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

All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. MCLs, defined in the **Definitions and Abbreviations** in this report, are set at very stringent levels. To understand the possible health effects described for many regulated constituents, 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.

Contaminants that may be present in source water include:
Microbial contaminants, such as viruses and bacteria, which may come from wastewater treatment plants, septic systems, agricultural livestock operations, and wildlife.
Inorganic contaminants, such as salts and metals, which can be naturally-occurring or from urban storm water run-off, wastewater discharges, oil/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 vdatile 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which 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.

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. People at risk should seek advice about drinking water from their health care providers.

Decatur Utilities also tests your source water for pathogens, such as Cryptosporidium and Giardia. These pathogens can enter the water from animal or human waste. General information for immunocompromised persons is available on the official website of the Center for Disease Control at www.cdc.gov/parasites/crypto/gen_info/infect_ic.html or from the Safe Drinking Water Hotline at (800) 426-4791. This language does not indicate the presence of cryptosporidium in our drinking water.

## MONITORING SCHEDULE

The Environmental Protection Agency (EPA) Safe Drinking Water Act (SDWA) and the State of Alabama Department of Environmental Management (ADEM) regulations allow monitoring waivers to reduce or eliminate monitoring requirements for asbestos, volatile organic chemicals (VOCs), lead and copper, and synthetic organic chemicals (SOCs).

Decatur Utilities has been granted a waiver to reduce sampling for Lead/Copper and granted a waiver to reduce sampling for Lead/Copper and SOCs to once every three years. This is based on prior sampling events not detecting these contaminants.

Based on a study conducted by ADEM with EPA approval, a statewide waiver for monitoring of asbestos and dioxin was issued. Therefore, these contaminants were not sampled. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule.

| Constituents Monitored | Date Monitored |
|---|---|
| Inorganic Contaminants | 2017 |
| Lead/Copper | 2015 |
| Microbiological Contaminants | current |
| Nitrates | 2017 |
| Radioactive Contaminants | 2012 |
| Synthetic Organic Contaminants | 2017 |
| Volatile Organic Contaminants | 2017 |
| Disinfection Byproducts | 2017 |
| Cryptosporidium | 2017 |
| UCMR3 | 2014 |
| DSE Disinfection Byproducts | 2017 |

The EPA's Unregulated Contaminant Monitoring Rule 3 (UCMR3) required some water systems to monitor for 30 unregulated contaminants during 2013-2015. Our system sampled during 2014 and the results are shown below.

**DETECTED UNREGULATED CONTAMINANTS**

| Contaminant | Amount Detected (ug/L) | Range (ug/L) |
|---|---|---|
| *Entry Point Data (Water Treatment Plant)* | | |
| 1,4-dioxane | 0.14 | 0.1-0.2 |
| Strontium | 66 | 57-74 |
| Chromium-6 | 0.06 | 0.05-0.07 |
| Chlorate | 83 | 27-130 |
| Vanadium | 0.4 | 0-0.7 |
| *Distribution System Data* | | |
| Strontium | 68 | 58-74 |
| Chromium-6 | 0.10 | 0.08-0.12 |
| Chlorate | 85 | 30-130 |
| Vanadium | 0.4 | 0-0.8 |

As you can see by the table of **Detected Drinking Water Contaminants** below, our system had no violations. We have determined through our monitoring and testing that some constituents have been detected. For assistance interpreting these tables, reference the **Definitions and Abbreviations** section on the reverse side.

