**The City of Talladega Water & Sewer Department**

**P.O. Box 498**

**Talladega, Alabama 35161**

**PWSID: AL0001260**

**2019 Annual Drinking Water Quality Report**

**The U.S. Environmental Protection Agency (EPA) wants you to know:**

In order to ensure that tap water is safe to drink, the 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 that must provide the same protection for public health. 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 water poses 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 (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 radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

**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 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 storm water 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 storm water runoff, and septic systems. *Radioactive contaminants*, which can be naturally occurring or be the result of oil and gas production and mining activities. We are required to monitor for each of these contaminants according to a schedule set by the EPA and the State.

**Important Information About 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. The City of Talladega Water & Sewer Department 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.

**Note:**

**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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).**

Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

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.

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule.

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| **Contaminants Monitored** | **Date Monitored** |
| Inorganic Compounds | 2019 |
| Lead and Copper | 2018 |
| Microbiological Contaminants | Current |
| Nitrates | 2019 |
| Radioactive Contaminants | 2019 |
| Synthetic Organic Contaminants (including herbicides and pesticides) | 2019 |
| Volatile Organic Contaminants | 2019 |
| Disinfection By-products (TTHM and HAA5) | 2019 |
| **Table of Primary Drinking Water Contaminants** |
| **CONTAMINANT** | **MCL** | **Amount Detected** | **CONTAMINANT** | **MCL** | **Amount Detected** |
| **Bacteriological** | Endothall | 100 ppb | ND |
| Total Coliform Bacteria | < 5% | ND | Endrin | 2 ppb | ND |
| Turbidity | TT | 0.34 | Epichlorohydrin | TT | ND |
| **Radiological** | Glyphosate | 700 ppb | ND |
| Beta/photon emitters (mrem/yr) | 4 | ND | Heptachlor | 400 ppt | ND |
| Alpha emitters (pCi/L) | 15 | 2.3 | Heptachlor epoxide | 200 ppt | ND |
| Combined radium (pCi/L) | 5 | 1.7 | Hexachlorobenzene | 1 ppb | ND |
| **Inorganic** | Lindane | 200 ppt | ND |
| Antimony  | 6 ppb | ND | Methoxychlor | 40 ppb | ND |
| Arsenic  | 10 ppb | ND | Oxamyl [Vydate] | 200 ppb | ND |
| Barium  | 2 ppm | 0.086 | PCBs | 500 ppt | ND |
| Beryllium  | 4 ppb | ND | Pentachlorophenol | 1 ppb | ND |
| Cadmium | 5 ppb | ND | Picloram | 500 ppb | ND |
| Chromium | 100 ppb | ND | Simazine | 4 ppb | ND |
| **Copper \*** | AL=1.3 ppm | 0.17 | Toxaphene | 3 ppb | ND |
| Cyanide | 200 ppb | ND | Benzene | 5 ppb | ND |
| Fluoride | 4 ppm | 0.71 | Carbon Tetrachloride | 5 ppb | ND |
| **Lead \*** | AL=15 ppb | ND | Chlorobenzene | 100 ppb | ND |
| Mercury | 2 ppb | ND | Dibromochloropropane | 200 ppt | ND |
| Nitrate | 10 ppm | 2.48 | 0-Dichlorobenzene | 600 ppb | ND |
| Nitrite | 1 ppm | ND | p-Dichlorobenzene | 75 ppb | ND |
| Selenium | 50 ppb | ND | 1,2-Dichloroethane | 5 ppb | ND |
| Thallium | 2 ppb | ND | 1,1-Dichloroethylene | 7 ppb | ND |
| **\*90th percentile of the most recent sampling event.** | Cis-1,2-Dichloroethylene | 70 ppb | ND |
| **Organic Chemicals** | trans-1,2-Dichloroethylene | 100 ppb | ND |
| 2,4-D | 70 ppb | ND | Dichloromethane | 5 ppb | ND |
| 2,4,5-TP (Silvex) | 50 ppb | ND | 1,2-Dichloropropane | 5 ppb | ND |
| Acrylamide | TT | ND | Ethylbenzene | 700 ppb | ND |
| Alachlor | 2 ppb | ND | Ethylene dibromide | 50 ppt | ND |
| Atrazine | 3 ppb | ND | Styrene | 100 ppb | ND |
| Benzo(a)pyrene[PAHs] | 200 ppt | ND | Tetrachloroethylene | 5 ppb | ND |
| Carbofuran | 40 ppb | ND | 1,2,4-Trichlorobenzene | 70 ppb | ND |
| Chlordane | 2 ppb | ND | 1,1,1-Trichloroethane | 200 ppb | ND |
