

2016 Annual Drinking Water Quality Report - Tuscumbia Utilities

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water source is the Big Spring, which is located in the center of town. The Big Spring generates up to 50 million gallons per day of natural spring water. The Tuscumbia Water Treatment Plant provides an average of 1.7 million gallons per day for the citizens of Tuscumbia as well as some areas outside the city limits. We also provide water to the Littleville Water Department, Colbert County Water Department and Spring Valley Water Department.

Tuscumbia Utilities has developed a source water protection plan to help determine the possible contamination sources in regard to the Big Spring. The Geological Survey of Alabama, in conjunction with ADEM and Tuscumbia Utilities has identified the recharge area of the Big Spring and has developed a report showing these possible contamination points. To date, we have identified over 500 possible contamination sites. Maps of the recharge area with these possible contamination sites are available in our lobby.

I'm pleased to report that our drinking water is safe and meets all federal and state requirements.

If you want to learn more, please attend any of our regularly scheduled Board meetings. They are held on the second Monday of every month at the utilities building conference room at 202 East 6th Street. If you have any questions about this report or concerning your water utility, please contact Jeff McDonald, General Manager, at (256-383-0321).

Tuscumbia Utilities routinely monitors for constituents in your drinking water according to Federal and State laws. These tables show the results of our monitoring for the period of January 1st to December 31st, 2016. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose 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 at (800-426-4791).

As you can see by the table, even though we tested for 76 different substances, our system had no violations. **We're proud that your drinking water meets or exceeds all Federal and State requirements.** We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water **IS SAFE** at these levels.

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/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791). Tuscumbia Utilities tested for Cryptosporidium in 2016 and had no detection.

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. Tuscumbia 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 your exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Thank you for allowing us to continue providing your family with clean, quality water this year.

In these tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- ◆ *Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.
- ◆ *Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million
- ◆ *Parts per billion (ppb) or Micrograms per liter* - one part per billion
- ◆ *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.
- ◆ *Action Level* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- ◆ *Treatment Technique (TT)* - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.
- ◆ *Maximum Contaminant Level* - 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* -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.

| TEST RESULTS | | | | | | |
|-------------------------------------|---------------|----------------|------------------|------|-----|---|
| CONTAMINANT | VIOLATION Y/N | LEVEL DETECTED | UNIT MEASUREMENT | MCLG | MCL | LIKELY SOURCE OF CONTAMINATION |
| MICROBIOLOGICAL CONTAMINANTS | | | | | | |
| Turbidity | N | .025 | NTU | .3 | .5 | Soil runoff |
| INORGANIC CONTAMINANTS | | | | | | |
| Fluoride | N | .73 | PPM | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate (as Nitrogen) | N | 2.89 | PPM | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| ORGANIC CONTAMINANTS | | | | | | |
| TTHM (Total trihalomethanes) | N | 17.4 | PPB | 0 | 80 | By-product of drinking water chlorination |
| HAA5 | N | 6.7 | PPB | 0 | 60 | By-product of drinking water chlorination |

| CONTAMINANT | MCL IN CCR UNITS | AMOUNT DETECTED | CONTAMINANT | MCL IN CCR UNITS | AMOUNT DETECTED | CONTAMINANT | MCL IN CCR UNITS | AMOUNT DETECTED |
|--------------------------------|------------------|---------------------------------|---------------------------|------------------|-----------------|----------------------------------|------------------|---------------------------------|
| Bacteriological | | | Organic Chemicals | | | Organic Chemicals (Cont.) | | |
| Total Coliform Bacteria | < 5% | ND | 2,4-D | 70 PPB | ND | Pentachlorophenol | 1 PPB | ND |
| Turbidity | TT | See Detected Contaminants Table | 2,4,5-TP (Silvex) | 50 PPB | ND | Picloram | 500 PPB | ND |
| Radiological | | | Acrylamide | TT | ND | Simazine | 4 PPB | ND |
| Beta/Photon emitters (mrem/yr) | 4 | ND | Alachlor | 2 PPB | ND | Toxaphene | 3 PPB | ND |
| Alpha emitters (pci/l) | 15 | ND | Atrazine | 3 PPB | ND | Benzene | 5 PPB | ND |
| Combined radium (pci/l) | 5 | ND | Benzo(a)pyrene [PH As] | 200 NG/L | ND | Carbon Tetrachloride | 5 PPB | ND |
| Inorganic | | | Carbofuran | 40 PPB | ND | Chlorobenzene | 100 PPB | ND |
| Antimony | 6 PPB | ND | Chlordane | 2 PPB | ND | 0-Dichlorobenzene | 600 PPB | ND |
| Arsenic | 50 PPB | ND | Dalapon | 200 PPB | ND | p-Dichlorobenzene | 75 PPB | ND |
| Asbestos (MFL) | 7 MFL | ND | Di-(2-ethylhexyl)adipate | 400 PPB | ND | 1,2-Dichloroethane | 5 PPB | ND |
| Barium | 2 PPM | ND | Di(2-ethylhexyl)phthalate | 6 PPB | ND | 1,1-Dichloroethylene | 7 PPB | ND |
| Beryllium | 4 PPB | ND | Dibromochloropropane | 200 PPT | ND | Cis-1,2-Dichloroethylene | 70 PPB | ND |
| Cadmium | 5 PPB | ND | Dinoseb | 7 PPB | ND | Trans-1,2-Dichloroethylene | 100 PPB | ND |
| Chromium | 100 PPB | ND | Diquat | 20 PPB | ND | Dichloromethane | 5 PPB | ND |
| Copper | AL=1.3 PPM | ND | Dioxin[2,3,7,8-TCDD] | 30 PPQ | ND | 1,2-Dichloropropane | 5 PPB | ND |
| Cyanide | 200 PPB | ND | Endothall | 100 PPB | ND | Ethylbenzene | 700 PPB | ND |
| Fluoride | 4 PPM | See Detected Contaminants Table | Endrin | 2 PPB | ND | Styrene | 100 PPB | ND |
| Lead | AL=15 PPB | ND | Epichlorohydrin | TT | ND | Tetrachloroethylene | 5 PPB | ND |
| Mercury | 2 PPB | ND | Ethylene dibromide | 50 PPT | ND | 1,2,4-Trichlorobenzene | 70 PPB | ND |
| Nitrate | 10 PPM | See Detected Contaminants Table | Glyphosate | 700 PPB | ND | 1,1,1-Trichloroethane | 200 PPB | ND |
| Nitrite | 1 PPM | ND | Heptachlor | 400 PPT | ND | 1,1,2-Trichloroethane | 5 PPB | ND |
| Selenium | 50 PPB | ND | Heptachlor epoxide | 200 PPT | ND | Trichloroethylene | 5 PPB | ND |
| Thallium | 2 PPB | ND | Hexachlorobenzene | 1 PPB | ND | TTHM | 80 PPB | See Detected Contaminants Table |
| | | | Hexachlorocyclopentadine | 50 PPB | ND | Toluene | 1 PPM | ND |
| | | | Lindane | 200 PPT | ND | Vinyl Chloride | 2 PPB | ND |
| | | | Methoxychlor | 40 PPB | ND | Xylenes | 10 PPM | ND |
| | | | Oxamyl [Vydate] | 200 PPB | ND | HAA5 | 9.1 PPB | See Detected Contaminants Table |
| | | | PCBs | 500 PPT | ND | | | |