

Radiation from stricken nuclear plant reaches sea

Bloomberg News

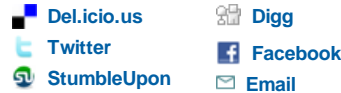
March 22, 2011, 6:57AM



Mark Baker AP

Three fishing boats are left grounded in Higashimatsushima City, Japan.

Share



Resources



The Japan quake

Photos: The disaster and the nation's reaction

TOKYO — Radiation has leaked into the sea from Japan's crippled nuclear plant, raising concern that seafood may become tainted, while the site's operator moved closer Tuesday to restoring power to critical cooling pumps.

Five kinds of radioactive materials released by damaged fuel rods were detected in the sea, Tokyo Electric Power Co. said on its website. Levels of Iodine-131, which increases the risk of thyroid cancer, were 127 times higher than normal in a sample of seawater taken Monday, the company said.

"You could swim in the water with these levels of Iodine-131, and there shouldn't be a problem," said Don Higson, a Sydney-based fellow at the Australian Radiation Protection Society. "The only risk might be if people eat seafood with these materials inside it and this will be something the authorities will be paying careful attention to."

Screening food for radiation is being stepped up as Japan seeks to calm a population that eats more fish than any other country other than China. Tokyo Electric said it expects to restore power to the buildings housing the plant's first four reactors later today, a step toward getting cooling systems working again. Reactors No. 5 and 6 have electricity supply.

Chief Cabinet Secretary Yukio Edano told reporters Tuesday that all Japanese vegetables on the market are safe to eat after concerns were raised about produce from the area near the plant.

"Food-borne radiation will last longer than airborne radiation," Gregory Hartl, a spokesman for the World Health Organization in Geneva, said in an interview. "Even smaller amounts of radiation in food could potentially be more dangerous because you ingest it."

The decay of radioactive fuel rods, composed of uranium and plutonium, at the Fukushima Dai-ichi plant was suspected by company officials five days after the March 11 earthquake and tsunami, Tokyo Electric Power said. Seawater readings showed cesium-134 was 25 times normal and cesium-137 was 17 times higher, it said. Cobalt has also been detected.

Japan, an island nation that prizes raw fish, consumes about 9 million metric tons of seafood a year, according to the website of the Sea Around Us Project, a collaboration between the University of British Columbia and the Pew Environment Group. China ranked first with consumption of 13.6 million metric tons and the United States was third at 4.7 million tons.

Lam Ching-wan, a chemical pathologist at the University of Hong Kong's medical school, said cesium in the water is not a cause of concern, despite a half life of 30 years. "Cesium doesn't cause many problems with cancer because it's mainly concentrated in the muscles and not other organs," he said. "Muscles aren't dividing cells. Even if there's a mutation, it cannot stimulate cells and grow and produce cancer."

Japan has been battling for 12 days to prevent a meltdown at the plant. Electricity from the grid and back-up power systems to the reactor were cut off and damaged in the quake and tsunami, leading to explosions at the steel-and-concrete structures around the reactors and overheating fuel rods.