

# Leakage from the Desalination System (RO3) at Fukushima Daiichi Nuclear Power Station

< Reference >  
December 10, 2012  
Tokyo Electric Power Company

**Date and Time:** December 10, 2010 at 10:55 AM

**Location:** In the temporary warehouse of the desalination system (RO3)

## Outline

1. A cooperative company worker on patrol found a puddle as he entered the temporary warehouse (10:55 AM).
2. The desalination system (RO3) was manually stopped (10:55 AM) and the leakage was confirmed to have stopped (11:00 AM).
3. The hose was inspected and recovered. The leaked water (approx. 60L) was cleaned up (3:20 PM).

**Estimated leakage amount:** Approx. 96L (4m x 8m x 3mm). The leaked water remains in the dam and has not flowed to the outside.

## Radiation dose measurement results

Water surface : 0.02 [mSv/h], : 4.0 [mSv/h]

Ambient dose: : 0.01 [mSv/h], : 1.0 [mSv/h]

**Leakage location:** The drain header at the outlet of RO3-2 cassette

## Estimated cause

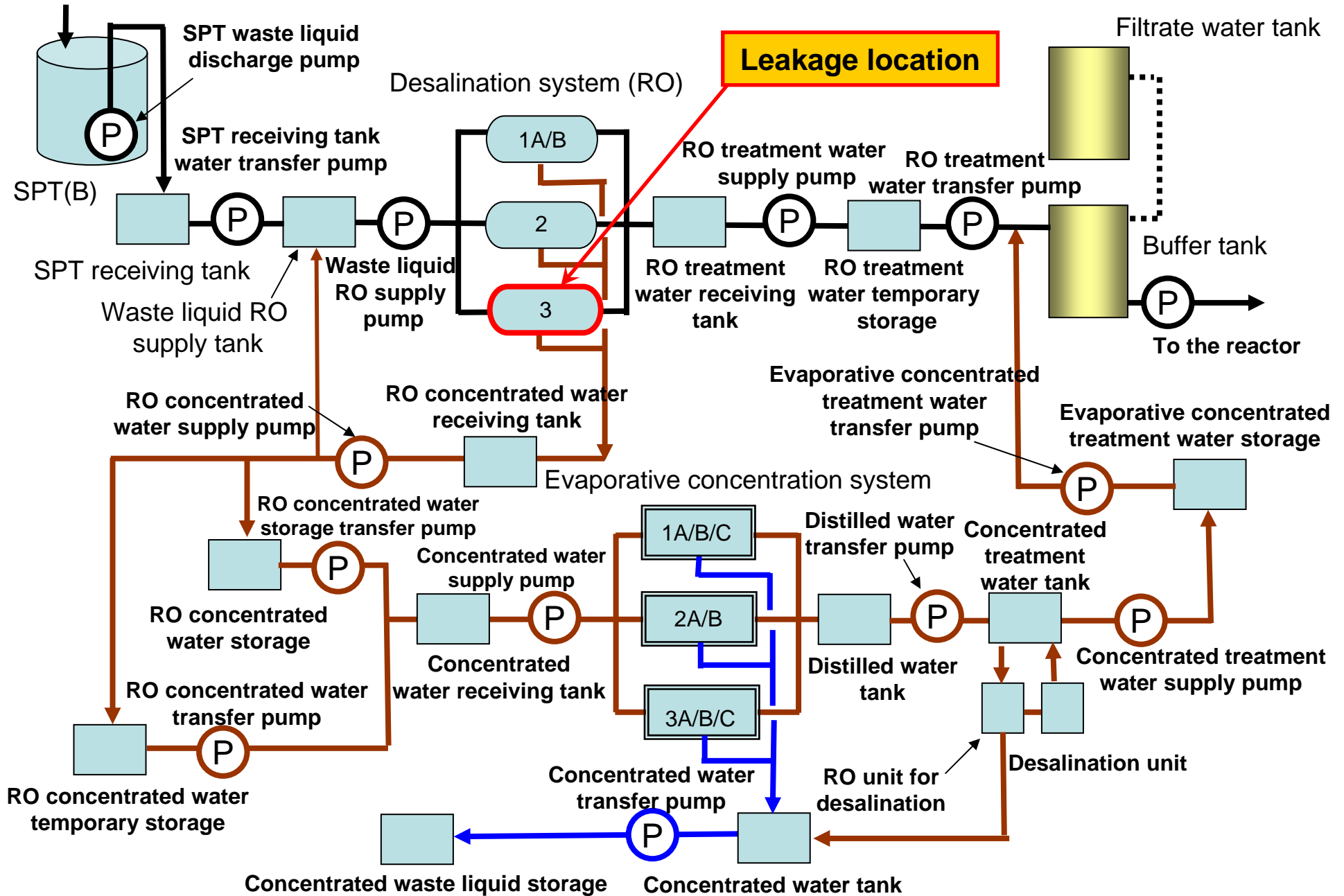
- Header joint part came off due to the RO cassette drain valve was opened after being touched.

