

# **Montrose Water System**

## **2013 Annual Drinking Water Quality Report**

We're pleased 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 goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand, and be involved in, the efforts we make to continually improve the water treatment process and protect our water resources.

### ***Where Does Our Drinking Water Come From?***

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. We purchase treated water from the City of Portland whose sources are two wells that pump from the Cockfield Formation Aquifer.

### ***How Safe Is The Source Of Our Drinking Water?***

The Arkansas Department of Health has completed a Source Water Vulnerability Assessment for City of Portland. The assessment summarizes the potential for contamination of our sources of drinking water and can be used as a basis for developing a source water protection plan. Based on the various criteria of the assessment, our water sources have been determined to have a low susceptibility to contamination. You may request a summary of the Source Water Vulnerability Assessment from our office.

### ***What Contaminants Can Be In Our Drinking Water?***

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, 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 stormwater 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 stormwater 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 stormwater 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 assure tap water is safe to drink, EPA has 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 which must provide the same protection for public health.

### ***Am I at Risk?***

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 the water poses a health risk. However, 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 small amounts of contamination. These people should seek advice about drinking water from their health care providers. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791. In addition, EPA/CDC guidelines on appropriate means to lessen the risk of infection by microbiological contaminants are also available from the Safe Drinking Water Hotline.

### ***Lead and Drinking Water***

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. We are 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>.

### ***How Can I Learn More About Our Drinking Water?***

If you have any questions about this report or concerning your water utility, please contact Gary Williamson, Operator, at 870-853-7340. We want our valued customers to be informed about their water utility. Our system currently holds no scheduled meetings. If you want to learn more, please contact Gary Williams.

## TEST RESULTS

We and the City of Portland routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2013. In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms we've provided the following definitions:

**Action Level** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**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)** - unenforceable public health goal; 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)** - 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.

**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.

**Not Applicable (NA)**

**Parts per billion (ppb)** - a unit of measurement for detected levels of contaminants in drinking water. One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per million (ppm)** - a unit of measurement for detected levels of contaminants in drinking water. One part per million corresponds to one minute in two years or a single penny in \$10,000.

| MICROBIOLOGICAL CONTAMINANTS  |                                   |                                     |                                    |                            |                                    |   |
|---|-----------------------------------|-------------------------------------|------------------------------------|----------------------------|------------------------------------|---|
| Contaminant   | Violation Y/N                     | Level Detected                      | Unit                               | MCLG (Public Health Goal)  | MCL (Allowable Level)              | Major Sources in Drinking Water   |
| Total Coliform Bacteria (Montrose Water)  | N                                 | 1 positive in April                 | Present                            | 0                          | <b>1 positive sample per month</b> | Naturally present in the environment  |
|   | Y                                 | <b>8 positives in May</b>           |                                    |                            |                                    |   |
| <p>♦ <b>Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.</b></p>   |                                   |                                     |                                    |                            |                                    |   |
| INORGANIC CONTAMINANTS  |                                   |                                     |                                    |                            |                                    |   |
| Contaminant   | Violation Y/N                     | Level Detected                      | Unit                               | MCLG (Public Health Goal)  | MCL (Allowable Level)              | Major Sources in Drinking Water   |
| Nitrate [as Nitrogen] (Portland Water)  | N                                 | 0.42                                | ppm                                | 10                         | 10                                 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| LEAD AND COPPER TAP MONITORING  |                                   |                                     |                                    |                            |                                    |   |
| Contaminant   | Number of Sites over Action Level |                                     | 90 <sup>th</sup> Percentile Result | Unit                       | Action Level                       | Major Sources in Drinking Water   |
| Lead (Montrose Water)   | 1                                 |                                     | 0.018                              | ppm                        | 0.015                              | Corrosion from household plumbing systems; erosion of natural deposits                      |
| Copper (Montrose Water)   | 0                                 |                                     |                                    | ppm                        | 1.3                                |   |
| <p>♦ <b>Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.</b></p> <p>♦ We are currently on a reduced monitoring schedule and required to sample once every three years for lead and copper at the customers' taps. The results above are from our last monitoring period in 2013. Our next required monitoring period is in 2016.</p> |                                   |                                     |                                    |                            |                                    |   |
| REGULATED DISINFECTANTS   |                                   |                                     |                                    |                            |                                    |   |
| Disinfectant  | Violation Y/N                     | Level Detected                      | Unit                               | MRDLG (Public Health Goal) | MRDL (Allowable Level)             | Major Sources in Drinking Water   |
| Chlorine (Montrose Water)   | N                                 | Average: 0.26<br>Range: 0.03 – 0.83 | ppm                                | 4                          | 4                                  | Water additive used to control microbes   |

