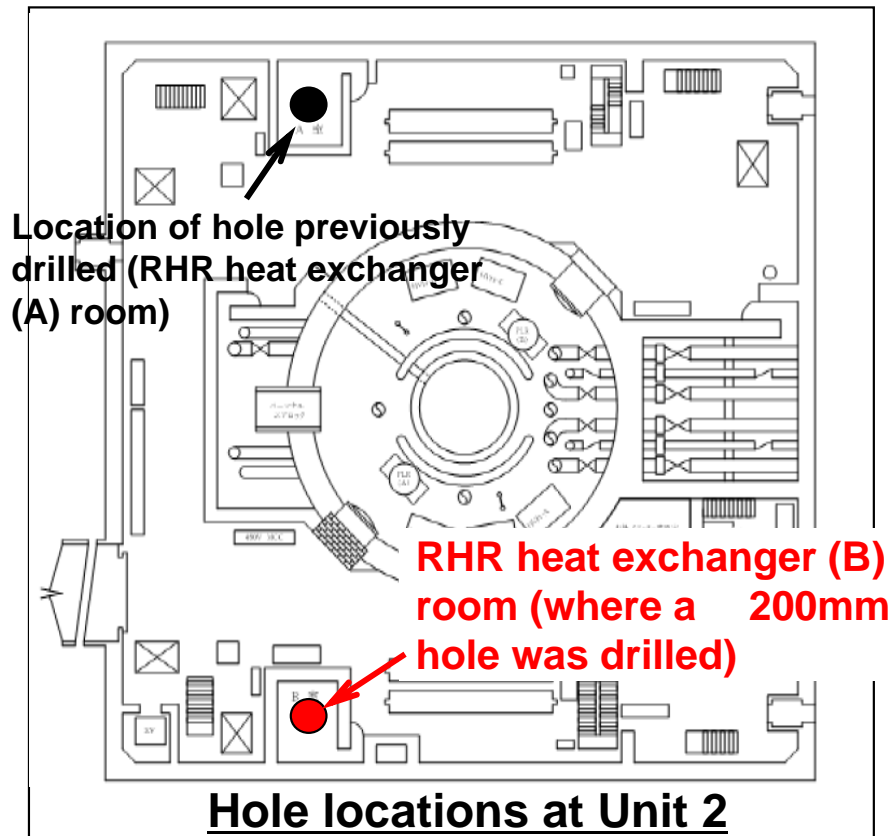


Investigation of Unit 2 Torus Room at Fukushima Daiichi Nuclear Power Station

April 12, 2013
Tokyo Electric Power Company

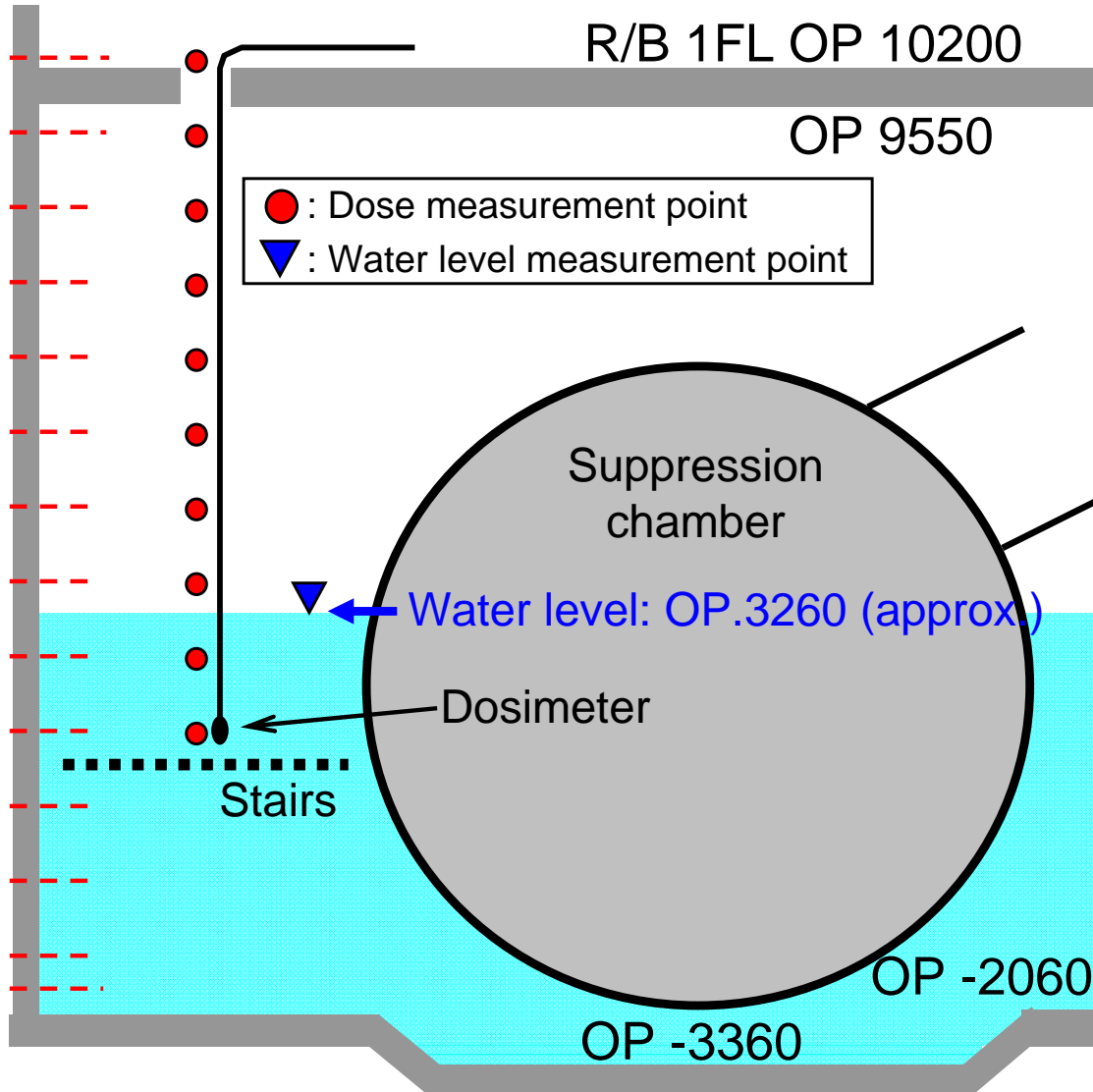
1. Investigation Method (Temperature, Dose, Camera, Sampling of Accumulated Water and Sediments)

