

**CONSUMER CONFIDENCE REPORT #21**  
**ROCKWELL'S WATER QUALITY 2019**

Water Source: Well # 1 drilled in 1939, 453 foot deep (emergency use only)

Well # 2 drilled in 1962, 455 foot deep (emergency use only)

Well # 3 drilled in 1983, 480 foot deep

All three wells are in the Maquoketa Formation. We treat our water with chlorine which controls contaminants. In 2019 we pumped an average of 78,00 gallons of water and used 2 lbs. of gas chlorine daily.

This water supply obtains water from one or more groundwater aquifers. Every aquifer has a degree of susceptibility to contamination because of the characteristics of the aquifer, overlying material, and human activity. Susceptibility to contamination generally increases with shallower aquifers, increasing permeability of the aquifer and overlying material, nearby development or agricultural activity, and abandoned or poorly maintained wells. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources, and is available from this water supply.

<u>Aquifer Name</u>	<u>Susceptibility</u>
Devonian	Low

This report shows our water quality and what it means. If you have any questions about this report or the water you drink please contact Jay Siefken, Public Works Director at 641-822-4906. Our Council meets the first and third Wednesdays of the month at 7:00 p.m. in the Council Chambers at City Hall.

The City of Rockwell routinely monitors for constituents in your drinking water according to Federal and State laws. This report shows the results of our monitoring from January 2010 through June 2019. All drinking water, including bottled water, may be expected to contain at least a small amount of some constituents. It's important to remember that the presence of these constituents do not necessarily pose a health risk. In this table you will find many terms you may not understand. Here are some definitions to help you.

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

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

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

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

*Maximum Contaminant Level* – The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water. MCL’s are set as closed to the MCLG’s as feasible using the best available treatment technology.

*Maximum Contaminant Level Goal* – The “Goal” (MCLG) is 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.

**Nitrate** in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider. I tested on 06/24/2019, the result for our water was less than 0.10 ppm.

### **Systems with a 95th percentile Lead level above the Action Level (AL)**

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your homes plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

**LEAD:** 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.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or is manmade. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminations does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

MCL,s 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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. These people 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).

**VIOLATIONS** In August 2017 we failed to monitor for Haloacetic Acids (HAA5). Adverse health effects, if any, are not known. Monitoring procedures have been corrected to avoid future violations.

In August 2017 we failed to monitor for Total THM. Adverse health effects, if any, are not known. Monitoring procedures have been corrected to avoid future violations.

The test was taken in July 2017 rather than August 2017 which made it a violation. However, the HAA5 result was <0.006 with an MCL of 0.06. The TTHM was <0.0020 with an MCL of 0.08.