

JERRY PLOTT PLANT RECOGNIZED FOR OPTIMIZATION AWARD

In October 2014, The City of Tuscaloosa's Jerry Plott Plant was recognized by the Alabama Department of Environmental Management's Drinking Water Branch's Safe Drinking Water Program for reaching an optimized level of performance that is three times beyond the minimum requirements established by the United States Environmental Protection Agency.

By reaching this level of "Optimized Performance", the staff of the City of Tuscaloosa have demonstrated their dedication to provide our customers with the best possible water quality. This level of performance significantly reduces the chance of any microbiological organisms getting into your drinking water supply. Please join us in thanking the staff of the City of Tuscaloosa Water Treatment Division for their dedication to ensure that our customers receive the best possible water quality.



Stephen Daly and Chris Jarrell receive the Optimization Award from Laura Taylor of ADEM.

THE SOURCE OF OUR DRINKING WATER IS...

Lake Tuscaloosa is Tuscaloosa's primary surface water supply source for drinking water. Lake Tuscaloosa is a 5,885-acre impoundment of North River and several major creeks. This beautiful man-made lake holds more than 40 billion gallons of excellent quality water. Lake Nicol and Harris Lake are our alternate sources of water. Currently, Harris Lake is used for industrial water.

The City of Tuscaloosa has completed and published the required Source Water Assessment data. The data may be viewed at the City of Tuscaloosa Water & Sewer Department's Office at 2230 6th Street.

Lake Tuscaloosa's watershed is comprised of a large portion of three counties. Every activity in the watershed has an impact on the quality of our drinking water.

HELP PROTECT OUR WATER SOURCE

The seventh annual Lake Cleanup Day is on Saturday April 11, 2015. The Lakes Division hosts this annual event. The public is invited to participate in this event. Last year, 86 volunteer's removed 5670 lbs. of trash from our source water. For more information, email dwillingham@tuscaloosa.com. or call 205-349-0279.

OUR WATER IS TREATED USING THESE TECHNIQUES

The City of Tuscaloosa operates two water treatment plants. These are the Ed Love Water Plant, and the Jerry Plott Water Treatment Plant. The Ed Love Water Plant was named for former superintendent Ed E. Love. The Jerry Plott Plant was named after former City Councilman Jerry Plott.

The Ed Love facility is a conventional treatment plant. Raw water enters a flash mixer where aluminum sulfate and lime are added for coagulation. Sodium permanganate is added when necessary for removal of iron and manganese for taste and odor control. The water then travels through four flocculators and four settling basins.

The water is then gravity filtered through multi-media filters. Lime is added for pH adjustment and corrosion control. Sodium hypochlorite is added for disinfection. Fluoride is added for the prevention of tooth decay, and ortho-phosphate is added for corrosion control. The finished water is pumped into the water distribution system.

The Jerry Plott Water Plant uses the same basic treatment as the Ed Love Plant, but with some different chemicals and techniques. Coagulation starts in a flash mixer with poly aluminum chloride. As the water passes through one of two flocculators, it enters a settling basin. The plant has two basins. Settling is accelerated with a series of settling plates.

The settled water is pumped under pressure to a bank of seven membrane filters. The water is squeezed through the pores of the membranes while impurities are left behind. Sodium hydroxide is added for pH control. Fluoride and orthopolyphosphate are also added. The finished water then goes to the water distribution system. The water produced at these two plants is very similar.

The plants are maintained by 35 full-time employees. These employees are responsible for producing water that meets all state and federal drinking water standards. Water is supplied to nearly 200,000 consumers in the service area. The plants are operated 24 hours a day, 365 days a year.

The City's most valuable asset is its abundant supply of excellent quality water! Because of this excellent quality, numerous industries and businesses have selected Tuscaloosa as their home.

Water Mains in Service, 4" and larger.....602 Miles
 Water Storage Tanks.....13 Tanks
 Water Booster Pump Stations.....10 Stations
 Water Storage Capacity.....25.4 Million Gallons
 Ed Love Treatment Capacity.....45.7 Million Gallons/Day
 Jerry Plott Treatment Capacity.....14 Million Gallons/Day
 Public Fire Hydrants.....3403 Hydrants

The City of Tuscaloosa's Mayor and Council are:

- | | | | |
|---------------------------|----------------|----------------------------|----------------|
| Walter Maddox, | Mayor | Phyllis W. Odom, | Dist. 1 |
| Harrison Taylor, | Dist. 2 | Cynthia Lee Almond, | Dist. 3 |
| Matthew Calderone, | Dist. 4 | Kip Tyner, | Dist. 5 |
| Eddie Pugh, | Dist. 6 | Sonya McKinstry, | Dist. 7 |

The Tuscaloosa City Council meetings are held every Tuesday at 6:00 p.m. in the Council Chambers on the second floor of Tuscaloosa City Hall, 2201 University Boulevard. The agenda for each meeting is published in the Tuscaloosa News and on the City of Tuscaloosa website at www.tuscaloosa.com, or you may contact the City Clerk at (205) 248-5010 for more information.

