CITY OF CORINTH GAS AND WATER DEPARTMENT

2019 WATER QUALITY REPORT

CLIFFORD G. WORSHAM WATER TREATMENT FACILITY

PLACED SECOND IN THE STATE FOR BEST TASTING WATER AT THE MsRWA ANNUAL CONFERENCE IN MARCH 2019
From left to right Plant Operator Jacob Crum, Chief Operator Ken Briggs, Plant Operator Joe Price, Plant Manager David Bass
Plant operator Jimmy Rogers, Plant Operator Brett Benjamin, and Plant Operator / Maintenance Clay Young.

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. Corinth Gas and Water 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 the 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 http://www.epa.gov/safe water/lead. The Mississippi State Department of Health Public Laboratory offers lead testing Please call 601-576-7518 if you wish to have your water tested.

FLUORDIDATION COMPLIANCE

To comply with the "Regulation Governing Fluoridation of Community Water Supply", MS0020002 is required to report certain results to fluoridation of our water system. The number of months in the previous calendar year in which average fluoride sample results were within in the optimal range of 0.6-1.2 ppm was 11. The percentage of fluoride samples collected the previous calendar year that was within the optimal range of 0.6-1.3 ppm was 92%.

DO YOU WANT MORE INFORMATION?

If you are interested in learning more about the Corinth Gas and Water Department, or if you have any questions concerning water quality, our office is located at 305 West Waldron Street. Our office hours are from 8:00 AM to 5:00 PM, Monday through Friday. You can also call our office (662) 286-2263 or treatment plant (662) 396-2250.. Our contact person is David Bass or Ken Briggs. The City of Corinth Public Utility Commission meets at 7:00 PM on the second Monday of each month at the address above. Board meetings are open to the public.

CONTINUING OUR COMMITMENT

Mission Statement

"To assure the availability of a consistently adequate supply of natural gas and water while providing for the highest quality service possible at a reasonable cost to our customers consistent with good management and sound business practices."

All the information in this Annual Water Quality Report has been prepared in accordance with the standards established by the Environmental Protection Agency (EPA) and includes details about where your water comes from, what it contains and how it compares to standards set by the regulatory agencies.

CALL BEFORE YOU DIG

YOU CAN SUBMIT A REQUEST ONLINE @ WWW.MS1CALL.ORG

OR

YOU CAN CALL 811 TO SUBMIT A REQUEST

TREATED WATER QUALITY SUMMARY

The table below lists all of the drinking water contaminants that we detected during the 2018 calendar year. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Except as indicated, 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 change frequently.

INORGANIC CONTAMINANTS

CONTAMINANT	MCL	MCLG	DETECTED	RANGE DETECTED	DATE	TYPICAL SOURCE
ARSENIC	.010 ppm	.010 ppm	0.0008 ppm		2018	Erosion of natural deposits
BARIUM	2 ppm	2 ppm		.0311-.032 ppm	2018	Erosion of natural deposits
CHROMIUM	0.1 ppm	0.1 ppm		.0012-.0016 ppm	2018	Erosion of natural deposits
FLUORIDE	4 mg/l	4 mg/l		.855-.879 ppm	2018	Erosion of natural deposits
NITRATE	10 mg/l	10 mg/l	.02 mg/l		2018	Runoff from fertilizer use or erosion of natural deposits
NITRATE / NITRITE	10 mg/l	10 mg/l		.12 -.24 mg/l	2018	Runoff from fertilizer use or erosion of natural deposits
LEAD	AL=15 ppb	15 ppb	0.000 ppb		2018	Customer plumbing and service connection
COPPER	AL=1.3 mg/l	1.3 mg/l	0.1 mg/l		2018	Customer plumbing and service connection

DISINFECTION BYPRODUCTS

CONTAMINANT	MCL	MCLG	YOUR WATER	RANGE DETECTED	DATE	TYPICAL SOURCE
CHLORINE	4 mg/l	4 mg/l	1.50 ppm	.5-2.20 PPM	2018	Water additive to control microbes

CONTAMINANT	VIOLATION Y/N	DATE COLLECTED	LEVEL DETECTED	RANGE OF DETECTS OR #OF SAMPLES EXCEEDING MCL/ACL	UNIT MEASUREMENT	MCLG	MCL	LIKELY SOURCE OF CONTAMINATION
TL COLIFORM	N	6/5/2018	POSITIVE	12	P/A	1P	1P	Naturally present in the Environment

TOTAL COLIFORM RULE ALLOWS A SYSTEM TO RESAMPLE WITH IN 24 HOURS. IF THOSE SAMPLES ARE NEGITIVE, THE SYSTEM IS NOT IN VIOLATION OF THE TOTAL COLFORM RULE.

Health Effects Language for total coliforms

"Coliforms are bacteria that are naturally present in the environment and are used as an indicator that others, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliform indicating the need to look for potential problems in the water treatment or distribution system. When this occurs, we are required to conduct assessments to identify problems and to correct any problems that were found during these assessments."

"During the past year we were required to conduct **1** level 1 assessment (LV1A). **1** level 1 assessment was completed. In addition, we were required to take **2** corrective actions and we completed **2** of these actions."

