Japan sets new radiation safety level for seafood

THE INDEPENDENT

Tuesday, 5 April 2011

Japan's government set its first radiation safety standards for fish today after its tsunami-ravaged nuclear plant reported radioactive contamination in nearby seawater measuring at several million times the legal limit.

The plant operator insisted that the radiation will rapidly disperse and that it poses no immediate danger, but an expert said exposure to the highly concentrated levels near the Fukushima Dai-ichi plant could cause immediate injury and that the leaks could result in residual contamination of the sea in the area.

The new levels coupled with reports that radiation was building up in fish led the government to create an acceptable radiation standard for fish for the first time, and officials said it could change depending on circumstances. Some fish caught on Friday off Japan's coastal waters would have exceeded the new limit.

"Even if the government says the fish is safe, people won't want to buy seafood from Fukushima," said Ichiro Yamagata, a fisherman who used to live within sight of the nuclear plant and has since fled to a shelter in Tokyo.

"We probably can't fish there for several years," he said.

India announced today that it is halting food imports from Japan. Few countries have gone so far, but India's three-month ban reflected the unease the nuclear crisis generates — both in consumers confused about radiation and among Japan's fishermen fearing collapse of their business.

The coastal areas hit by the March 11 tsunami make up about a fifth of Japan's huge industry, but radiation fears could taint all of the country's catch through guilt by association. Japan imports far more than it exports, but it still sent the world $2.3 billion worth of seafood last year. And in the home of sushi, the worries over contamination could deal a blow to its brand.

Radiation has been leaking into Pacific near the plant on the northeastern Japanese coast since a 9.0-magnitude earthquake spawned a massive tsunami that inundated the complex. Over the weekend, workers there discovered a crack where highly contaminated water was spilling directly into the ocean. They said today that they had finally found the source of the leak and were injecting coagulant that seemed to be slowing it.

The tsunami pulverized about 250 miles of the northeastern coast, flattening whole towns and cities and killing up to 25,000 people. Tens of thousands more lost their homes in the crush of water, and several thousand were forced from the area near the plant because of radiation concerns.

Many of those "radiation refugees" have grown frustrated with the mandatory 12-mile no-go zone, and plant operator Tokyo Electric Power Co. — whose stock value has plunged to the lowest level in its 60-year history — said today it would give affected towns 20 million yen ($240,000) each. That would be on top of any legally required compensation.

Also todayy, TEPCO announced that samples taken from seawater near one of the reactors contained 7.5 million times the legal limit for radioactive iodine on April 2. Two days later, that figure dropped to 5 million.

The company said in a statement that even those large amounts would have "no immediate impact" on the environment but added that it was working to stop the leak as soon as possible.

The readings released today were taken closer to the plant than before — apparently because new measuring points were added after the crack was discovered — and did not necessarily reflect a worsening of the contamination. Other measurements several hundred metres away from the plant have declined to levels about 1,000 times the legal limit — down from more than four times that last week.

Experts agree that radiation dissipates quickly in the vast Pacific, but direct exposure to the most contaminated water measured would lead to "immediate injury," said Yoichi Enokida, a professor of materials science at Nagoya University's graduate school of engineering.

He added that seawater may be diluting the iodine, which decays quickly, but the leak also contains long-lasting cesium-137, which can build up in fish over time. Both can build up in fish, though iodine's short half-life means it does not stay there for very long. The long-term effects of cesium, however, will need to be studied, he said.

"It is extremely important to implement a plan to reduce the outflow of contaminated water as soon as possible," he said.