[Reference] Countermeasures against Approaching Typhoon No.27 (Francisco) of Each Tank Area at Fukushima Daiichi NPS

October 28, 2013
Tokyo Electric Power Company

Name of area (Type of tank)	Water type stored	Transfer or discharge (implemented on Oct 26)	Countermeasures against heavy rainfall (implemented on Oct 26)	Amount of pumping up, transfer and discharge	Analysis result [Bq/L] on Oct 26 The detection limit value is provided in parentheses	Sampling time	[Reference] Analysis result [Bq/L] on Oct 20 The detection limit value is provided in parentheses	Note
H1-East (Flange type)	RO concentrated water	Transfer	Water transfer to the underground reservoir No.4 was conducted	Total transfer amount to the underground reservoir No.4: Approx. 850m^3 Transfer amount from each dike is uncertain	- Cs-134: Below the detection limit value (11) - Cs-137: Below the detection limit value (15) - Sr-90: 43	Oct 26, 2013 1:15 AM	- Cs-134: Below the detection limit value (7.4) - Cs-137: Below the detection limit value (10) - Sr-90: 24	
H2-North (Flange type)	RO concentrated water	Transfer	Water transfer to the underground reservoir No.4 was conducted	Total transfer amount to the underground reservoir No.4: Approx. 850m^3 Transfer amount from each dike is uncertain	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (15) - Sr-90: 65	Oct 26, 2013 1:20 AM	- Cs-134: Below the detection limit value (7.8) - Cs-137: Below the detection limit value (10) - Sr-90: 32	
H2-South (Flange type)	RO concentrated water	Transfer	Water transfer to the underground reservoir No.4 was conducted	Total transfer amount to the underground reservoir No.4: Approx. 850m^3 Transfer amount from each dike is uncertain	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (15) - Sr-90: 1,400	Oct 26, 2013 1:10 AM	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (17) - Sr-90: 710	All β: 9,100Bq/L (Obtained from water inside the dike on Oct 26)
H3 (Flange type)	RO concentrated water	Transfer	Water transfer to the underground reservoir No.4 was conducted	Total transfer amount to the underground reservoir No.4: Approx. 850m^3 Transfer amount from each dike is uncertain	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (16) - Sr-90: 820	Oct 26, 2013 1:00 AM	- Cs-134: Below the detection limit value (8.4) - Cs-137: Below the detection limit value (12) - Sr-90: 160	
H4-North (Flange type)	RO concentrated water	Transfer	Water transfer to the notch tanks (4,000m^3) was conducted	Total transfer amount to notch tanks: Approx. 40m^3 Transfer amount from each dike is uncertain	- Cs-134: 30 - Cs-137: 80 - Sr-90: 13,000	Oct 26, 2013 1:55 AM	- Cs-134: 18 - Cs-137: 44 - Sr-90: 12,000	All β: 490,000Bq/L (Obtained from water inside the dike on Oct 26)
H4-East (Flange type)	RO concentrated water	Transfer	Water transfer to the underground reservoir No.4 was conducted	Total transfer amount to the underground reservoir No.4: Approx. 850m^3 Transfer amount from each dike is uncertain	- Cs-134: Below the detection limit value (11) - Cs-137: 17 - Sr-90: 490	Oct 26, 2013 1:43 AM	- Cs-134: Below the detection limit value (7.3) - Cs-137: Below the detection limit value (9.9) - Sr-90: 300	
H4 (Flange type)	RO concentrated water	Transfer	Water transfer to the underground reservoir No.4 was conducted	Total transfer amount to the underground reservoir No.4: Approx. 850m^3 Transfer amount from each dike is uncertain	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (15) - Sr-90: 33	Oct 26, 2013 1:35 AM	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (17) - Sr-90: 26	
H5 (Flange type)	RO concentrated water	Transfer	Water transfer to the underground reservoir No.7 was conducted	Total transfer amount to the underground reservoir No.7: Approx. 750m^3 Transfer amount from each dike is uncertain	- Cs-134: Below the detection limit value (11) - Cs-137: Below the detection limit value (15) - Sr-90: 140	Oct 26, 2013 1:35 AM	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (17) - Sr-90: 120	
H6 (Flange type)	RO concentrated water	Transfer	Water transfer to the underground reservoir No.7 was conducted	Total transfer amount to the underground reservoir No.7: Approx. 750m^3 Transfer amount from each dike is uncertain	- Cs-134: Below the detection limit value (11) - Cs-137: Below the detection limit value (16) - Sr-90: 72	Oct 26, 2013 1:45 AM	- Cs-134: Below the detection limit value (8.8) - Cs-137: Below the detection limit value (12) - Sr-90: 44	
H9 (Flange type)	RO treated water (Freshwater)	-	There is a margin left in the water level inside the dike	-	- Cs-134: Below the detection limit value (11) - Cs-137: Below the detection limit value (15) - Sr-90: 2.2	Oct 26, 2013 12:37 AM	- Cs-134: Below the detection limit value (7.8) - Cs-137: Below the detection limit value (10) - Sr-90: Below the detection limit value (2.2)	
H9-West (Flange type)	RO treated water (Freshwater)	-	There is a margin left in the water level inside the dike	-	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (16) - Sr-90: 2.8	Oct 26, 2013 12:30 AM	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (17) - Sr-90: Below the detection limit value (2.2)	