WATER AND SEWER DEPARTMENT

Post Office Box 2090 Tuscaloosa, AL 35403-2090

Water Billing Office Turn On/Turn Off
 Office Hours: Mon. – Fri. 8:00 a.m. – 4:30 p.m. 205- 248-5500
 Drive Thru: Mon. – Fri. 7:30 a.m. – 5:00 p.m.

Lakes Division Scott Sanderford Lakes Division Manager
 Office Hours: Mon. – Fri. 7:30 a.m. – 3:30 p.m. 205- 349-0279

Distribution Division Line Breaks/Leaks
 Office Hours: Mon. – Fri. 7:30 a.m. – 3:30 p.m. 205- 248-5950

Hilliard N. Fletcher Wastewater Plant
 Office Hours: Mon. – Fri. 7:30 a.m. – 3:30 p.m. 205- 248-5900

**MONITORING NON-COMPLIANCE NOTICE
 TWO VIOLATIONS FOR FAILOR TO MONITOR**

TUSCALOOSA WATER AND SEWER IS REQUIRED TO MONITOR YOUR DRINKING WATER FOR SPECIFIC CONTAMINANTS ON A REGULAR BASIS. RESULTS OF REGULAR MONITORING ARE AN INDICATOR OF WHETHER OR NOT YOUR DRINKING WATER MEETS HEALTH STANDARDS. DURING FEBRUARY 19 AND 20, AND APRIL 5 AND 6 2015, WE DID NOT COMPLETE ALL REQUIRED MONITORING FOR TURBIDITY AND THEREFORE CAN NOT BE SURE OF THE QUALITY OF YOUR DRINKING WATER DURING THAT TIME.

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.



**CITY OF TUSCALOOSA
 WATER AND SEWER
 DEPARTMENT**

Jimmy W. Junkin, Director

**2015
 ANNUAL WATER
 QUALITY REPORT**



Ed Love Water Filtration Plant
 1125 Jack Warner Parkway North East
 Tuscaloosa, Alabama 35404-1056
 Telephone 205- 248-5630 Fax 205- 349-0213
<http://www.tuscaloosa.com>

Office Hours: Monday - Friday 7:00 a.m. to 3:30 p.m.

Additional Information:
Stephen Daly, Deputy Director



Jerry Plott Water Plant
 Tuscaloosa, AL 35406
 2101 New Watermelon Road
 205-248-5600

THE SAFE DRINKING WATER ACT...

The Safe Drinking Water Act (SDWA) was signed into law on December 16, 1974. The purpose of the law is to insure that the nation's water supply systems that serve the public meet minimum national standards for the protection of public health.

The SDWA directed the U.S. Environmental Protection Agency (EPA) to establish national drinking water standards. 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 [EPA Safe Drinking Water Hotline 800-426-4791](tel:8004264791) or by visiting [EPA's website www.epa.gov/safewater](http://www.epa.gov/safewater).

Amended in 1996, the SDWA contains provisions for consumer involvement and right-to-know. The Consumer Confidence Report or Annual Water Quality Report is the centerpiece of public right-to-know in SDWA. This report provides consumers the detected amounts of contaminants, sources of contamination, and plain language definitions.

The amendments recognized that some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive or other immune system disorders, some elderly, and infants can be particularly at risk from infections. People at risk should seek advice about drinking water from their 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](tel:18004264791).

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 radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

PLAIN LANGUAGE DEFINITIONS

- Maximum Contaminant Level Goal or MCLG:** 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 Contaminant Level or MCL:** 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 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.
- Treatment Technique or TT:** A required process intended to reduce the level of a contaminant in drinking water.
- Action Level or AL:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

In the following tables, you may find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the following definitions.

