

Current status of the groundwater bypass at Fukushima Daiichi Nuclear Power Station

April 18, 2014
Tokyo Electric Power Company

Storage in Gr1-1 tank

- The water pumped up and stored (Gr1-1) is undergoing detailed analysis by a third party and TEPCO from April 9 through 14.
- The water temporary stored in the Gr-1 tank was analyzed to determine “whether the operational targets are met” (operational target analysis). And today (April 18), it was found that all of the analysis results given by the third party as well as TEPCO show the detected values are less than the operational targets.

	Cs-134	Cs-137	Gross β	H-3
TEPCO	ND (0.63)	ND (0.56)	ND (4.4)	250 Bq/L
Third party (Japan Chemical Analysis Center)	ND (0.065)	ND (0.059)	ND (0.34)	240 Bq/L

*: “ND” indicates a case where the analysis result is below the detection limit value that is shown in parentheses next to “ND”.

Storage in Gr2 (2-1 and 2-3) tanks

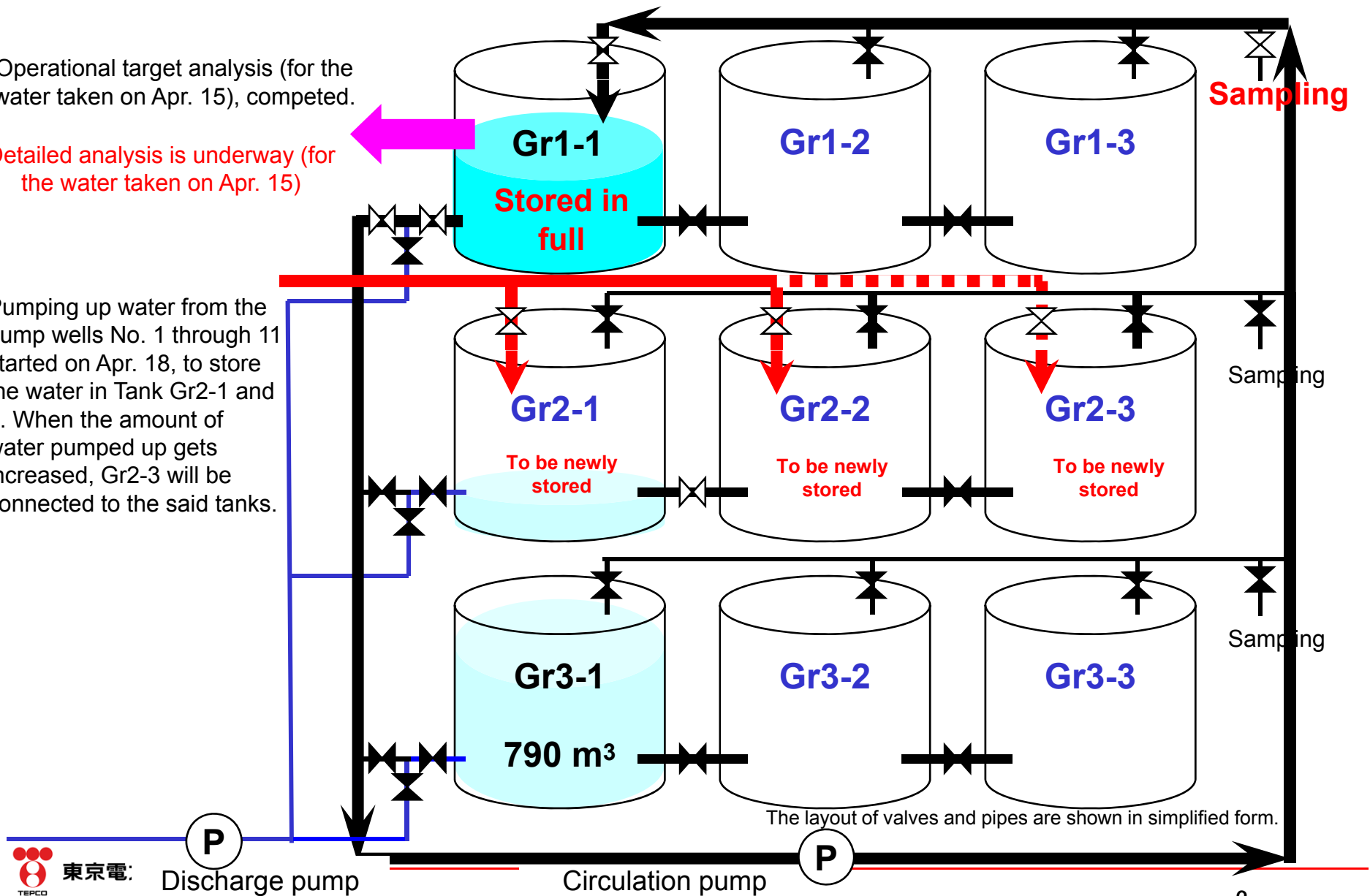
- Routine monitoring activity on a weekly basis (taken on April 15) detected a tritium value of “1,600 Bq/L” in the pump well No. 12 of the groundwater bypass.
- Today (April 18), groundwater at the pump well No. 12 was taken once again to evaluate to what extent it affects the quality of water in the temporary storage tank. If the evaluation result shows “no such effect which makes the value go beyond the operational targets”, the pumping up operation of the pump well in question will be restarted.
- As for the pump wells No. 1 through 11, the pumping up operation for each will be restarted sequentially from 11:59 to 12:23, to store water in the temporary tanks (Gr2- 1 and 2).

Storing status of temporary storage tanks

Operational target analysis (for the water taken on Apr. 15), completed.

Detailed analysis is underway (for the water taken on Apr. 15)

Pumping up water from the pump wells No. 1 through 11 started on Apr. 18, to store the water in Tank Gr2-1 and 2. When the amount of water pumped up gets increased, Gr2-3 will be connected to the said tanks.



(Reference) Control methods for groundwater bypass

Operational targets

■ The **operational target** for the groundwater bypass will be determined based on the values detected in the **temporary storage tanks** to which the groundwater will be transferred from all of the 12 pump wells, and **the groundwater which has exceeded the operational target will not be discharged.**

		Cesium 134	Cesium 137	Gross β	Tritium	Sum of ratios against the Density Limit Specified by the Regulation (Tolerance)
Operational targets		1 Bq/L	1 Bq/L	5 Bq/L	1,500 Bq/L	0.22
Routine monitoring	Temporary storage tanks	—	—	Once/ 10 days ND < 1 Bq/L	—	
		Once/ month, Detailed analysis (Cesium 134/137, Strontium 90, Tritium, Gross α , and Gross β)				
	Pump wells	—	—	Gross β Once/ week No.7 and12: ND < 5 Bq/L The others: ND < 15 Bq/L	Once/ week	

* Density Limit Specified by the Regulation: Cesium 134: 60 Bq/L, Cesium 137: 90 Bq/L, Strontium 90: 30 Bq/L, and Tritium: 60,000 Bq/L

WHO Guidelines for drinking-water quality: Cesium 134: 10 Bq/L, Cesium 137: 10 Bq/L, Strontium 90: 10 Bq/L, and Tritium: 10,000 Bq/L