Results of Nuclide Analysis of Seawater <Coast>

Reference

(Data summerized on July 8)

Place of Sampling	North of Discharge Channel of 5-6u of 1F (approx. 30m north of 5-6u discharge channel)		Around South Discharge Channel of 1F (appox. 330m south of 1-4u Discharge Channel)		Around North Discharge Channel of 2F (Around 3,4u Discharge Channel) (approx. 10 km from 1F)		Around Iwasawa Shore of 2F (appox. 7 km south of 1,2u Discharge Channel) (appox. 16 km from 1F)		② Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
Time and Date of Sample Collection	10:15am July 7, 2011		9:55am July 7, 2011		8:25am July 7, 2011		7:50am July 7, 2011		
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)	
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	-	4.3	0.05	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.

※ 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. 8Bq/L., Cs-134: approx. 20Bq/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 1/3>

Reference

(Data summerized on July 8)

Place of Sampling	15 km offshore of MinamiSouma City Upper layer		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 Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
Time and Date of Sample Collection	8:15am July 7, 2011		8:15am July 7, 2011		be exempted from today's Analysis		be exempted from today's Analysis		be exempted from today's Analysis		be exempted from today's Analysis		
Detected Nuclides (Half-life)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	
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 offshore of Fukushima Daini Upper layer		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 Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
Time and Date of Sample Collection	be exempted from today's Analysis		be exempted from today's Analysis		8:05am July 7, 2011		8:05am July 7, 2011		8:35am July 7, 2011		8:35am July 7, 2011		
Detected Nuclides (Half-life)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	
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 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 (aproximately 6Bq/L for I-131), "ND" is stated.**
Detection limits of the three main nuclides are as follows: I-131: approx. 3Bq/L、Cs-134: 4Bq/L、Cs-137: 5Bq/L
However, detection limits differs dep

Results of Nuclide Analysis of Seawater<Offshore 2/3>

Reference

(Data summarized on：July 8)

Place of Sampling	3km offshore of Haramachi district Upper layer		3km offshore of Haramachi 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 Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
Time and Date of Sample Collection	8:50 am July 7, 2011		8:50 am July 7, 2012		9:10 am July 7, 2011		9:10 am July 7, 2011		7:10 am July 7, 2012		7:10 am July 7, 2013		
Detected Nuclides (Half-life)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	
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

Place of Sampling	8km offshore of Odaka district Upper layer		8km offshore of Odaka district Lower layer		8km offshore of Iwasawa coast Upper layer		8km offshore of Iwasawa coast Lower layer						② Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
Time and Date of Sample Collection	9:25 am July 7, 2011		9:25 am July 7, 2012		7:35 am July 7, 2013		7:35 am July 7, 2014						
Detected Nuclides (Half-life)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	
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 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 (aproximately 6Bq/L for I-131), "ND" is stated.**
Detection limits of the three main nuclides are as follows: I-131: approx. 3Bq/L、Cs-134: 4Bq/L、Cs-137: 5Bq/L
However, detection limits differs depending on the detectors and samples types, and therefore may be detected, under figures below.

Results of Nuclide Analysis of Seawater＜Offshore 3/3＞

参考値

(Data summarized on：July 8)

Place of Sampling	North Iwaki Offshore 3km Upper Layer		North Iwaki Offshore 3km Lower Layer		Natsui-gawa Offshore 3km Upper Layer		Natsui-gawa Offshore 3km Lower Layer		Onahama Port Offshore 3km Upper Layer		Onahama Port Offshore 3km Lower Layer		② Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
Time and Date of Sample Collection	6:05am July 7, 2011		6:05am July 7, 2012		5:45am July 7, 2013		5:45am July 7, 2014		5:35am July 7, 2015		5:35am July 7, 2016		
Detected Nuclides (Half-life)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	
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

Place of Sampling	Ena Offshore 3km Upper Layer		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 Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
Time and Date of Sample Collection	5:50am July 7, 2011		5:50am July 7, 2012		5:25am July 7, 2013		5:25am July 7, 2014		5:15am July 7, 2015		5:15am July 7, 2016		
Detected Nuclides (Half-life)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm3)	Scaling Factor (①/②)	
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

※ 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 (aproximately 6Bq/L for I-131), "ND" is stated.
Detection limits of the three main nuclides are as follows: I-131: approx. 3Bq/L、Cs-134: 4Bq/L、Cs-137: 5Bq/L
However, detection limits differs depending on the detectors and samples types, and therefore may be detected, under figures below.

Results of Nuclide Analysis of Seawater ＜Coast and Offshore＞

Reference

(Data summerized on July 8)

Place of Sampling	North of Discharge Channel of 5-6u of 1F (approx. 30m north of 5-6u discharge channel)		Around South Discharge Channel of 1F (appox. 330m south of 1-4u Discharge Channel)		15 km offshore of Fukushima Daini		15 km offshore of Fukushima Daini		②② Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
Time and Date of Sample Collection	13-Jun-11		13-Jun-11		13-Jun-11		13-Jun-11		
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)	
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
Sr-89 (about 51 days)	13	0.04	2.8	0.01	0.37	0.00	0.1	0.00	300
Sr-90 (about 29 yeras)	5.3	0.18	0.89	0.03	0.13	0.00	0.048	0.00	30

※ "○.○E－○"and "○.○×１０$^{－○}$" have the same meaning.

※ 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－１３１""Ｃｓ－１３４" and "Ｃｓ－１３７" had released at June14 and 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 and the offshore, the influence of the accident is considered, but each density was below each density limit in the water.