



UTILITIES BOARD OF THE CITY OF TUSKEGEE

Annual Drinking Water Quality Report of the Tuskegee Water Treatment Plant January 2019 – December 2019



The Utilities Board of Tuskegee (aka-UBT) is again honored to present to you this year's Annual Drinking Water Quality Report! Designed to inform you of the quality of the water and services we deliver to you every day, this report contains information on the results of the past year's continual testing your water undergoes to insure your product is safe and of extremely high quality. We want you to understand the investments made by UBT to continually improve the water treatment process and protect our water resources. The Mission Statement of the UBT Water Treatment Plant is to consistently provide a safe, clean, and palatable product (WATER) that is suitable for human consumption. UBT's Treatment Plant (WTP) is a 4 million-gallon per day facility that utilizes the Tallapoosa River as the raw water source. The Plant is located at 2323 Macon County Road 8 in Milstead. The raw water pumping station is located approximately one mile from the Treatment Plant. UBT has an updated Source Water Assessment Plan and is available at the Municipal Complex for review. It provides information such as potential sources of possible contamination. UBT's Treatment Plant collected samples for the EPA's UCMR 4 Monitoring. This is when selected water systems collect samples for unregulated contaminants monitoring and reporting (UCMR) and the data is used to determine if any new contaminants will be added to the existing monitoring list; results from this monitoring is available for review at the Water Treatment Plant.

UBT is committed to ensuring the quality of your water and our personnel work diligently to achieve the assurance of our commitment.

UBT's WTP adds **chlorine** to the water to kill bacteria; **lime** to produce a desirable water quality by raising the pH level to reduce corrosion and acidic conditions; **fluoride** to help in the reduction of cavities in teeth; **potassium permanganate** to oxidize iron, and aid in taste and odor control. **Aluminum sulfate** and a **cationic polymer** are used as coagulant aids, and **ortho-phosphate** is added to help control corrosion in the distribution system. I'm pleased to report that our drinking water is safe and meets federal and state requirements. If you have any questions about this report, or concerns about your water utility, please contact John Tate, at UBT's Water Treatment Plant at 334-724-2125 or General Manager Gerald Long at 334-720-0712. We want our valued customers to be informed about their water utility and the service we provide. If you want to learn more, please attend our regularly scheduled meetings held on the 1st Tuesday of each month at 6:00 PM at the Utilities Board of the City of Tuskegee Municipal Complex located at 101 Fonville Street, Tuskegee, AL.

The Tuskegee WTP routinely monitors for contaminants in your drinking water according to federal and state laws. The following tables are the results of our monitoring for the period of January 1st to December 31st, 2019. All 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 the water poses a health risk. **More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline (800-426-4791).**

PLAIN LANGUAGE DEFINITIONS

- **Non-Detects (ND)** - laboratory analysis indicates that the contaminant is not present.
- **Not Required (NR)** - Laboratory analysis not required due to waiver granted by the Environmental Protection Agency for the State of Alabama.
- **Parts per million (ppm) or Milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion (ppb) or Micrograms per liter** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Parts per trillion (ppt) or Nanograms per liter (nanograms/l)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- **Parts per quadrillion (ppq) or Picograms per liter (picograms/l)** - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
- **Picocuries per liter (pCi/L)** - Picocuries per liter is a measure of the radioactivity in water.
- **Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.
- **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **Variances & Exemptions (V&E)** - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- **Action Level - (AL)** the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Treatment Technique (TT)** - (mandatory language) a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- **Threshold Odor Number (T.O.N.)** - The greatest dilution of a sample with odor-free water that still yields a just-detectable odor.
- **Maximum Contaminant Level** - (mandatory language) The "Maximum Allowed" (**MCL**) is 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.
- **Maximum Contaminant Level Goal** - (mandatory language) The "Goal" (**MCLG**) is 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.
- **Maximum Residual Disinfectant Level Goal or MRDLG** - 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.
- **Maximum Residual Disinfectant Level or MRDL** - 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.

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 storm water run-off, 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, storm water run-off, 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 run-off, and septic systems.
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

Table of Primary Drinking Water Contaminants

At high levels some primary contaminants are known to pose a health risks to humans. This table provides a quick glance of any primary contaminant detections.

