

ADDITIONAL DRINKING WATER WARNING

City of Burlington

Infants below the age of six (6) months who drink water containing nitrate in excess of the MCL (maximum contaminant level) could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Blue baby syndrome is indicated by blueness of the skin. Symptoms in infants can develop rapidly, with health deteriorating over a period of days.

<u>From January 1, 2009 through February 28, 2014</u>, the health of infants under six (6) month of age may have been affected by the City of Burlington's drinking water because it exceeded the health-based limit of nitrate.

From January 1, 2009 through February 28, 2015, the City of Burlington operated a drinking water system in a manner that violated the laws governing the operation of drinking water systems, which potentially endangered the residents and visitors of Burlington. During that period, the City of Burlington collected and analyzed 537 samples of drinking water for nitrate. The City did not report the results of 443 of the 537 samples to the Colorado Department of Public Health and Environment. **Of the 443 unreported sample results, 235 exceeded the health-based limit for nitrate.** After receiving the sample results that exceeded the health-based limit, the City of Burlington failed to perform a series of actions that are required by the regulation. The City's failure to comply with the requirements of the regulation has resulted in 2,019 violations of the drinking water regulations.

The following is a list of these violations, including the type of violations and number of violations:

- <u>235 Violations of the Health-based Limit for Nitrate</u>: 235 sample results exceeded the health-based limit of nitrate of 10 mg/L. The exceedances ranged from 10.5 mg/L to 18.6 mg/L.
- 705 Violations for Failing to Notify the Public that the Water Exceeded the Health-based Limit for Nitrate:

 To protect public health, the drinking water regulations require drinking water systems to immediately provide the public with information when a sample result for nitrate exceeds the health-based limit. Generally, a public notification includes information about the health-based limit, the population potentially affected by the contaminant, what actions the public should take, what caused the exceedance of the health-based limit, and the actions the drinking water system is planning to take to address the quality of water. The City of Burlington failed to distribute public notification for the 235 sample results that exceeded the health-based limit for nitrate in three (3) required instances per sample result for a total of 705 violations.
- <u>470 Violations for Failing to Notify the Colorado Department of Public Health and Environment:</u> The City of Burlington failed to notify the Colorado Department of Public Health and Environment about the 235 sample results that exceeded the health-based limit and about 235 sampling violations.
- <u>235 Sampling Violations:</u> The City did not collect confirmation samples for the 235 samples that exceeded the health-based limit for nitrate.
- <u>443 Reporting Violations:</u> The City of Burlington did not report 443 of samples results to the Colorado Department of Public Health and Environment. These included all 235 sample results that exceeded the health-based limit for nitrate.
- <u>16 Violations for Failing to Sample at Proper Frequencies:</u> The City of Burlington sampled in a manner that did not meet the requirements in the regulation. The City did not request or obtain approval from the Colorado Department of Public Health and Environment to modify its sampling frequency. Sixteen (16) sample results were greater than or equal to 5 mg/L, and the City did not properly increase its sampling frequency.
- 5 Violations for Providing Inadequate Information to Customers in the Supplier's Consumer Confidence Reports from 2009 through 2013: All drinking water systems are required to provide their customers with annual Consumer Confidence Reports. A Consumer Confidence Report is an annual report that includes information on the quality of the water supplied and characterizes the risks, if any, from exposure to contaminants detected in the drinking water in an accurate and understandable manner. The City of Burlington was required to include a clear and readily understandable explanation of every violation, any potential adverse health effects, and the

steps the supplier has taken to correct the violation. The City of Burlington did not include the required information about the violations associated with exceeding the health-based limit for nitrate.

What should I do?

The violations described in this notice pertain to historical elevated nitrate levels in the City's drinking water that took place from January 1, 2009 through February 2014. **As such, there is not a current health risk associated with these historical violations.** Residents and visitors to the City during that time period who had infants under six (6) months of age and/or were pregnant/nursing or had other health issues are encouraged to contact their medical care provider with any questions or concerns.

Current public health concerns pertaining to the ongoing elevated nitrate levels in the City's drinking water are being addressed through actions that the City is required to take pursuant to formal Enforcement Order No. DW-14-023, issued by the Colorado Department of Public Health and Environment. Since April 17, 2014, the City has been providing public notification regarding the current public health that will be ongoing as a requirement under Enforcement Order DW-14-023. A copy of the City's ongoing public notification is attached. The ongoing notification includes important information for current residents and visitors to the City with infants under six (6) months of age and/or are pregnant/nursing or have other health issues.

What is being done?

As a result of the City's failure to comply with the requirements of the drinking water regulations from January 1, 2009 through February 28, 2014 and the resulting 2,019 violations, the Colorado Department of Public Health and Environment (CDPH&E) has issued an additional Enforcement Order, DW.07.15.132005 to the City. The City must comply with the requirements of both Enforcement Orders, DW-14-023 and DW.07.15.132005. Enforcement Order DW-14-023 includes specific actions and deadlines that the City must perform to address the elevated nitrate levels in its drinking water with a final compliance deadline of December 1, 2017.

The City is working to keep those wells that have exceeded the MCL for nitrate offline. However, the wells with high levels of nitrates may need to be used at any time to meet the community's water supply needs. The City is continuing to test the drinking water for nitrate on a monthly basis and will continue to provide the ongoing public notice until the nitrate issues are resolved.

