

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

Reference

(Data summarized on September 10)

Place of Sampling	West Gate of Fukushima Daiichi		MP-1 of Fukushima Daini (Reference)		/		Density limit by the announcement of Reactor Regulation ( Bq/cm <sup>3</sup> ) (Density limit in the air to which radiation workers breathe in the section 4 of the appendix 2)
	Time of Sampling	2011/9/9 7:00 ~ 12:00	2011/9/9 9:29 ~ 9:39				
Detected Nuclides (Half-life)	density of sample ( Bq/cm <sup>3</sup> )	Scaling Factor ( / )	density of sample ( Bq/cm <sup>3</sup> )	Scaling Factor ( / )	density of sample ( Bq/cm <sup>3</sup> )	Scaling Factor ( / )	
I-131 (about 8 days)	ND	-	ND	-	/	/	1E-03
Cs-134 (about 2 years)	2.5E-07	0.00	ND	-	/	/	2E-03
Cs-137 (about 30 years)	2.6E-07	0.00	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 measurable limit. Detection limits of 3 nuclides on the West Gate of Fukushima Daiichi are as follows:

Volatile: I-131: approx. 1E-7Bq/cm<sup>3</sup>, Cs-134: approx. 3E-7Bq/cm<sup>3</sup>, Cs-137: approx. 4E-7Bq/cm<sup>3</sup> Particulate: I-131: approx. 7E-8Bq/cm<sup>3</sup>

Detection limits of 3 nuclides on MP-1 of Fukushima Daini are as follows: Volatile: I-131: approx. 2E-6Bq/cm<sup>3</sup>, Cs-134: approx. 3E-6Bq/cm<sup>3</sup>, Cs-137: approx. 3E-6Bq/cm<sup>3</sup> Particulate: I-131: approx. 9E-7Bq/cm<sup>3</sup>, Cs-134: approx. 2E-6Bq/cm<sup>3</sup>, Cs-137: approx. 2E-6Bq/cm<sup>3</sup>

Reference
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Result of particulate nuclide analysis of particulate radioactive materials in the air, sea area in front of Fukushima Daiichi NPS

(Data summarized on September 10)

Place of Sampling	Fukushima Daiichi Upper of Offshore 2km-3km First time		Fukushima Daiichi Upper of Offshore 2km-3km Second time		Fukushima Daiichi Upper of Offshore 2km-3km Third time		Fukushima Daiichi Upper of Offshore 2km-3km Forth time		Density limit by the announcement of Reactor Regulation ( Bq/cm3 ) (Density limit in the air to which radiation workers breathe in the section 4 of the appendix 2)
Time of Sampling	2011/9/8 20:00 ~ 20:30		2011/9/8 20:33 ~ 21:03		2011/9/8 21:06 ~ 21:36		2011/9/8 21:37 ~ 22:07		
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 ( / )	
I-131 (about 8 days)	ND	-	ND	-	ND	-	ND	-	1E-03
Cs-134 (about 2 years)	1.1E-07	0.00	ND	-	1.5E-07	0.00	2.0E-07	0.00	2E-03
Cs-137 (about 30 years)	1.2E-07	0.00	ND	-	1.8E-07	0.00	2.5E-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.

\* "ND" means the sampled data is below measurable limit. Detection limits of 3 nuclides are as follows: I-131: approx. 2E-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 is the result of particulate nuclide analysis in the air.