CONTAMINANT	MCL	AMOUNT DETECTED	CONTAMINANT	MCL	AMOUNT DETECTED
Bacteriological		ND	Organic Chemicals		
Total Coliform Bacteria	< 5%	ND	Total trihalomethanes (TTHM)(ppb)	80	83.63
Fecal Coliform & E. coli	0	ND	Chlorine (ppm)	4	1.32
Radiological		ND	Total Organic Carbon (TOC)	TT	1.73
Inorganic			Haloacetic Acids (HAA5)(ppb)	60	41.634
Barium (ppm)	2	.025			
Copper (ppm)2019 90 th percentile results	AL= 1.3	ND			
Cyanide (ppb)	200	ND			
Fluoride (ppm)	4	0.8			
Lead (ppb)	AL= 15	ND			
Nitrate (as N)(ppm)	10	.185			
Nitrite (as N)(ppm)	1	ND			
Total Nitrate/Nitrite (ppm)	10	0.247			
Sulfate (ppm)	500	ND			

Table of Detected Contaminants

CONTAMINANT	MCL G	MCL	Amount Detected	Likely Source of Contamination
Inorganic January – December 2019				
Total Organic Carbon (TOC)	N/A	TT	1.55	Naturally present in the environment
Barium	N/A	2	0.025 ppm	
Fluoride	4	4	0.8 ppm	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (as N)	10	10	0.247 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Haloacetic Acids	N/A	60	41.634 ppb	By-product of drinking water chlorination
TTHM	0	80	83.63 ppb	By-product of drinking water chlorination
Chlorine	MR DL G 4	MRDL 4	1.32 ppm	Water additive used to control microbes
Secondary Contaminants January – December 2019				
Chloride	N/A	250	8.5 ppm	Naturally occurring in the environment or as a result of agricultural runoff
Special Contaminants January – December 2019				
Carbon Dioxide	0	n/a	20.5 ppm	Naturally occurring in the environment
pH	0	n/a	7.95 SU	Naturally occurring in the environment or as a result of treatment with water additives
Total Alkalinity	0	n/a	22.1 ppm	Naturally occurring in the environment
Calcium	N/A	N/A	138 ppm	Erosion of natural deposits
Magnesium	N/A	N/A	1.8 ppm	Erosion of natural deposits
Total Hardness (as CaCO3)	N/A	N/A	43.5 ppm	Naturally occurring in the environment or as a result of treatment with water additives
Sulfate	N/A	N/A	ND ppm	Naturally occurring in the environment
Unregulated Contaminants January- December 2019				
Dibromochloromethane	N/A	N/A	0.95 Ppb	Residual of banned fire extinguisher additive
Chloroform	N/A	N/A	29.9 Ppb	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination
Bromodichloromethane	N/A	N/A	0 ppm	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff; by-product of chlorination

Table of Secondary Contaminants

Contaminants	Detects	MCL	Contaminants	Detects	MCL
Aluminum	ND	PPM 0.2	Manganese	ND	PPM 0.05
Chloride	8.5	PPM 250	Silver	ND	PPM 0.1
Iron	ND	PPM 0.3	Total Dissolved Solids	82	PPM 500
Color	ND	PPM 15.0	Zinc	ND	PPM 5
Foaming Agents	ND	PPB 500	Copper	ND	PPM 1
Odor	ND	T.O.N. 3	Lead	ND	PPB .015

Table of Special Contaminants

Contaminants	Detects		MCL	Contaminants	Detects		MCL
Calcium	138	PPM	N/A	Sodium	ND	PPM	N/A
Carbon Dioxide	19.5	PPM	N/A	Sulfate	ND	PPM	250
Magnesium	1.8	PPM	N/A	Total Alkalinity	22.1	PPM	N/A
pH	7.95	PPM	N/A	Total Hardness (as CaCO3)	43.5	PPM	N/A

Table of Unregulated Drinking Water Contaminants

1,1 - Dichloropropene	ND	Chloroform	0.029 ppm	1,2,4-Trichlorobenzene	ND
Methomyl	ND	3-Hydroxycarbofuran	ND	MTBE	ND
Bromodichloromethane	0 ppm	Bromoform	ND	Bromomethane	ND

GENERAL INFORMATION

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.

