Reference
2011/7/26
Tokyo Electric Power Company

Sampling, Measurement Frequency and Nuclide Analysis Plan (July 26)

○ Gamma Ray Radiation Measure (1/3)

Content	Sampling Spot		Before	After	Note
Soil	1F	Playground (west-northwest approx. 500m)	1 time/week	Same as before	Sampling frequency is 2 times/week. *
	1F	Forest of wild birds (west approx. 500m)			
	1F	Adjacent to industrial waste disposal facility south-southwest approx. 500m)			
Air	1F	West Gate of Fukushima Daiichi	1 time/day	Same as before	
	2F	MP-1 of Fukushima Daini			
	1F	Top of the slope at north side of Unit 1	—	1 time/week	Additional sampling points to expand and enhance the monitoring (Announced on July 7)
	1F	Top of the slope at the west of Unit 1 and 2			
	1F	Top of the slope at the west of Unit 3 and 4			
	1F	Mountain side of Unit 1		1 time/month	
	1F	Mountain side of Unit 2			
	1F	Mountain side of Unit 3			
	1F	In front of the Environment Administration Office			
	1F	In front of Water Treatment Building			
	1F	In front of Switchyard of Unit 5 and 6			
	1F	MP－1		1 time/week	
	1F	MP－3			
	1F	MP－8			
Underground Water	1F	Subdrain around Unit 1 turbine building	3 times/week	Same as before	
	1F	Subdrain around Unit 2 turbine building			
	1F	Subdrain around Unit 3 turbine building			
	1F	Subdrain around Unit 4 turbine building			
	1F	Subdrain around Unit 5 turbine building			
	1F	Subdrain around Unit 6 turbine building			
	1F	Deep well			
	1F	Subdrain northeast of Process Main Building	1 time/day	Same as before	
	1F	Subdrain southeast of Process Main Building			
	1F	Subdrain south of Miscellaneous Solid Waste Volume Reduction Treatment Building			
	1F	Subdrain southwest of On-site Bunker Building	1 time/week		
	1F	Subdrain west of Incineration Workshop Building	1 time/day		
	1F	Subdrain north of Miscellaneous Solid Waste Volume Reduction Treatment Building			

* Sampling is done twice in a week. Out of which, one sample is measured. If it is recognized that the radioactivity concentration is changed, the remaining sample will be measured.

○ Gamma Ray Radiation Measure (2/3)

Content	Sampling Spot		Before	After	Note
Seawater (inside port)	1F	Front of Shallow Draft Quay	1 time/day	Same as before	
	1F	Inside north water intake canal of Unit 1-4			
	1F	Screen of Unit 1 (outside the silt fence)			
	1F	Screen of Unit 1 (inside the silt fence)			
	1F	Screen of Unit 2 (outside the silt fence)			
	1F	Screen of Unit 2 (inside the silt fence)			
	1F	Screen of Unit 3 (outside the silt fence)			
	1F	Screen of Unit 3 (inside the silt fence)			
	1F	Screen of Unit 4 (outside the silt fence)			
	1F	Screen of Unit 4 (inside the silt fence)			
	1F	Inside the south ofUnit 1-4 Water Intake Canal			
Seawater (ouside port)	Coast	North of Discharge Channel of 5-6u of 1F	1 time/day	Same as before	
		Around South Discharge Channel of 1F			
		Around North Discharge Channel of 2F			
		Around Iwasawa Shore of 2F			
	Within 20km of periphery	3km offshore of Haramachi district	1 time/2 days (Sampling 2 points (upper and lawer layer))	Same as before	
		3km offshore of Odaka district			
		3km offshore of Iwasawa coast			
		8km offshore of Odaka district			
		8km offshore of Iwasawa coast			
		15 km offshore of Ukedo-gawa			
		15 km offshore of Fukushima Daiichi			
		15 km offshore of Fukushima Daini			
	Within 30km of periphery	15 km offshore of MinamiSouma City	2 times/week (Sampling 2 points (upper and lawer layer))	Same as before	
		15 km offshore of Iwasawa Shore			
		15 km offshore of Hirono-machi			
	Outside 30km of periphery	North Iwaki offshore 3km			
		Natsui-gawa offshore 3km			
		Onahama Port offshore 3km			
		Ena offshore 3km			
		Numanouchi offshore 3km			
		Toyoma offshore 3km			

○ Gamma Ray Radiation Measure (3/3)

