

**2025 Annual Drinking Water Quality Report**  
(For period January through December 2024)

**HARVEST MONROVIA WATER & SEWER AUTHORITY**



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We are pleased to present to you this year's Annual Water Quality Report. This report provides information on the sources of our water, the results of water analyses, important information about water and health, plain language definitions, and contact information. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. Last year, as in years past, we had no MCL violations, and your tap water met all U.S. Environmental Protection Agency (EPA) and Alabama Department of Environmental Management (ADEM) drinking water health standards. We diligently safeguard your water supplies, and once again we are proud to report that our system has not violated any water quality standard.

|                          |                                                                                                                                                                                                                         |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Water Sources</b>     | 8 groundwater wells producing from the Tusculumbia-Fort Payne Aquifer<br>Purchased water from Huntsville Utilities and Madison Utilities                                                                                |
| <b>Water Treatment</b>   | 10 MGD Burwell Treatment Plant: flocculation, filtration, chlorination, fluoridation, coagulation, corrosion control<br>4.1 MGD Mt Zion Treatment Plant: microfiltration, chlorination, fluoridation, corrosion control |
| <b>Storage Capacity</b>  | 7 water storage facilities with a capacity of 11.5 million gallons                                                                                                                                                      |
| <b>Population Served</b> | Approximately 55,674                                                                                                                                                                                                    |
| <b>Interconnections</b>  | Madison County Water Department, Huntsville Utilities, Madison Water Works Board, and Limestone County Water Authority                                                                                                  |
| <b>Board Members</b>     | Frank Turner, Chairman<br>Tracy Brewer, Vice Chairman<br>Brant Neely, Secretary                                                                                                                                         |

**Excellence Awards**

Our goal at Harvest-Monrovia Water and Sewer Authority is to provide clean, safe drinking water to our customers throughout the year, and our staff strives each day to accomplish this goal. Our water system has won many excellence awards in our population-served division. Our recent awards include:

- 2024 AWPCA Best Operated Distribution System 15,001-25,000 Meters
- 2023 AWPCA Best Operated Plant Award 50,001-100,000 Population
- 2007-2023 EPA and ADEM Optimization Award for Optimized Water Treatment



**Water Quality Protection**

Harvest-Monrovia Water and Sewer Authority developed a Wellhead Protection Plan (WHPP) encompassing wells serving the Harvest and Monrovia communities, and Huntsville Utilities and Madison Utilities developed Source Water Assessment Plans (SWAP) on their surface water sources. These Plans assist in protecting our water sources. All components of the Plans were completed and approved by ADEM. As part of the assessment process, information on potential contaminant sources was defined, and the major potential sources were ascertained to be existing wells, agricultural run-off and septic tanks. The WHPP and SWAPs are available for review at the respective water offices during regular business hours with prior request.

Harvest-Monrovia Water and Sewer Authority routinely completes a water storage facility inspection and utilizes a Bacteriological Monitoring Plan. The required chlorine residual is maintained throughout our distribution system to protect your drinking water from possible outside contaminants. Please help us make these efforts worthwhile by protecting our source water. Carefully follow instructions on pesticides and herbicides you use for your lawn and garden, and properly dispose of household chemicals, paints, and waste oil. We ask that all our customers help us protect our valuable water sources, which are the heart of our community, our way of life, and our children's futures.

**Consumer Information**

All drinking water, including bottled drinking 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. MCL's, defined in a List of Definitions 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. In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the levels of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water.

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 run-off, 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, storm water run-off, 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.

Radon can move up through the ground into a home through cracks and holes in the foundation. It may also get into indoor air when released from tap water. Compared to radon entering the home through soil, radon entering the home through tap water will, in most cases, be a small source of radon in indoor air. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home consider having the home tested. Testing is easy and inexpensive. For more information call EPA's Radon Hotline at (800-SOS-RADON).

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immunocompromised 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791) or on EPA's website [www.epa.gov/sites/default/files/2015-10/documents/cryptosporidium-report.pdf](http://www.epa.gov/sites/default/files/2015-10/documents/cryptosporidium-report.pdf).

