# <u>Definite Results of Nuclides Analysis at Fukushima Daiichi Nuclear Power Station (Announced on July 1 - 15, 2012)</u>

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

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

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

Please refer to the following pages.

/ : Not applicable or cancelled due to the bad weather

Announcement Date of the Preliminary Report	July														
Sampling Point	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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						ı						ı	ı		
Nuclides Analysis Result of Radioactive Materials in the Seawater < Coast >	_	_	_	_	_	-	-	_	_	_	_	-	ı	_	-
Nuclides Analysis Result of the Radioactive Materials in the Seawater < Offshore of Ibaraki Prefecture >															
Nuclides Analysis Result of the Radioactive Materials in the Seawater of the Port	_		_	_	_	-	-	_	_	_	_	-	ı	_	-
Nuclides Analysis Result of the Sub-drain of Fukushima Daiichi NPS			-		-		_	$\overline{}$		_		-		-	
Nuclides Analysis Result of the Sub-drain Water in the Surroundings of the Central Radioactive Waste Treatment Facility	_	_	-	_	-	_	_	-	_	_	_	-	_	-	-
Nuclides Analysis Result of Radioactive Materials in the Seawater< Coast, Fukushima Daiichi Nuclear Power Station, Remeasurement>				_								-			
Nuclides Analysis Result of Marine Soil (May 2012)															
Nuclide Analysis Results of Radioactive Materials in the Air above the Reactor Building at Fukushima Daiichi Power Station ( Upper Part of Unit 1 Reactor Building )										_					
Nuclide Analysis Results of Radioactive Materials in the Air above the Reactor Building at Fukushima Daiichi Power Station ( Upper Part of Unit 2 Reactor Building )										_					
Nuclide Analysis Results of Radioactive Materials in the Air above the Reactor Building at Fukushima Daiichi Power Station ( Upper Part of Unit 3 Reactor Building )								$\overline{/}$		_		$\overline{/}$			
Nuclides Analysis Results of the Radioactive Materials in the Air at the Opening of Buildings at Fukushima Daiichi NPS										_					

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

Place of Sampling	Shallow Draft Quay at 1F				Inside U	Init 1-4 Water Int	ake Canal (Nor	th) at 1F	Unit 1 Scr (Outside the			reen at 1F Silt Fence)	Density Limit Specified by the Reactor Regulation
Time of Sampling	Jul 1, 6:48		N	/A		2012 3 AM	N	/A	Jul 1, 7:00				(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)	9.6	0.16	-	-	10	0.17	-	-	6.4	0.11	3.5	0.06	60
Cs-137 (Approx. 30 years)	14	0.16	-	-	14	0.16	-	-	8.2	0.09	6.5	0.07	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

<sup>\*</sup> The density specified by the Reactor Regulation is converted from Bq/cm <sup>3</sup> to Bq/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.

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

<sup>\* &</sup>quot;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

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

Place of Sampling	Unit 2 Screen at 1F (Outside the Silt Fence)			Unit 2 Screen at 1F (Inside the Silt Fence)		Unit 3 Screen at 1F (Outside the Silt Fence)		reen at 1F Silt Fence)	Unit 4 Sci (Outside the	reen at 1F e Silt Fence)	Unit 4 Screen at 1F (Inside the Silt Fence)		Density Limit Specified by the Reactor Regulation (Bg/L)
Time of Sampling	Jul 1, 7:05	2012 5 AM	Jul 1, 7:10			2012 3 AM		2012 4 AM		Jul 1, 2012 7:17 AM		Jul 1, 2012 7:20 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	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	the surrounding 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)	3.7	0.06	53	0.88	9.5	0.16	ND	-	ND	-	ND	-	60
Cs-137 (Approx. 30 years)	5.9	0.07	82	0.91	12	0.13	24	0.27	ND	-	35	0.39	90
Mn-54 (Approx. 310 days)	ND	-	0.8	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	- 3. D. 0	ND	-	ND	-	ND	-	ND	-	400

<sup>\*</sup> The density specified by the Reactor Regulation is converted from Bq/cm <sup>3</sup> to Bq/L.

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

<sup>\* &</sup>quot;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

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

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

Place of Sampling	Inside Unit 1-4 Canal (So	outh) at 1F		ni NPS	In Front of Unit Canal	l at 1F							Density Limit Specified by the Reactor Regulation (Bq/L)
Time of Sampling	Jul 1, 7:25		N	/A	Jul 1, 7:30							(The density limit in the water outside the surrounding	
Detected Nuclides (Half-life)	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)	10	0.17	-	-	ND	-							60
Cs-137 (Approx. 30 years)	13	0.14	-	-	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	-	1	-	ND	-							10,000
Cs-136 (Approx. 13 days)	ND	-	1	-	ND	-							300
Ba-140 (Approx. 13 days)	ND	-	-	-	ND	-							300
La-140 (Approx. 40 hrs)	ND	-	-	-	ND	-							400

<sup>\*</sup> The density specified by the Reactor Regulation is converted from Bq/cm <sup>3</sup> to Bq/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.

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

<sup>\* &</sup>quot;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

## 【Definite Report】 Nuclides Analysis Result of Marine Soil

Around South Discharge Channel of 1F (1-4U Discharge Channel) (T-2)				
May 14, 2012 9:10 AM				
	Radio	pactivity Density (Bq/kg・Dr	y Soil)	
ND				
890				
1,300				
5.9				
ND				
	Channel of 1F (1-4U Discharge Channel) (T-2)  May 14, 2012 9:10 AM  ND  890  1,300  5.9  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Channel of 1F (1-4U Discharge Channel) (T-2)  May 14, 2012 9:10 AM  Radia  ND  890  1,300  5.9  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Channel of 1F (1-4U Discharge Channel) (T-2)  May 14, 2012 9:10 AM  Radioactivity Density (Bq/kg · Dr  ND  890  1,300  5.9  ND  ND  ND  ND  ND  ND  ND  ND  ND  N	Channel of 1F (1-4U   Discharge Channel) (T-2)

<sup>\* &</sup>quot;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. 15Bq/L, Moist Soil

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

<sup>\*</sup> As for other place of sampling on "Summary of Marine Soil Monitoring Result: Fukushima Daiichi Nuclear Power Station (May 2012)" (announced on July 13, reference), nuclides except for the major 3 nuclides were not detected.