

Plans of the Sea Area Monitoring Conducted by Tokyo Electric Power Company (FY 2013)

<Reference>

April 1, 2013

Tokyo Electric Power Company

Place of Sampling		Place No. T-	Sampling Content/Analysis Items	Analysis Frequency	Note			
Coast	1F North Discharge Channel of 5-6	1	Upper part (γ)	1/Day	(1) Upper part (γ), Middle part (γ), Lower part (γ): Nuclide analysis of γ in the seawater at upper layer, middle layer and lower layer. (2) Upper part (Pu): Analysis of Pu-238, Pu-239+Pu240 at upper layer of the sea. Analysis of U-234, U-235, U-238, Am-241, Cm242 and Cm243+Cm244 will be conducted when Pu-238 is detected. (3) Upper part (α,β,H-3, Sr): Analysis of All α, All β, H-3 and Sr-90 at upper layer of the sea. (4) Upper part (Cs detail), Middle part (Cs detail), Lower part (Cs detail): Cs detail analysis of seawater at upper layer, middle layer and lower layer by AMP precipitation method (detection limit: approx. 1mBq/L). (5) Marine soil (γ,Pu,Sr): Nuclide analysis of γ, Pu-238, Pu-239+Pu240 and Sr-90 in the marine soil. Analysis of U-234, U-235, U-238, Am-241, Cm242 and Cm243+Cm244 will be conducted when Pu-238 is detected. (6) Marine soil (γ): Nuclide analysis of γ in the marine soil. (7) Upper part (Sr): Analysis of Sr-90 in the seawater at upper layer. (8) Fish(γ): Nuclide analysis of γ in the fish and shellfish. (9) Sr-90 will be conducted when the density of radioactive Cs is found high in the fish and shellfish.			
			Upper part (Pu)	1/Month				
			Upper part (α,β,H-3,Sr)	1/Month				
			Upper part (Cs detail)	1/Week				
	Marine soil (γ,Pu,Sr)	γ: 1/Month, Pu,Sr: 1/2 Months						
	1F Around South Discharge Channel	2-1	Upper part (γ)	1/Day				
			Upper part (Pu)	1/Month				
			Upper part (α,β,H-3,Sr)	1/Month				
			Upper part (Cs detail)	1/Week				
	2F Around North Discharge Channel	3	Upper part (γ)	1/Day				
			Upper part (Cs detail)	1/Week				
			Marine soil (γ)	1/Month				
Around the South Side of Kitasakogawa	4-2	Upper part (γ)	1/Day					
		Upper part (Cs detail)	1/Week					
		Marine soil (γ)	1/Month					
Within 20km Range of Fukushima Daiichi NPS	3km Offshore of Odaka Ward	14	Upper part (Cs detail)	1/Week				