### Information about Lead

*As required by ADEM, we conducted a Lead Service Line Inventory during 2024: there are no records of lead or galvanized service lines in our system, and none were found during the inventory. The Lead Service Line Inventory report and results from our latest lead results are available for review in our office upon request.*

Lead is rarely found in source water but is primarily from corrosion of materials and components associated with home plumbing. Your water system is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. As required by federal and state agencies, we utilize an outside laboratory to analyze the samples we monitor for lead. Even though we have not had a problem with lead in our distribution system, the information about lead is required to be in this report. If present, elevated levels of lead can cause serious health problems, especially for pregnant women, young children, and people who are immunocompromised, such as cancer patients, etc.

The Environmental Protection Agency (EPA) and the Center for Disease Control (CDC) make the following recommendations:

- Before using any tap water for drinking or cooking, flush your water system by running the kitchen tap (or any other tap you take drinking or cooking water from) on COLD for 1–2 minutes. Flushing can minimize the potential for lead exposure, especially if the water has been sitting undisturbed for several hours, as in overnight.
- In all situations, *especially for making baby formula*, drink or cook only with water that comes out of the cold tap. Warm or hot tap water is more likely to cause lead to leach from plumbing materials.
- Periodically remove the aerator on the tip of the faucet and wash out any debris such as metal particles.
- Remember - Boiling will NOT reduce the amount of lead in your water.

The actions recommended above are likely to be effective in reducing lead levels because most of the lead in household water usually comes from the plumbing in your house. 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 [www.epa.gov/safewater](http://www.epa.gov/safewater) or by calling the EPA Safe Drinking Water Hotline at 1-800-426-4791. Water systems are required to sample for lead in schools and licensed child care facilities as requested by the facility. Contact your school or child care facility for further information about potential sampling results.

### Questions?

If you have any questions about this report or concerning your water utility, please contact Mike Oliver at 256-837-1132. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Tuesday of each month at 1:30 p.m. at the water office.

## Monitoring Schedule and Results

We routinely monitor your drinking water for contaminants according to Federal and State laws. The Alabama Department of Environmental Management allows us to monitor for some contaminants less than once per year because the levels of these contaminants do not change frequently. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule. 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.

| Constituents Monitored         | Harvest Monrovia | Huntsville | Madison |
|--------------------------------|------------------|------------|---------|
| Inorganic Contaminants         | 2022             | 2024       | 2023    |
| Lead/Copper                    | 2022             | 2023       | 2022    |
| Microbiological Contaminants   | monthly          | monthly    | monthly |
| Nitrates                       | 2024             | 2024       | 2024    |
| Radioactive Contaminants       | 2020             | 2024       | 2019    |
| Synthetic Organic Contaminant  | 2022             | 2023       | 2023    |
| Volatile Organic Contaminants  | 2023             | 2024       | 2023    |
| Disinfection By-products       | 2024             | 2024       | 2024    |
| Cryptosporidium (on raw water) | 2024             | 2024       | 2024    |
| UCMR5 Contaminants             | 2024             | 2024       | 2024    |
| PFAS Contaminants              | 2024             | 2024       | 2024    |

