

Japan to release water from stricken Fukushima nuclear plant

August 22 2023, by Natsuko FUKUE, Hiroshi HIYAMA



An aerial photo shows storage tanks that hold treated water at TEPCO's crippled Fukushima Daiichi Nuclear Power Plant.

Japan will release water from the stricken Fukushima power plant into the Pacific Ocean from Thursday, 12 years after one of the world's worst

nuclear disasters.

China, which has already partially halted Japanese food shipments, sharply criticized the announcement, while Hong Kong and Macau said they would ban the import of "aquatic products" from 10 Japanese regions, with the latter also banning vegetable and dairy imports.

Japan insists that the gradual discharge of the more than 500 Olympic swimming pools' worth of water from the site in northeast Japan, announced by Prime Minister Fumio Kishida on Tuesday, is safe.

The Fukushima-Daiichi nuclear power station was knocked out by a massive earthquake and tsunami that killed around 18,000 people in March 2011, sending three of its reactors into meltdown.

Operator TEPCO has since collected 1.34 million tons of water used to cool what remains of the still highly radioactive reactors, mixed with groundwater and rain that has seeped in.

TEPCO says the water will be diluted and filtered before release to remove all radioactive substances except tritium, levels of which are far below dangerous levels.

It has failed to reassure China, which said it would take "necessary measures to safeguard the marine environment, food safety and public health".

Its foreign ministry said Tuesday that it had summoned Japan's ambassador to lodge "solemn representations" against the release.

"The ocean is the common property of all humankind, not a place for Japan to arbitrarily dump nuclear-contaminated water," spokesperson Wang Wenbin said at an earlier press conference.

A nuclear expert, however, said the level of tritium was well below World Health Organization drinking water limits.

"Tritium has been released (by nuclear power plants) for decades with no evidential detrimental environmental or health effects," Tony Hooker, a nuclear expert from the University of Adelaide, told AFP.

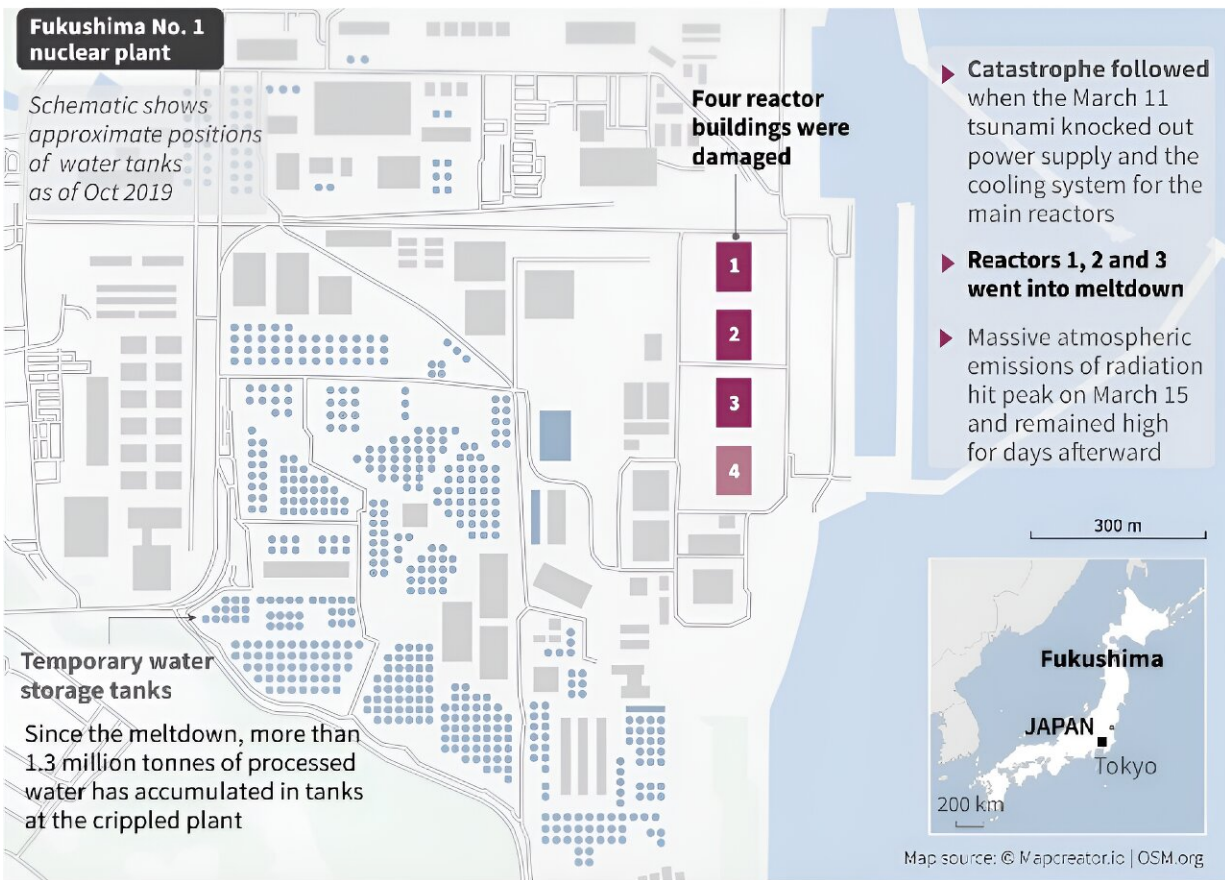
'Immense'