- ppm** - parts per million and is equal to mg/L or milligrams per liter
- ppb** - parts per billion and is equal to µg/L or micrograms per liter
- ppt** - parts per trillion and is equal to ng/L or nanograms per liter
- pCi/L** - picocuries per liter, a measure of radiation
- ntu** - Nephelometric Turbidity Units
- cfu** - Colony Forming Units
- MFL** - million fibers per liter longer than 10 micrometers
- N/A** - not applicable
- ND** - not detected

Based on a study conducted by 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.

EPA LEAD AND COPPER STATEMENT

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. The City of Tuscaloosa is responsible for providing high quality drinking water, but cannot control the variety of materials used in the 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 with 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>.

TUSCALOOSA'S LEAD AND COPPER PROGRAM

Since 1991, the City of Tuscaloosa has tested 57 homes annually for the presence of lead and copper. Because of the involvement of these citizens, this program continues to be very successful. The City has always maintained compliance with this regulation. We would like to commend those 57 participants for their support of this endeavor.

WATER QUALITY REPORT						
PRIMARY DRINKING WATER PARAMETERS						
WATER SOURCE LAKE TUSCALOOSA						
DETECTED CONTAMINANTS						
MICROBIOLOGICAL						
All results meet or surpass Federal Drinking Water Regulations						
Period Covered: 12 Months Ending December, 2014	Units	MCL	MCLG	Highest Level in Distribution System	Range of detections	Violations (Yes/No)
Major Sources in Drinking Water						
Total Coliform Bacteria				Coliform Present in 0.50 % of samples in one month	Not detected - 0.50 %	No
Presence of total coliform bacteria in <5% of the 120 required monthly samples						
Naturally present in the environment						
Only 4 of 2465 samples were positive for Total Coliform or 0.16%, in 2014. No samples were E.coli positive.						
Total Organic Carbon	mg/L	TT	N/A	1.7	1.1 - 1.7	No
Naturally present in the environment						
Turbidity	NTU	0.3	N/A	0.499	0.004 - 0.499	No
Soil Runoff -Turbidity can interfere with disinfection						
Chlorine as Cl ₂	mg/L	4	4	2.8	0.0 - 2.8	No
Water additive used to control microbes						
Chlorine Dioxide as ClO ₂	mg/L	0.8	0.8	0.6	0.0 - 0.6	
Water additive used to control microbes						
Chlorite as ClO ₂ ⁻	mg/L	1	1	0.840	<0.050 - 0.840	No
Water additive used to control microbes						
RADIOLOGICAL						
All results meet or surpass Federal Drinking Water Regulations						
Gross Alpha	pCi/L	15	0	1.1+/-0.6	0.0+/-0.5 - 1.1+/-0.6	No
Erosion of natural deposits						
INORGANIC CHEMICALS						
All results meet or surpass Federal Drinking Water Regulations						
Fluoride as F ⁻	mg/L	4	4	1.04	0.00 - 1.04	No
Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizers and aluminum factories						
Nitrate as NO ₃ ⁻ -N	mg/L	10	10	0.26	0.24 - 0.26	No
Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits						
Sulfate as SO ₄	mg/L	50	50	31.9	15.2 - 31.9	No
Erosion of natural deposits.						
DISINFECTION BY-PRODUCTS						
All results meet or surpass Federal Drinking Water Regulations						
Period Covered: 12 Months Ending December, 2014	Units	MCL	MCLG	Average Level in Distribution System	Range of detections	Violations (Yes/No)
Major Sources in Drinking Water						
Haloacetic Acids	µg/L	60	N/A	30.9	9.38 - 61.7	No
By-product of drinking water chlorination						
The sum of Dibromoacetic, Dichloroacetic, Monobromoacetic, Monochloroacetic, & Trichloroacetic Acids annual average MCL equal to or less than 60 µg/L.						
Total Trihalomethanes	µg/L	80	N/A	40.2	18.5 - 75.6	No
By-product of drinking water chlorination						
The sum of Chloroform, Bromodichloromethane, Dibromochloromethane & Bromoform annual average MCL equal to or less than 80 µg/L.						
LEAD AND COPPER PRIMARY MONITORING						
All results meet or surpass Federal Drinking Water Regulations						
Period Covered: 12 Months Ending December, 2014	Units	MCL	MCLG	Highest Level in Distribution System	Range of detections	Violations (Yes/No)
Major Sources in Drinking Water						
Lead as Pb	mg/L	AL= 0.015	0	<0.005	<0.005 - <0.005	No
Corrosion of household plumbing system; Erosion of natural deposits						
Copper as Cu	mg/L	AL= 1.3	1.3	0.176	<0.050 - 0.176	No
Corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives						
There were no violations, more than 90% of samples were below the action level. Only one lead result and only one copper result were above the action level.						
ORGANIC CHEMICALS						
UNREGULATED CONTAMINANTS						
All results meet or surpass Federal Drinking Water Regulations						
Period Covered: 12 Months Ending December, 2014	Units	MCL	MCLG	Highest Level in Distribution System	Range of detections	Violations (Yes/No)
Major Sources in Drinking Water						
Bromodichloromethane	µg/L	N/A	N/A	4.03	1.77 - 4.03	No
By-Product of drinking water chlorination						
Chloroform	µg/L	N/A	N/A	7.3	1.88 - 7.34	No
By-Product of drinking water chlorination						
Dibromochloromethane	µg/L	N/A	N/A	2.94	1.78 - 2.94	No
By-Product of drinking water chlorination						