| Dalapon | 200 ppb | ND | 1,1,2-Trichloroethane | 5 ppb | ND |
| Di-(2-ethylhexyl)adipate | 400 ppb | ND | Trichloroethylene | 5 ppb | 1.2 |
| Di-(2-ethylhexyl)phthalates | 6 ppb | ND | TTHM | 80 ppb | 63.7 |
| Dinoseb | 7 ppb | ND | Toluene | 1 ppm | ND |
| Diquat | 20 ppb | ND | Vinyl Chloride | 2 ppb | ND |
| Chloramines | 4 ppm | ND | Xylenes | 10 ppm | ND |
| Chlorite | 1 ppm | ND | TOC | TT | 1.8 |
| HAA5 | 60 ppb | 73 | Chlorine | 4 ppm | 2.54 |
| **Table of Unregulated Drinking Water Contaminants** |
| **CONTAMINANT** | **Low Result, PPM** | **High Result, PPM** | **CONTAMINANT** | **Low Result, PPM** | **High Result, PPM** |
| 1,1 - Dichloropropene | ND | ND | Chloroform | ND | 0.0140 |
| 1,1,1,2-Tetrachloroethane | ND | ND | Chloromethane | ND | ND |
| 1,1,2,2-Tetrachloroethane | ND | ND | Dibromochloromethane | ND | ND |
| 1,1-Dichloroethane | ND | ND | Dibromomethane | ND | ND |
| 1,2,3 - Trichlorobenzene | ND | ND | Dicamba | ND | ND |
| 1,2,3 - Trichloropropane | ND | ND | Dichlorodifluoromethane | ND | ND |
| 1,2,4 - Trimethylbenzene | ND | ND | Dieldrin | ND | ND |
| 1,3 - Dichloropropane | ND | ND | Hexachlorobutadiene | ND | ND |
| 1,3 - Dichloropropene | ND | ND | p-Isoprpylbenzene | ND | ND |
| 1,3,5 - Trimethylbenzene | ND | ND | M-Dichlorobenzene | ND | ND |
| 2,2 - Dichloropropane | ND | ND | Methomyl | ND | ND |
| 3-Hydroxycarbofuran | ND | ND | MTBE | ND | ND |
| Aldicarb | ND | ND | Metolachlor | ND | ND |
| Aldicarb Sulfone | ND | ND | Metribuzin | ND | ND |
| Aldicarb Sulfoxide | ND | ND | N - Butylbenzene | ND | ND |
| Aldrin | ND | ND | Naphthalene | ND | ND |
| Bromobenzene | ND | ND | N-Propylbenzene | ND | ND |
| Bromochloromethane | ND | ND | O-Chlorotoluene | ND | ND |
| Bromodichloromethane | ND | 0.0025 | P-Chlorotoluene | ND | ND |
| Bromoform | ND | ND | P-Isopropyltoluene | ND | ND |
| Bromomethane | ND | ND | Propachlor | ND | ND |
| Butachlor | ND | ND | Sec - Butylbenzene | ND | ND |
| Carbaryl | ND | ND | Tert - Butylbenzene | ND | ND |
| Chloroethane | ND | ND | Trichlorfluoromethane | ND | ND |
| **Table of Secondary Drinking Water Contaminants** |
| **CONTAMINANT** | **MCLG** | **MCL** | **Low Result** | **High Result** | **CONTAMINANT** | **MCLG** | **MCL** | **Low Result** | **High Result** |
| pH | 7 | Monitored | 7.0 | 7.5 | Aluminum | 0 | 0.2 | ND | ND |
| Color, APHA (units) | N/A | 15 | ND | ND | Copper | N/A | 1 | ND | 0.012 |
| Odor | N/A | 3 | ND | ND | Iron | 0 | 0.3 | 0.071 | 0.226 |
| Foaming Agents | N/A | 0.5 | ND | ND | Manganese | 0 | 0.05 | ND | ND |
| TDS | 0 | 500 | 82 | 254 | Silver | 0 | 0.1 | ND | ND |
| Fluoride | N/A | 2.0 | 0.65 | 0.71 | Zinc | 0 | 5 | 0.009 | 0.229 |
| Sulfate | 0 | 250 | 11.51 | 26.14 | Total Hardness | 0 | Monitored | 36 | 153 |
| Chloride | N/A | 250 | 4.67 | 12.28 | Corrosivity | N/A | N/A | Non Corrosive | Non Corrosive |
| **Table of Detected Primary Drinking Water Contaminants** |
| **CONTAMINANT** | **MCLG** | **MCL** | **Range Detected** |  **Likely Source of Contamination**  |
| Turbidity | N/A | TT | 0.03 | - | 0.34 | Soil Runoff.  |
| Trichloroethylene |  | 5 ppb | ND | **-** | 1.2 | Discharge from metal degreasing sites and other factories |
| Barium | 2 | 2 ppm | 0.008 | **-** | 0.086 | Discharge of drilling wastes; discharge of metal refineries; erosion of natural deposits  |
| Nitrate | 10 | 10 ppm | ND | **-** | 2.48 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Fluoride  | 4 | 4 ppm | 0.65 | **-** | 0.71 | Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories |
| Copper | 1.3 | AL=1.3 ppm | ND | **-** | 0.33 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| Alpha Emitters | 0 | 15 pCi/L | 1.7 | **-** | 2.3 | Erosion of natural deposits. |
| Combined Radium | 0 | 5 pCi/L | ND | **-** | 1.7 | Erosion of natural deposits. |
| TTHM | NA | 80 ppb | ND | **-** | 63.7 | By-product of drinking water chlorination |
| HAA5 | NA | 60 ppb | ND | **-** | 73 | By-product of drinking water chlorination |
|  TOC | N/A | TT | 0.6 | **-** | 1.8 | Naturally present in the environment |
|  Chlorine | MRDLG=4 | MRDL=4 ppm | 0.5 | **-** | 2.54 | Water additive used to control microbes  |