This water will be released, if weather conditions allow, into the ocean off Japan's northeast coast at a maximum rate of 500,000 liters (132,000 US gallons) per day.

The UN atomic watchdog, the International Atomic Energy Agency (IAEA), said in July the release would have a "negligible radiological impact on people and the environment".

2011 Fukushima nuclear disaster

The worst atomic disaster since Chernobyl in 1986



Sources: TEPCO/ pref.fukushima.lg.jp/ josen.env.go.jp/en/decontamination

AFP

Graphic on the Fukushima nuclear disaster in 2011 and a schematic of the storage tanks for treated water at the power plant.

On Tuesday, the IAEA said its staff would be on site for the start of the discharge and beyond and would publish "real-time and near real-time monitoring data".

Japan's fisheries agency will take samples of bottom-dwelling flatfish at two designated sampling spots near the outlet of the water pipe.

But environmental pressure group Greenpeace has said the filtration process is flawed.

Japan "has opted for a false solution—decades of deliberate radioactive pollution of the marine environment—during a time when the world's oceans are already facing immense stress and pressures", Greenpeace said Tuesday.

Salt panic

Many South Koreans are alarmed at the prospect of the release, staging demonstrations and even stocking up on sea salt because of fears of contamination.

Dozens of protesters gathered in front of the Japanese embassy in Seoul on Tuesday, with more rallies planned.

One protester held up a sign reading: "We denounce the Japanese government for killing the ocean!"

But President Yoon Suk Yeol's government, taking political risks at home, has sought to improve long-frosty relations with Japan and has not objected to the plan.

Meanwhile, China had already accused Japan of treating the ocean like a "sewer", banning imports of food from 10 Japanese prefectures even before the release and imposing strict radiation checks.

James Brady from the Teneo risk consultancy said that, while China's safety concerns may be sincere, there was a distinct whiff of geopolitics and economic rivalry in its harsh reaction.

"The multifaceted nature of the Fukushima wastewater release issue

makes it quite a useful one for Beijing to potentially exploit," Brady told AFP.

The threat of restrictions has worried people in Japan's fishing industry, just as business was beginning to recover.

"Nothing about the water release is beneficial to us," third-generation fisherman Haruo Ono, 71, whose brother was killed in 2011, told AFP in Shinchimachi, 60 kilometers (40 miles) north of the nuclear plant.

© 2023 AFP

Citation: Japan to release water from stricken Fukushima nuclear plant (2023, August 22) retrieved 31 August 2024 from <https://techxplore.com/news/2023-08-japan-fukushima-thursday.html>

<p>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.</p>
--