			Lower part (Cs detail)	1/Week				
			Marine soil (γ)	1/Month				
	3km Offshore of Ukedo River	D1	Upper part (Cs detail)	1/Week				
			Lower part (Cs detail)	1/Week				
			Upper part (α,β,H-3,Sr,Pu)	1/Month				
	3km Offshore of 1F	D5	Upper part (Cs detail)	1/Week				
			Lower part (Cs detail)	1/Week				
			Upper part (α,β,H-3,Sr,Pu)	1/Month				
	3km Offshore of 2F	D9	Upper part (Cs detail)	1/Week				
			Lower part (Cs detail)	1/Week				
			Upper part (α,β,H-3,Sr,Pu)	1/Month				
	15km Offshore of 1F	5	Upper part (Cs detail)	1/Week				
			Lower part (Cs detail)	1/Week				
			Upper part (α,β,H-3,Sr,Pu)	1/Month				
	3km Offshore of Iwasawa Shore	11	Upper part (Cs detail)	1/Week				
			Lower part (Cs detail)	1/Week				
			Marine soil (γ)	1/Month				
			Marine soil (γ)	1/Month				
			Marine soil (γ)	1/Month				
			Marine soil (γ)	1/Month				
			Marine soil (γ)	1/Month				
			Marine soil (γ)	1/Month				
			Marine soil (γ)	1/Month				
Marine soil (γ)			1/Month					
Marine soil (γ)			1/Month					
Within 30km Range	15km Offshore of Iwasawa Shore	7	Upper part (Cs detail)	1/Month				
			Lower part (Cs detail)	1/Month				
			Marine soil (γ)	1/2 Months				
	3km Offshore of Onahama Port	18	Seawater	Upper part (Cs detail)	1/Month			
				Lower part (Cs detail)	1/Month			
				Marine soil (γ)	1/2 Months			
				5km Offshore of Numanouchi	M10	Marine soil	Upper part (Cs detail)	1/Month
							Lower part (Cs detail)	1/Month
							Marine soil (γ)	1/2 Months
	Out of 30km Range Iwaki Offshore	3km Offshore of North of Iwaki City	12	Upper part (Cs detail)	1/Month			
				Lower part (Cs detail)	1/Month			
				Marine soil (γ)	1/2 Months			
1km Offshore of Natsui River		17-1	Seawater	Upper part (Cs detail)	1/Month			
				Lower part (Cs detail)	1/Month			
				Marine soil (γ)	1/2 Months			
3km Offshore of Toyoma	20	Marine soil	Upper part (Cs detail)	1/Month				
			Lower part (Cs detail)	1/Month				
			Marine soil (γ)	1/2 Months				
Within 30km Range	1km Offshore of Nida River	13-1	Upper part (Cs detail)	1/Month				
			Lower part (Cs detail)	1/Month				
			Marine soil (γ)	1/2 Months				