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immunocompromised, such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive or individuals with other immune system disorders, some elderly, and infants, can be particularly at risk from infections. Those at risk should seek advice about drinking water from the health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Based on a study conducted by the ADEM with the approval of the EPA, a statewide waiver for the monitoring of Asbestos and Dioxin was issued. Thus, monitoring for these contaminants was not required.

Lead in Drinking Water: “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. UBT’s Water Treatment Plant 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> .”

MCL’s are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

VIOLATIONS

As much as we detest being out of compliance for any water standard, sometimes it will occur. Our system received monitoring violations for total trihalomethanes (TTHM) which is a disinfectant by-product. Below is a copy of the notice of violation that was sent to all of our customers for the second and third quarters: the fourth quarter violation was for exceeding the locational running annual average (LRAA); albeit the fourth quarter monitoring results were in compliance.

IMPORTANT NOTICE

THE UTILITIES BOARD OF TUSKEGEE HAS LEVELS OF TRIHALOMETHANES ABOVE DRINKING WATER STANDARDS OUR WATER SYSTEM RECENTLY VIOLATED A DRINKING WATER STANDARD. **ALTHOUGH THIS IS NOT AN EMERGENCY**, AS OUR CUSTOMERS, YOU HAVE THE RIGHT TO KNOW WHAT HAPPENED, WHAT YOU SHOULD DO, AND WHAT WE ARE DOING TO CORRECT THIS SITUATION.

WE ROUTINELY MONITOR FOR THE PRESENCE OF DRINKING WATER CONTAMINANTS. TESTING RESULTS WE RECEIVED IN THE MONTHS OF MAY (SECOND QUARTER), AUGUST (THIRD QUARTER), AND NOVEMBER (FOURTH QUARTER LRAA) 2019 SHOW THAT OUR SYSTEM EXCEEDED THE STANDARD FOR MAXIMUM CONTAMINANT LEVELS (MCL) FOR TOTAL TRIHALOMETHANES (TTHM). THE STANDARD FOR TOTAL TRIHALOMETHANES IS **.080 mg/L**. THE CHART BELOW LISTS THE LOCATION, DISINFECTANT BY-PRODUCT AND LEVEL THAT EXCEEDED THE MAXIMUM CONTAMINANT LEVEL.

THIS IS NOT AN IMMEDIATE RISK. IF IT HAD BEEN, YOU WOULD HAVE BEEN NOTIFIED IMMEDIATELY. HOWEVER, SOME PEOPLE WHO DRINK WATER CONTAINING TRIHALOMETHANES IN EXCESS OF 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. HOWEVER, IF YOU HAVE SPECIFIC HEALTH CONCERNS, CONSULT YOU DOCTOR.

LOCATION	CONTAMINANT	LEVEL
2402 Charles Avenue April-June 2019	TTHM	0.176
2812 Auburn Street April-June 2019	TTHM	0.156
1608 Hunter Street April-June 2019	TTHM	0.189
2009 MLK Boulevard April-June 2019	TTHM	0.151

LOCATION	CONTAMINANT	LEVEL
2402 Charles Avenue July-Sept 2019	TTHM	0.129
1608 Hunter Street July-Sept 2019	TTHM	0.149
2009 MLK BLVD July-Sept 2019	TTHM	0.147
2812 Auburn Street July-Sept 2019	TTHM	0.124

(Location Running Annual Average) 2019	CONTAMINANT	LEVEL
2402 Charles Avenue	TTHM	0.102
1608 Hunter Street	TTHM	0.107
2812 Auburn Street	TTHM	0.095
2009 MLK BLVD	TTHM	0.100
1906 OLD COLUMBUS RD	TTHM	.092

