

## Results of Nuclide Analysis of Seawater <Coast>

Reference

( Data summarized on : July 15 )

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 ( approx. 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 ( approx. 7 km south of 1,2u Discharge Channel) ( approx. 16 km from 1F )		Density limit by the announcement of Reactor Regulation (Bq/L)		
Time and Date of Sample Collection	10:40 July 14, 2011	10:10 July14, 2011		N/A		8:25 July 14, 2011		7:55 July 14, 2011		(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 ( / )	
I-131 (about 8 days)	ND	-	ND	-	/	/	ND	-	ND		-	40
Cs-134 (about 2 years)	50	0.83	ND	-	/	/	ND	-	ND		-	60
Cs-137 (about 30 years)	74	0.82	ND	-	/	/	ND	-	ND	-	90	

Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm<sup>3</sup> 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. 11Bq/L, Cs-134: approx. 20Bq/L, Cs-137: approx. 22Bq/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 1/2 >

Reference

( Data summarized on : July 15 )

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		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	9:20 July 14, 2011		9:20 July 14, 2011		8:55 July 14, 2011		8:55 July 14, 2011		8:20 July 14, 2011		8:20 July 14, 2011	
Detected Nuclides (Half-life)	Density of Sample ( Bq/cm3 )	Scaling Factor ( / )	Density of Sample ( Bq/cm3 )	Scaling Factor ( / )	Density of Sample ( Bq/cm3 )	Scaling Factor ( / )	Density of Sample ( Bq/cm3 )	Scaling Factor ( / )	Density of Sample ( Bq/cm3 )	Scaling Factor ( / )	Density of Sample ( Bq/cm3 )	Scaling Factor ( / )	
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	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 Hironomachi Upper layer		15 km offshore of Hironomachi Lower layer		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	7:50 July 14, 2011		7:50 July 14, 2011		7:10 July 14, 2011		7:10 July 14, 2011		6:45 July 14, 2011		6:45 July 14, 2011	
Detected Nuclides (Half-life)	Density of Sample ( Bq/cm3 )	Scaling Factor ( / )	Density of Sample ( Bq/cm3 )	Scaling Factor ( / )	Density of Sample ( Bq/cm3 )	Scaling Factor ( / )	Density of Sample ( Bq/cm3 )	Scaling Factor ( / )	Density of Sample ( Bq/cm3 )	Scaling Factor ( / )	Density of Sample ( Bq/cm3 )	Scaling Factor ( / )	
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 (approximately 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: 5Bq/L, Cs-137: 4Bq/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 2/2 >

Reference

( Data summarized on : July 15 )

Place of Sampling	3 km offshore of North of Iwaki City Upper layer		3 km offshore of North of Iwaki City Lower layer		3 km offshore of North of Natsui River Upper layer		3 km offshore of North of Natsui River Lower layer		3 km offshore of Onahama Port Upper layer		3 km offshore of Onahama Port Lower layer		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	4:45 am July 14, 2011		4:45 am July 14, 2011		5:15 am July 14, 2011		5:15 am July 14, 2011		5:25 am July 14, 2011		5:25 am July 14, 2011	
Detected Nuclides (Half-life)	Density of Sample ( Bq/cm3)	Scaling Factor ( / )	Density of Sample ( Bq/cm3)	Scaling Factor ( / )	Density of Sample ( Bq/cm3)	Scaling Factor ( / )	Density of Sample ( Bq/cm3)	Scaling Factor ( / )	Density of Sample ( Bq/cm3)	Scaling Factor ( / )	Density of Sample ( Bq/cm3)	Scaling Factor ( / )	
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	3 km offshore of Ena Upper layer		3 km offshore of Ena Lower layer		3 km offshore of Numanouchi Upper layer		3 km offshore of Numanouchi Lower layer		3 km offshore of Toyoma Upper layer		3 km offshore of Toyoma Lower layer		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	5:45 am July 14, 2011		5:45 am July 14, 2011		5:35 am July 14, 2011		5:35 am July 14, 2011		5:50 am July 14, 2011		5:50 am July 14, 2011	
Detected Nuclides (Half-life)	Density of Sample ( Bq/cm3)	Scaling Factor ( / )	Density of Sample ( Bq/cm3)	Scaling Factor ( / )	Density of Sample ( Bq/cm3)	Scaling Factor ( / )	Density of Sample ( Bq/cm3)	Scaling Factor ( / )	Density of Sample ( Bq/cm3)	Scaling Factor ( / )	Density of Sample ( Bq/cm3)	Scaling Factor ( / )	
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: 5Bq/L, Cs-137: 4Bq/L

However, detection limits differs depending on the detectors and samples types, and therefore may be detected, under figures below.