

Fukushima dumps first batch of once-radioactive water in sea

September 14 2015



Black smoke rises from reactor number three at the Fukushima Dai-ichi nuclear power plant in March 2011 after a tsunami crippled the plant

The operator of Japan's Fukushima on Monday began releasing previously radioactive groundwater from the crippled nuclear plant into the sea, saying a filtration process had made the discharge safe.

Tokyo Electric Power Co (TEPCO), which operates the plant in eastern Japan, said that on the first day it had released 850 tons of groundwater,

which had become radioactive after flowing near the plant.

It was the first time the plant, whose reactors suffered meltdowns after a huge tsunami in 2011, had released filtered water into the sea after a years-long battle with fishermen, who feared it could destroy their livelihood.

TEPCO said the water was safe as it has been filtered through its Advanced Liquid Processing System, which removes highly radioactive substances like strontium and caesium but leaves in the less dangerous tritium.

Fishermen had argued that the discharge would heighten contamination concerns and hurt their already battered reputation. But they eventually bowed to pressure from TEPCO, which is struggling to find space to store tainted water.

"We have confirmed this underground water contains contaminants since it includes rainwater that has been exposed to rubble at the site. But its radiation levels are much lower than the water kept in the reactor buildings," said a TEPCO spokesman.

Monday's move is a milestone for the company, which has been struggling to handle some 300 tons of dirty water it has been extracting from the ground every day. Previously it was just added to huge tanks on site.

TEPCO has also previously pumped clean water from the ground and released it into the sea to stop it becoming contaminated.

But it has yet to find a solution to deal with the other 680,000 tons of highly radioactive water stored on site.

This includes water used to cool reactors when they were knocked out by a towering tsunami on March 11, 2011.

Local fishermen have still not agreed to any discharge of [water](#) collected from the reactor buildings even after it is filtered.

The tsunami, following a 9.0 magnitude quake, triggered the world's worst nuclear disaster in a generation and prompted Tokyo to shut down the 50 reactors nationwide used to generate electricity.

Decommissioning of the crippled Fukushima reactors is expected to take decades. The compensation bill for residents—excluding the cost of the site's cleanup—now top \$57 billion.

© 2015 AFP

Citation: Fukushima dumps first batch of once-radioactive water in sea (2015, September 14) retrieved 27 March 2023 from <https://phys.org/news/2015-09-fukushima-dumps-batch-once-radioactive-sea.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.