

[朝日新聞デジタル Japanese](#) [朝日新聞中文网 Chinese](#) [Asahi Asia Antenna - 독자와 함께 Korean](#)

## 120 tons of contaminated water leaks at Fukushima nuclear plant

April 06, 2013

2

---

By SHUNSUKE KIMURA/ Staff Writer

About 120 tons of contaminated water has leaked from an underground storage tank at the Fukushima No. 1 nuclear plant and may have mixed with underground water, Tokyo Electric Power Co. said April 6.

TEPCO estimated that the water contained about 710 billion becquerels of radioactivity and leaked through the joints of protective sheets of the storage tank.

The water had passed through a filtration system before leaking, and its radioactivity level was about half that of water that has yet to be filtered, according to TEPCO.

TEPCO acknowledged that the contaminated water likely soaked the soil surrounding the tank and may have reached underground water.

But "the contaminated water has not seeped into the sea," TEPCO spokesman Masayuki Ono said at a news conference before dawn on April 6. Ono noted that the storage tank is located 800 meters from the Pacific Ocean.

About 13,000 tons of contaminated cooling water was put into the tank from Feb. 1 to March 2, filling it to capacity.

Workers began to transfer contaminated water from the leaky underground storage tank to a different tank early on April 6. It takes about an hour to transfer about 100 tons of water, meaning five days or more are required to complete the task.

The water had initially been used to cool melted nuclear fuel after the onset of the Fukushima nuclear disaster in March 2011, and was subsequently put into the storage tank.

TEPCO has been removing cesium from the water with filtration equipment. However, water that goes through the filtration process and is stored in the underground storage tank is still highly contaminated because it contains other radioactive materials, such as strontium. The radioactivity level of the water is about 290,000 becquerels per cubic centimeter.

TEPCO became aware of the leak after measuring the height of the water in the tank on April 4 and 5.

The underground storage tank is 60 meters long, 53 meters wide and 6 meters deep. It is lined with three layers of protective sheets--two made of polyethylene and the outermost layer of clay--to prevent leakage.

TEPCO had been checking for possible leaks by measuring radioactivity levels of water from a hole dug near the tank. Until last month, however, the radioactivity level of the water had been so low that it was impossible to detect any leakage.

But on April 3, 20 becquerels of radioactivity per cubic centimeter was detected, followed by 35 becquerels the next day.

At 3 p.m. on April 5, workers took water from an area between the clay layer and a polyethylene layer. At 10 p.m. they found that the radioactivity level of the water was about 6,000 becquerels.

TEPCO suspects that joints in the sheets of the polyethylene layer had ruptured and the water then managed to leak through the 6.4-millimeter-thick clay layer.

By SHUNSUKE KIMURA/ Staff Writer