Busiest Waukesha well shut down for repairs

Impact on radium compliance expected to be minimal

By Brian Huber

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WAUKESHA — The city's busiest well has been shut down for repairs but the use of an alternative well is not expected to significantly impact the city's ability to remain compliant with radium limits over the next several weeks.

Waukesha Water Utility Manager Dan Duchniak said well No. 10, located on Wolf Road, was shut down after a routine check revealed loud vibration noise and monitoring showed that its normal output of 3.9 million gallons a day had fallen to about 3.2 mgpd. The well was shut down Monday and the city activated a different well, No. 7, to compensate, Duchniak said.

Because well No. 7 had been inactive and water levels beneath it have risen as a result, Duchniak said, that well can produce water that is compliant with the city's radium limits, at least for the short term. Prolonged use will result in a drawdown that would increase radium levels, he said, but the repairs to well No. 10 are expected to be complete in four to six weeks, minimizing that impact.

Duchniak said a contractor has already begun pulling column pipe from well No. 10, at the bottom of which sits the pump, about 800 feet deep. He said it remained to be determined whether the problem was with the column pipe or the pump, but the suspicion is the pipe is faulty.

Duchniak said he expected no water service disruptions through the repair process. All told, it will cost up to about $150,000 to repair the well, Duchniak said.

Typically, the process of closing a well, ordering replacement equipment, waiting for its arrival and then testing it after installation could take six to eight months. But this process is expected to take only a few weeks, because in September, the Water Commission approved the purchase of $194,000 worth of replacement equipment as a contingency plan in case of a well failure, Duchniak said.

"The commission had the foresight to approve that and allow us to be prepared in the event that this happened," Duchniak said. "In the meantime we've begun to

operate well No 7. ... That should be the only non-live well that we should have to run. If we are able to do that, we anticipate we will be able to be in compliance with the consent order we've signed with the state. If it's down for any significant amount of time we will be out of compliance."

Duchniak added this is the third time in six years this well has been down. "That speaks once again as to why we need to develop a new water supply in that the reliability of the supply comes into question, but then it's also the long-term sustainability," he said. "We need a long-term sustainable water supply for our residents so we don't have to be concerned about this."

Moving forward toward lake project

To that end, the city last summer received approval from the Compact Council to withdraw water from the Great Lakes, hurdling the last regulatory barrier to tapping Lake Michigan for a long-term water supply and setting a precedent under the Great Lakes Compact. The city has been under a court order and agreement with the state to limit the content of radium, a naturally occurring radioactive element that increases in concentration as more water is withdrawn from underground aquifers, to 5 picocuries per liter. Duchniak said the city generally falls below that limit by treating the water.

Since the approval, the city has hired and been meeting with an engineering firm to bring its employees up to speed. In the next few months, there are 38 workshops and meetings slated with the various parties to set a foundation and chart a course for the program to tap into Lake Michigan.

The main subcontractor, Greeley & Hansen of Chicago, is expected to open an office in Waukesha. Duchniak added a team of engineers, scientists, surveyors and public relations specialists is working to design how the process will move forward. 95 percent of the program is being done by parties located in southeastern Wisconsin, Duchniak said.

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