Results of Nuclide Analysis of Seawater <Coast>

Reference

(Data summerized on August 5)

Place of Sampling	North of D Channel of 5 (approx. 30m of 6	5-6u of 1F north of 5-			rge Channel o -4u Discharge		Around North Channel (Around 3,4u Channe (approx. 10 k	of 2F Discharge el)	Around Iwasawa (appox. 7 kr 1,2u Discharg (appox. 16 kr	n south of e Channel)	② Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit	
Time and Date of Sample Collection	10:20am August 4,2011		9:55a August 4		2:30 pm August 4,2011		8:30 am August 4,2011		8:05 am August 4,2011		in the water outside of surrounding	
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Scaling Sample Factor (Bq/L) (①/②)		monitored areas in the section 6 of the appendix 2)	
I-131 (about 8 days)	ND	-	ND	-	ND	-	ND	-	ND	-	40	
Cs-134 (about 2 years)	ND	-	ND	-	ND	-	ND	-	ND	-	60	
Cs-137 (about 30 years)	ND	_	ND	-	ND	-	ND	-	ND	-	90	

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

Detection limits of the three main nuclides are as follows: I-131: approx. 9Bq/L., Cs-134: approx. 21Bq/L., Cs-137: approx. 24Bq/L., Please note that these nuclides are sometimes detected even when they are below the threshold, contingent on the detector or samples.

^{*} 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.

^{*} In the case that the data is below measurable limit, "ND" is stated.

Results of Nuclide Analysis of Seawater $\langle 0ffshore 1/3 \rangle$

Reference

(Data summerized on August 5)

Place of Sampling	15 km offsh MinamiSoun Upper la	na City	15 km offshore of MinamiSouma City Lower layer		15 km offshore of Ukedo-gawa Upper layer		15 km offshore of Ukedo-gawa Lower layer		15 km offshore of Fukushima Daiichi Upper layer		15 km offshore of Fukushima Daiichi Lower layer		② Density limit by the announcement of
Time and Date of Sample Collection	8∶30aı August 4,		8:30ar August 4,		N/A		N/A		N/A		N/A		Reactor Regulation (Bq/L) (the density limit in
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	the water outside of surrounding monitored areas in the section 6 of the appendix 2)
I-131 (about 8 days)	ND	-	ND	-									40
Cs-134 (about 2 years)	ND	_	ND	_									60
Cs-137 (about 30 years)	ND	_	ND	-									90

Place of Sampling	15 km offsh Fukushima Upper la	Daini	15 km offshore of Fukushima Daini Lower layer		15 km offshore of Iwasawa Shore Upper layer		15 km offshore of Iwasawa Shore Lower layer		15 km offshore of Hirono- machi Upper layer		15 km offshore of Hirono- machi Lower layer		② Density limit by the announcement of
Time and Date of Sample Collection	N/A	,		N/A		8:35am August 4,2011		8:35am August 4,2011		9:15am August 4,2011		n 2011	Reactor Regulation (Bq/L) (the density limit in
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	the water outside of surrounding monitored areas in the section 6 of the appendix 2)
I-131 (about 8 days)					ND	_	ND	_	ND	_	ND	-	40
Cs-134 (about 2 years)					ND	-	ND	-	ND	ı	ND	-	60
Cs-137 (about 30 years)					ND	_	ND	_	ND	_	ND	_	90

X 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.

In the case that the data is below measurable limit, "ND" is stated.
Detection limits of the three main nuclides are as follows: I-131: approx. 3Bq/L., Cs-134: approx. 5Bq/L., Cs-137: approx. 5Bq/L.,
Please note that these nuclides are sometimes detected even when they are below the threshold, contingent on the detector or samples.

Results of Nuclide Analysis of Seawater $\langle 0ffshore 2/3 \rangle$

Reference

(Data summerized on August 5)

Place of Sampling	distrio	chore of Haramachi district district Lower layer		3km offshore of Odaka district Upper layer		3km offshore of Odaka district Lower layer		3km offshore of Iwasawa coast Upper layer		3km offshore of Iwasawa coast Lower layer		② Density limit by the announcement of	
Time and Date of Sample Collection	9∶05a August 4,		9∶05ar August 4,		9:15aı August 4,		9:15am August 4,2011		7:40am August 4,2011		7:40am August 4,2011		Reactor Regulation (Bq/L) (the density limit in
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	the water outside of
I-131 (about 8 days)	ND	-	ND	-	ND	-	ND	-	ND	ı	ND	-	40
Cs-134 (about 2 years)	ND	_	ND	_	ND	_	ND	_	ND	ı	ND	_	60
Cs-137 (about 30 years)	ND	-	ND	_	ND	-	ND	-	ND	-	ND	_	90

Place of Sampling	8km offshore distric Upper la	et	8km offshore distric Lower la	t	8km offshore o coast Upper la		8km offshore o coast Lower la						② Density limit by the announcement of
Time and Date of Sample Collection	9∶35ar August 4,		9∶35ar August 4,	**	8∶05ar August 4,		8:05am August 4,201						Reactor Regulation (Bq/L) (the density limit in
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	the water outside of surrounding monitored areas in the section 6 of the appendix 2)						
I-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 Bg/cm3 to Bg/L

^{*} Data of other nuclides are under evaluation.