## Countermeasures

- Install a warning sign near the valve and remind workers be aware of the risk.
- Have the valve closed at all times utilizing an INSULOK, etc.
- The system will be restarted once the countermeasures are implemented (Planned on December 11 AM).

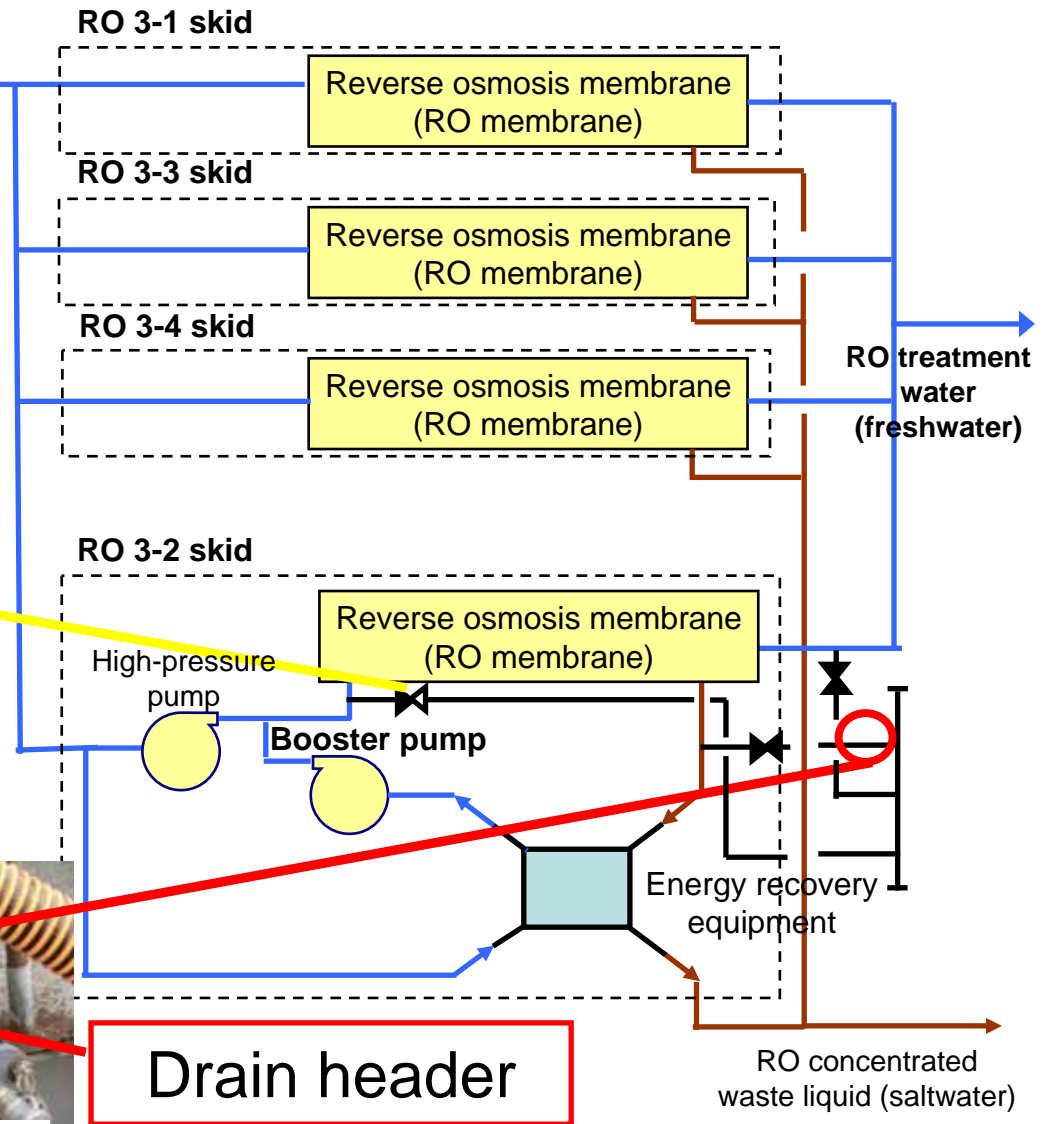
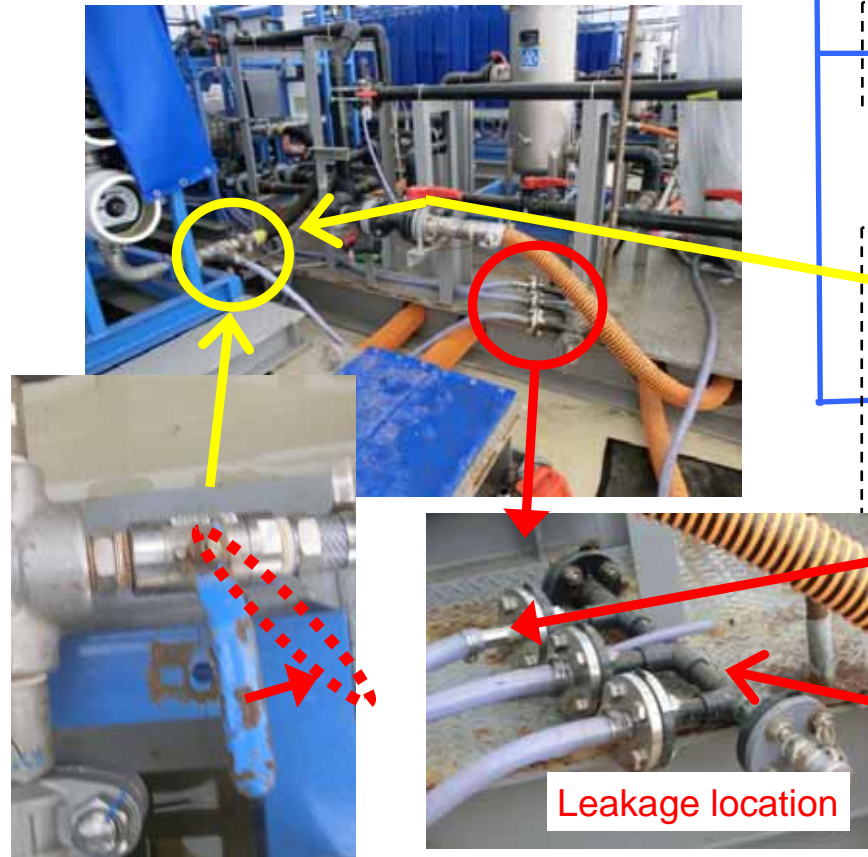
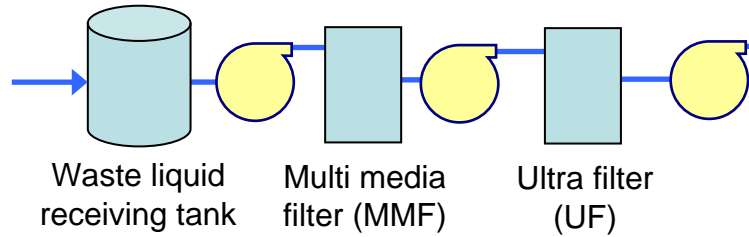
From the decontamination system

