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New well, same radium treatment

by Carol Klusman

Elburn's well number 5, which is under construction in the Blackberry Creek subdivision, will include the same radium removal technology that has been effective for village wells number 3 and 4. In a 5-0 vote, with trustee Tom Burgholzer absent, the Elburn Village Board agreed to hire Water Remediation Technology, LLC (WRT) to install a system that removes contaminants from the water, including radium. It is the same system that has proven effective for Elburn's other water sources. Originally hiring WRT three years ago, the village saw the potential to save money and use technology that was more attractive than other solutions they considered, said Village President Jim Willey. Rather than transferring radium from the water to another location, such as a waste water treatment plant, WRT's system sends the water through a bed of media to which the radium adheres. Willey called the method more socially conscious and questioned whether other towns may someday be faced with removing radium from their waste water treatment locations.

Radium is a naturally occurring chemical in the water. The Environmental Protection Agency (EPA) set new standards, lowering the amount of radium allowed in municipality water supplies effective in 2006. "The general public forgets how big an issue this was for us; it was an unfunded mandate," said Willey. Ron Dollar of WRT made a presentation regarding the success for wells 3 and 4.

"This is an extremely effective treatment project," said Dollar.

For instance, reviewing results of Elburn's two other wells, the maximum containment level (MCL) set by the FDA is 5 pico curies per liter (pCi/L), and has determined that it is a health concern at levels above the MCL.

Well number 3 had a 13.1 pCi/L combined average radium in raw water, or before treatment. After treatment, the water tests at less than one. At well number 4, the combined average radium in raw water was 19.9 pCi/L but is non-detectable after treatment, explained Dollar. Results were similar when reviewing gross figures, or particle activity, at 15 pCi/L, at both wells.

Original tests of untreated water showed fairly high radium levels for this part of the country, said Dollar.

"It was a leap of faith, and it worked out real well," said trustee Craig Swan.

The treatment vessel for well number 5 is expected to be delivered in the next few weeks, and the entire system is expected to be up and running by the end of the year, explained Village Administrator Dave Morrison.

In an annexation agreement, developer B&B Enterprises agreed to install and construct the well, explained Willey. The developer's costs are \$360,000 for installation and \$29,334 for an underutilization fee, because the project was started so early before it will be usable to the residents, Willey added.

WRT's system is also in place in other nearby towns such as Oswego, Cortland, Bartlett, Sycamore and Antioch.