| DETECTED DRINKING WATER CONTAMINANTS        |                            |                          |                          |           |         |               |                                                                                               |
|---------------------------------------------|----------------------------|--------------------------|--------------------------|-----------|---------|---------------|-----------------------------------------------------------------------------------------------|
| Primary Contaminants                        | Harvest Monrovia           | Huntsville Utilities     | Madison Utilities        | Unit Msmt | MCLG    | MCL           | Likely Source                                                                                 |
| Total coliform bacteria                     | <1%                        | 7 present                | ND                       | present   | 0       | 5% of samples | Naturally present in the environment; used as an indicator that other bacteria may be present |
| Chlorine, finished water                    | 1.7-2.3                    | 2.0-3.6                  | 0.60-2.50                | ppm       | MRDLG=4 | MRDL=4        | Water additive used to control microbes                                                       |
| Total organic carbon                        | ND-1.0                     | 1.26-1.84                | 1.03-2.2                 | ppm       | RAA<2.0 | TT            | Naturally present in the environment                                                          |
| Turbidity, filtered water                   | 0.01--0.2                  | 0.01-0.22                | 0.04                     | NTU       | n/a     | 0.3           | Soil runoff: Indicator of the effectiveness of filtration                                     |
| Barium                                      | 0.0021-0.0024              | 0.023-0.025              | 0.027                    | ppm       | 2       | 2             | Drilling waste and refinery discharge; erosion                                                |
| Chromium                                    | 0.166-0.808                | ND                       | ND                       | ppb       | 100     | 100           | Steel and pulp mill discharge; erosion of natural deposits                                    |
| Copper                                      | 0.571 *<br>0.00373 - 0.695 | 0.19 *<br>0.019-0.44     | 0.059 *                  | ppm       | 1.3     | AL=1.3        | Household plumbing corrosion; erosion; preservative leaching                                  |
| Fluoride                                    | ND – 1.00                  | ND-0.55                  | 0.15                     | ppm       | 4       | 4             | Erosion; water additive; fertilizer & aluminum factory discharge                              |
| Lead                                        | ND *                       | 0.001 *<br>ND-0.0017     | ND *                     | ppm       | 0       | AL=0.015      | Corrosion of household plumbing systems, erosion of natural deposits                          |
| Mercury (inorganic)                         | 0.127-0.138                | ND                       | ND                       | ppb       | 2       | 2             | Erosion; discharge from industry; runoff                                                      |
| Nitrate (as Nitrogen)                       | 2.70-2.93                  | 0.10-2.0                 | 0.26-1.67                | ppm       | 10      | 10            | Fertilizer runoff; septic tank leaching, sewage; erosion                                      |
| Bis [2-Ethylhexyl] phthalate                | ND-0.04                    | ND                       | ND                       | ppb       | 0       | 6             | Discharge from rubber chemical factories                                                      |
| Ethylene dibromide                          | ND                         | ND                       | 20.4                     | ppt       | 0       | 50            | Discharge from petroleum refineries                                                           |
| Simazine                                    | ND                         | ND                       | 0.53                     | Ppb       | 4       | 4             | Herbicide runoff                                                                              |
| Tetrachloroethylene                         | ND                         | ND-0.0011                | ND                       | ppb       | 0       | 5             | Discharge from metal degreasing sites and other factories                                     |
| TTHM [Total trihalomethanes]                | LRAA 14.4<br>(0.63-44.7)   | LRAA 43.2<br>(21.5-59.9) | LRAA 60.6<br>(27.0-78.0) | ppb       | 0       | 80            | By-product of drinking water chlorination                                                     |
| HAA5 [Total haloacetic acids]               | LRAA 10.9<br>(ND-38.0)     | LRAA 30.2<br>(18.9-34.8) | LRAA 41.2<br>(4.044.0)   | ppb       | 0       | 60            | By-product of drinking water chlorination                                                     |
| <b>Unregulated Contaminants</b>             |                            |                          |                          |           |         |               |                                                                                               |
| Chloroform                                  | 1.27                       | 13.0-39.0                | 10.5                     | ppb       | 70      | n/a           | Naturally occurring or from discharge or runoff                                               |
| Bromodichloromethane                        | ND                         | ND-6.9                   | 5.61                     | ppb       | 0       | n/a           | Naturally occurring or from discharge or runoff                                               |
| Chlorodibromomethane                        | ND                         | ND-1.0                   | 0.63                     | ppb       | 60      | n/a           | Naturally occurring or from discharge or runoff                                               |
| <b>Secondary Contaminants</b>               |                            |                          |                          |           |         |               |                                                                                               |
| Alkalinity, Total (as CA, CO <sub>3</sub> ) | 100-141                    | NR                       | 68.1                     | ppm       | n/a     | n/a           | Caused by carbonates, bicarbonates and hydroxides                                             |
| Aluminum                                    | ND-0.014                   | 0.32-0.064               | ND                       | ppm       | n/a     | 0.2           | Erosion of natural deposits or from water treatment                                           |
| Calcium                                     | 6.4-44.6                   | NR                       | 30.5                     | ppm       | n/a     | n/a           | Naturally occurring; dissolved minerals                                                       |
| Carbon Dioxide                              | 30-82                      | NR                       | ND                       | ppm       | n/a     | n/a           | Naturally occurring or used to adjust pH                                                      |
| Chloride                                    | 8.14-8.57                  | 8.7-10.7                 | 13.9                     | ppm       | n/a     | 250           | Naturally occurring in the environment or from runoff                                         |
| Hardness                                    | 24.1-145                   | 66.4-82.4                | 92.7                     | ppm       | n/a     | n/a           | Naturally occurring; treatment with water additives                                           |
| Iron                                        | ND-0.04                    | NR                       | NR                       | ppm       | n/a     | 0.30          | Naturally occurring; erosion; leaching from pipes                                             |
| Magnesium                                   | 1.98-8.26                  | NR                       | NR                       | ppm       | n/a     | n/a           | Naturally occurring; dissolved minerals                                                       |
| Manganese                                   | ND-0.04                    | NR                       | NR                       | ppm       | n/a     | 0.05          | Erosion of natural deposits; leaching from pipes                                              |
| Nickel                                      | 0.002-0.005                | NR                       | ND                       | ppm       | n/a     | n/a           | Erosion of natural deposits; leaching from pipes                                              |
| pH                                          | 6.6-7.3                    | 7.2-7.7                  | 7.3                      | S.U.      | n/a     | n/a           | Naturally occurring; treatment with water additives                                           |
| Silver                                      | ND-0.0075                  | NR                       | ND                       | ppm       | n/a     | 0.10          | Naturally occurring in the environment                                                        |
| Sodium                                      | 4.31-5.88                  | 10.3-14.3                | 7.9                      | ppm       | n/a     | n/a           | Naturally occurring in the environment                                                        |
| Specific Conductance                        | 83.3-295                   | NR                       | 242                      | µs/cm     | n/a     | n/a           | Indicates presence of natural ions that conduct electricity.                                  |
| Sulfate                                     | 0.56-2.34                  | 21.3-26.4                | 7.39                     | ppm       | n/a     | 250           | Naturally present in the environment or from runoff                                           |
| Total Dissolved Solids                      | 51-185                     | 121-137                  | 102                      | ppm       | n/a     | 500           | Naturally present in the environment or from runoff                                           |
| Zinc                                        | 0.004-0.077                | ND                       | ND                       | ppm       | n/a     | 5             | Erosion; discharge from industry; runoff from landfills                                       |

