MILWAUKEE JOURNAL SENTINEL

Published 6:30 a.m. CT July 19, 2017 | **Updated 6:38 a.m. CT July 19, 2017** By Don Behm, Milwaukee Journal Sentinel

STATE EXTENDS WAUKESHA DEADLINE TO FULLY COMPLY WITH RADIUM STANDARDS FOR DRINKING WATER

The Wisconsin Justice Department has agreed to extend a court-ordered deadline for Waukesha to fully comply with federal and state safe drinking water standards for radium until the city switches to a Lake Michigan water supply in 2023.

The Waukesha Common Council on Tuesday unanimously approved an agreement that gives the city five additional years — from the current June 30, 2018, deadline to Sept. 1, 2023 — to provide radium safe drinking water to its customers.

At this time, the Waukesha Water Utility is allowed under a Waukesha County Circuit Court order to blend water from deep and shallow wells to meet the standards. Prior to blending, radium levels are reduced by treating water from three of seven deep wells to remove the radioactive metallic element.

Deep wells that draw radium-contaminated water from a sandstone aquifer provide up to 85% of the city's water needs.

"Radium standards are designed to protect people from the risks of drinking a half gallon of water per day for an entire lifetime," Waukesha Mayor Shawn Reilly said. "Our water already meets the federal standard at almost all times and is safe to drink while we implement the long-term solution."

When lake water becomes available, Waukesha will stop using its 10 groundwater wells, including seven deep wells.

The Water Utility is negotiating to purchase up to an average of 8.2 million gallons a day of lake water by midcentury from Oak Creek. That is the maximum volume set by the eight Great Lakes states last year in approving Waukesha's request for a lake water supply under terms of a 2008 federal law known as the Great Lakes protection compact.

Construction of pipelines and pumping stations is expected to start in 2019 or 2020 and be completed by 2022, according to Water Utility General Manager Dan Duchniak. Lake water would be distributed throughout Waukesha in early 2023, under current plans.

The state agreement requires Waukesha to complete engineering plans for installation of a temporary radium treatment system on one additional deep well in case the project falls behind schedule, officials said. Estimated cost of preparing the plans is \$400,000.

"If the Lake Michigan project is not 50% completed by May 1, 2022, Waukesha will need to install the temporary treatment system at a cost of \$3.1 million," Reilly said.

The additional system would ensure the city complies with interim radium standards set by the court even if one of the other three treated wells shuts down unexpectedly, according to Reilly. The new system would remain in place until the switch to the lake water supply is completed.

The Waukesha County Circuit Court must approve the agreement, which was negotiated as an amendment to the court order, now that the city council has signed off on it.

"The amendment to our agreement recognizes the good faith effort Waukesha has made to find a long-term, sustainable solution to our water problems, and the time it takes to implement it," Reilly said.

Total cost of the project was estimated at \$207 million in 2012. A revised financial plan to be completed later this year is expected to boost the final price to around \$300 million, according to Duchniak.

One condition of the states' approval of a lake water supply requires Waukesha to return 100% of the volume of water purchased from a supplier to the lake as fully treated wastewater. A pipeline and pumping stations to be built by Waukesha would discharge that flow to the Root River at S. 60th St. in Franklin. The river is tributary to the lake.

Milwaukee is making a last-minute effort to wrestle the water sales deal away from Oak Creek. Milwaukee's offer is being reviewed by the Waukesha Water Utility and a recommendation — either to sign a final contract with Oak Creek or begin negotiations with Milwaukee — is expected in early September.

http://www.jsonline.com/story/news/local/milwaukee/2017/07/19/state-extends-waukesha-deadline-fully-comply-radium-standards-drinking-water/487539001/