# Overview of the Desalination System



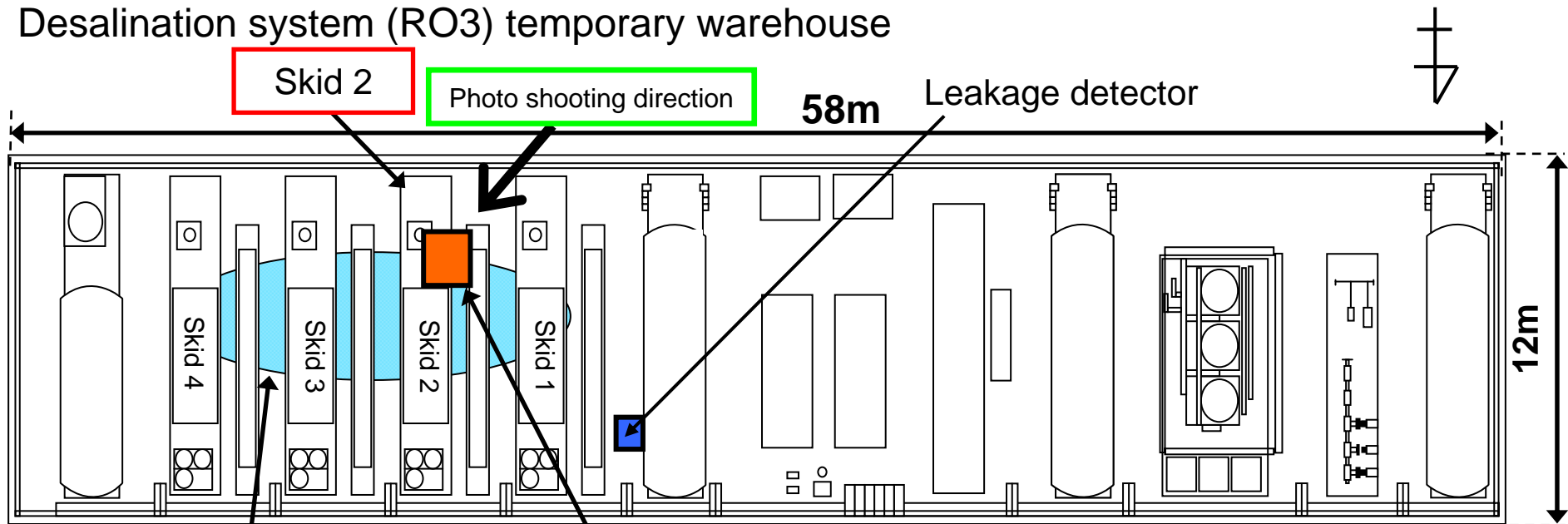
# Desalination System (RO3) Structure and Leakage Location

From the waste liquid  
RO supply pump



# Water Leakage Location in the Desalination System (Reverse Osmosis Membrane) 3

Desalination system (RO3) temporary warehouse



Leaked water

4m x 8m x 3mm (depth)

(Estimated leakage amount: Approx. 96L)