\* Figure shown is 90<sup>th</sup> percentile from latest round of sampling, and number of sample sites exceeding the Action Level (AL) is 0.

## Microbiological Contaminants

Water sources that are surface water or groundwater under the influence of surface water are tested for pathogens such as *Cryptosporidium* at certain intervals determined by the EPA and ADEM. These pathogens can enter the water from animal or human waste. All test results were well within Federal and State standards. For people who may be immuno-compromised, 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) or on EPA's website [www.epa.gov/sites/default/files/2015-10/documents/cryptosporidium-report.pdf](http://www.epa.gov/sites/default/files/2015-10/documents/cryptosporidium-report.pdf).

| Microbiological Contaminants – Raw Water<br>Harvest Monrovia                                                                                                  |             |              |                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------|-----------------------------|
| Contaminants                                                                                                                                                  | Results     | Unit<br>Msmt | Likely Source               |
| Cryptosporidium                                                                                                                                               | ND          | Oocysts/L    | Wildlife and/or human waste |
| Giardia                                                                                                                                                       | ND          | Cysts/L      | Wildlife and/or human waste |
| E. Coli                                                                                                                                                       | ND-33       | #/100mL      | Wildlife and/or human waste |
| Turbidity                                                                                                                                                     | 0.08 - 9.14 | NTU          | Soil runoff                 |
| Testing for these contaminants was performed on raw water, before any treatment. <i>Cryptosporidium</i> has not been detected in our finished drinking water. |             |              |                             |

## PFAS Contaminants

Below is a complete list of PFAS contaminants for which our water sources were monitored. Harvest Monrovia results from 2024 are included in the table below:

