## Nuclide Analysis Results of Radioactive Materials in Seawater <Coast>

Reference

(Data summarized on December 22)

Place of Sampling	North of Discha of 5-6u (approx. 30m n discharge o	of 1F orth of 5-6u	Around South Channel ( appox. 330m Discharge (	of 1F south of 1-4u	Around North Channel ( Around 3,4u Chanr ( approx. 10 ki	of 2F u Discharge nel)	Around Iwasawa ( appox. 7 km s Discharge ( ( appox. 16 kr	south of 1,2u Channel)	Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of
Time of Sampling	Dec 21, 08:45		Dec 21, 08:20		Dec 21, 08:25		Dec 21, 08:00		
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 ( / )	surrounding monitored areas in the section 6 of the appendix 2)
l-131 (about 8 days)	ND	-	ND	-	ND	-	ND	-	40
Cs-134 (about 2 years)	3.5	0.06	2.5	0.04	ND	-	ND	-	60
Cs-137 (about 30 years)	4.6	0.05	2.5 0.03		ND -		ND -		90

\* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

\* Data of other nuclides are under evaluation.

\* In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

\* "ND" means the sampled data is below measurable limit.

I-131: approx. 0.70Bq/L, Cs-134: approx. 0.94Bq/L, Cs-137: approx. 1.0Bq/L

## Nuclide Analysis Results of Radioactive Materials in Seawater < Offshore 1/2>

Reference

(Data summarized on December 22)

Place of Sampling	3 km offsh Haramachi Wa Layei	ard Upper	3 km offshore of Haramachi Ward Lower Layer		3 km offshore of Odaka Ward Upper Layer		3 km offshore of Odaka Ward Lower Layer		3 km offshore of Iwasawa shore Upper Layer		3 km offshore of Iwasawa shore Lower Layer		Density limit by the announcement of Reactor Regulation
Time of Sampling	Dec 20, 2 09:10 a		Dec 20, 2 09:10 a		Dec 20, 2 09:40 a		Dec 20, 2 09:40 a		Dec 20, 2 07:40 a		Dec 20, 2011 07:40 am		(Bq/L) (the density limit in the water outside of
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 in the section 6 of the appendix 2)
l-131 (about 8 days)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	40
Cs-134 (about 2 years)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	60
Cs-137 (about 30 years)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	90

Place of Sampling	8 km offshore Ward Upper		8 km offshore Ward Lower		lwasawa sho	8 km offshore of Iwasawa shore Upper Layer		8 km offshore of Iwasawa shore Lower Layer					Density limit by the announcement of Reactor Regulation
Time of Sampling	Dec 20, 2 09:15 a		Dec 20, 2 09:15 a		Dec 20, 2 08:10 a		Dec 20, 2 08:10 a						(Bq/L) (the density limit in 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 ( / )	water outside of surrounding monitored areas in the section 6 of the appendix 2)
l-131 (about 8 days)	ND	-	ND	-	ND	-	ND	-					40
Cs-134 (about 2 years)	ND	-	ND	-	ND	-	ND	-					60
Cs-137 (about 30 years)	ND	-	ND	-	ND	-	ND	-					90

\* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

\* Data of other nuclides are under evaluation.

\* In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

\* "ND" means the sampled data is below measurable limit.

I-131: approx. 0.65Bq/L, Cs-134: approx. 0.95Bq/L, Cs-137: approx. 1.0Bq/L

## Nuclide Analysis Results of Radioactive Materials in Seawater < Offshore 2/2>

Reference

(Data summarized on December 22)

Place of Sampling		m offshore of Souma City Upper Layer City Lower Layer		5 km offshore of Souma City Upper Layer		5 km offshore of Souma City Lower Layer		5 km offshore of Kashima Upper Layer		5 km offshore of Kashima Lower Layer		Density limit by the announcement of Reactor Regulation	
Time of Sampling	Dec 20, 2 06:30 a	-	Dec 20, 2 06:30 a		Dec 20, 2 06:45 a		Dec 20, 2 06:45 a	-	Dec 20, 2 07:00 a		Dec 20, 2 07:00 a		(Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
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 ( / )	
l-131 (about 8 days)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	40
Cs-134 (about 2 years)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	60
Cs-137 (about 30 years)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	90

Place of Sampling Time of Sampling	5km Offsho Numanouch Layer N/A	i Upper	5km Offsho Numanouch Layer N/A	i Lower									Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in 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 ( / )	water outside of surrounding monitored areas in the section 6 of the appendix 2)
l-131 (about 8 days)	-	-	-	-									40
Cs-134 (about 2 years)	-	-	-	-									60
Cs-137 (about 30 years)	-	-	-	-									90

\* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

\* Data of other nuclides are under evaluation.

\* In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

\* "ND" means the sampled data is below measurable limit.

I-131: approx. 0.67Bq/L, Cs-134: approx. 0.98Bq/L, Cs-137: approx. 1.1Bq/L

Nuclide Analysis Results of Radioactive Materials in Seawater < offshore Unmanned Survey Ship >

Reference

(Data summarized on December 22)

Place of Sampling	1km offshore of	of Futaba	2km offshore o	of Futaba	1km offsho Fukushima		2km offsho Fukushima		1km offshore of Kumagawa				Density limit by the announcement of
Time of Sampling	Dec 20, 2 12:08 p		Dec 20, 2 11:59 a		Dec 20, 2 12:34 p		Dec 20, 2 11:32 a		Dec 20, 2 12:58 p				Reactor Regulation (Bq/L) (the density limit in the water outside of
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor ( / )	surrounding monitored areas in the section 6 of the appendix 2)										
I-131 (about 8 days)	ND	-			40								
Cs-134 (about 2 years)	ND	-			60								
Cs-137 (about 30 years)	ND	-			90								

\* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L.

\* Data of other nuclides are under evaluation.

\* In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

\* "ND" means the sampled data is below measurable limit.

I-131: approx. 0.68Bq/L, Cs-134: approx. 0.95Bq/L, Cs-137: approx. 1.1Bq/L