

Officials: 3 TVA nuclear plants leak tritium into groundwater

It gives activists a chance to speak.

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The Tennessee Valley Authority's three nuclear power plants have leaked a radioactive form of hydrogen called tritium into the groundwater, according to TVA documents and Nuclear Regulatory Commission officials.

The leaked tritium has not moved beyond TVA property and is not a public health hazard, NRC officials told The Chattanooga Times Free Press.

NRC spokesman Kenneth Clark said if the leaked tritium reaches the Tennessee River, that body of water would dilute the substance until its concentration would not be a "health and safety issue for the public."

Tritium, usually found in water, is a byproduct created when electricity is produced with nuclear power. It is the least dangerous of radioactive materials.

NRC inspector George Kuzo said groundwater sampling at all three Tennessee Valley Authority plants Watts Bar in Spring City, Tenn.; Sequoyah in Soddy-Daisy and Browns Ferry in Athens, Ala. revealed tritium, according to reports prepared by TVA for a nuclear industry trade group and shared with the NRC.

"At Watts Bar, they actually had a small hole in a pipe," Kuzo said. "We verified that they fixed it."

In an Aug. 4 letter to the Nuclear Regulatory Commission, TVA officials documented at least seven instances of leaks, spills or leaching at the three plants. According to TVA's letter, all the leaks or spills either have been fixed or are being worked on.

The letter does not specify the quantity of the "inadvertent releases," but it states that a 2005 sampling at Watts Bar following the pipe leak there found tritium concentrations at a nearby monitoring point were more than 13 times the groundwater limit acceptable by federal standards.

Some neighbors of the Watts Bar plant and nuclear watchdog groups said they were surprised and frightened to learn about the "inadvertent releases."

"It's scary to know this happens and it's not made public," said Sharon Harris, who said she fishes with her husband, Scott, near the plant about once a week. "If they're going to have problems, they should notify the public."

But TVA spokesman John Moulton said the most recent sampling at Watts Bar found the tritium concentrations have dropped below the groundwater limit.

"Tritium is one of the least dangerous radionuclides in existence," Moulton said. "Did we do a press release on it? No. There was no reason to. They do not present a risk to the public."

Moulton said TVA reported the leaks to the NRC, which puts them on its Web site.

He said the leaks never posed a danger to plant employees or the public.

Moulton said all nuclear plants release some tritium in controlled discharges to rivers, but he said he could not say how much tritium is released locally in either controlled or uncontrolled releases.

The U.S. Environmental Protection Agency and state regulators permit all nuclear plants to release some tritium either to the river or the air, officials said. However, the leaks detailed in the TVA letter were not permitted releases.

Stephen Smith paid activist of the Southern Alliance for Clean Energy said the leaks are "very serious." "The industry does not take it as seriously as it needs to," Smith said