| BY-PRODUCTS OF DRINKING WATER DISINFECTION  |                |   |                           |  |                       |
|---|----------------|---|---------------------------|--|-----------------------|
| Contaminant   | Violation Y/N  | Level Detected  | Unit                      | MCLG (Public Health Goal)                  | MCL (Allowable Level) |
| HAA5 [Haloacetic Acids] (Montrose Water)  | NA             | Highest Running 12 Month Average: 16.3<br>Range: 5.9 – 26.6                       | ppb                       | 0  | 60                    |
| TTHM [Total Trihalomethanes] (Montrose Water)   | NA             | Highest Running 12 Month Average: <b>82.9</b><br>Range: 67.6 – <b>98.1(YC003)</b> | ppb                       | NA   | <b>80</b>             |
| <ul style="list-style-type: none"> <li>The levels detected for HAA5 &amp; TTHM are from investigative (or preliminary) monitoring performed under the upcoming Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR). The purpose of the Stage 2 DBPR is to increase public health protection by having us meet the HHA5 and TTHM allowable levels (MCLs) as an annual average at specific locations and not just averaging the entire system. This is a tougher standard and when the Rule goes into effect some localities will have trouble meeting it. To assist us in meeting these stricter requirements we are taking investigative samples to work on reducing HAA5s and TTHMs throughout the distribution system before the new Rule goes into effect. MCL violations are not applicable to investigative monitoring.</li> <li><b>While these are investigative samples with no violations, the running highest Locational average of TTHM and the upper range exceeded the MCL. Some people who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.</b></li> </ul> |                |   |                           |  |                       |
| UNREGULATED CONTAMINANTS  |                |   |                           |  |                       |
| Contaminant   | Level Detected | Unit  | MCLG (Public Health Goal) | Major Sources in Drinking Water            |                       |
| Chloroform (Portland Water)   | 32.3           | ppb   | 70                        | By-products of drinking water disinfection |                       |
| Bromodichloromethane (Portland Water)   | 8.94           | ppb   | 0                         |  |                       |
| Dibromochloromethane (Portland Water)   | 1.63           | ppb   | 60                        |  |                       |
| <ul style="list-style-type: none"> <li>Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. MCLs (Maximum Contaminant Levels) and MCLGs (Maximum Contaminant Level Goals) have not been established for all unregulated contaminants.</li> </ul>   |                |   |                           |  |                       |

| VIOLATIONS - Montrose Water System  |           |            |  |
|---|-----------|------------|--|
| TYPE: Bacteriological Sampling  | FROM:     | TO:        | CORRECTIVE ACTION:   |
| Failed to submit valid resamples following a coliform positive sample   | 4/1/2013  | 4/30/2013  | Resumed bacteriological monitoring as required by state and federal regulations  |
| Exceeded the Maximum Contaminant Level (MCL) for Total Coliform bacteria  | 5/1/2013  | 5/31/2013  | Adjusted the level of disinfectant and resumed bacteriological monitoring as required by state and federal regulations |
| TYPE: Annual Drinking Water Quality Reporting   | FROM:     | TO:        | CORRECTIVE ACTION:   |
| Consumer Confidence Report (CCR) - Failure to provide annual water quality report to customers  | 7/1/2013  | 10/11/2013 | Made report available to public by Posting   |
| Consumer Confidence Report (CCR) - Failure to provide the state with certification of distribution of the annual water quality report | 10/1/2013 | 10/16/2013 | Provided the state with certification of distribution of the annual water quality report                               |
| TYPE: State licensing   | FROM:     | TO:        | CORRECTIVE ACTION:   |
| State licensing regulations were not met  | 11/1/2013 | 1/13/2014  | Water system operator obtained license in compliance with state regulations  |

| SIGNIFICANT DEFICIENCIES   |  |
|--|--|
| Under the new Ground Water Rule, each Water Treatment System must be surveyed (audited) by the Arkansas Department of Health and all uncorrected Significant Deficiencies must be identified, corrected and reported to the public. Montrose Water had two Significant Deficiencies identified during their May 27, 2010 survey. |  |
| Nature of Deficiencies   | Progress to Date   |
| Montrose Water must comply with the minimum standards for a Cross Connection Control Program that prevents potentially contaminated non-drinking water from entering into the drinking water system.   | As of this date Montrose Water has not responded with a Plan to correct this deficiency. |
| Montrose Water must submit their monthly operating reports with the Arkansas Department of Health by the 10 <sup>th</sup> of each month.   | As of this date Montrose Water has not responded with a Plan to correct this deficiency. |