PLEASE SHARE THIS INFORMATION WITH ALL THE OTHER PEOPLE WHO DRINK THIS WATER, ESPECIALLY THOSE WHO MAY NOT HAVE RECEIVED THIS NOTICE DIRECTLY (FOR EXAMPLE, PEOPLE IN APARTMENTS, NURSING HOMES, SCHOOLS, AND BUSINESSES). YOU CAN DO THIS BY POSTING THIS NOTICE IN A PUBLIC PLACE OR DISTRIBUTING COPIES BY HAND OR MAIL. UBT HAVE BEEN AND STILL ARE WORKING ON WATER MAINS NEAR THIS SECTION OF THE DISTRIBUTION AREA. THIS MAY HAVE CONTRIBUTED TO THE CONTAMINANT LEVELS DURING THE TESTING PERIODS. WE WILL INCREASE FLUSHING FREQUENCY IN THIS AREA TO ASSIST WITH BRINGING THE LEVELS BACK INTO COMPLIANCE. PLEASE BE AWARE THAT THIS NOTICE MAY BE ISSUED AGAIN DUE TO THE METHOD USED FOR COMPLIANCE CALCULATIONS.

FOR ADDITIONAL INFORMATION OR QUESTIONS CONCERNING THIS VIOLATION OR MONITORING REQUIREMENTS, PLEASE CONTACT: JOHN TATE, UBT WATER PLANT MANAGER AT 334-724-2125 P.O. BOX 831050 TUSKEGEE, AL-36083

UBT has implemented a Corrective Action Plan to address these violations. Although fourth quarter testing easily met quarterly compliance standards, the locational running annual average (LRAA) calculations were still at exceedance levels due to the high levels of the two previous quarters. UBT is pleased to report that compliance testing results are indicating a steady decline in disinfection by-products. We will continue to employ the measures in our Plan and other changes as necessary to further our successful resolution to this issue.

UBT Water Treatment Plant Staff

*Euclide Chisholm (Operator Grade IV) *Harold Davis (Maintenance Tech) *Gilbert Fitzpatrick (Operator Grade IV) *Alonzo Harrison (Operator Grade IV, Restricted) *Roland Harrison (Operator Grade IV, Restricted) *Rickie Newbolt (Chief Operator, Grade IV) *Stepfon Purifoye (Operator Grade IV) *Amir Swanson (Assistant Chief Operator, Grade IV)
*John Tate (Plant Manager/Grade IV)

We take great pride in our employees and the job they are doing at your facility. Many thanks go out to these individuals for the excellent job they are doing in a most professional way. Our staff will continue to work diligently in spite of the current litigations to ensure that your water is as safe and wholesome as possible. We take this time to say "THANK YOU" for the opportunity to allow us to provide, deliver and serve a product we trust you can be proud to say is yours and ours.



Pictured is the generator that UBT's Water Treatment Plant is using to conduct a trial study using chlorine dioxide as a pre-oxidant. To date, compliance test results for TTHM's and HAA5's (disinfection by-products- aka DBP's) have been significantly reduced as evidenced by fourth quarter 2019 test results.

UBT Board Members

Annie Brown
Ulysees Roberts
Christopher Lee
Lawrence Haygood
Harold Washington, Board Chairman



UTILITIES BOARD OF TUSKEGEE

Purpose. Progress. People.

**IMPORTANT NOTICE
(For Water Customers Only)**

**THE UTILITIES BOARD OF TUSKEGEE HAS LEVELS OF TRIHALOMETHANES ABOVE
DRINKING WATER STANDARDS**

OUR WATER SYSTEM HAS IMPLEMENTED A CORRECTIVE ACTION PLAN TO ADDRESS WATER QUALITY ISSUES. AS A RESULT OF THE ACTIONS WE HAVE TAKEN, RESULTS FROM OUR INDEPENDENT LAB FOR THE FIRST QUARTER OF 2020 YIELDED TEST RESULTS WELL BELOW THE MAXIMUM CONTAMINANT LEVEL FOR TTHM AT ALL TEST LOCATIONS. WE EXPECT THAT THE MEASURES WE HAVE TAKEN WILL CONTINUE TO YIELD RESULTS THAT COMPLY WITH DRINKING WATER STANDARDS AND OVER TIME WILL RESULT IN A RUNNING ANNUAL AVERAGE THAT IS IN COMPLIANCE.

