Definite Results of Nuclides Analysis at Fukushima Daiichi Nuclear Power Station (Announced on June 16- 30, 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 nucl Please refer to the following pages.

Announcement Date of the Preliminary Report	June															
Sampling Point	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	\geq
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						\checkmark	-	\checkmark			/			-		
Nuclides Analysis Result of Radioactive Materials in the Seawater < Coast >	-	-	-	-	-		-	-	-	-	-	-	-	-	-	
Nuclides Analysis Result of the Radioactive Materials in the Seawater < Offshore of Ibaraki Prefecture >					Ι											
Nuclides Analysis Result of the Radioactive Materials in the Seawater of the Port		-	-	-	Ι	-		-	-	-	-	-	-	-	-	
Nuclides Analysis Result of the Sub-drain of Fukushima Daiichi NPS	-		\square	-		-		-	\nearrow		-		-		-	
Nuclides Analysis Result of Marine Soil		-			-	-			\nearrow				-			
Nuclides Analysis Result of the Sub-drain Water in the Surroundings of the Central Radioactive Waste Treatment Facility	_	-	-	-	-	_	-	-	-	-	-	-	_	-	-	
Nuclides Analysis Results of the Radioactive Materials in the Air at the Opening of Buildings at Fukushima Daiichi NPS			\square		-		\square		\nearrow	\nearrow	\square					
Nuclides Analysis Results of the Radioactive Fallout inseide and Outside Fukushima Daiichi NPS	\square		\square		-		\square		\square			\square	\square	\nearrow		

Place of Sampling		Shallow Dra	ft Quay at 1F		Inside U	nit 1-4 Water In	take Canal (Nor	th) at 1F	Unit 1 Screen at 1F (Outside the Silt Fence)		Unit 1 Scr (Inside the	Density Limit Specified by the Reactor Regulation	
Time of Sampling	Jun 15 6:49	5, 2012 9 AM	Ν	/Α	Jun 15, 2012 6:53 AM		N/A		Jun 15, 2012 6:56 AM		Jun 15, 2012 6:59 AM		(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.)
I-131 (Approx. 8 days)	ND	-	-	-	ND	-	-	-	ND	-	ND	-	40
Cs-134 (Approx. 2 years)	33	0.55	-	-	11	0.18	-	-	5.4	0.09	11	0.18	60
Cs-137 (Approx. 30 years)	53	0.59	-	-	17	0.19	-	-	13	0.14	18	0.20	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 >

* 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. 2Bq/L

Place of Sampling	Unit 2 Sc (Outside the	reen at 1F e Silt Fence)	at 1F Unit 2 Screen at 1 Fence) (Inside the Silt Fenc		Unit 3 Screen at 1F (Outside the Silt Fence)		Unit 3 Screen at 1F (Inside the Silt Fence)		Unit 4 Screen at 1F (Outside the Silt Fence)		Unit 4 Screen at 1F (Inside the Silt Fence)		Density Limit Specified by the Reactor Regulation
Time of Sampling	Jun 15 7:02	5, 2012 2 AM	Jun 15 7:04	5, 2012 I AM	Jun 15 7:07	5, 2012 7 AM	Jun 15, 2012 7:10 AM		Jun 15, 2012 7:07 AM		Jun 15, 2012 7:10 AM		(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.)
I-131 (Approx. 8 days)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	40
Cs-134 (Approx. 2 years)	8.8	0.15	44	0.73	5.0	0.08	20	0.33	ND	-	27	0.45	60
Cs-137 (Approx. 30 years)	14	0.16	71	0.79	10	0.11	40	0.44	ND	-	23	0.26	90
Mn-54 (Approx. 310 days)	ND	-	1.5	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 >

* 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. 9Bq/L, Cs-134: Approx.18Bq/L, Cs-137: Approx.22Bq/L

Place of Sampling	Inside Unit 1-4 Canal (Sc	4 Water Intake outh) at 1F	Port Entrance Daiich	of Fukushima ni NPS	In Front of Unit Cana	6 Water Intake I at 1F							Density Limit Specified by the Reactor Regulation
Time of Sampling	Jun 15 7:14	5, 2012 I AM	N.	/Α	Jun 15 8:55	5, 2012 5 AM							(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.)
I-131 (Approx. 8 days)	ND	-	-	-	ND	-							40
Cs-134 (Approx. 2 years)	18	0.30	-	-	ND	-							60
Cs-137 (Approx. 30 years)	31	0.34	-	-	ND	-							90
Mn-54 (Approx. 310 days)	ND	-	-	-	ND	-							1,000
Co-60 (Approx. 5 years)	ND	-	-	-	ND	-							200
Tc-99m (Approx. 6 hrs)	ND	-	-	-	ND	-							40,000
Te-129m (Approx. 34 days)	ND	-	-	-	ND	-							300
Te-129 (Approx. 70 mins)	ND	-	-	-	ND	-							10,000
Cs-136 (Approx. 13 days)	ND	-	-	-	ND	-							300
Ba-140 (Approx. 13 days)	ND	-	-	-	ND	-							300
La-140 (Approx. 40 hrs)	ND	-	-	-	ND	-							400