Place of Sampling		Place No. T-	Sampling Content/Analysis Items	Analysis Frequency	Note
Out of 30km Range Haragama Offshore	3km Offshore of Soma	22	Seawater Marine soil	Upper part (Cs detail)	1/Month
				Lower part (Cs detail)	
				Marine soil (y)	1/2 Months
	5km Offshore of Kashima	MA		Upper part (Cs detail)	1/Month
				Lower part (Cs detail)	
				Marine soil (y)	1/2 Months
Fish and shellfish	Around 1km Offshore of Ota River	S1	Fish (y)	1/Month	
			Upper part (Cs detail)		
			Lower part (Cs detail)		
	Around 3km Offshore of Odaka Ward	S2	Marine soil (y)		
			Fish (y)		
			Upper part (Cs detail)		
	Around 3km Offshore of Ukedo River	S3	Lower part (Cs detail)		
			Marine soil (y)		
			Fish (y)		
	Around 3km Offshore of 1F	S4	Upper part (Cs detail)		
			Lower part (Cs detail)		
			Marine soil (y)		
	Around 2km Offshore of Kido River	S5	Fish (y)		
			Upper part (Cs detail)		
			Lower part (Cs detail)		
	Around 2km Offshore of 2F	S7	Marine soil (y)		
			Fish (y)		
			Upper part (Cs detail)		
	Around 4km Offshore of Kumagawa	S8	Lower part (Cs detail)		
			Marine soil (y)		
Fish (y)					
Around 15km Offshore of Odaka Ward	B1	Upper part (Cs detail)			
		Lower part (Cs detail)			
		Marine soil (y)			
Around 18km Offshore of Ukedo River	B2	Fish (y)			
		Upper part (Cs detail)			
		Lower part (Cs detail)			
Around 10km Offshore of 1F	B3	Marine soil (y)			
		Fish (y)			
		Upper part (Cs detail)			
Around 10km Offshore of 2F	B4	Lower part (Cs detail)			
		Marine soil (y)			
		Fish (y)			
Offshore of Miyagi Prefecture	Offshore of Minamisanriku	MG0	Upper part (Cs detail)	2/Month	
			Middle part (Cs detail)		
			Lower part (Cs detail)		
	Ishinomaki Bay		MG1		Upper part (Cs detail)
					Middle part (Cs detail)
					Lower part (Cs detail)
	Offshore of Kinkasan East		MG2		Upper part (Cs detail)
					Middle part (Cs detail)
					Lower part (Cs detail)
	Offshore of Kinkasan South		MG3		Upper part (Cs detail)
					Middle part (Cs detail)
					Lower part (Cs detail)
Offshore of Shichigahama	MG4	Upper part (Cs detail)			
		Middle part (Cs detail)			
		Lower part (Cs detail)			
Central Area of Sendai Bay	MG5	Upper part (Cs detail)			
		Middle part (Cs detail)			
		Lower part (Cs detail)			
Offshore of Abukuma River	MG6	Upper part (Sr)	1/2 Months		
		Upper part (Cs detail)	2/Month		
		Middle part (Cs detail)			
Offshore of Ibaraki Prefecture	3km Offshore of Isohara Shore	Z	Lower part (y)	1/Month	
			Upper part (y)		
	3km Offshore of Takadokobama Shore		A		Lower part (y)
					Upper part (y)
	3km Offshore of Kujihama Shore		B		Lower part (y)
					Upper part (y)
	3km Offshore of Oarai Shore		C	Lower part (y)	1/2 Months
				Upper part (Sr)	
	3km Offshore of Hirai Shore		D	Upper part (y)	1/Month
				Lower part (y)	
3km Offshore of Hasaki Shore	E	Upper part (y)			
		Lower part (y)			