Investigation of the inside of the Torus Room was performed by inserting a thermometer, a dosimeter and a camera from a hole of a diameter of 200mm drilled on the floor of the RHR heat exchanger (B) room in the south side of the first floor of the Reactor Building (on April 11). A hose for sampling accumulated water and a sediment sampler were inserted from the same hole to collect accumulated water and sediments (on April 12).



	Investigation item
Apr. 11 (Thu)	Dose measurement (Atmosphere, accumulated water)
	Temperature measurement (Atmosphere, accumulated water)
	Image acquisition (in the Torus Room)
Apr. 12 (Fri)	Accumulated water sampling
	Sediments sampling

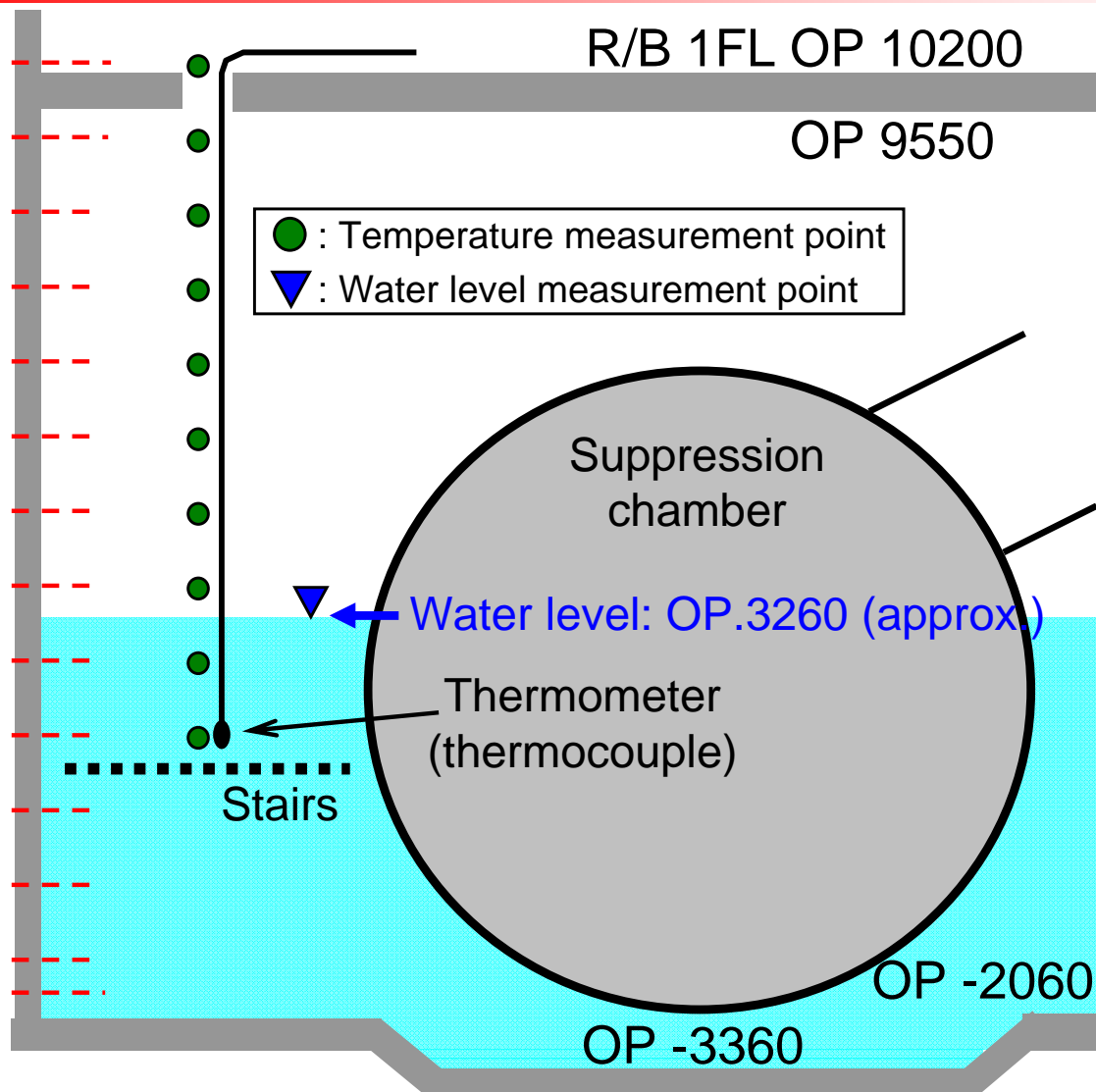
2. Measurement Results (Dose)



