Reference

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

(Data summarized on June 21)

Place of Sampling	Shallow Draft Quay at 1F			Inside Unit 1-4 Water Intake Canal (North) at 1F				1F Unit 1 Screen (Outside the Silt Fence)		1F Unit 1 Screen (Inside the Silt Fence)		Density Limit Specified by the Reactor Regulation	
Time of Sampling	Jun 20, 2013 6:03 AM		N/A		Jun 20, 2013 6:07 AM		N/A		Jun 20, 2013 6:09 AM		Jun 20, 2013 6:10 AM		(Bq/L) (The density limit in the water outside the
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 ( / )	surrounding monitored
I-131 (Approx. 8 days)	ND	-	-	-	ND	-	-	-	ND	-	ND	-	40
Cs-134 (Approx. 2 years)	3.1	0.05	-	-	9.5	0.16	-	-	6.9	0.12	4.7	0.08	60
Cs-137 (Approx. 30 years)	4.5	0.05	-	-	24	0.27	-	-	11	0.12	11	0.12	90

<sup>\*</sup> The density specified by the Reactor Regulation is converted from Bq/cm³ 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> Data of other nuclides is under evaluation.

\* 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.

I-131: Approx. 2Bq/L

Reference

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

(Data summarized on June 21)

Place of Sampling	1F Unit 2 Screen (Outside the Silt Fence)		1F Unit 2 Screen (Inside the Silt Fence)		1F Unit 3 Screen (Outside the Silt Fence)		1F Unit 3 Screen (Inside the Silt Fence)		1F Unit 4 Screen (Outside the Silt Fence)		1F Unit 4 Screen (Inside the Silt Fence)		Density Limit Specified by the Reactor Regulation (Bq/L) (The density limit in the water outside the
Time of Sampling	Jun 20, 2013 6:13 AM		Jun 20, 2013 6:15 AM		Jun 20, 2013 6:17 AM		Jun 20, 2013 6:18 AM		Jun 20, 2013 6:19 AM		Jun 20, 2013 6:21 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 ( / )	surrounding monitored
I-131 (Approx. 8 days)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	40
Cs-134 (Approx. 2 years)	4.7	0.08	6.6	0.11	8.2	0.14	82	1.4	16	0.27	38	0.63	60
Cs-137 (Approx. 30 years)	10	0.11	15	0.17	15	0.17	160	1.8	50	0.56	48	0.53	90

<sup>\*</sup> The density specified by the Reactor Regulation is converted from Bq/cm³ 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> Data of other nuclides is under evaluation.

\* 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.

I-131: Approx. 11Bq/L

Reference

### Radioactivity Density of the Seawater in the Port of Fukushima Daiichi NPS < 3/3 >

(Data summarized on June 21)

Place of Sampling	Inside Unit 1- Intake Canal ( 1F		Port Entran Fukushima Dai		In Front of Unit 6 Water Intake Canal at 1F								Density Limit Specified by the Reactor Regulation
Time of Sampling	Jun 20, 2 6:24 Al		N/A		N/A								(Bq/L) (The density limit in the water outside the
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 ( / )	surrounding monitored areas is provided in section 6 of Appendix 2.)
I-131 (Approx. 8 days)	ND	-	-	-	-	-							40
Cs-134 (Approx. 2 years)	28	0.47	-	-	-	-							60
Cs-137 (Approx. 30 years)	54	0.60	-	-	-	-							90

<sup>\*</sup> The density specified by the Reactor Regulation is converted from Bq/cm³ 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> Data of other nuclides is under evaluation.
\* 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.

I-131: Approx. 3Bq/L

## Nuclides Analysis Result of Radioactive Materials in the Unit 1-4 Water Intake

Place of Sampling	Place of Sampling  North of Unit 1-4 Water Intake at Fukushima  Daiichi NPS						
Date of Sampling	Jun 10, 2013	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	monitored areas is provided in				
I-131 (Approx. 8 days)	ND	-	40				
Cs-134 (Approx. 2 years)	7.3	0.12	60				
Cs-137 (Approx. 30 years)	14	0.16	90				
H-3 (approx. 12yrs)	500	0.01	60,000				
All α	*	-	-				
ΑΙΙ β	290	-	-				
Sr-89 (Approx. 51 days)	*	-	300				
Sr-90 (Approx. 29 years)	*	-	30				

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

### (Evaluation)

Although H-3 and all  $\beta$  was detected supposedly as a result of this accident, it is less than the density limit in the water which is specified by the announcement.

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

<sup>\*</sup> Nuclide analysis results of I-131, Cs-134, Cs-137 were announced on June 11.

<sup>\*</sup> When the measurement value is below the detection limit, "ND" is marked. The detection limits are as follows. I-131: Approx. 1.6 Bq/L

<sup>\* &</sup>quot;\*" indicates the samples are under analysis.

# Radioactivity Density of the Seawater in Front of the Shallow Draft Quay at 1F (Bq/L)





















