Water leakage in Fukushima Daiichi Nuclear Power Station (Discovered on 29 January)

January 29, 2012 Tokyo Electric Power Company

N 0	Date and Time (Stoppage/isolation)	Location	Leaked amount	Puddle of water	Radioactivity density (Bq/cm3)	Outflow to sea	Impact on systems	Air dose rate (mSv/h)
	Jan 29, 2012 9:35 (Completion of isolation 10:15)	Secondary water cooling unit of Unit 4 spent fuel pool	40L (4m×10m×1mm)	No	Filtrate water	No	Stoppage of water circulation cooling of secondary system at 9:35 Restarting at 11:14	-
	Jan 29, 2012 9:50 (Stoppage of water leakage 9:55)	3C flow meter of emergency reactor injection pump on the hill	600L (Conservative estimation)	No	RO water Cs-134:4.3E-02 Cs-137:5.4E-02 I-131:ND (1/28 Analysis results of RO outlet water)	No (Estimation)	No	Same level as surrounding area
	Jan 29, 2012 10:05 (Stoppage of water leakage 10:05)	"A" system minimum flow line flange, waste liquid supply pump, Water desalinations (RO)	10L (1m×10m×1mm)	Yes	Cs-134:8.7E00 Cs-137:1.2E01 I-131:ND	No	-	γ:0.6 β:35 (air)γ:0.11 (air)β:2
	Jan 29, 2012 10:05 (Stoppage of water leakage 10:37)	Boiler "B" system, Water desalinations (evaporative concentration apparatus)	25L (5m×5m×1mm)	No	Filtrate water	No	-	-
	Jan 29, 2012 10:05 (Stoppage of water leakage 10:37)	Boiler "C" system, Water desalinations (evaporative concentration apparatus)		No	Filtrate water	No	-	-
	Jan 29, 2012 10:02 (Stoppage of water leakage 10:03)	Flow meter of reactor water injection pump from Unit 3 condensate storage tank to Unit 2	4L (2m×2m×1mm)	No	RO7k Cs-134:4.3E-02 Cs-137:5.4E-02 I-131:ND (1/28 Analysis results of RO outlet water)	No	No	Same level as surrounding area
	Jan 29, 2012 10:09 (Stoppage of water leakage 10:11)	Flow meter of reactor water injection pump from Unit 3 condensate storage tank to Unit 3	4L (2m×2m×1mm)	No	RO water Cs-134:4.3E-02 Cs-137:5.4E-02 I-131:ND (1/28 Analysis results of RO outlet water)	No	No	Same level as surrounding area

N o	Date and Time (Stoppage/isolation)	Location	Leaked amount	Puddle of water	Radioactivity density (Bq/cm3)	Outflow to sea	Impact on systems	Air dose rate (mSv/h)
		Header of filtrate water supply line into fuel pool make up system	9L (3m×3m×1mm)	No	Filtrate water	No	-	-
	11:06	Flange of demineralizer resin transfer line of water desalinations (evaporative concentration apparatus)	0.5L (1m×0.5m×1mm)	Yes	treat water Cs-134:ND Cs-137:4.9E-02 I-131:ND	No	-	Same level as surrounding area
	(Stoppage of water	Flow meter of filtrate water backwash line of boiler water supply of evaporative concentration apparatus	18L (6m×3m×1mm)	Yes	Filtrate water	No	-	-
	Jan 29, 2012 around 13:00 (Stoppage of water leakage)	Flow meter of filtrate water of deionizer	1L	No	Filtrate water	No	-	-
		Flange of cooling water line of Unit 6 water circulation pump	7000L	No	Deionized water		Suspension of sea water pump due to leakage repairing (pump restarted already)	-
	Jan 29, 2012 around 15:00 (Stoppage of water leakage)	Flow meter of waste water line of deionizer	Filtrate water·9L (9m×3m×1mm)	Yes	Deionized water	No	-	-
		Filtrate water supply valve of Unit 3 spent fuel pool cooling system	50L (5m×10m×1mm)	No	Filtrate water	No	-	-