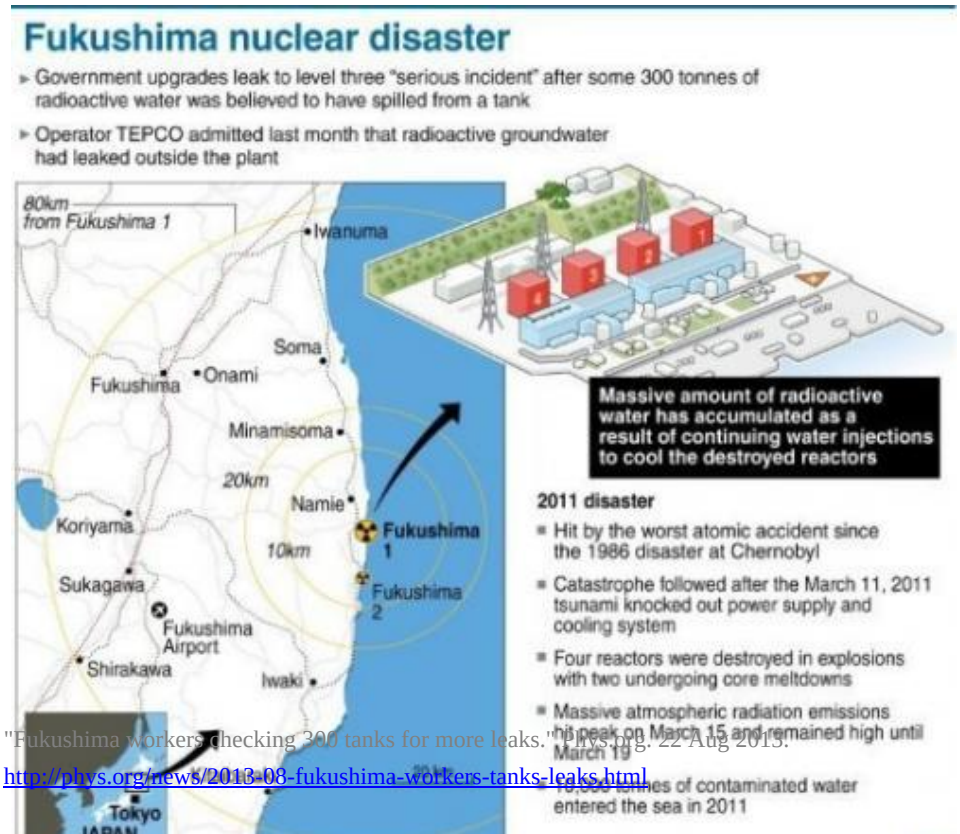
Fukushima workers checking 300 tanks for more leaks

Contaminated water from a leaking water tank is shown at TEPCO's Fukushima nuclear power plant on August 19, 2013. Workers at Japan's crippled Fukushima nuclear plant on Thursday scrambled to check 300 tanks storing highly radioactive water after one sprang a leak that is feared to have spread into the Pacific.

Workers at Japan's crippled Fukushima nuclear plant on Thursday scrambled to check hundreds of tanks storing highly radioactive water, after one sprang a leak that is feared to have seeped into the Pacific.



Graphic on Japan's Fukushma nuclear disaster. Some 300 tonnes of radioactive water is believed to have seeped from one of the tanks that hold water used to cool the broken reactors.

Government officials and nuclear experts inspect a construction site set up to prevent the seepage of contaminated water into the sea, at the Fukushima nuclear plant on August 6, 2013. Japan's nuclear regulator upgraded a radioactive water leak at the crippled Fukushima plant to a level three "serious incident" Wednesday, its highest warning in two years.

A Tokyo Electric Power worker walks next to waste water tanks at Japan's Fukushima nuclear plant on June 12, 2013.

Around 300 tonnes of toxic liquid was believed to have escaped from one of the tanks that hold water used to cool the broken reactors, while operator Tokyo Electric Power Co (TEPCO) warned some of it might have flowed into the ocean.

"We are hurriedly checking if some 300 tanks of the same type holding contaminated water have the same leak problem," a TEPCO spokesman said.

"We have finished pumping out water from the troubled tank, while we have continued removing the soil soaked by the water," he said.

Spokesman Tsuyoshi Numajiri said Wednesday that traces of radioactivity were detected in a drainage stream.

"We cannot rule out the possibility that part of the contaminated water flowed into the sea," he said.

On Wednesday, nuclear regulators said the leak represented a level-three "serious incident" on the UN's seven-point International Nuclear Event Scale (INES), which measures radiation accidents.

The alert was raised from level one, which indicates an "anomaly".

It is the most serious single event since the plant was declared to be in a "state of cold shutdown"—effectively indicating it was under control at the end of 2011.

The quake and tsunami-sparked meltdowns at the plant in March of that year were ultimately categorised as level seven on the INES scale. The Chernobyl disaster in 1986 is the only other incident to have been given the most serious ranking.

TEPCO has said puddles of water near the tank were so toxic that anyone exposed to them would receive the same amount of radiation in an hour that a nuclear plant worker in Japan is allowed to receive in five years.

The absence of a water-level gauge on the 1,000-tonne tank made detecting the problem more difficult, experts say.

Thursday's safety checks on 300 tanks came after Nuclear Regulation Authority (NRA) chairman Shunichi Tanaka on Wednesday voiced concern that there could be similar leaks from other containers.

"We must carefully deal with the problem on the assumption that if one tank springs a leak the same thing can happen at other tanks," he said.

Experts say levels of radiation in the ocean in several spots along the Fukushima coast had been recovering.

"It is too early to estimate the impact of the latest leak," said Masashi Kusakabe, researcher at Marine Ecology research Institute.

"All we can do is to continue monitoring levels of marine radiation very carefully," Kusakabe said.

Jota Kanda, an oceanographer and professor at Tokyo University of Marine Science and Technology, said: "It is inevitable that some water has reached the sea. So far its impact on the marine environment is limited, but it will be a different story if more leaks happen."

TEPCO—which faces huge clean-up and compensation costs—has struggled to cope with the disaster.

More than two years after the meltdowns, it continues to be beset by difficulties, chief among which is how it should handle the vast amounts of water used to cool the broken reactors.

Around 1,000 tanks of varying sizes have been installed at the site to contain it, but experts warn this can only be a temporary fix.

A series of problems, and delays in announcing them to the public, have added to the impression that the huge utility is not on top of the clean-up.

TEPCO in July admitted for the first time that radioactive groundwater had been leaking outside the plant.

This month it started pumping it out to reduce leakage into the Pacific. It said this week that 30 trillion becquerels of strontium and caesium, possibly cancer-causing substances, could have entered the ocean since May 2011 from this leak.

While no one is officially recorded as having died as a direct result of the radiation released by the meltdowns, large areas around the plant had to be evacuated.

Tens of thousands of people are still unable to return to their homes, with scientists warning some areas may have to be abandoned.