Dear City of Boulder Utilities Customer:

The City of Boulder water system has exceeded the drinking water standard for haloacetic acids for the third quarter of 2017. This was not an emergency and does not require using an alternate water source. This notification complies with federal and state laws requiring water systems to notify customers when a drinking water standard is exceeded. All other drinking water standards were met during this period.

What Happened: Haloacetic acids are a byproduct of the drinking water disinfection process, and small amounts are always present in drinking water. As reported to water customers in July 2017, there was an increase in haloacetic acid levels in late May/early June that caused a drinking water violation in the second quarter of 2017. This same issue, which was corrected in June 2017, has resulted in another violation in the third quarter, because of the way the drinking water standard (called the maximum contaminant level, or MCL) for haloacetic acids is calculated.

How the Drinking Water Standard for Haloacetic Acids Is Calculated: State and federal regulations require the city to collect water samples at eight locations throughout the city on a quarterly basis, or every three months. The four most recent sampling results at each location are averaged and reported to the state each quarter (this calculation is called the running annual average). The MCL for haloacetic acids is 60 micrograms/liter (µg/L). The running annual average of haloacetic acids at one sampling site for this quarter was 60.6 µg/L, or 0.6 µg/L above the MCL. Average haloacetic acid levels in Boulder typically range from 23 to 48 µg/L. Although levels of haloacetic acids have been below 60 µg/L at all eight sampling sites since late June, the increased levels in late May/early June caused the running annual average at one site to be above 60 µg/L. The June 2017 sampling results will continue to be calculated into the running annual average through the first quarter of 2018. Therefore, it is possible that two additional violations will be reported, in January and April 2018.

Why the Increased Levels of Haloacetic Acids Occurred: Haloacetic acids are formed when chlorine, a necessary part of the water disinfection process, reacts with natural organic matter in the water. Construction at the Betasso Treatment Plant required a change to the disinfection process to keep drinking water free of disease-causing bacteria and other pathogens. This change, combined with high levels of organic matter during spring snowmelt runoff, created higher levels of haloacetic acids in late May and early June 2017.

Corrective Actions: After the high levels of haloacetic acids were measured in June 2017, city staff adjusted water treatment operations, which lowered the level of haloacetic acids. Staff has also modified sampling routines and data analysis to identify potential problems earlier in the treatment process. The city has maintained levels below 60 µg/L at all sampling sites since late June. To view recent sampling results and additional information about the second quarter violation, please visit www.bouldercolorado.gov/water.

What This Means for Customers
- **You do not need to take any action** related to your drinking water or seek an alternate supply of drinking water. If this had been an emergency, you would have been notified immediately. Staff estimate that high levels of haloacetic acids were present in the water system for less than thirty days in late May/early June and have not occurred since that time.
- **Health effects.** Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. The level of haloacetic acids exceeded the MCL for less than 30 days and has been below the drinking water standard since June. Customers who wish to learn more about the potential health effects of exposure may visit www.cdc.gov/safewater/chlorination-byproducts.html or consult with their doctor.
- **Who is affected.** While only one of the city’s eight sampling sites indicated an exceedance of the MCL, it is possible that levels that occurred in late May/early June exceeded the MCL in other areas of the city’s distribution system. Therefore, all customers may have consumed water with elevated levels of haloacetic acids during this time period.

For more information, please contact Tom Settle at 303-441-3200, settle@bouldercolorado.gov or 1094 Betasso Road, Boulder, CO 80302. You may also visit www.bouldercolorado.gov/water/drinking-water-quality to learn more about water quality monitoring in the city and to view the 2017 Drinking Water Quality Report.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

Residents who do not receive water from the City of Boulder can disregard this notification.

The City of Boulder (Water System CO0107152) sent you this notice, October 2017.