B-North (Flange type)	RO treated water (Freshwater)	Collection/transfer	Suction by a vacuum and water transfer to the underground reservoir No.4 was conducted	Total transfer amount to the underground reservoir No.4: Approx. 850m^3 Transfer amount from each dike is uncertain	- Cs-134: 39 - Cs-137: 90 - Sr-90: 18	Oct 26, 2013 1:45 AM	- Cs-134: Below the detection limit value (7.7) - Cs-137: 20 - Sr-90: 7.5	
B-South (Flange type)	RO treated water (Freshwater)	Collection/transfer	Suction by a vacuum and water transfer to the notch tanks (4,000m^3) was conducted	Total transfer amount to notch tanks: Approx. 20m^3 Transfer amount from each dike is uncertain	- Cs-134: 55 - Cs-137: 170 - Sr-90: 130	Oct 26, 2013 2:40 AM	- Cs-134: 35 - Cs-137: 68 - Sr-90: 27	
C-East (Flange type)	RO concentrated water	-	There is a margin left in the water level inside the dike	-	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (15) - Sr-90: 3.3	Oct 26, 2013 12:25 AM	- Cs-134: Below the detection limit value (8.0) - Cs-137: Below the detection limit value (10) - Sr-90: 3.0	
C-West (Flange type)	RO concentrated water	-	There is a margin left in the water level inside the dike	-	- Cs-134: Below the detection limit value (11) - Cs-137: Below the detection limit value (15) - Sr-90: Below the detection limit value (2.2)	Oct 26, 2013 12:15 AM	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (17) - Sr-90: Below the detection limit value (2.2)	
E (Flange type)	RO concentrated water	-	There is a margin left in the water level inside the dike	-	- Cs-134: Below the detection limit value (11) - Cs-137: Below the detection limit value (15) - Sr-90: 4.4	Oct 26, 2013 12:05 AM	- Cs-134: Below the detection limit value (7.6) - Cs-137: Below the detection limit value (10) - Sr-90: 2.7	
G4-South (Flange type)	RO concentrated water	Discharge	Water discharge to the outside of the dike by drain pump and fire enginewas conducted	Approx. 350m^3	- Cs-134: Below the detection limit value (11) - Cs-137: Below the detection limit value (15) - Sr-90: 2.7	Oct 25, 2013 11:50 AM	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (17) - Sr-90: 3.5	
G6-North (Flange type)	RO concentrated water	Discharge	Water discharge to the outside of the dike was conducted by opening a drain valve	Approx. 450m^3	- Cs-134: Below the detection limit value (11) - Cs-137: Below the detection limit value (16) - Sr-90: 9.5	Oct 25, 2013 12:20 PM	- Cs-134: Below the detection limit value (13) - Cs-137: Below the detection limit value (17) - Sr-90: 7.2	
G6-South (Flange type)	RO concentrated water	-	There is a margin left in the water level inside the dike	-	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (15) - Sr-90: 18	Oct 26, 2013 2:00 AM	- Cs-134: Below the detection limit value (8.0) - Cs-137: Below the detection limit value (12) - Sr-90: 21	
G3-East (Welding type)	Treated water through Multi-nuclide Removal Apparatus	-	There is a margin left in the water level inside the dike	-	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (15) - Sr-90: 2.2	Oct 26, 2013 12:15 AM	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (17) - Sr-90: 4.2	
G3-West (Welding type)	Treated water through Multi-nuclide Removal Apparatus/RO concentrated water	-	There is a margin left in the water level inside the dike	-	- Cs-134: Below the detection limit value (13) - Cs-137: Below the detection limit value (15) - Sr-90: Below the detection limit value (2.2)	Oct 26, 2013 12:50 AM	-	Drain valve at the dike was closed on Oct 24
G3-North (Welding type)	RO concentrated water	-	There is a margin left in the water level inside the dike	-	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (15) - Sr-90: Below the detection limit value (2.2)	Oct 26, 2013 12:30 AM	- Cs-134: Below the detection limit value (8.6) - Cs-137: Below the detection limit value (12) - Sr-90: 4.1	
H8-North (Welding type)	RO concentrated water	-	There is a margin left in the water level inside the dike	-	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (16) - Sr-90: 5.0	Oct 26, 2013 12:02 AM	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (17) - Sr-90: Below the detection limit value (2.2)	
H8-South (Welding type)	RO concentrated water	-	There is a margin left in the water level inside the dike	-	- Cs-134: Below the detection limit value (12) - Cs-137: Below the detection limit value (16) - Sr-90: 4.5	Oct 26, 2013 3:05 AM	- Cs-134: Below the detection limit value (8.5) - Cs-137: Below the detection limit value (12) - Sr-90: 2.3	

* Discharge standard
-Cesium-134: Below 15Bq/L (Sea Discharge Standard Value: 60 Bq/L)
-Cesium-137: Below 25Bq/L (Sea Discharge Standard Value: 90 Bq/L)
-No detection of the other γ nuclides (excludes natural nuclides)
-Strontium-90: Below 10Bq/L (Sea Discharge Standard Value: 30 Bq/L)
-Satisfaction of the notification levels for the other nuclides, by using water quality, etc. of the tanks as a reference.