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

In the case that the data is below measurable limit, "ND" is stated.
Detection limits of the three main nuclides are as follows: I-131: approx. 3Bq/L., Cs-134: approx. 5Bq/L., Cs-137: approx. 5Bq/L.,
Please note that these nuclides are sometimes detected even when they are below the threshold, contingent on the detector or samples

(Data summerized on August 5)

Place of Sampling	North Iwaki (3km Upper La		3km	North Iwaki Offshore 3km Lower Layer		Natsui-gawa Offshore 3km Upper Layer		Natsui-gawa Offshore 3km Lower Layer		Onahama Port Offshore 3km Upper Layer		Offshore	② Density limit by the announcement of Reactor Regulation
Time and Date of Sample Collection	4∶50ar August 4,		4∶50ar August 4,		6∶00a August 4,		6∶00ar August 4,		5:30a August 4,		5:30am August 4,2011		$\begin{array}{c} (Bq/\bar{L}) \\ (\text{the density limit in} \end{array}$
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	the water outside of surrounding monitored areas in the section 6 of the appendix 2)
I-131 (about 8 days)	ND	ı	ND	-	ND	-	ND	_	ND	_	ND	-	40
Cs-134 (about 2 years)	ND	1	ND	-	ND	_	ND	_	ND	-	ND	_	60
Cs-137 (about 30 years)	ND	-	ND	_	ND	_	ND	_	ND	_	ND	_	90

Place of Sampling	Ena Offshoi Upper La		Ena Offshore 3km Lower Layer		Numanouchi Offshore 3km Upper Layer		Numanouchi Offshore 3km Lower Layer		Toyoma Offshore 3km Upper Layer		Toyoma Offshore 3km Lower Layer		② Density limit by the announcement of	
Time and Date of Sample Collection	5:50ar August 4,		5:50am August 4,2011		5:40am August 4,2011		5:40am August 4,2011		5:25am August 4,2011		5:25am August 4,2011		Reactor Regulation (Bq/L) (the density limit in	
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	①Density of Sample (Bq/L)	Scaling Factor (1)/2)	the water outside of surrounding monitored areas in the section 6 of the appendix 2)	
I-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	

 $[\]divideontimes$ 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.

In the case that the data is below measurable limit, "ND" is stated.
Detection limits of the three main nuclides are as follows: I-131: approx. 3Bq/L., Cs-134: approx. 5Bq/L., Cs-137: approx. 5Bq/L.,
Please note that these nuclides are sometimes detected even when they are below the threshold, contingent on the detector or samples.

Results of Nuclide Analysis of Seawater

<Offshore>

attachment

(Data summerized on August 5)

Place of Sampling	Fukushima Daiid 15km offshore from		Fukushima Dair 15km offshore from	Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas		
Time and Date of Sample Collection	July 14,2011		July 14,2011			
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor	Density of Sample (Bq/L)	Scaling Factor	in the section 6 of the appendix 2)	
I-131 (about 8 days)	ND		ND		40	
Cs-134 (about 2 years)	ND		ND		60	
Cs-137 (about 30 years)	ND		ND		90	
Sr-89 (about 51 days)	0.11	0.00	0.13	0.00	300	
Sr-90 (about 29 yeras)	0.048	0.00	0.048	0.00	30	

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

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

The data of "I - 1 3 1 ""C s - 1 3 4" and "C s - 1 3 7" had released at July 15.

Analysis Agency: Japan Chemical Analysis Center (Sr-89,90), TEPCO (I-131,Cs-134,Cs-137)

(Evaluation)

As Sr-89 and 90 were detected at the coast, the influence of the accident is considered, but each density was below each density limit in the water.

Results of Nuclide Analysis of Seawater < Offshore >

Attachment

(Data summerized on August 5)

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Place of Sampling	North of Di Channel of 5- (approx. 30m n 6u discharge	-6u of 1F orth of 5-	Around South Channel of (appox. 330m 1-4u Discharge	of 1F south of	Fukushima [15km offshore		Fukushima 15km offshore		Density limit by the announcement of Reactor Regulation (Bq/L)
Time and Date of Sample Collection	June 13,	2011	June 13,	2011	June 14,	2011	June 14,	2011	(the density limit in the water outside of surrounding monitored
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 (/)	areas in the section 6 of the appendix 2)
I-131 (about 8 days)	ND		ND		ND		ND		40
Cs-134 (about 2 years)	21	0.35	24	0.40	ND		ND		60
Cs-137 (about 30 years)	30	0.33	25	0.28	ND		ND		90
Total ray	ND		ND		ND		ND		
Total ray	ray 31		27		ND		ND		

Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm3 to Bq/L In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1. The data of "I - 1 3 1 " C s - 1 3 4" and "C s - 1 3 7" had released at June 14 and 15.

(Evaluation)

As total beta rays were detected at the coast, the influence of the accident is considered,