "Dump No Waste Drains to River" or "Protect
  Your Water." Produce and distribute a flyer for households to remind residents that storm drains
  dump directly into your local water body.

#### Results of Cryptosporidium and Giardia Monitoring

We constantly monitor the water supply for various constituents. We have detected cryptosporidium in the Jackson County Utility Authority - East (PWSID MS0300166) source water. We have detected this constituent in 2 out of 14 samples taken. Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring of the source water indicates the presence of these organisms. Current test methods do not allow us to determine if the organisms are dead or alive. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people (such as those with AIDS, undergoing chemotherapy or recent organ transplants) are at greater risk of developing a severe, life-threatening illness. Immuno-compromised individuals should consult their doctor regarding appropriate precautions to take to prevent infection. Cryptosporidium must be taken in through the mouth to cause disease, and it may be passed by other than drinking water.

We constantly monitor the water supply for various constituents. We have detected Giardia in the Jackson County Utility Authority - East (PWSID MS0300166) source water. We have detected this constituent in 3 out of 14 samples taken. Giardia is a microbial pathogen found in surface water throughout the U.S. Although Giardia can be removed by filtration, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring of source water indicates the presence of these organisms. Current test methods do not allow us to determine if the organisms are dead or alive. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people (such as those with AIDS, undergoing chemotherapy or recent organ transplants) are at greater risk of developing a severe, life-threatening illness. Immuno-compromised persons consult their doctor to learn about appropriate precautions to take to prevent infection. Giardia must be taken in through the mouth to cause disease and it may be passed by other than drinking water.

The Jackson County Utility Authority - East Regional Water Supply System uses multiple sources for supply that include both groundwater and surface water. The source water testing that detected Cryptosporidium and Giardia was only conducted on the surface water supply which is withdrawn from the Pascagoula River.

The Jackson County Utility Authority - East Regional Water Supply System (PWSID MS0300166) uses the advanced "UF" (ultra-filtration) as part of our treatment process to provide additional removal of source water contaminates as well as disinfection and constant monitoring of our finished water supply to our customers.

Your water system is classified as a Class "A" water system. This means the source for some, or all, of this system is from surface water. All surface water is treated at our drinking water filtration plant. Additionally, your water system has groundwater supply wells. The Jackson County Utility Authority is constantly monitoring your water sources and distribution system for optimal efficiency. Should you desire to learn more about our system please contact our administration office for referral to water supply for any questions or to arrange for a visit to our facilities.

#### **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. JCUA - East System 0300166 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.

#### **Water Quality Data Table**

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

			Detect	Rai	nge			
G4	or	MCL, TT, or	In Your	T	TT! - 1.	Sample		T
	MRDLG			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)								
Chlorine (as Cl2) (ppm)	4	4	1	.46	1.89	2018	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	32	NA	NA	2018	No	By-product of drinking water chlorination

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				Detect	Rai	nge			
Contaminants	MCL or MRDI	T	MCL, T, or IRDL	In Your Water	Low	High	Sample Date	Violation	Typical Source
TTHMs [Total Trihalomethanes] (ppb)	NA		80	4.43	NA	NA	2018	No	By-product of drinking water disinfection
Inorganic Contamina	ants								
Barium (ppm)	2		2	.0013	.0014	.039	2018	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	100		100	4.4	NA	4.4	2017	No	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	4		4	.472	NA	.472	2017	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Contaminants		ICLG	G AL	Your Water	Sample Date	Exce	mples eeding AL	Exceeds AL	Typical Source
Inorganic Contamina	ants			T					
Copper - action level at consumer taps (ppm)		1.3	1.3	.5	2016		0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Inorganic Contamina	ants								
Lead - action level at consumer taps (ppb)		0	15	4	2016		0	No	Corrosion of household plumbing systems; 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)					
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				

## For more information please contact:

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