Sampling Locations of the Sea Area Monitoring Conducted by Tokyo Electric Power Company

Place of Sampling		Place No.	Latitude (North Latitude)	Longitude (East Longitude)	
Coast	North of Discharge Channel of 5-6 Units of 1F	T-1	37°25 52	141°02 04	
	Around South Discharge Channel of 1F	T-2 ³	37°24 55	141°02 02	
		T-2-1 ³	37°24' 22"	141°02' 01"	
	Around North Discharge Channel of 2F	T-3	37°19 20	141°01 35	
	2F Around Iwasawa Shore ²	T-4	37°14 30	141°00 50	
	Around the North Side of Asamigawa ^{2*4}	T-4-1	37°12 37	141°00 20	
Around the South Side of Kitasakogawa ⁴	T-4-2	37°12 51	141°00 25		
Within 20km Range of Fukushima Daiichi NPS	3km Offshore of Odaka Ward	T-14	37°33 10	141°3 45	
	3km Offshore of Iwasawa Shore	T-11	37°14 30	141°2 50	
	3km Offshore of Ukedo River	T-D1	37°30 00	141°4 20	
	3km Offshore of 1F	T-D5	37°25 00	141°4 20	
	3km Offshore of 2F	T-D9	37°20 00	141°4 20	
	15km Offshore of 1F	T-5	37°25	141°12	
	1km Offshore of Murakami, Odaka Ward	T-	37°33 6	141°2 30	
	2km Offshore of Murakami, Odaka Ward	T-	37°33 6	141°3 00	
	1km Offshore of Ukedo, Namie Town	T-	37°27 30	141°2 30	
	2km Offshore of Ukedo, Namie Town	T-	37°27 30	141°3 00	
	3km Offshore of Ukedo, Namie Town	T-	37°27 30	141°3 30	
	1km Offshore of Kumagawa, Okuma Town	T-	37°23 00	141°2 30	
	2km Offshore of Kumagawa, Okuma Town	T-	37°23 00	141°3 00	
	3km Offshore of Kumagawa, Okuma Town	T-	37°23 00	141°3 30	
	5km Offshore of Kumagawa, Okuma Town	T-	37°23 00	141°5 30	
	10km Offshore of Kumagawa, Okuma Town	T-	37°23 00	141°10 00	
	15km Offshore of Kumagawa, Okuma Town	T-	37°23 00	141°12 00	
	20km Offshore of Kumagawa, Okuma Town	T-	37°23 00	141°15 00	
	1km Offshore of Yamadahama, Naraha Town	T-	37°14 18	141°1 30	
	Around 1km Offshore of Ota River	T-S1	37°35 05	141°2 32	
	Around 3km Offshore of Odaka Ward	T-S2	37°33 10	141°3 45	
	Around 3km Offshore of Ukedo River	T-S3	37°27 30	141°04 44	
	Around 3km Offshore of 1F	T-S4	37°25 43	141°04 57	
	Around 2km Offshore of Kido River	T-S5	37°15 54	141°02 22	
	Around 2km Offshore of 2F ¹	T-S7	37°18 40	141°02 50	
	Around 4km Offshore of Kumagawa ¹	T-S8	37°23 00	141°04 44	
	Around 15km Offshore of Odaka Ward	T-B1	37°32	141°13	
	Around 18km Offshore of Ukedo River	T-B2	37°31	141°14	
Around 10km Offshore of 1F	T-B3	37°24 28	141°09 15		
Around 10km Offshore of 2F	T-B4	37°20 54	141°08 55		
Within 30km Range of Fukushima Daiichi NPS	1km Offshore of Nida River	T-13-1	37°38 27	141°02 33	
	15km Offshore of Iwasawa Shore	T-7	37°14	141°12	
Out of 30km Range of Fukushima Daiichi NPS	Offshore of Fukushima Prefecture	3km Offshore of Onahama Port	T-18	36°54 20	140°55 20
		3km offshore of North of Iwaki City	T-12	37°09 00	141°2 15
		1km Offshore of Natsui River	T-17-1	37°03 20	141°00 25
		3km Offshore of Toyoma	T-20	36°58 00	141°00 00
		3km Offshore of Soma	T-22	37°49 28	141°1 21
		5km Offshore of Kashima	T-MA	37°45	141°5
	Offshore of Ibaraki Prefecture	5km Offshore of Numanouchi	T-M10	37°00	141°5
		3km Offshore of Isohara Shore	T-Z	36°47 30	140°47 21
		3km Offshore of Takadokobama Shore	T-A	36°42 50	140°45 50
		3km Offshore of Kujihama Shore	T-B	36°30 23	140°39 56
		3km Offshore of Oarai Shore	T-C	36°17 59	140°36 14
		3km Offshore of Hirai Shore	T-D	35°59 15	140°42 08
	Offshore of Miyagi Prefecture	3km Offshore of Hasaki Shore	T-E	35°47 46	140°50 14
		Offshore of Minamisanriku	T-MG0	38°38	141°35
		Ishinomaki Bay	T-MG1	38°20	141°17
		Offshore of Kinkasan East	T-MG2	38°18	141°40
		Offshore of Kinkasan South	T-MG3	38°14	141°35
		Offshore of Shichigahama	T-MG4	38°15	141°08
	Central Area of Sendai Bay	T-MG5	38°10	141°15	
	Offshore of Abukuma River	T-MG6	38°05	141°00	

