

Antioch works on radium levels in well water

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SPECIAL TO THE NEWS SUN

ANTIOCH — Village officials have finalized a contract to treat two deep wells with new technology to bring their radium levels down below current state standards.

The wells will serve the Deercreech-NeuHaven, Clublands and Redwing View developments on the southeast side of the village. "The wells will not be used until the radium is reduced to an acceptable level," said village administrator Michael Haley.

Getting the radium level down to an acceptable level is becoming a critical issue for the village, said Mayor Dorothy Larson.

Cost of the filtration system and its annual operation costs of \$85,000 over the next 20 years will be picked up by Neumann Homes. All of the developments are within a separate service area, so it will be up to Neumann Homes to determine how the costs will be paid, said Haley.

On Monday, the Village Board approved a contract with WRT Environmental and RMD Operations to install filtration systems at wells one and two and oversee the filtering process of the well water through a natural medium called Z88. The fine sandy material attracts radium and is able to reduce the amount of radium far below the current five picocuries per liter (pCi/l) allowed by the Illinois Environmental Protection Agency. The Antioch wells tested at 7 pCi/l.

"It is a new technology approved by the EPA that eliminates the need for the need to filter the radium waste through the wastewater treatment plant," said Village Attorney Rudy Magna. The filtering material will be removed by WRT and disposed of at a landfill site, according to the contract. Magna said once the material leaves the Antioch wells it will be the responsibility of WRT to dispose of it.

The material is mined in Montana and is being used successfully in other municipal water systems, including the village of Oswego. "This is the only game in town when it comes to this material, but it is the up and coming treatment for this problem of radium in deep wells. It is a very safe and natural material. That's the beauty of it."

Before village officials looked at treating the well water they tried the standard approach of blending water from shallow wells with the deeper wells to reduce the radium level in the water.

"We tried blending the water from the deep well with another well to bring the down the level but that did not work," said Haley.

Haley said the wells will not be used until the radium removal equipment is installed and the water is tested by the IEPA. Currently, residents in that area are getting their water from existing wells in the downtown Antioch area that is being transmitted by an 18-inch water main.

05/04/06