



Waukesha Water Utility

SERVING WAUKESHA SINCE 1886

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Public Notice

Dear Customer/User:

Waukesha Water Utility currently operates our system to meet the radium and gross alpha standard based upon a weighted average calculation as agreed upon with the State of Wisconsin Department of Justice. Waukesha has agreed to come into complete compliance by meeting this standard at all times at each entry point by 2018. This will allow Waukesha Water Utility to implement its future water supply plans. Until 2018, the U.S. Environmental Protection Agency (EPA) requires that we publish this notice quarterly to inform you of a violation of the maximum contaminant level (MCL) for gross alpha and radium in the Waukesha water supply. The State and Federal MCL is set at 15 picocuries per liter (pCi/L) for gross alpha and 5 pCi/L for combined radium.

Sources and potential health effects: The EPA sets drinking water standards and has determined that alpha emitting radionuclides may be of health concern at certain levels of exposure. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk getting cancer. EPA has set the drinking water standard for alpha emitters at 15 pCi/L to protect against cancer risk.

Radium is one of several common natural radioactive elements in the earth's crust. It is found in most major rock types in varying concentrations. Shales, granites, and sandstones are the types of rocks which, typically, contain a higher percentage of radium. Our wells draw from formations containing sandstone and shale. Some people who drink water containing radium 226 and 228 in excess of the MCL over many years may have an increased risk of getting cancer. Radium is similar to calcium, in that it accumulates in the bones. Risks are estimated from animal tests and occupational exposures where doses are extremely high. Because we may not know more about the actual effects of low levels of radium in the diet for many years, the drinking water standard was established at 5 pCi/L as a preventative measure.

The Wisconsin Department of Natural Resources and Department of Health and Social Services have advised us that the standard is based on the consumption of one-half gallon of water per day during an entire lifetime, and that the immediate health risk is negligible. The water is safe to drink, and seeking of alternative water sources of unknown bacteriological or chemical quality is not recommended.

What the Utility is doing: We currently operate three HMO (Hydrous Manganese Oxide) treatment plants to remove radium and one treatment plant to remove iron in our shallow well water that blends with a deep well to achieve compliance with all drinking water standards. We also constructed and put into service a new shallow well that meets all drinking water standards. Further, the Utility continues the practice of an operations plan that includes the management of our water supplies utilizing weighted averaging strategies, which provides customers with the lowest radium content water at all times.

Please share this information with 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.

Please call (262) 521-5272, if you have any questions.

Daniel S. Duchniak, P.E.
General Manager
Waukesha Water Utility