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

* 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, Cs-134: Approx.3Bq/L, Cs-137: Approx.4Bq/L

Place of Sampling		Shallow Dra	ft Quay at 1F		Inside U	nit 1-4 Water In	take Canal (Nor	th) at 1F	Unit 1 Screen at 1F (Outside the Silt Fence)		Unit 1 Sci (Inside the	Density Limit Specified by the Reactor Regulation	
Time of Sampling	Jun 21 7:34	I, 2012 I AM	Ζ	/Α	Jun 21, 2012 7:40 AM		N/A		Jun 21, 2012 7:45 AM		Jun 21, 2012 7:49 AM		(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.)
I-131 (Approx. 8 days)	ND	-	-	-	ND	-	-	-	ND	-	ND	-	40
Cs-134 (Approx. 2 years)	7.4	0.12	-	-	16	0.27	-	-	12	0.20	17	0.28	60
Cs-137 (Approx. 30 years)	12	0.13	-	-	24	0.27	-	-	18	0.20	31	0.34	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 >

* 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. 2Bq/L

Place of Sampling	Unit 2 Scr (Outside the	reen at 1F e Silt Fence)	Unit 2 Screen at 1F (Inside the Silt Fence)		Unit 3 Screen at 1F (Outside the Silt Fence)		Unit 3 Screen at 1F (Inside the Silt Fence)		Unit 4 Screen at 1F (Outside the Silt Fence)		Unit 4 Screen at 1F (Inside the Silt Fence)		Density Limit Specified by the Reactor Regulation	
Time of Sampling	Jun 21 7:52	1, 2012 2 AM	Jun 21 7:57	, 2012 7 AM	Jun 21 8:00	, 2012 0 AM	Jun 21 8:02	Jun 21, 2012 8:02 AM		Jun 21, 2012 8:05 AM		I, 2012 7 AM	(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.)	
I-131 (Approx. 8 days)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	40	
Cs-134 (Approx. 2 years)	18	0.30	50	0.83	20	0.33	360	6.0	38	0.63	78	1.3	60	
Cs-137 (Approx. 30 years)	30	0.33	77	0.86	31	0.34	580	6.4	60	0.67	110	1.2	90	
Mn-54 (Approx. 310 days)	ND	-	0.88	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 >

* 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. 17Bq/L

Place of Sampling	Inside Unit 1-4 Canal (Sc	4 Water Intake outh) at 1F	Port Entrance Daiich	of Fukushima ni NPS	In Front of Unit Cana	6 Water Intake I at 1F							
Time of Sampling	Jun 21 8:11	, 2012 AM	N.	/Α	Jun 21 9:10	I, 2012) AM							(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.)
I-131 (Approx. 8 days)	ND	-	-	-	ND	-							40
Cs-134 (Approx. 2 years)	62	1.0	-	-	ND	-							60
Cs-137 (Approx. 30 years)	93	1.0	-	-	ND	-							90
Mn-54 (Approx. 310 days)	ND	-	-	-	ND	-							1,000
Co-60 (Approx. 5 years)	ND	-	-	-	ND	-							200
Tc-99m (Approx. 6 hrs)	ND	-	-	-	ND	-							40,000
Te-129m (Approx. 34 days)	ND	-	-	-	ND	-							300
Te-129 (Approx. 70 mins)	ND	-	-	-	ND	-							10,000
Cs-136 (Approx. 13 days)	ND	-	-	-	ND	-							300
Ba-140 (Approx. 13 days)	ND	-	-	-	ND	-							300
La-140 (Approx. 40 hrs)	ND	-	-	-	ND	-							400

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

* 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. 2Bq/L, Cs-134: Approx.2Bq/L, Cs-137: Approx.2Bq/L

【Definite Report】 Nuclides Analysis Result of Marine Soil

Place of Sampling	Around 2km Offshore of 2F (T-S7)				
Time of Sampling	Jun 24, 2012 6:35 AM				
Detected Nuclides (Half-life)		Radio	activity Density (Bq/kg, Moi	st Soil)	
I-131 (Approx. 8 days)	ND				
Cs-134 (Approx. 2 years)	120				
Cs-137 (Approx. 30 years)	190				
Mn-54 (Approx. 310 days)	2.3				
Co-60 (Approx. 5 years)	ND				
Tc-99m (Approx. 6 hrs)	ND				
Ag-110m (Approx. 250 days)	ND				
Sb-125 (Approx. 3 yrs)	ND				
Te-129 (Approx. 70 mins)	ND				
Te-129m (Approx. 34 days)	ND				
Cs-136 (Approx. 13 days)	ND				
Ba-140 (Approx. 13 days)	ND				
La-140 (Approx. 40 hrs)	ND				

* "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. 4Bq/L, Moist Soil