The nitrate issues that the City is facing are complicated, but the City is working proactively to address the issues. The City has purchased water rights from additional wells, and has been evaluating the feasibility of making changes to the City's drinking water infrastructure to address the nitrate issues. The City has retained an engineering firm, McLaughlin Water Engineers (MWE), to assess the City's system, to evaluate possible options and to identify the most reasonable and effective solution for bringing its water system into compliance. MWE has completed an evaluation report and has proposed a water supply blending project as the recommended solution. The City is continuing to work with MWE and is also researching options for funding the proposed project, which has an estimated cost of \$4.4 million.

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 notice in a public place or distributing copies by hand or mail.

For more information, please contact the City of Burlington at 719-346-8652 or in person at 415 15th Street, Burlington CO 80807. All records, reports, etc., pertaining to this matter are available for public inspection upon request at the City Clerk's Office during normal business hours.

This notice is being sent to you by the **City of Burlington** Colorado Public Water System ID#: CO-0132005

Date distributed: August 12, 2015



DRINKING WATER WARNING

The City of Burlington
Has Elevated Levels of Nitrate in its Drinking Water

DO NOT GIVE THE WATER TO INFANTS UNDER 6 MONTHS OLD OR USE IT TO MAKE INFANT FORMULA

The City of Burlington operates multiple groundwater wells to provide drinking water to the citizens and visitors of the City. The City is required by the Colorado Primary Drinking Water Regulations, Regulation 11, to collect routine samples from the drinking water that they provide to the community. One of the parameters for which the samples are analyzed is nitrate. Water sample results for the City continue to exceed the nitrate maximum contaminant level (MCL) of 10 mg/L. Nitrate in drinking water is a serious health concern for infants less than six (6) months old, for women who are pregnant and/or breastfeeding and other sensitive individuals (as detailed below).

What should I do?

- ✓ DO NOT GIVE THE WATER TO INFANTS. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome. Blue baby syndrome is indicated by blueness of the skin. Symptoms in infants can develop rapidly, with health deteriorating over a period of days. If symptoms occur, seek medical attention immediately.
- ✓ Water, juice, and formula for children <u>under six months of age</u> should not be prepared with tap water. Bottled water or other water low in nitrates should be used for infants until further notice.
- ✓ **DO NOT BOIL THE WATER.** Boiling, freezing, filtering, or letting water stand does not reduce the nitrate level. Excessive boiling can make the nitrates more concentrated, because nitrates remain behind when the water evaporates.
- ✓ Women who are trying to become pregnant or who are pregnant or breastfeeding or individuals with the following conditions should not drink city water or use ice made from city water:
 - People with oxygen transport or delivery conditions like anemia, cardiovascular diseases, lung disease, sepsis, etc.;
 - People taking certain antibiotic medications;
 - People taking the following medications: anesthetic teething gels, phenazopyridine (Pyridium), dapsone, isosorbide dinitrate (Isordil, Dilatrate-SR, BiDil), isosorbide mononitrate (Imdur, Ismo, Monoket), nitroglycerin (Nitrolingual, NitroMist, Nitrostat), or topical anesthetics such as lidocaine (Lidoderm patch, AnaMantle HC, LidaMantle HC, Synera) or tetracaine;
 - People with enzyme deficiency (Glucose 6 Phosphate Dehydrogenase and RBC methemoglobin reductase and other genetic factors);
 - Recreational drug users (volatile nitrite inhalers, cocaine, cocaine adulterated with phenacetin and local anesthetics like benzocaine); and
 - People with rare conditions, which are generally passed on through generations, who have higher than normal levels of methemoglobin in their blood.

✓ Adults and children older than six months (excluding those sensitive individuals listed above) can drink the city water.

What happened?

Nitrate in drinking water can come from natural, industrial, or agricultural sources (including septic systems and run-off). Levels of nitrate in drinking water can vary throughout the year. The City's drinking water system uses wells that turn on and off as necessary to meet the community's water quantity needs. Water from the operating wells blends together throughout the distribution system piping. As a result, it is not possible for the City to determine which wells are providing water to specific areas of the community or to specific residences or businesses at any given time.

What is being done?

The City is working to keep those wells that have exceeded the MCL for nitrate offline. However, the wells with high levels of nitrates may need to be used at any time to meet the community's spring and summer water supply needs. The City is continuing to test the drinking water for nitrate on a bi-weekly basis and will let you know if the drinking water MCL for nitrate is exceeded again. If the City's sampling results exceed the drinking water MCL for nitrate, you will be notified by the City within twenty-four (24) hours of them becoming aware of the violation.

The nitrate issues that the City is facing are complicated, but the City is working proactively to address the issues. Currently, the City is working to purchase water rights from additional wells and has been evaluating the feasibility of making changes to the City's drinking water infrastructure that could involve re-piping and/or adding distribution piping and installing treatment for nitrates. Because of the complexities associated with the nitrate issues, the City does not have a good estimate of when the nitrate issues will be fully resolved.

For more information, please contact the City of Burlington at 719-346-8652 or 415 15th Street, Burlington, CO 80807.

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This notice is being sent to you by The City of Burlington Colorado Public Water System ID#: CO-0132005

Date distributed: 4/17/2014