



"It's a present reality that the contaminated water is seeping out to the bay without us being able to control it," Ono said.

TEPCO is also pumping hundreds of tons of water a day into the plant to cool the crippled reactors two and a half years later, though most of that fluid is recycled.

The 2011 tsunami swamped the plant, located 240 km (150 miles) north of Tokyo, and knocked out power to cooling systems for the three reactors that were operating at the time. The result was the second-worst nuclear accident in history, trailing only the 1986 disaster at Chernobyl, in the former Soviet union .

Meltdowns and hydrogen explosions spewed radioactive particles across many of the surrounding towns, complicating an already historic disaster. Though no deaths have been directly attributed to the accident, tens of thousands of people from towns as far as 25 miles away have been displaced by the disaster.

In July, TEPCO disclosed that water from test wells around the reactor buildings showed concentrations of radioactive tritium in one well as high as 500,000 bequerels -- a unit of radioactive intensity -- per liter of water. By comparison, Japan's maximum safe level of radioactivity in drinking water for adults is 300 bequerels per liter.

Another reactor byproduct, strontium-90, has been showing up in increasing concentrations as well, said Ken Buesseler, a marine radiochemist at the Woods Hole Oceanographic Institute in the United States. Strontium-90 mimics calcium in the body, seeking out bone in animal life.

Buesseler said the amount of radioactive material leaking from the plant now is a small fraction -- about one ten-thousandth -- of what poured out of the plant in the weeks following the meltdowns. But while TEPCO's admission was not news to scientists, "What's less clear to me is how much this has changed in the last month," he said. "And I think that's part of the urgency."

Michael Friedlander, a former nuclear plant operator and engineer, told CNN on Tuesday that the current problem may leave TEPCO and the Japanese government with two choices sure to stoke further public anger: "You can either dump it in the ocean, or you can evaporate it."

"At the end of the day, collecting 400 tons of water every single day is not a sustainable solution," he said.

Federal officials allowed the Three Mile Island nuclear plant in Pennsylvania, the site of the worst American nuclear accident, to let contaminated water evaporate, Friedlander said -- but TMI was nowhere near the scale of the Fukushima disaster.

"We're in uncharted territory here," he said.