

Nuclide Analysis Results of Radioactive Materials in the Air at the Sites of Fukushima Nuclear Power Stations

Reference

(Data summarized on November 12)

Place of Sampling	West Gate of Fukushima Daiichi NPS		MP-1 of Fukushima Daini (Reference)		/		Density limit by the announcement of Reactor Regulation (Bq/cm ³) (Density limit in the air to which radiation workers breathe in the section 4 of the appendix 2)
	Time of Sampling	2011/11/11 7:00 ~ 12:00	2011/11/11 9:36 ~ 9:46	density of sample (Bq/cm ³)	Scaling Factor (/)	density of sample (Bq/cm ³)	
Detected Nuclides (Half-life)	density of sample (Bq/cm ³)	Scaling Factor (/)	density of sample (Bq/cm ³)	Scaling Factor (/)	density of sample (Bq/cm ³)	Scaling Factor (/)	
I-131 (about 8 days)	ND	-	ND	-	/	/	1E-03
Cs-134 (about 2 years)	ND	-	ND	-	/	/	2E-03
Cs-137 (about 30 years)	ND	-	ND	-	/	/	3E-03

* The value of radioactivity density is the sum of the value of volatile nuclide's density and the value of particulate nuclide's density.

O.OE - O means O.O x 10-O

Data of other nuclides are under examination.

* 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 the detection limit.

Detection limits of 3 nuclides on the West Gate of Fukushima Daiichi are as follows:

Volatile: I-131: approx. 1E-7Bq/cm³, Cs-134: approx. 3E-7Bq/cm³, Cs-137: approx. 3E-7Bq/cm³

Particulate: I-131: approx. 7E-8Bq/cm³, Cs-134: approx. 2E-7Bq/cm³, Cs-137: approx. 2E-7Bq/cm³

Detection limits of 3 nuclides on MP-1 of Fukushima Daini are as follows:

Volatile: I-131: approx. 2E-6Bq/cm³, Cs-134: approx. 3E-6Bq/cm³, Cs-137: approx. 3E-6Bq/cm³

Particulate: I-131: approx. 9E-7Bq/cm³, Cs-134: approx. 2E-6Bq/cm³, Cs-137: approx. 1E-6Bq/cm³

Nuclide Analysis Results of Radioactive Materials in the Air at the seaside in front of the site of Fukushima Daiichi Nuclear Power Station

(Data summarized on November 12)

Place of Sampling	2km-3km offshore of Fukushima Daiichi on the sea 1st sampling		2km-3km offshore of Fukushima Daiichi on the sea 2nd sampling		2km-3km offshore of Fukushima Daiichi on the sea 3rd sampling		2km-3km offshore of Fukushima Daiichi on the sea 4th sampling		Density limit by the announcement of Reactor Regulation (Bq/cm ³) (Density limit in the air to which radiation workers breathe in the section 4 of the appendix 2)
Time of Sampling	2011/11/10 16:36 ~ 17:06		2011/11/10 17:18 ~ 17:48		2011/11/10 17:49 ~ 18:19		2011/11/10 18:20 ~ 18:50		
Detected Nuclides (Half-life)	density of sample (Bq/cm ³)	Scaling Factor (/)	density of sample (Bq/cm ³)	Scaling Factor (/)	density of sample (Bq/cm ³)	Scaling Factor (/)	density of sample (Bq/cm ³)	Scaling Factor (/)	
I-131 (about 8 days)	ND	-	ND	-	ND	-	ND	-	1E-03
Cs-134 (about 2 years)	ND	-	5.8E-08	0.00	8.1E-07	0.00	6.5E-07	0.00	2E-03
Cs-137 (about 30 years)	ND	-	9.5E-08	0.00	9.4E-07	0.00	7.5E-07	0.00	3E-03

* O.OE - O means O.O x 10-O

Data of other nuclides are under examination.

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

* When the radioactivity density is below the detection limit, it shows "ND" which means "Not Detectable".

The followings show the detection limits.

I-131: approx. 4E-8Bq/cm³, Cs-134: approx. 3E-8Bq/cm³, Cs-137: approx. 3E-8Bq/cm³

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

This survey shows results of the nuclide analysis of particulate radioactive materials in the air.