HOWEVER, AS IT STANDS NOW, THE RUNNING ANNUAL AVERAGE FOR OUR WATER SYSTEM STILL VIOLATES A DRINKING WATER STANDARD. ALTHOUGH THIS IS NOT **AN EMERGENCY**, AS OUR CUSTOMERS, YOU HAVE THE RIGHT TO KNOW WHAT HAPPENED, WHAT YOU SHOULD DO, AND WHAT WE ARE DOING TO CORRECT THIS SITUATION.

WE ROUTINELY MONITOR FOR THE PRESENCE OF DRINKING WATER CONTAMINANTS. TESTING RESULTS RECEIVED IN FEBRUARY OF 2020 SHOW THAT OUR SYSTEM EXCEEDS THE STANDARD FOR MAXIMUM CONTAMINANT LEVELS (MCL) FOR TOTAL TRIHALOMETHANES (TTHM). THE STANDARD FOR TOTAL TRIHALOMETHANES IS .080 mg/L. THE CHART BELOW LISTS THE LOCATION, DISINFECTANT BY-PRODUCT, AND LEVEL THAT EXCEEDED THE MAXIMUM CONTAMINANT LEVEL.

THIS IS NOT AN IMMEDIATE RISK. IF IT HAD BEEN, YOU WOULD HAVE BEEN NOTIFIED IMMEDIATELY. THE EXCEEDENCES REGARDING TRIHALOMETHANES MENTIONED ABOVE ARE FAR BELOW THE LEVELS DOCUMENTED TO EVER CAUSE ANY INJURY TO ANYONE FROM CONSUMPTION. NEVERTHELESS, UBT IS DEDICATED TO PROVIDING ITS CUSTOMERS WITH SAFE DRINKING WATER WITH ABSOLUTELY NO EXCEEDENCES OF DRINKING WATER STANDARDS. HOWEVER, SOME PEOPLE WHO DRINK WATER CONTAINING TRIHALOMETHANES IN EXCESS OF 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 HOWEVER, IF YOU HAVE SPECIFIC HEALTH CONCERNS, CONSULT YOUR DOCTOR.

LOCATION	CONTAMINANT	LEVEL
2402 Charles Avenue	TTHM	0.094
1608 Hunter Street	TTHM	0.103
2009 MLK BLVD	TTHM	0.092
2812 Auburn Street	TTHM	0.088
1906 Old Columbus Road	TTHM	0.087

PLEASE SHARE THIS INFORMATION WITH ALL THE OTHER PEOPLE WHO DRINK THIS WATER, ESPECIALLY THOSE WHO MAY NOT HAVE RECEIVED THIS NOTICE DIRECTLY (FOR EXAMPLE, PEOPLE IN APARTMENTS, NURSING HOMES, SCHOOLS, AND BUSINESSES). YOU CAN DO THIS BY POSTING THIS NOTICE IN A PUBLIC PLACE OR DISTRIBUTING COPIES BY HAND OR MAIL.

THE RUNNING ANNUAL AVERAGE CALCULATIONS FOR THESE SITES WERE EXCEEDED DUE TO HIGH PREVIOUS RESULTS DURING THE PREVIOUS THREE QUARTERS OF 2019. AS NOTED ABOVE, A **CORRECTIVE ACTION PLAN** HAS BEEN CREATED AND IT HAS BEEN APPROVED BY THE PROPER AUTHORITIES TO RESOLVE THESE ISSUES. YOU ARE **NOT** REQUIRED TO BOIL OR BUY BOTTLED WATER AS A RESULT OF THIS VIOLATION, AS IT POSES **NO IMMEDIATE RISK TO YOU**. AS OUR CUSTOMERS, WE WANT YOU TO BE WELL INFORMED OF ANYTHING THAT MAY AFFECT THE QUALITY OF YOUR DRINKING WATER AND ANY MEASURES WE OR YOU NEED TO TAKE AS A RESULT OF ANY COMPLIANCE ISSUES.

FOR ADDITIONAL INFORMATION, OR QUESTIONS CONCERNING THIS VIOLATION OR MONITORING REQUIREMENTS, CONTACT PLANT MANAGER JOHN TATE AT 334-724-2125.