Water Systems are selected by The Environmental Protection Agency (EPA) to participate in the Unregulated Contaminant Monitoring (UCMR) program to collect nationally representative data for contaminants suspected to be present in drinking water. These contaminants do not have regulatory standards. The monitoring period is between 2018 – 2020. This monitoring is used by the EPA to understand the frequency and level of occurrence of unregulated contaminants in the nation’s public water systems. Every five years the EPA develops a new list of UCMR contaminants, largely based on the Contaminant Candidate List (CCL). The detection of a UCMR contaminant does not represent cause for concern, in and of itself.

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| **Table of Detected UCMR 4 Contaminants** |
| **Contaminant** | **Minimum Reporting Level (MRL/ug/L)** | **Reference Concentration (ug/L)** | **Range Detected** | **Additional Information** |
| Manganese | 0.4 | 300 | ND | - | 0.75 | Naturally occurring element; commercially available in combination with other elements and materials; a byproduct of zinc ore processing; used in infrared optics, fiber optic systems, electronics and solar applications |
| Bromochloroacetic Acid | NA | NA | ND | - | 2.5 | By-products of drinking water chlorination |
| Bromodichloroacetic Acid | NA | NA | ND | - | 1.6 | By-products of drinking water chlorination |
| Chlorodibromoacetic Acid | NA | NA | ND | - | 0.37 | By-products of drinking water chlorination |
| Dichloroacetic Acid | NA | NA | ND | - | 19.1 | By-products of drinking water chlorination |
| Monochloroacetic Acid | NA | NA | ND | - | 2.4 | By-products of drinking water chlorination |
| Trichloroacetic Acid | NA | NA | ND | - | 20.2 | By-products of drinking water chlorination |
| Bromide | NA | NA | 14.2 | - | 14.2 | An indicator for HAA |
| Total Organic Carbon | NA | NA | 1640 | - | 1640 | Naturally present in the environment |

**Definitions**

Maximum Contaminant Level (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 Contaminant Level Goal (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 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.

Variances and Exemptions: ADEM or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Action Level (or AL): The concentration of a contaminant that triggers treatment or other requirement, a water system shall follow.

Treatment Technique (or TT): A required process intended to reduce the level of a contaminant in drinking water.

Nephelometric Turbidity Units (NTU): A measure of clarity.

Non-Detect (ND): Not detectable at testing limits.

Parts per Million (PPM): milligrams per liter (mg/l). One part per million corresponds to a single penny in $10,000.

Parts per Billion (PPB): micrograms per liter (ug/l). One part per billion corresponds to a single penny in $10,000,000.

Parts per Trillion (PPT): nanograms per liter (nanograms/l). One part per trillion corresponds to a single penny in $10,000,000,000.

Picocuries per Liter (pCi/L): A measure of radioactivity.

Millirems per Year (mrem/yr): Measure of radiation absorbed by the body.

Standard Units (S.U.): pH of water measures the water’s balances of acids and bases. Water with less than 6.5 could be acidic, soft and corrosive. A pH greater than 8.5 could indicate that the water is hard.

N/A: Not applicable

FDA: Food and Drug Administration.

CDC: Centers for Disease Control.