| Harvest Monrovia Water 2024<br>PFAS Contaminants (ppb)                                                                                                                                                                                                                          |                                                     |       |       |             |              |                              |       |       |             |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|-------|-------|-------------|--------------|------------------------------|-------|-------|-------------|
| Abbreviation                                                                                                                                                                                                                                                                    | Contaminant                                         | MCLG  | MCL   | Results     | Abbreviation | Contaminant                  | MCLG  | MCL   | Results     |
| 11Cl-PF3OUdS                                                                                                                                                                                                                                                                    | 11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid | --    | --    | ND          | PFDoA        | Perfluorododecanoic acid     | --    | --    | ND          |
| 9Cl-PF3ONS                                                                                                                                                                                                                                                                      | 9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid    | --    | --    | ND          | PFHpA        | Perfluoroheptanoic acid      | --    | --    | ND          |
| ADONA                                                                                                                                                                                                                                                                           | 4,8-dioxa-3H-perfluorononanoic acid                 | --    | --    | ND          | PFHxS        | Perfluorohexanesulfonic acid | 0.010 | 0.010 | .0019-.0022 |
| HFPO-DA                                                                                                                                                                                                                                                                         | Hexafluoropropylene oxide dimer acidA               | 0.010 | 0.010 | ND          | PFNA         | Perfluorononanoic acid       | 0.010 | 0.010 | ND          |
| NEtFOSAA                                                                                                                                                                                                                                                                        | N-ethylperfluorooctanesulfonamidoacetic acid        | --    | --    | ND          | PFOS         | Perfluorooctanesulfonic acid | 0     | 0.004 | .0039-.0049 |
| NMeFOSAA                                                                                                                                                                                                                                                                        | N-methylperfluorooctanesulfonamidoacetic acid       | --    | --    | ND          | PFOA         | Perfluorooctanoic acid       | 0     | 0.004 | .0034-.0041 |
| PFBS                                                                                                                                                                                                                                                                            | Perfluorobutanesulfonic acid                        | --    | --    | .0034-.0047 | PFTeDA       | Perfluorotetradecanoic acid  | --    | --    | ND          |
| PFDA                                                                                                                                                                                                                                                                            | Perfluorodecanoic acid                              | --    | --    | ND          | PFTrDA       | Perfluorotridecanoic acid    | --    | --    | ND          |
| PFHxA                                                                                                                                                                                                                                                                           | Perfluorohexanoic acid                              | --    | --    | .0028-.0031 | PFUnA        | Perfluoroundecanoic acid     | --    | --    | ND          |
| <b>Note:</b> In April 2024, the EPA established individual MCLGs and MCLs for five (5) PFAS contaminants in drinking water. PFOA, PFOS, PFHxS, PFNA, & HFPO-DA. Mixtures containing 2 or more of PFHxS, PFNA, HFPO-DA, & PFBS were assigned MCL of 1 "Hazard Index" (unitless). |                                                     |       |       |             |              |                              |       |       |             |

PFAS detected results for Huntsville Utilities and Madison Utilities from 2024 are in the tables below:

| Huntsville Utilities 2024<br>Detected PFAS Contaminants (ppb) |                     |
|---------------------------------------------------------------|---------------------|
| Contaminants                                                  | Range of Detections |
| PFOS-Perfluorobutanesulfonic acid                             | ND-0.0069           |
| PFHxA-Perfluorohexanoic acid                                  | ND-0.0040           |
| PFHxS-Perfluorohexanesulfonic acid                            | ND-0.003            |
| PFOS-Perfluorooctanesulfonic acid                             | ND-0.0099           |
| PFOA-Perfluorooctanoic acid                                   | ND-0.0039           |
| Total PFAS                                                    | 0.0277              |

| Madison Utilities 2024<br>Detected PFAS Contaminants (ppb) |                     |
|------------------------------------------------------------|---------------------|
| Contaminants                                               | Range of Detections |
| PFOS-Perfluorobutanesulfonic acid                          | ND-0.002            |
| PFHxA-Perfluorohexanoic acid                               | ND-0.001            |
| PFOS-Perfluorooctanesulfonic acid                          | ND-0.003            |
| Total PFAS                                                 | ND-0.005            |

For more information on PFAS contaminants, please refer to the USEPA's website, [www.epa.gov/pfas](http://www.epa.gov/pfas).