**DETECTED DRINKING WATER CONTAMINANTS**

| Contaminant Type | Violation Y/N | Level Detected | Range | Unit Msmt | MCLG | MCL | Likely Source of Contamination |
|---|---|---|---|---|---|---|---|
| **Regulated Contaminants** | | | | | | | |
| Chlorine | NO | RAA 2.54 | 2.33-2.94 | ppm | MRDLG=4 | MRDL=4 | Water additive used to control microbes |
| Total Organic Carbon | NO | RAA 1.5 | 1.3-1.9 | ppm | n/a | TT | Soil runoff |
| Turbidity (filtered) | NO | Highest 0.099 | 0.025–0.099 | NTU | n/a | TT | Soil runoff |
| Copper | NO | 0.387* 0>AL | ND-0.540 | ppm | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from preservatives |
| Fluoride - WTP | NO | 1.10 | 0.38-1.10 | ppm | 4 | 4 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from factories |
| Nitrate (as Nitrogen) | NO | 0.57 | 0.57 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| TTHM [Total trihalomethanes] | NO | HRAA 27.9 | 6.50-39.0 | ppb | 0 | 80 | By-product of drinking water chlorination |
| HAA5 [Total haloacetic acids] | NO | HRAA 20.5 | 12.3-26.9 | ppb | 0 | 60 | By-product of drinking water chlorination |
| **Unregulated Contaminants** | | | | | | | |
| Chloroform | NO | 12.2 | 12.2 | ppb | n/a | n/a | Naturally occurring in the environment or from runoff |
| Bromodichloromethane | NO | 7.97 | 7.97 | ppb | n/a | n/a | Naturally occurring in the environment or from runoff |
| Chlorodibromomethane | NO | 1.94 | 1.94 | ppb | n/a | n/a | Naturally occurring in the environment or from runoff |
| **Secondary Contaminants** | | | | | | | |
| Alkalinity, Total (as CA, $Co_3$) | NO | 58 | 41-63 | ppm | none | none | Caused by carbonates, bicarbonates, hydroxides, phosphates, silicates |
| Calcium, as Ca | NO | 23.4 | 23.4 | ppm | none | none | Naturally occurring in the environment; dissolved minerals |
| Carbon Dioxide | NO | 6.70 | 6.70 | ppm | none | none | Naturally occurring in the environment |
| Chloride | NO | 18.8 | 18.8 | ppm | n/a | 250 | Naturally occurring in the environment or from runoff |
| Color | NO | 4.0 | ND-4.0 | units | none | 15 | Naturally occurring in the environment or water treatment |
| Hardness, as $CaCO_3$ | NO | 81.2 | 81.2 | ppm | n/a | n/a | Naturally occurring in the environment or from runoff |
| Iron | NO | 0.10 | ND-0.10 | ppm | none | 0.30 | Naturally occurring in the environment; erosion; leaching from pipes |
| Magnesium | NO | 5.55 | 5.55 | ppm | none | none | Naturally occurring in the environment; dissolved minerals |
| pH | NO | 7.20 | 6.90-7.30 | S.U. | n/a | n/a | Naturally occurring in the environment or from runoff |
| Sodium | NO | 9.35 | 9.35 | ppm | n/a | n/a | Naturally occurring in the environment |
| Specific Conductance | NO | 230 | 230 | µS/cm | n/a | n/a | Measure of how well water can conduct an electrical current |
| Sulfate | NO | 15.0 | 15.0 | ppm | n/a | 250 | Naturally occurring in the environment or from runoff |
| Total Dissolved Solids | NO | 120 | 120 | ppm | n/a | 500 | Naturally occurring in the environment or from runoff |
| **Distribution System Evaluation (DSE) Contaminants** | | | | | | | |
| TTHM [Total trihalomethanes] | NO | Avg. 20.1 | 5.1 – 56.0 | ppb | 0 | 80 | By-product of drinking water chlorination |
| HAA5 [Total haloacetic acids] | NO | Avg. 18.0 | 9.2 – 36.1 | ppb | 0 | 60 | By-product of drinking water chlorination |

* Figure shown is 90th percentile and # of sites above action level (1.3 ppm) = 0

Below is a table of contaminants for which the Environmental Protection Agency and the Alabama Department of Environmental Management require testing. These contaminants were not detected in your drinking water unless they are also listed in the **Detected Drinking Water Contaminants** table.

**STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS**

| Contaminant | MCL | Unit of Msmt | Contaminant | MCL | Unit of Msmt |
|---|---|---|---|---|---|
| **Bacteriological Contaminants** | | | trans-1,2-Dichloroethylene | 100 | ppb |
| Total Coliform Bacteria | <5% | present/ absent | Dichloromethane | 5 | ppb |
| Fecal Coliform and E. coli | 0 | present/ absent | 1,2-Dichloropropane | 5 | ppb |
| Turbidity | TT | NTU | Di (2-ethylhexyl)adipate | 400 | ppb |
| Cryptosporidium | TT | Calc.organ -isms/l | Di (2-ethylhexyl)phthalate | 6 | ppb |
| **Radiological Contaminants** | | | Dinoseb | 7 | ppb |
| Beta/photon emitters | 4 | mrem/yr | Dioxin [2,3,7,8-TCDD] | 30 | ppq |
| Alpha emitters | 15 | pCi/l | Diquat | 20 | ppb |
| Combined radium | 5 | pCi/l | Endothall | 100 | ppb |
| Uranium | 30 | pCi/l | Endrin | 2 | ppb |
| **Inorganic Chemicals** | | | Epichlorohydrin | TT | TT |
| Antimony | 6 | ppb | Ethylbenzene | 700 | ppb |
| Arsenic | 10 | ppb | Ethylene dibromide | 50 | ppt |
| Asbestos | 7 | MFL | Glyphosate | 700 | ppb |
| Barium | 2 | ppm | Heptachlor | 400 | ppt |
| Beryllium | 4 | ppb | Heptachlor epoxide | 200 | ppt |
| Cadmium | 5 | ppb | Hexachlorobenzene | 1 | ppb |
| Chromium | 100 | ppb | Hexachlorocyclopentadiene | 50 | ppb |
| Copper | AL=1.3 | ppm | Lindane | 200 | ppt |
| Cyanide | 200 | ppb | Methoxychlor | 40 | ppb |
| Fluoride | 4 | ppm | Oxamyl [Vydate] | 200 | ppb |
| Lead | AL=15 | ppb | Polychlorinated biphenyls | 0.5 | ppb |
| Mercury | 2 | ppb | Pentachlorophenol | 1 | ppb |
| Nitrate | 10 | ppm | Picloram | 500 | ppb |
| Nitrite | 1 | ppm | Simazine | 4 | ppb |
| Selenium | .05 | ppm | Styrene | 100 | ppb |
| Thallium | .002 | ppm | Tetrachloroethylene | 5 | ppb |
| **Organic Contaminants** | | | Toluene | 1 | ppm |
| 2,4-D | 70 | ppb | Toxaphene | 3 | ppb |
| Acrylamide | TT | TT | 2,4,5-TP(Silvex) | 50 | ppb |
| Alachlor | 2 | ppb | 1,2,4-Trichlorobenzene | .07 | ppm |
| Atrazine | 3 | ppb | 1,1,1-Trichloroethane | 200 | ppb |
| Benzene | 5 | ppb | 1,1,2-Trichloroethane | 5 | ppb |
| Benzo(a)pyrene [PAHs] | 200 | ppt | Trichloroethylene | 5 | ppb |
| Carbofuran | 40 | ppb | Vinyl Chloride | 2 | ppb |
| Carbon tetrachloride | 5 | ppb | Xylenes | 10 | ppm |
| Chlordane | 2 | ppb | **Disinfectants & Disinfection Byproducts** | | |
| Chlorobenzene | 100 | ppb | Chlorine | 4 | ppm |
| Dalapon | 200 | ppb | Chlorine Dioxide | 800 | ppb |
| Dibromochloropropane | 200 | ppt | Chloramines | 4 | ppm |
| o-Dichlorobenzene | 600 | ppb | Bromate | 10 | ppb |
| p-Dichlorobenzene | 75 | ppb | Chlorite | 1 | ppm |
| 1,2-Dichloroethane | 5 | ppb | HAA5 [Total haloacetic acids] | 60 | ppb |
| 1,1-Dichloroethylene | 7 | ppb | TTHM [Total trihalomethanes] | 80 | ppb |
| cis-1,2-Dichloroethylene | 70 | ppb | Total Organic Carbon | TT | ppm |

**UNREGULATED CONTAMINANTS**

| | | | |
|---|---|---|---|
| 1,1 – Dichloropropene | Aldicarb | Chloroform | Metolachlor |
| 1,1,1,2-Tetrachloroethane | Aldicarb Sulfone | Chlorodibromomethane | Metribuzin |
| 1,1,2,2-Tetrachloroethane | Aldicarb Sulfoxide | Chloromethane | N - Butylbenzene |
| 1,1-Dichloroethane | Aldrin | Dibromomethane | Naphthalene |
| 1,2,3 - Trichlorobenzene | Bromobenzene | Dicamba | N-Propylbenzene |
| 1,2,3 - Trichloropropane | Bromochloromethane | Dichlorodifluoromethane | O-Chlorotoluene |
| 1,2,4 - Trimethylbenzene | Bromodichloromethane | Dieldrin | P-Chlorotoluene |
| 1,3 – Dichloropropane | Bromoform | Hexachlorobutadiene | P-Isopropyltoluene |
| 1,3 – Dichloropropene | Bromomethane | Isoprpylbenzene | Propachlor |
| 1,3,5 - Trimethylbenzene | Butachlor | M-Dichlorobenzene | Sec - Butylbenzene |
| 2,2 – Dichloropropane | Carbaryl | Methomyl | Tert - Butylbenzene |
| 3-Hydroxycarbofuran | Chloroethane | MTBE | Trichlorfluoromethane |

**SECONDARY CONTAMINANTS**

| | | | |
|---|---|---|---|
| Alkalinity, Total (CA, Co3) | Corrosivity | Magnesium | Sodium |
| Aluminum | Foaming agents | Manganese | Sulfate |
| Calcium, as Ca | (MBAS) | Odor | Total Dissolved Solids |
| Chloride | Hardness | Nickel | Zinc |
| Color | Iron | pH | Zinc |
| Copper | Langelier Index | Silver | |