EPA: Environmental Protection Agency.

ADEM: Alabama Department of Environmental Management.

**UCMR Definitions:**

UCMR Minimum Reporting Level (MRL): The minimum concentration that may be reported by a laboratory as a quantified value for a method analyte following analysis. The MRLs were established based on the capability of the analytical method, not based on a level established as “significant” or “harmful”.

UCMR Reference Concentration: The reference concentrations are based on publicly-available health information found in the following EPA resources: 2018 Edition of the Drinking Water Standards and Health Advisories Tables [i.e., Health advisories (HA)] and the CCL 4 Contaminant Information Sheets {i.e., Health Reference Levels (HRLs)]. The primary sources of the health information used to derive the guideline values in the resources referenced above are peer-reviewed assessments from EPA or other governmental agencies. The reference concentrations are subject to change as new health assessments are completed. Reference Concentrations are not legally enforceable federal standards.

Health Reference Levels (HRL): The CCL process derives HRLs for screening purposes using available data and can be used in the Regulatory Determination process as risk-derived concentrations against which to evaluate the occurrence data to determine if contaminants may occur at levels of public health concern. HRLs are not final determinations about the level of a contaminant in drinking water that is necessary to protect any particular population and, in some cases, are derived prior to development of a complete exposure assessment using the best available data. HRLs are not legally enforceable federal standards

Health Advisories (HA): Has provide information on contaminants that can cause human health effects and are known or anticipated to occur in drinking water. EPA’s health advisories are non-enforceable and non-regulatory and provide technical information to State agencies and other public health officials on health effects, analytical methodologies and treatment technologies to assist with risk management decisions.



Annual Drinking Water Quality Report

(January 1, 2019 – December 31, 2019)

Your City Water officials vigilantly safeguard its water supplies and once again we are proud to present to you this year's Annual Drinking Water Quality 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. This year’s report sometimes called the “Consumer Confidence Report” covers the calendar year 2019 water quality testing and has been prepared in compliance with all applicable State and Federal regulations. In accordance with the Safe Drinking Water Act, the City of Talladega Water & Sewer Department monitors over 100 compounds in your water supply. This report includes a complete listing of all these compounds, whether they were detected or not.

**What You Need to Know about Your Water, and How it May Affect You**

Sources of Supply & Water Treatment Techniques

The City of Talladega Water & Sewer Department’s water supply comes from a blend of groundwater from four active wells and surface water from the City’s Surface Water Treatment Plant. The wells draw water from the Rome and Knox Aquifers. This comprises approximately eighty percent of our total drinking water supply. The water produced by Talladega’s four groundwater sources is chlorinated for disinfection purposes and fluoride is added to promote dental hygiene. The remaining twenty percent of our drinking water supply comes from the Surface Water Treatment Plant, which draws raw water from a reservoir created by a low head dam constructed on Talladega Creek around 1923. Treatment at this facility includes the addition of lime and liquid alum for coagulation and flocculation. In the next stage, chlorine is added for disinfection and algae control prior to sedimentation, which allows unwanted solids to settle out. The water is then filtered through media beds containing various sizes of sand and gravel, and then chlorinated again for disinfection purposes. Caustic soda is then added for pH adjustment and corrosion control along with fluoride to promote dental hygiene. The combined capacity of all these sources gives us the ability to pump over 8 million gallons per day. Our average usage is just slightly over 4 million gallons per day.

A Source Water Assessment Plan has been completed for all the sources listed above. The plan is available for review at the City of Talladega Water & Sewer Department’s office, located at 100 North Court Street, Talladega, Alabama. A public hearing was held January 30, 2003 to present the results of the Source Water Assessment Program and answer any questions. A Wellhead Protection Plan for the groundwater (well) sources has also been completed and is also available for review. The City of Talladega Water & Sewer Department routinely completes a water storage facility inspection plan, utilizes a Bacteriological Monitoring Plan and a Cross Connection Policy to ensure good safe drinking water for our customers.

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

If you have any questions about your water, please contact us for answers……

For further information about this report, or for any questions relating to your drinking water quality, please contact our Main Office at (256) 362-4439 or our Service Center at (256) 362-6211.

En Espanol:

Este informe contiene la información importante sobre su agua potable. Tradúzcalo, o hable con alguien que lo entiende.

This report contains important information about your drinking water. Translate it or speak with someone who understands it.

**Community Participation**

You are invited to attend and participate in the Talladega City Council meetings to voice your concerns about your drinking water. The Talladega City Council meets on the first and third Mondays of each month beginning at 5:00pm at Talladega City Hall, 203 West South Street, Talladega, Alabama.