## UCMR5 Contaminants

The table below contains the full list of UCMR5 contaminants and the results for Harvest Monrovia from 2024.

| Harvest Monrovia Water 2024<br>UCMR5 Contaminants (in ppb)         |           |                                                           |           |
|--------------------------------------------------------------------|-----------|-----------------------------------------------------------|-----------|
| Contaminants                                                       | Results   | Contaminants                                              | Results   |
| 11Cl-PF3OUdS (11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid) | ND        | PFHxA (perfluorohexanoic acid)                            | ND-0.0031 |
| 9Cl-PF3ONS (9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid)      | ND        | PFMPA (perfluoro-3-methoxypropanoic acid)                 | ND        |
| ADONA (4,8-dioxa-3H-perfluorononanoic acid)                        | ND        | PFMBA (perfluoro-4-methoxybutanoic acid)                  | ND        |
| HFPO-DA (hexafluoropropylene oxide dimer acid)                     | ND        | PFNA (perfluorononanoic acid)                             | ND        |
| NFDHA (nonafluoro-3,6-dioxaheptanoic acid)                         | ND        | 6:2FTS (1H,1H, 2H, 2H-perfluorooctane sulfonic acid)      | ND        |
| PFBA (perfluorobutanoic acid)                                      | ND        | PFOS (perfluorooctanesulfonic acid)                       | ND-0.0041 |
| PFBS (perfluorobutanesulfonic acid)                                | ND-0.0047 | PFOA (perfluorooctanoic acid)                             | ND-0.0044 |
| 8:2FTS (1H,1H, 2H, 2H-perfluorodecane sulfonic acid)               | ND        | PFPeA (perfluoropentanoic acid)                           | ND-0.0038 |
| PFDA (perfluorodecanoic acid)                                      | ND        | PFPeS (perfluoropentanesulfonic acid)                     | ND        |
| PFDoA (perfluorododecanoic acid)                                   | ND        | PFUnA (perfluoroundecanoic acid)                          | ND        |
| PFEESA (Perfluoro (2-ethoxyethane)sulfonic acid)                   | ND        | NEtFOSAA (N-ethyl perfluorooctanesulfonamidoacetic acid)  | ND        |
| PFHpS (perfluoroheptanesulfonic acid)                              | ND        | NMeFOSAA (N-methyl perfluorooctanesulfonamidoacetic acid) | ND        |
| PFHpA (perfluoroheptanoic acid)                                    | ND        | PFTA (perfluorotetradecanoic acid)                        | ND        |
| 4:2FTS (1H,1H, 2H, 2H-perfluorohexane sulfonic acid)               | ND        | PFTrDA (perfluorotridecanoic acid)                        | ND        |
| PFHxS (perfluorohexanesulfonic acid)                               | ND        | Lithium                                                   | ND        |

For more information on UCMR contaminants, please refer to [www.epa.gov/dwucmr](http://www.epa.gov/dwucmr).

UCMR5 detected results for Huntsville Utilities and Madison Utilities from 2024 are in the tables below:

| Huntsville Utilities 2024<br>Detected UCMR5 Contaminants (ppb) |                     |
|----------------------------------------------------------------|---------------------|
| Contaminants                                                   | Range of Detections |
| PFOS-Perfluorobutanesulfonic acid                              | 0.0018-0.0062       |
| PFxHA-Perfluorohexanoic acid                                   | 0.0011-0.0023       |
| PFBA-Perfluorobutanoic acid                                    | 0.0032-0.0092       |
| PFPeA-Perfluoropentanoic acid                                  | 0.0011-0.0025       |
| PFPeA-Perfluoroheptanoic acid                                  | ND-0.0011           |
| PFHxS-Perfluorohexanesulfonic acid                             | ND-0.0026           |
| PFOS-Perfluorooctanesulfonic acid                              | 0.0015-0.0090       |
| PFOA-Perfluorooctanoic acid                                    | ND-0.0029           |

| Madison Utilities 2024<br>Detected UCMR5 Contaminants (ppb) |                     |
|-------------------------------------------------------------|---------------------|
| Contaminants                                                | Range of Detections |
| PFxHA-Perfluorohexanoic acid                                | 0.05                |
| PFBA-Perfluorobutanoic acid                                 | 0.025               |
| PFPeA-Perfluoropentanoic acid                               | 0.06                |

### Madison Water Works & Sewer Board TOC Reporting Non-compliance

The Madison Water Works & Sewer Board has incurred a total organic carbon (TOC) reporting non-compliance. The non-compliance resulted from a failure to submit the January 2024 results by February 10, 2024.

We also incurred another total organic carbon (TOC) reporting non-compliance. The noncompliance resulted from a failure to submit the July 2024 results by August 10, 2024.

