Definite Results of Nuclides Analysis at Fukushima Daiichi Nuclear Power Station (Announced on October 16 - 31, 2012)

< Legend > - : γ nuclides except for the major 3 nuclides (I-131, Cs-134, Cs-137) were not detected.

: γ nuclides other than the major 3 nuclides (I-131, Cs-134, Cs-137) were detected.

/ : Not applicable or cancelled due to the bad weather

Please refer to the preliminary reports for the result of the major nuclides. Please refer to the following pages.

Announcement Date of the Preliminary Report	Octobe	r														
Sampling Point	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Nuclides Analysis Result of the Radioactive Materials in the Air at Fukushima Nuclear Power Stations	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nuclides Analysis Result of the Radioactive Materials in the Air at the Sea Side of Fukushima Nuclear Power Stations				-			\backslash	\nearrow	\nearrow		-				\nearrow	\square
Nuclides Analysis Result of Radioactive Materials in the Seawater < Coast >	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nuclides Analysis Result of the Radioactive Materials in the Seawater < Offshore of Ibaraki Prefecture >				-		\square		\square		/	\square		\square			
Nuclides Analysis Result of the Radioactive Materials in the Seawater of the Port	-	-	-	-	-	-	-	-	-		-	-	-	-	-	-
Nuclides Analysis Result of the Sub-drain of Fukushima Daiichi NPS	-		-		-		\square	-		I		-			-	
Nuclides Analysis Result of the Sub-drain Water in the Surroundings of the Central Radioactive Waste Treatment Facility	-	-	-	-	-	-	-	-	-	I	-	-	-	-	-	-
Nuclides Analysis Result of the Radioactive Materials in the Seawater < Coast, Fukushima Daiichi Nuclear Power Station, Remeasurement >		-		-				-			\checkmark		\bigvee	\checkmark		
Nuclides Analysis Result of the Radioactive Materials in the Seawater in Front of Unit 5-6 Intake					-			-							-	
Nuclides Analysis Results of the Radioactive Materials in the Air at the Opening of Buildings at Fukushima Daiichi NPS							\square	\square	-							
Nuclides Analysis Results of the Radioactive Fallout inseide and Outside Fukushima Daiichi NPS	\square		\square	\square		\square		\square	-		\square		\mathbb{Z}	\square	\square	\nearrow

Place of Sampling		Shallow Draf	t Quay at 1F		Inside U	nit 1-4 Water In	take Canal (Nor	th) at 1F	Unit 1 Sci (Outside the	reen at 1F e Silt Fence)	Unit 1 Scr (Inside the	reen at 1F Silt Fence)	Density Limit Specified by the Reactor Regulation (Bq/L) (The density limit in the water outside the surrounding	
Time of Sampling	Oct 24 6:24		Ν	/Α	Oct 24 6:31		N.	'A		I, 2012 S AM		I, 2012 7 AM		
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	monitored areas is provided in section 6 of Appendix 2.)							
l-131 (Approx. 8 days)	ND	-	-	-	ND	-	-	-	ND	-	ND	-	40	
Cs-134 (Approx. 2 years)	11	0.18	-	-	15	0.25	-	-	10	0.17	12	0.20	60	
Cs-137 (Approx. 30 years)	9.5	0.11	-	-	15	0.17	-	-	18	0.20	25	0.28	90	
Mn-54 (Approx. 310 days)	ND	-	-	-	ND	-	-	-	ND	-	ND	-	1,000	
Co-60 (Approx. 5 years)	ND	-	-	-	ND	-	-	-	ND	-	ND	-	200	
Tc-99m (Approx. 6 hrs)	ND	-	-	-	ND	-	-	-	ND	-	ND	-	40,000	
Te-129m (Approx. 34 days)	ND	-	-	-	ND	-	-	-	ND	-	ND	-	300	
Te-129 (Approx. 70 mins)	ND	-	-	-	ND	-	-	-	ND	-	ND	-	10,000	
Cs-136 (Approx. 13 days)	ND	-	-	-	ND	-	-	-	ND	-	ND	-	300	
Ba-140 (Approx. 13 days)	ND	-	-	-	ND	-	-	-	ND	-	ND	-	300	
La-140 (Approx. 40 hrs)	ND	-	-	-	ND	-	-	-	ND	-	ND	-	400	

[Definite Report] Radioactivity Density of the Seawater in the Port of Fukushima Daiichi NPS < 1/3 >

* The density specified by the Reactor Regulation is converted from Bq/cm³ to Bq/L.

* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

* "ND" indicates that the measurement result is below the detection limit.

The detection limits of the major three nuclides not detected are as follows:

I-131: Approx. 1Bq/L

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

Place of Sampling	Unit 2 Screen at 1F (Outside the Silt Fence)						Unit 3 Screen at 1F (Outside the Silt Fence)		Unit 3 Scr (Inside the		Unit 4 Sci (Outside the		Unit 4 Screen at 1F (Inside the Silt Fence)		Density Limit Specified by the Reactor Regulation
Time of Sampling	ng Oct 24, 2012 Oct 24, 2012 6:41 AM 6:44 AM		·	Oct 24, 2012 6:50 AM		Oct 24 6:51	,	Oct 24 6:54	I, 2012 I AM	Oct 24 6:55	(Bq/L) (The density limit in the water outside the surrounding				
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor	monitored areas is		
l-131 (Approx. 8 days)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	40		
Cs-134 (Approx. 2 years)	41	0.68	71	1.2	31	0.52	100	1.7	ND	-	47	0.78	60		
Cs-137 (Approx. 30 years)	57	0.63	99	1.1	36	0.40	160	1.8	61	0.68	71	0.79	90		
Mn-54 (Approx. 310 days)	ND	-	0.74	0.00	ND	-	ND	-	ND	-	ND	-	1,000		
Co-60 (Approx. 5 years)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	200		
Tc-99m (Approx. 6 hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	40,000		
Te-129m (Approx. 34 days)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	300		
Te-129 (Approx. 70 mins)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	10,000		
Cs-136 (Approx. 13 days)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	300		
Ba-140 (Approx. 13 days)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	300		
La-140 (Approx. 40 hrs)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	400		

[Definite Report] Radioactivity Density of the Seawater in the Port of Fukushima Daiichi NPS < 2/3 >

* The density specified by the Reactor Regulation is converted from Bq/cm³ to Bq/L.

* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

* "ND" indicates that the measurement result is below the detection limit.

The detection limits of the major three nuclides not detected are as follows:

I-131: Approx. 10Bq/L, Cs-134: Approx.17Bq/L

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

Place of Sampling Time of Sampling	Canal (So Oct 24	4 Water Intake buth) at 1F 4, 2012 2 AM	Port Entrance Daiich	ii NPS		t 6 Water Intake I at 1F /A							Density Limit Specified by the Reactor Regulation (Bq/L) (The density limit in the water outside the surrounding
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	monitored areas is provided in section 6 of Appendix 2.)
l-131 (Approx. 8 days)	ND	-	-	-	-	-							40
Cs-134 (Approx. 2 years)	27	0.45	-	-	-	-							60
Cs-137 (Approx. 30 years)	47	0.52	-	-	-	-							90
Mn-54 (Approx. 310 days)	ND	-	-	-	-	-							1,000
Co-60 (Approx. 5 years)	ND	-	-	-	-	-							200
Tc-99m (Approx. 6 hrs)	ND	-	-	-	-	-							40,000
Te-129m (Approx. 34 days)	ND	-	-	-	-	-							300
Te-129 (Approx. 70 mins)	ND	-	-	-	-	-							10,000
Cs-136 (Approx. 13 days)	ND	-	-	-	-	-							300
Ba-140 (Approx. 13 days)	ND	-	-	-	-	-							300
La-140 (Approx. 40 hrs)	ND	-	-	-	-	-							400

[Definite Report] Radioactivity Density of the Seawater in the Port of Fukushima Daiichi NPS < 3/3 >

* The density specified by the Reactor Regulation is converted from Bq/cm³ to Bq/L.

* In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

* "ND" indicates that the measurement result is below the detection limit.

The detection limits of the major three nuclides not detected are as follows:

I-131: Approx. 1Bq/L

As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.