

A water droplet found at the batch treatment tank 2A of multi-nuclide removal equipment (ALPS) in Fukushima Daiichi Nuclear Power Station

<Reference>
June 17, 2013
Tokyo Electric Power Company

■ Overview of the incident:

June 15

Around 11:00 PM A TEPCO employee found a trace of discolored water in the leaked water receiving pan under the batch treatment tank (2A) of multi-nuclide removal equipment (ALPS). No new water droplet has been found as of now. As we checked surroundings, dew condensation water was attached on the surface of the batch treatment tank, and partially discolored part was found near the welding line. Therefore, we have placed a container to receive the water droplet just in case.

June 16

No other occurrence of dew condensation water or discolored water droplet has been found upon condition monitoring. Since the cause of the discoloration near the welding line on the surface of the tank is estimated to be rust or a leakage, we have judged that detailed investigation is needed.

Around 3:00 PM

The incident was reported to the safety inspector.

Around 4:00 PM

Survey of the discolored part near the welding line and surface of the tank was performed.

6:17 PM

An operation to stop A system at multi-nuclide removal equipment (ALPS) was started.

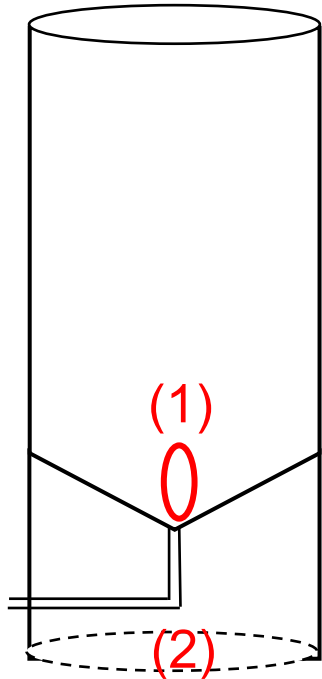
11:20 PM

A system at multi-nuclide removal equipment (ALPS) was stopped.

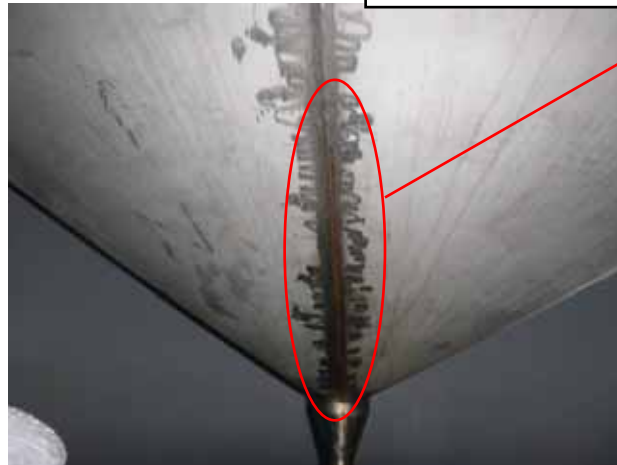
■ Cause of the incident: Under investigation

Condition at the Site

Discolored (brown) part near the welding line was found



Structural drawing of the batch treatment tank



(1) Condition at the bottom part of the tank



(1) Condition at the bottom part of the tank (enlarged image)

Trace of discolored water droplet was found



(2) Condition of the leaked water receiving pan

■ **Measurement results**

- Surface of the batch treatment tank (discolored part near the welding line): 7,900cpm
- Surface of the batch treatment tank (part not discolored near the welding line): 700cpm
- Leaked water receiving pan under the tank (part having trace of discolored water): 4,300cpm
- Leaked water receiving pan under the tank (part not discolored): 1,300cpm

* Background: 180cpm

Entire System of Multi-nuclide Removal Equipment (ALPS)

