

# Exelon takes responsibility for radioactive plume

By Hal Dardick and Michael Hawthorne  
Tribune staff reporters  
Published January 25, 2006, 9:57 PM CST

Exelon Corp. officials said Wednesday that they should have acted much sooner after millions of gallons of water containing radioactive material spilled in 1998 and 2000 outside the company's nuclear plant in Braidwood.

"We should have done better," said Thomas O'Neill, Exelon Nuclear's vice president of regulatory affairs. "This is a black eye for Exelon Nuclear. We are not happy about this.

"We put tritium into the ground in a place where it is not supposed to be," he said. "We acknowledge our failing in that regard, and we are going to fix it and make it right."

But other Exelon officials and a consultant downplayed the risk posed to local residents by the spills.

Daily drinking of groundwater from one contaminated drinking well would increase a person's typical annual exposure to radioactivity from normal eating and drinking by less than 1 percent, said Eli Port, a certified health physicist hired by Exelon to explain the risk.

Tritium, a form of radioactive water, is a natural byproduct of a nuclear plant's operation. Braidwood had a permit to discharge it through a 5-mile long "blowdown line" that ends at the Kankakee River.

By the time it flows into the river, its radioactivity is below the level deemed dangerous by the U.S. Environmental Protection Agency in groundwater, said Phil Harvey, a hydrologist who is a consultant to Exelon Nuclear.

But vacuum valves on the blowdown line failed in 1998 and 2000, each time spilling about 3 million gallons of effluent onto the ground outside the plant. Those spills were northeast of the plant, near Smiley Road, between Center Street and Cemetery Road in Reed Township in Will County, officials said.

The owner of a pond and surrounding property that extends into that area has accepted Exelon's buyout offer. Exelon has pledged to cover any property value losses at 14 other privately owned properties in the area.

The company also has offered to test 28 other private wells in the area. "We don't expect to find anything," said Craig Nesbit, Exelon Nuclear's spokesman.

E-98

In 1998, "there was nothing done ... to remediate the leak," O'Neill said. In 2000 tritium-tainted water was pumped from the site, he said.

The Illinois EPA first learned about the spills last March when a local official asked for an investigation, said Maggie Carson, EPA spokeswoman.

The agency urged Exelon to drill monitoring wells and the elevated tritium levels were found and reported to the EPA in November, at the same time they were reported to the federal Nuclear Regulatory Commission.

Exelon informally told commission officials about the spills when they happened, but no formal notification was filed. The filing wasn't required because it was assumed no radioactive substances were released into the environment, said Jan Strasma, a commission spokesman.

Through its monitoring wells, Exelon last year found groundwater on its property with tritium levels of more than 11 times higher than the federal limit, according to the commission.

In an area of about 1,000 square feet near the site of the spills, levels exceeded the federal limit, Exelon officials said. But it exceeded the normal "background" levels in a much wider area, mostly spreading north from the spill site.

Exelon has tested 14 private wells, and 13 showed tritium levels no higher than normal. In one well, the tritium level was nearly eight times higher than normal, but well below the federal limit.

Drinking two liters of water a day from that well would increase a person's annual radioactivity ingestion from normal eating and drinking by less than 1 percent, Port said.

O'Neill said Exelon also tested groundwater for other radioactive substances. "We found that there is nothing else there," he said.

Tritium can enter the body through ingestion, inhalation or skin absorption. At high levels, it can cause cancer, birth defects and genetic damage, said Paul Gunter, director of the Reactor Watchdog Project at the Nuclear Information & Resource Service, a Washington, D.C.-based anti-nuclear organization.

Gunter's group joined 22 organizations and six individuals Wednesday in petitioning the regulatory commission to demand more information about alleged radioactive leaks at Braidwood and six other nuclear plants, including Exelon's Dresden nuclear plant near Morris in Grundy County. "This is an industrywide problem," Gunter said.

Exelon, meanwhile, is working with the state EPA to come up with a remediation plan, which could include letting the tritium naturally dissipate, pumping it from the ground or a combination of both, O'Neill said.

The company also has launched an internal probe "to determine how it happened and why it happened," with the goal of ensuring it never occurs again, O'Neill said. Exelon quit sending tritium through the blowdown line in November, he said.

*hdardick@tribune.com*

*mhawthorne@tribune.com*