

Fukushima: Radioactivity - water, strontium, ocean

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Huge Amount of Contaminated Water Found in Fukushima No. 3 Reactor Basement

Fukushima, June 10 (Jiji Press)—Tokyo Electric Power Co. said Friday there is a massive amount of radioactive water in the basement of the No. 3 reactor building in its crippled Fukushima No. 1 nuclear power plant.

During their inspection of the building Thursday, five TEPCO and four partner company officials found a pool of water whose surface was 5.8 meters above the floor of the first basement, the company said.

According to the operator of the nuclear plant, which was heavily damaged by the March 11 earthquake and tsunami, the survey team monitored 51 millisieverts per hour of radiation in the air near the water pool and 96 millisieverts on the first floor's surface. The reading reached as high as 100 millisieverts on the same floor.

The team's another finding was that storage racks for water gauges and other measurement instruments were covered by soot, which is believed to have been generated by a hydrogen explosion on March 14 at the building. The radiation level nearby was high at 60 millisieverts.

TEPCO also said its test of the tainted water treatment system at the Fukushima plant was suspended on the first day because of water leaks from the installation supplied by Kurion Inc of the United States to absorb cesium and other radioactive materials.

Jiji Press, June 10, 2011

<http://jen.jiji.com/jc/eng?g=eco&k=2011061100013>

High level of strontium found at Fukushima plant

Radioactive strontium up to 240 times the legal concentration limit has been detected in seawater samples collected near an intake at the crippled Fukushima Daiichi nuclear plant, Tokyo Electric Power Co. said Sunday.

The utility said the substance was also found in groundwater near the plant's Nos. 1 and 2 reactors. The government's Nuclear and Industrial

Safety Agency said it is the first time that the substance has been found in groundwater.

The agency said it is necessary to carefully monitor the possible effects of the strontium on fishery products near the plant.

Strontium tends to accumulate in bones and is believed to cause bone cancer and leukemia.

Kyodo, June 13, 2011

<http://search.japantimes.co.jp/cgi-bin/nn20110613a1.html>

Tepco vents No. 2 reactor while U.S. surveys ocean

Tokyo Electric Power Co. said Saturday it began filtered venting of the No. 2 reactor building at the crippled Fukushima No. 1 nuclear plant to reduce radiation levels to the point where workers can go inside.

If the airborne radioactivity inside drops enough after three days, Tepco plans to open up the doors and send workers in to make repairs.

The No. 2 unit's high radioactivity and humidity have prevented workers from checking gauges and pipes, hampering the beleaguered utility's efforts to guide the reactor into a cold shutdown.

Meanwhile, a U.S. private research institute is conducting a survey of waters off Fukushima to assess the radiation's impact on the ecosystem.

An international team of experts led by the Woods Hole Oceanographic Institution began the 15-day survey June 4. It is being carried out on a research ship from the University of Hawaii, with permission from the Japanese government, government officials said.

Kyodo, June 12, 2011

<http://search.japantimes.co.jp/cgi-bin/nn20110612a5.html>

TEPCO Starts Tainted Seawater Treatment

Tokyo, June 13 (Jiji Press)—Tokyo Electric Power Co. said Monday it has started operating a system to remove radioactive substances from seawater in the area surrounded by the breakwater at its stricken nuclear power station in northeastern Japan.

TEPCO will operate two sets of equipment around the clock to treat the seawater there where highly radioactive water leaked from the

Fukushima No. 1 nuclear power plant, which was hit by the March 11 earthquake and tsunami. The two units are capable of processing 60 tons per hour in total.

The units, which are installed near the water intakes of the No. 2 and 3 reactors, absorb such radioactive substances as cesium by using zeolite.

Although the system is believed to be able to reduce the level of radioactive substances by 60 pct to 70 pct, trial operations only cut them by 20 pct to 30 pct.

TEPCO said the poor trial results stemmed from oil contained in seawater.

Jiji Press, June 13, 2011

<http://jen.jiji.com/jc/eng?g=eco&k=2011061300838>