Health Effects Language for total coliforms

UNREGULATED CONTAMINANTS

CONTAMINANT	MRL	DETECTED	RANGE DETECTED	DATE	TYPICAL SOURCE
$HAA5_{16}$			12.32-46.03 ppb	2018	
$HAA6Br_{16}$			2.41-6.73 ppb	2018	
$HAA9_{18}$			14.14-52.43 ppb	2018	
MANGANESE	0.4 ppb		0.4-.53 ppb	2018	Naturally-occurring element
2-PR0PEN-1-OL		1 ppm		2018	
TOTAL ORGANIC CARBON		1160 ppm		2013	

RADIOACTIVE CONTAMINANTS

CONTAMINANT	MCL	MCLG	YOUR WATER	RANGE DETECTED	DATE	TYPICAL SOURCE
RADIUM -226	5 PcI/L	0	.4 pCi/l		2016	Erosion of natural deposits

TABLE OF DEFINITIONS

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers a treatment of other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the MCLGs as is economically and technologically feasible.

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 are set by the U. S. Environmental Protection Agency.

MRDL (Maximum Residual Disinfectant Level): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the U. S. Environmental Protection Agency.

MRL (Minimal Risk Level) Estimate of the daily human exposure to a hazardous substance that is likely to be without appreciable risk of adverse noncancerous health effects over a specified duration of exposure.

NA: Not applicable.

ppb (parts per billion): One part substance per billion parts of water, or

Ug/l micrograms per liter.

ppm (parts per million): One part substance per million parts water, or mg/l milligrams per liter.

PDWS (Primary Drinking Water Standards): MCL's and MRDL's for contaminants that affect health along with the requirements for monitoring, reporting and treatment.

Explanation of Giardia and Cryptosporidium Special Notices

The below statements concerning Giardia and Cryptosporidium are required verbatim by the EPA. To clarify the Statements we are required by the EPA to pull these samples at our source water, The Tombigbee Waterway which is fed by the Tennessee River. The samples that indicated these microbial parasites was before any type of water treatment or filtration.

When the raw water has gone through the treatment process it is required by the EPA to meet 4 log disinfection or 99.99% virus removal. Corinth Gas and Water more than meets the minimum requirements set by the EPA for virus removal. Corinth Gas and Water has an annual inspection conducted by the MSDH to insure that all requirements are met throughout the year.

******Special Notice Concerning Cryptosporidium******

We constantly monitor the water supply for various constituents. We have detected Cryptosporidium in the **City of Corinth (PWSID MS0020002) source water.** We detected this constituent in **1** out of **9** samples tested. Cryptosporidium or a microbial parasite found in surface waters throughout the United States. Although Cryptosporidium can be removed by filtration, the most commonly used filtration cannot guarantee 100% removal. Our monitoring of source water indicates the presence of these organisms. Current test methods do not enable us to determine if these organisms are dead or alive. Symptoms of infection include nausea, diarrhea, and abdominals cramps. Most healthy persons are able to overcome the disease within a few weeks. However, immune-compromised people (such as those with AIDS, undergoing chemotherapy or recent organ transplant recipients)
are at greater risk of developing a severe, life-threatening illness. Immune-compromised persons should contact their doctor to learn about appropriate precautions to prevent infection. Cryptosporidium must be taken in through the mouth to cause disease and maybe passed by other means than drinking water.

******Special Notice Concerning Giardia******

We constantly monitor the water supply for various constituents. We have detected Giardia in the **City of Corinth (PWSID MS0020002) source water.** We detected this constituent in **3** out of **9** samples tested. Giardia or a microbial parasite found in surface waters throughout the United States. Although Giardia can be removed by filtration, the most commonly used filtration cannot guarantee 100% removal. Our monitoring of source water indicates the presence of these organisms. Current test methods do not enable us to determine if these organisms are dead or alive. Symptoms of infection include nausea, diarrhea, and abdominals cramps. Most healthy persons are able to overcome the disease within a few weeks. However, immune-compromised people (such as those with AIDS, undergoing chemotherapy or recent organ transplant recipients)
are at greater risk of developing a severe, life-threatening illness. Immune-compromised persons should contact their doctor to learn about appropriate precautions to prevent infection. Giardia must be taken in through the mouth to cause disease and maybe passed by other means than drinking water.

SOURCE WATER ASSESSMENT

The Safe Drinking Water Act (1996) mandates states to develop and implement Source Water Assessment Programs designed to notify public water systems and their customers regarding the susceptibility of the potable water supply to contamination (i.e. spills, floods, etc.). The Mississippi Department of Environmental Quality has completed our SWA. MDEQ has determined the rankings of our wells as follows: 3 wells “low”, and 4 wells “moderate”. These rankings are used to notify systems in Mississippi of the relative susceptibility of their wells to contamination. Wells with high ranking have a higher chance of becoming contaminated than the average public water well in Mississippi, but they should not be considered as unsafe sources of drinking water. Likewise, it should not be construed that those public water system wells with low susceptibility rankings are totally immune from contamination events; however, such wells are less susceptible than the average well operating in the state. A moderate susceptibility ranking signifies wells that have an average chance of becoming contaminated; these wells serve as the norm or standard for comparison. The final susceptibility ranking represents a “snap shot” in time, and thus, are subject to modification as conditions associated with wells and potential contaminant sources located around wells change with time. A copy of the Source Water

EXPLANTION OF REASONS FOR MONITORING UNREGULATER CONTAMINANTS

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 regulations is warranted.