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Radioactive leak taints water in Will

By Michael Hawthorne and Hal Dardick Tribune staff reporters

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A plume of radioactive tritium seeping into groundwater near a Will County nuclear power plant has prompted Exelon Corp. to buy out one nearby property owner and offer to compensate 14 others for any loss in home value.

Levels of the radioactive isotope found outside the Braidwood Generating Station so far have been well below the amount the federal government considers unhealthy. But the company acknowledged Tuesday that there is more tritium in the nearby groundwater than occurs naturally and vowed to clean it up.

In one well on Exelon's property, the amount of tritium was more than 11 times higher than the federal limit for groundwater, according to the Nuclear Regulatory Commission.

Based on that finding and tests of 15 nearby private wells, the Illinois Environmental Protection Agency cited Exelon, the parent company of ComEd, for two violations of the state's groundwater standards and gave company officials until Feb. 3 to file a report detailing what they know about the tritium plume.

Exelon has traced the tritium to a 1998 pipeline leak that wasn't thought at the time to contain significant amounts of radioactive material, a company spokesman said. The pipe pumps water from the plant's cooling lake to the Kankakee River 5 miles away.

The company has drilled 158 monitoring wells in an attempt to figure out where the plume has spread, said Craig Nesbitt, a company spokesman. Exelon also is offering to test the wells of 28 property owners who live next to the pipeline.

EPA officials said they found out about the plume in late November while completing their investigation of a 2000 leak from the same pipeline.

"We were kind of surprised," said Rick Cobb, manager of the EPA's groundwater section.

The agency and the company said tests suggest that only the 1998 leak is to blame for the tritium plume.

Tritium, the radioactive form of hydrogen, is found naturally in groundwater but is also one of the byproducts of nuclear energy production. Exposure can increase the risk of cancer, though the U.S. EPA considers it one of the least dangerous radioactive substances, in part because it leaves the body quickly.

As with most nuclear plants, it is legal for Braidwood to release small amounts of tritium into the environment. The isotope is normally diluted by the water used to cool nuclear reactors. Pumping that water into the Kankakee River does not violate state or federal regulations for surface water.

Exelon said there is no health threat from the tritium plume that has tainted area groundwater. The company, however, is negotiating financial deals with 15 property owners near the plant, Nesbitt said.

One has agreed to a buyout, he said, and the others have been promised that the company will cover any lost property value.

"We don't want these people to suffer any harm for something we did," Nesbitt said. "We will make them whole."

The company has scheduled an "invitation only" meeting Thursday for plant neighbors, but news of the tritium leak already is rippling through the community.

With the nuclear plant looming in the background, Dwayne Bawcum said he stopped drinking from his well after an Exelon official dropped off a letter Monday offering to test the water.

"While we have no reason to believe the tritium has migrated onto you property or your drinking well," the letter states, "Exelon would like to offer you assistance by sampling your well."

The letter left Bawcum angry and full of questions. He said he wonders if various ailments suffered by him and his wife--even his dog and cat--could be linked to something in the well water.

"There's a lot that has been running through my mind," said Bawcum, toting two plastic jugs of bottled water. "I'm scared."

Bawcum, 48, said he helped build his two-story, 2,400-square-foot home on 2 1/2 acres in Reed Township in 1996 and 1997. He had asked his future neighbors about the plant, but "they never gave the facility any thought," he said.

Company officials reported both the 1998 and 2000 pipeline leaks to federal regulators, but didn't provide information about the tritium plume until Nov. 30.

Some residents and local leaders have been urging elected officials to take a closer look. "No one here is anti-nuclear," said Joe Cosgrove, director of the park district in nearby Godley. "But they want to be safe."

Federal regulators are investigating possible violations of nuclear safety regulations, said Jan Strasma, spokesman for the Nuclear Regulatory Commission. "The Braidwood plant has put radioactive material in a place where it's not supposed to be," he said.

The Illinois EPA also is continuing to investigate. One of the two violations alleged so far involves the well on company property, which tested far above the federal health standard for tritium. The other is based on a test of a private well. Tritium levels in that well were far below the federal standard but exceeded what occurs naturally in groundwater--a potential violation of Illinois regulations.

None of the other private wells tested had above-normal tritium levels, according to the company and the Nuclear Regulatory Commission.

But federal records indicate high levels of contamination are not limited to the one well within the boundaries of the plant site. One of Exelon's off-site monitoring wells recorded similarly high levels of tritium, an NRC document shows.

This is the second time in as many years that Exelon has reported a tritium leak at one of its Illinois nuclear plants.

In October 2004, the company told federal regulators about a pipeline leak at the Dresden plant in Grundy County. Low levels of tritium were found in a monitoring well at the plant site, and the company offered to test nearby private wells.

None of the test results from outside the Dresden plant showed levels above the federal health standard, Nesbitt said.