WATER QUALITY REPORT			
TABLE OF PRIMARY DRINKING WATER PARAMETERS MONITORING PERIOD ENDING DECEMBER 2014			
WATER SOURCE LAKE TUSCALOOSA			
MICROBIOLOGICAL		RADIOLOGICAL	
Analyte	MCL	Highest Level Detected	Analyte
MCL		Highest Level Detected	MCL
Total Coliform Bacteria	<5%	0.50%	Beta / Photon Emitters
Turbidity	<0.3 NTU	0.499	Alpha Emitters
INORGANIC CHEMICALS			
Antimony as Sb	6 ppb	ND	Combined Radium
Arsenic as As	10 ppb	ND	Uranium
ORGANIC CHEMICALS			
Asbestos*	7 MLF	N/A	Endrin
Barium as Ba	2 ppm	ND	Epichlorohydrin
Beryllium as Be	4 ppb	ND	Glyphosate
Cadmium as Cd	5 ppb	ND	Heptachlor
Chromium as Cr	100 ppb	ND	Heptachlor epoxide
Copper as Cu	AL=1.3ppm	ND	Hexachlorobenzene
Cyanide as Cn	200 ppb	ND	Hexachlorocyclopentadiene
Fluoride as F ⁻	4 ppm	1.04	Lindane
Lead as Pb	AL=15 ppb	ND	Methoxychlor
Mercury as Hg	2 ppb	ND	Oxamyl (Vydate)
Nitrate as NO ₃ ⁻ -N	10 ppm	0.26	PCB's
Nitrite as NO ₂ ⁻ -N	1 ppm	ND	Pentachlorophenol
Selenium as Se	50 ppb	ND	Picloram
Thallium as Tl	2 ppb	ND	Simazine
DISINFECTION BY-PRODUCTS			
Chlorine	4 ppm	2.8	Benzene
Chloramines	4 ppm	ND	Carbon tetrachloride
Chlorite	1 ppm	0.94	Chlorobenzene
Chlorine Dioxide	800 ppb	0.6	Dibromochloropropane
Bromate	10 ppb	ND	o-Dichlorobenzene
Total Organic Carbon	TT	1.7	p-Dichlorobenzene
Total Trihalomethanes	80 ppb	75.6	1,2-Dichloroethane
Haloacetic Acids	60 ppb	61.7	1,1-Dichloroethylene
ORGANIC CHEMICALS			
2,4-D	70 ppb	ND	trans-1,2-Dichloroethylene
2,4,5-TP(Silvex)	50 ppb	ND	Dichloromethane
Acrylamide	TT	ND	1,2-Dichloropropane
Alachlor	2 ppb	ND	Ethylbenzene
Atrazine	3 ppb	ND	Ethylene dibromide
Benzo(A)pyrene	200 ppb	ND	Styrene
Carbofuran	40 ppb	ND	Tetrachloroethylene
Chlordane	2 ppb	ND	1,2,4-Trichlorobenzene
Dalapon	200 ppb	ND	1,1,1-Trichloroethane
Di(2-ethylhexyl)adipate	400 ppb	ND	1,1,2-Trichloroethane
Di(2-ethylhexyl)phthalates	6 ppb	ND	Trichloroethylene
Dinoseb	7 ppb	ND	Toluene
Diquat	20 ppb	ND	Vinyl Chloride
Dioxin(2,3,7,8-TCDD) *	30 ppq	ND	Xylenes
Endothall	100 ppb	ND	