

Columbiana Water Board
50 Water Works St. Columbiana, Alabama 35051
PWSID: AL0001151

2018 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.

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. Columbiana Water Board 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>.

Notes:

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.

| Contaminants Monitored | Date Monitored |
|--|----------------|
| Inorganic Compounds | 2018 |
| Lead and Copper | 2017 |
| Microbiological Contaminants | Current |
| Nitrates | 2018 |
| Radioactive Contaminants | 2017 |
| Synthetic Organic Contaminants (including herbicides and pesticides) | 2017 |
| Volatile Organic Contaminants | 2017 |
| Disinfection By-products (TTHM and HAA5) | 2018 |

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 | 0.09 | Epichlorohydrin | TT | ND |
| Radiological | | | Glyphosate | 700 ppb | ND |
| Beta/Photon emitters (mrem/yr) | 4 | ND | Heptachlor | 400 ppt | ND |
| Alpha emitters (pCi/L) | 15 | ND | Heptachlor epoxide | 200 ppt | ND |
| Combined radium (pCi/L) | 5 | ND | 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 | 0.011 | 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 | 0.09 | Toxaphene | 3 ppb | ND |
| Cyanide | 200 ppb | ND | Benzene | 5 ppb | ND |
| Fluoride | 4 ppm | ND | 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 | 0.30 | o-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 | ND |
| Di-(2-ethylhexyl)phthalates | 6 ppb | ND | TTHM | 80 ppb | 30.3 |
| 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 | 0.4 |
| HAA5 | 60 ppb | 6 | Chlorine | 4 ppm | 3.7 |

Table of Unregulated Drinking Water Contaminants

| CONTAMINANT | Low Result, PPM | High Result, PPM | CONTAMINANT, PPM | Low Result, PPM | High Result, PPM |
|-----------------------------|-----------------|------------------|-------------------------|-----------------|------------------|
| 1,1 - Dichloropropene | ND | ND | Chloroform | ND | 0.0229 |
| 1,1,1,2-Tetrachloroethane | ND | ND | Chloromethane | ND | ND |
| 1,1,1,2,2-Tetrachloroethane | ND | ND | Dibromochloromethane | ND | 0.0060 |
| 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-Isopropylbenzene | 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 | 0.0081 | P-Chlorotoluene | ND | ND |
| Bromoform | ND | 0.0016 | 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 | Trichlorofluoromethane | ND | ND |

| Table of Secondary Drinking Water Contaminants | | | | | | | | | |
|--|------|-----------|------------|-------------|-------------------|------|-----------|---------------|---------------|
| Parameters | MCLG | MCL | Low Result | High Result | Parameters (mg/L) | MCLG | MCL | Low Result | High Result |
| pH | 7 | Monitored | 7.04 | 7.67 | Aluminum | 0 | 0.2 | ND | ND |
| Color, APHA (units) | N/A | 15 | ND | ND | Copper | N/A | 1 | 0.003 | 0.015 |
| Odor | N/A | 3 | ND | ND | Iron | 0 | 0.3 | ND | ND |
| Foaming Agents | N/A | 0.5 | ND | ND | Manganese | 0 | 0.05 | ND | ND |
| TDS | 0 | 500 | 130 | 144 | Silver | 0 | 0.1 | ND | ND |
| Fluoride | N/A | 2.0 | ND | ND | Zinc | 0 | 5 | ND | ND |
| Sulfate | 0 | 250 | 0.34 | 0.93 | Total Hardness | 0 | Monitored | 119 | 155 |
| Chloride | N/A | 250 | 2.37 | 19.7 | 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 and Health Affects |
|-------------|---------|-------------|----------------|---|-------|--|
| | | | | | | |
| Turbidity | N/A | TT | 0.03 | - | 0.09 | Soil Runoff. |
| Barium | 2 | 2 ppm | 0.009 | - | 0.011 | Discharge of drilling wastes; discharge of metal refineries; erosion of natural deposits |
| Nitrate | 10 | 10 ppm | 0.10 | - | 0.30 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Copper | 1.3 | AL= 1.3 ppm | ND | - | 0.51 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| HAA5 | N/A | 60 ppb | ND | - | 6 | By-product of drinking water disinfection |
| TTHM | N/A | 80 ppb | ND | - | 30.3 | By-product of drinking water chlorination |
| TOC | N/A | TT | 0.2 | - | 0.4 | Naturally present in the environment |
| Chlorine | MRDLG=4 | MRDL= 4 ppm | 0.35 | - | 3.7 | Water additive used to control microbes |

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.

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

Columbiana Water Board
PWSID: AL0001151
205-669-5805

What's the Quality of My Water?

The Columbiana Water Board provides clean water to your community and helps to keep you and your family healthy. We take this mission very seriously. Our constant goal is to provide you with a safe and dependable supply of drinking water. Each year, the U.S. Environmental Protection Agency (EPA) and the state of Alabama require all water suppliers to prepare reports like this one. This report covers January 1 through December 31, 2018.

The Columbiana Water Board is again pleased to report that our drinking water met or exceeded all Federal and State water quality standards for 2018. Our ongoing goal is to provide you with ample quantities of safe and dependable drinking water. During 2018 we experienced no violations.

Our water source is groundwater pumped from five wells. We treat your water with chlorination for disinfection.

At the Columbiana Water Board, we work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future. Please feel free to visit us during our working hours or call if you have questions regarding the contents of this report.

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.

We want our valued customers to be informed about their water quality. If you have any questions about this report or concerning your water quality or our monitoring, please contact Lewis Green, Water Superintendent, at (205) 669-5805 or attend any of the regularly scheduled Board meetings. These meetings are held on the second Tuesday of each month at 5:30 pm at 50 Water Works St. Columbiana, AL 35051

Columbiana Water Board:

John Farr, Jr., Chairman
Tyrus Sockwell, Jr., Co-Chairman
Stancil Handley

Employees:

Lewis Green, Water Superintendent

The Columbiana Water Board has completed a Source Water Assessment (SWA). The SWA is designed to tell us certain information about our source water so that we as a water service and you as a water consumer can better preserve and protect our source water. For more information on the SWA, please contact Lewis Green at (205) 669-5805.