Location (Reference value)		Dose [mSv/h]
	OP.10500	4.3
	OP.9500	6.2
	OP.8500	10.3
	OP.7500	15.3
	OP.6500	20.5
	OP.5500	32.8
	OP.4500	74.0
	OP.3500	134.0 (Max.)
-	OP.3260 (Water level)	-
	OP.2500	18.7
	OP.2000	23.7
	OP.500	-
	OP.-500	-
	OP.-1500	-
	OP.-1760	-

- Dose was measured in the interval of approx. 1m.
- The maximum dose was approx. 134mSv/h measured near the water surface.

3. Measurement Results (Temperature)



Location (Reference value)		Temp. [°C]
	OP.10500	16.3
	OP.9500	18.1
	OP.8500	19.6
	OP.7500	20.4
	OP.6500	20.4
	OP.5500	20.7
	OP.4500	20.6
	OP.3500	20.1
-	OP.3260 (Water level)	-
	OP.2500	25.2
	OP.2000	25.2
	OP.500	-
	OP.-500	-
	OP.-1500	-
	OP.-1760	-

- Temperature was measured in the interval of approx. 1m.
- The air temperature was approx. 20 °C and the water temperature was approx. 25 °C.

4. Camera Images

Accumulated water level:

Approx. OP.3260 (Depth: Approx. 5.3m)

Clarity of the accumulated water (Visibility):

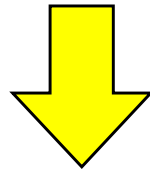
Approx. 100cm or more

Structures inside the Torus Room:

Though rust, etc. was found in the acquired images, **no major damage was found on the structures**. Evaluation in detail is to be performed. Since the camera interfered with the stairs in the Torus Room at approx. 1.5m below the water surface, **images of the bottom part could not be acquired**.

5. Sampling of Accumulated Water

	Sampling location	Sampling amount
Initial plan	Approx. 1m below the water surface	Approx. 250cc
	Approx. 1m above the bottom of the Torus Room	Approx. 250cc



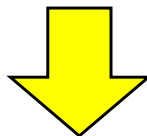
The sampling locations were changed due to the interference with the stairs in the Torus Room.

	Sampling location	Sampling amount	Surface dose of the container
Actual	Approx. 1m below the water surface	Approx. 500cc	Approx. 0.1mSv/h

Items to be analyzed	Conductivity, pH, chloride ion concentration, Sr 89/90 densities, tritium density, , , densities
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6. Sampling of Sediments

	Sampling location	Sampling amount
Initial plan	Bottom of the Torus Room	Small amount (a few cc)



The sampling location was changed due to the interference with the stairs in the Torus Room.

	Sampling location	Sampling amount	Surface dose of the container	Analysis item
Actual	Upper surface of the stair landing of the Torus Room (Approx.OP.1700)	Approx. 5cc	Approx. 0.1mSv/h	density

Sediments collector



Technical cooperation:
ATOX Co., Ltd., Chubu
Electric Power Co., Inc.

Sampling being performed



7. Radiation Exposure Dose (Actual)

	Investigation item	Individual maximum radiation exposure dose
Apr. 11 (Thu)	Temperature measurement (Atmosphere, accumulated water)	1.65mSv
	Dose measurement (Atmosphere, accumulated water)	
	Image acquisition (in the Torus Room)	
Apr. 12 (Fri)	Accumulated water sampling	2.59mSv
	Sediments sampling	