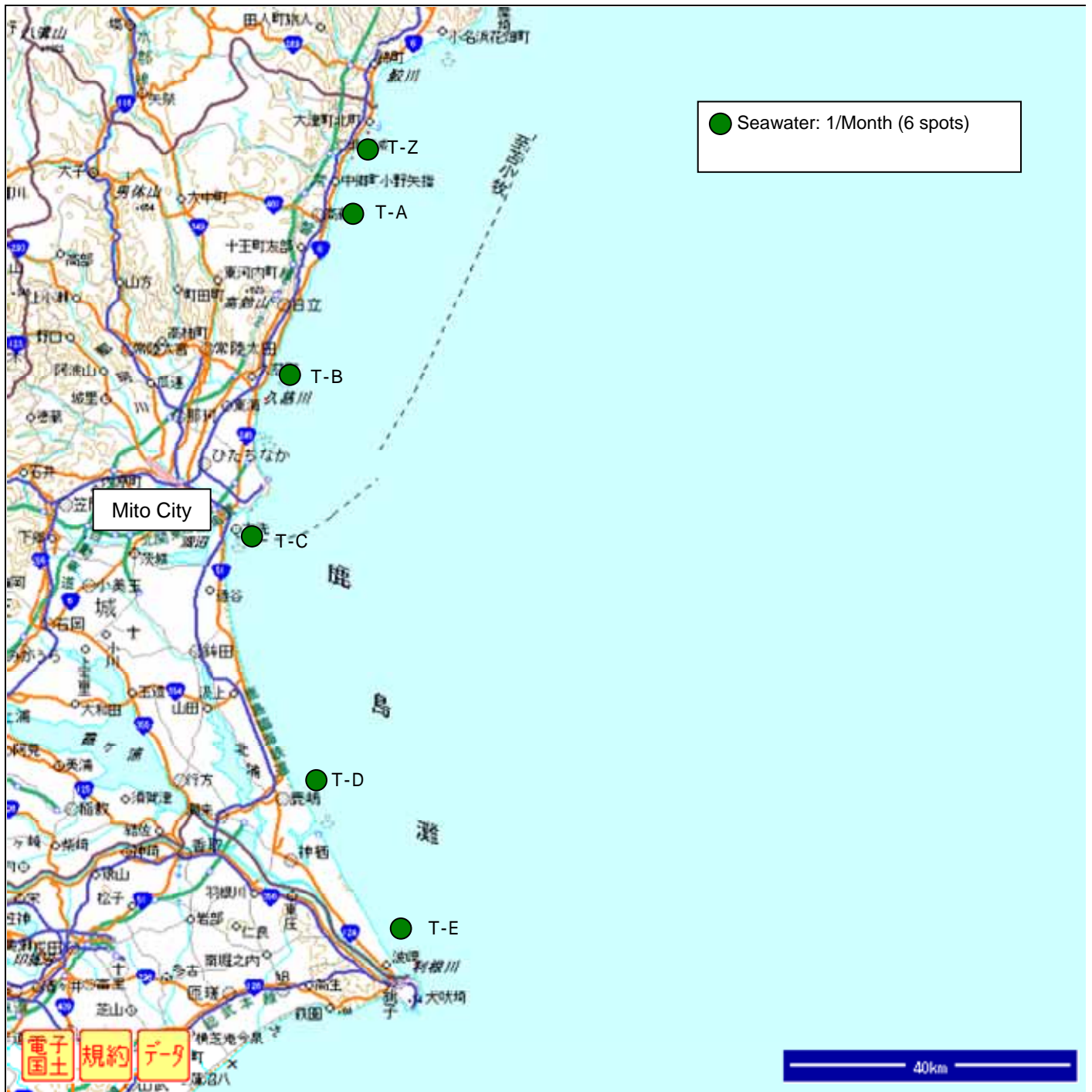
* 1F: Fukushima Daiichi Nuclear Power Station, 2F: Fukushima Daini Nuclear Power Station

*1 Place No. "T-S6" was changed to "T-S7" in May 2012. "T-S8" was added in July 2012.

*2 "T-4-1" was newly set to substitute for "T-4" in October 2012 as the road to access "T-4" has been closed since mid-September 2012.

*3 "T-2-1" was newly set to substitute for "T-2", since it is impossible to conduct marine soil (sand) sampling due to erosion.

*4 "T-4-2" was newly set to substitute for "T-4-1" in March 2013 as the road to access "T-4-1" has been closed since mid-March 2013.



**Figure 2. Sampling Locations (Seawater, etc.)
(Ibaraki Coast, Planning for FY 2013)**



**Figure 3. Sampling Locations (Seawater, etc.)
Miyagi Coast, Planning for FY 2013)**