ADEM Admin. Coder. 335-7-2-.20(1)(a) states, "the supplier of water shall report to the Department (ADEM) the results of any test, measurement or analysis within the first 10 days following the month in which the result is received or the first 10 days following the end of the required monitoring period as stipulated by the Department, whichever is shortest."

### Plain Language Definitions

**Action Level:** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

**Coliform Absent (ca):** laboratory analysis indicates that the contaminant is not present.

**Disinfection byproducts (DBPs):** formed when disinfectants react with bromide or natural organic matter present in the source water.

**Hazard Index (HI):** used to determine health concerns associated with mixtures of certain PFAS in finished drinking water. An HI greater than 1 requires a system to take action.

**Locational Running Annual Average (LRAA) –** yearly average of all the DPB results at each specific sampling site

**Maximum Contaminant Level (MCL):** highest level of a contaminant that is allowed in drinking water.

**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 (MRDL):** highest level of a disinfectant allowed in drinking water. There is convincing evidence that disinfection is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (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.

**Micrograms per liter (ug/L):** equivalent to parts per billion (ppb) since one liter of water is equal in weight to one billion micrograms.

**Microsiemens per centimeter (µs/cm):** unit of measurement for Specific Conductance.

**Milligrams per liter (mg/L):** equivalent to parts per million

**Millirems per year (mrem/yr):** a measure of radiation absorbed by the body.

**Nephelometric Turbidity Unit (NTU):** a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Parts per billion (ppb) or Micrograms per liter (µg/l):** corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per million (ppm) or Milligrams per liter (mg/l):** corresponds to one minute in two years or a single penny in \$10,000.

**Parts per quadrillion (ppq) or Picograms per liter (picograms/l):** corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000.

**Parts per trillion (ppt) or Nanograms per liter (nanograms/l):** corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

**Picocuries per liter (pCi/L):** a measure of the radioactivity in water.

**Running Annual Average (RAA):** yearly average of all the DPB results at each specific sampling site in the distribution system.

**Standard Units (S.U.):** pH of water measures the water's balances of acids and bases.

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

**Turbidity:** a measure of the cloudiness of the water, a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

**Unregulated Contaminants:** contaminants for which the EPA has not established MCLs.

**Variances & Exemptions (V&E):** State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Below is a table of contaminants for which we monitor as required on a schedule set by the Environmental Protection Agency and the Alabama Department of Environmental Management.

| STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS |        |                   |                 |                                                    |     |              |           |
|------------------------------------------------------|--------|-------------------|-----------------|----------------------------------------------------|-----|--------------|-----------|
| Contaminant                                          | MCL    | Unit of Msmt      | Results         | Contaminant                                        | MCL | Unit of Msmt | Results   |
| <b>Bacteriological Contaminants</b>                  |        |                   |                 | 1,1-Dichloroethylene                               | 7   | ppb          | ND        |
| Total Coliform Bacteria                              | <5%    | Present or absent | <1%             | cis-1,2-Dichloroethylene                           | 70  | ppb          | ND        |
| Fecal Coliform and E.coli                            | 0      | Present or absent | absent          | trans-1,2-Dichloroethylene                         | 100 | ppb          | ND        |
| Turbidity                                            | TT     | NTU               | 0.01-0.22       | Dichloromethane                                    | 5   | ppb          | ND        |
| Cryptosporidium                                      | TT     | Calc.organisms/l  | ND              | 1,2-Dichloropropane                                | 5   | ppb          | ND        |
| <b>Radiological Contaminants</b>                     |        |                   |                 | Di (2-ethylhexyl)adipate                           | 400 | ppb          | ND        |
| Beta/photon emitters                                 | 4      | mrem/yr           | ND              | Di (2-ethylhexyl)phthalate                         | 6   | ppb          | ND-0.04   |
| Alpha emitters                                       | 15     | pCi/l             | ND              | Dinoseb                                            | 7   | ppb          | ND        |
| Combined radium                                      | 5      | pCi/l             | ND              | Dioxin [2,3,7,8-TCDD]                              | 30  | ppq          | ND        |
| Uranium                                              | 30     | pCi/l             | ND              | Diquat                                             | 20  | ppb          | ND        |
| <b>Inorganic Chemicals</b>                           |        |                   |                 | Endothall                                          | 100 | ppb          | ND        |
| Antimony                                             | 6      | ppb               | ND              | Endrin                                             | 2   | ppb          | ND        |
| Arsenic                                              | 10     | ppb               | ND              | Epichlorohydrin                                    | TT  | TT           | ND        |
| Asbestos                                             | 7      | MFL               | ND              | Ethylbenzene                                       | 700 | ppb          | ND        |
| Barium                                               | 2      | ppm               | 0.002           | Ethylene dibromide                                 | 50  | ppt          | ND        |
| Beryllium                                            | 4      | ppb               | ND              | Glyphosate                                         | 700 | ppb          | ND        |
| Cadmium                                              | 5      | ppb               | ND              | Heptachlor                                         | 400 | ppt          | ND        |
| Chromium                                             | 100    | ppb               | 0.166-0.808     | Heptachlor epoxide                                 | 200 | ppt          | ND        |
| Copper                                               | AL=1.3 | ppm               | 0.00373 - 0.695 | Hexachlorobenzene                                  | 1   | ppb          | ND        |
| Cyanide                                              | 200    | ppb               | ND              | Hexachlorocyclopentadiene                          | 50  | ppb          | ND        |
| Fluoride                                             | 4      | ppm               | ND-1.0          | Lindane                                            | 200 | ppt          | ND        |
| Lead                                                 | AL=15  | ppb               | ND              | Methoxychlor                                       | 40  | ppb          | ND        |
| Mercury                                              | 2      | ppb               | 0.127-0.138     | Oxamyl [Vydate]                                    | 200 | ppb          | ND        |
| Nitrate                                              | 10     | ppm               | 2.70-2.93       | Polychlorinated biphenyls                          | 0.5 | ppb          | ND        |
| Nitrite                                              | 1      | ppm               | ND              | Pentachlorophenol                                  | 1   | ppb          | ND        |
| Selenium                                             | .05    | ppm               | ND              | Picloram                                           | 500 | ppb          | ND        |
| Thallium                                             | .002   | ppm               | ND              | Simazine                                           | 4   | ppb          | ND        |
| <b>Organic Contaminants</b>                          |        |                   |                 | Styrene                                            | 100 | ppb          | ND        |
| 2,4-D                                                | 70     | ppb               | ND              | Tetrachloroethylene                                | 5   | ppb          | ND        |
| Acrylamide                                           | TT     | TT                | ND              | Toluene                                            | 1   | ppm          | ND        |
| Alachlor                                             | 2      | ppb               | ND              | Toxaphene                                          | 3   | ppb          | ND        |
| Benzene                                              | 5      | ppb               | ND              | 2,4,5-TP (Silvex)                                  | 50  | ppb          | ND        |
| Benzo(a)pyrene [PAHs]                                | 200    | ppt               | ND              | 1,2,4-Trichlorobenzene                             | .07 | ppm          | ND        |
| Carbofuran                                           | 40     | ppb               | ND              | 1,1,1-Trichloroethane                              | 200 | ppb          | ND        |
| Carbon tetrachloride                                 | 5      | ppb               | ND              | 1,1,2-Trichloroethane                              | 5   | ppb          | ND        |
| Chlordane                                            | 2      | ppb               | ND              | Trichloroethylene                                  | 5   | ppb          | ND        |
| Chlorobenzene                                        | 100    | ppb               | ND              | Vinyl Chloride                                     | 2   | ppb          | ND        |
| Dalapon                                              | 200    | ppb               | ND              | Xylenes                                            | 10  | ppm          | ND        |
| Dibromochloropropane                                 | 200    | ppt               | ND              | <b>Disinfectants &amp; Disinfection Byproducts</b> |     |              |           |
| 1,2-Dichlorobenzene                                  | 1000   | ppb               | ND              | Chlorine                                           | 4   | ppm          | 1.7.7-2.3 |
| 1,4-Dichlorobenzene (para)                           | 75     | ppb               | ND              | Chlorite                                           | 1   | ppm          | ND        |
| o-Dichlorobenzene                                    | 600    | ppb               | ND              | TTHM [Total trihalomethanes]                       | 80  | ppb          | 0.63-44.7 |
| 1,2-Dichloroethane                                   | 5      | ppb               | ND              | HAA5 [Total haloacetic acids]                      | 60  | ppb          | ND-38.0   |

**More information about contaminants to drinking water and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).**