Content	Sampling Spot		Before	After	Note
Seawater (ouside port)	Outside 30km of periphery	3 km offshore of Souma City	1 time/week (Sampling 2 points (upper and lawer layer))	1 time/week (Sampling 2 points (upper and lawer layer))	
		5 km offshore of Souma City			
		5 km offshore of Kashima			
		5 km offshore of Numanouchi			
		15km offshore of Numanouchi		1 time/week (Sampling 3 points (upper, middle and lawer layer))	Correction of a mistake ("15 km offshore of Numanouchi" takes samples at 3 points including the middle layer.)
		30km offshore of Numanouchi	1 time/week (Sampling 3 points (upper, middle and lawer layer))		
		30 km offshore of MinamiSouma City			
		30 km offshore of Ukedo-gawa			
Seawater (ouside port)	Offshore of Ibaraki prefecture	3 km offshore of Takadokobama shore	2 times/week (Sampling 2 points (upper and lawer layer))	Same as before	
		3 km offshore of Kujihama shore			
		3 km offshore of Oarai shore			
		3 km offshore of Hirai shore			
		3 km offshore of Hasaki shore			
	Offshore of Miyagi prefecture	Ishinomaki Bay	1 time/2weeks (Sampling 3 points (upper, middle and lawer layer))	Same as before	
		Offshore of Kinkasan east			
		Offshore of Kinkasan south			
		Offshore of Shichigahama			
		Sendai Bay center			
		Offshore of Abukuma River			
Marine soil	Within 20km of periphery	3km offshore of Odaka district	1 time/month	Same as before	
		3km offshore of Iwasawa coast			

○ Plutonium, etc.

Content	Sampling Spot		Before	After	Note
Soil	1F	Playground (west-northwest approx. 500m)	1 time/week (Only Pu)	Same as before	Sampling frequency is 2 times/week. *
	1F	Forest of wild birds (west approx. 500m)			
	1F	Adjacent to industrial waste disposal facility (south-southwest approx. 500m)			
Air	1F	West Gate of Fukushima Daiichi	1 time/week	Same as before	
Underground water	1F	Subdrain around Unit 2 turbine building	1 time/month	Same as before	
	1F	Subdrain around Unit 5 turbine building	1 time/month	Same as before	
	1F	**Subdrain around Unit 1, 3, 4, 6 turbine buildings, and Deep well**	—	1 time/month (Refer to Note)	Additional points Take a sample in turn at 1 time/month from the sampling points mentioned in the left column
Seawater (inside port)	1F	Inside north water intake canal of Unit 1-4	1 time/month	Same as before	
Sea water (ouside port)	Coast	North of Discharge Channel of 5-6u of 1F	1 time/month	Same as before	
		Around South Discharge Channel of 1F			
	Within 20km of periphery	15 km offshore of Fukushima Daiichi	1 time/month (Upper layer)	Same as before	
		15 km offshore of Fukushima Daini			
Marine soil	Within 20km of periphery	3km offshore of Odaka district	1 time/3 months (If Pu is detected, U, Am, Cm analysis is conducted)	Same as before	
		3km offshore of Iwasawa coast			

* Sampling is done twice in a week. Out of which, one sample is measured. If it is recognized that the radioactivity concentration is changed, the remaining sample will be measured.

○ Strontium

Content	Sampling Spot		Before	After	Note
Soil	1F	Playground (west-northwest approx. 500m)	1 time/month	Same as before	
	1F	Forest of wild birds (west approx. 500m)			
	1F	Adjacent to industrial waste disposal facility (south-southwest approx. 500m)			
Air	1F	West Gate of Fukushima Daiichi	1 time/month	Same as before	
Underground Water	1F	Subdrain around Unit 2 turbine building	1 time/month	Same as before	
	1F	Subdrain around Unit 5 turbine building	1 time/month	Same as before	
	1F	**Subdrain around Unit 1, 3, 4, 6 turbine buildings, and Deep well**	—	1 time/month (Refer to Note)	Additional points Take a sample in turn at 1 time/month from the sampling points mentioned in the left column
Seawater (ouside port)	Coast	North of Discharge Channel of 5-6u of 1F	1 time/month	Same as before	
		Around South Discharge Channel of 1F			
	Within 20km of periphery	15 km offshore of Fukushima Daiichi	1 time/month (Upper layer)	Same as before	
		15 km offshore of Fukushima Daini			
Marine soil	Within 20km of periphery	3km offshore of Odaka district	time/3 month	Same as before	
		3km offshore of Iwasawa coast			

○Tritium, all α, β radiation

Content	Sampling Spot		Before	After	Note
Underground water	1F	Subdrain around Unit 2 turbine building	1 time/month	Same as before	
	1F	Subdrain around Unit 5 turbine building			
	1F	**Subdrain around Unit 1, 3, 4, 6 turbine buildings, and Deep well**	—	1 time/month (Refer to Note)	Additional points Take a sample in turn at 1 time/month from the sampling points mentioned in the left
Seawater (ouside port)	Coast	North of Discharge Channel of 5-6u of 1F	1 time/month	Same as before	
		Around South Discharge Channel of 1F			
	Within 20km of periphery	15 km offshore of Fukushima Daiichi	1 time/month	Same as before	
		15 km offshore of Fukushima Daini			