Nuclide Analysis Results of Radioactive Materials in the Air at the Sites of Fukushima Nuclear Power Stations <1/2>

Reference

(Data Summarized on August 18)

Place of sampling	West Gate of Fukushima Daiichi		MP-1 of Fukushima Daini (Reference)				②Density limit by the announcement of Reactor Regulation (Bq/cm³) (Density limit in the air to which radiation workers
Date and time of sampling	7:00 am to 12 noon August 17, 2011		9:22 am to 9:32 am August 17, 2011				
Detected nuclide (half-life)	①Radioactivity density ^{※1} ^{※3} (Bq/cm ³)	Scaling factor (①/②)	①Radioactivity density ^{※1} ※3 (Bq/cm³)	Scaling factor (①/②)	①Radioactivity density ^{※1} ※3 (Bq/cm³)	Scaling factor (①/②)	breathe in the section 4 of the appendix 2) ^{**2}
I-131 (approx. 8 days)	ND	-	ND	-			1E-03
Cs-134 (approx. 2 years)	ND	-	ND	1			2E-03
Cs-137 (approx. 30 years)	ND	-	ND	-			3E-03

X1 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.

*2 In the case of more than 2 nuclides, summation of scaling factor for each statutory density is compared to 1.

3 In this analysis, "ND" means that the results fall bellow detection limits.

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. 4E-7Bq/cm3, and Cs-137: approx. 4E-7Bq/cm3)

(Particulate: I-131: approx. 8E-8Bq/cm3, Cs-134: approx. 2E-7Bq/cm3, and 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, and Cs-137: approx. 3E-6Bq/cm3)

(Particulate: I-131: approx. 1E-6Bq/cm3, Cs-134: approx. 2E-6Bq/cm3, and Cs-137: approx. 2E-6Bq/cm3)

Nuclide Analysis Results of Radioactive Materials in the Air at the Sites of Fukushima Nuclear Power Stations <2/2>

Reference

(Data Summarized on August 18)

Place of sampling	In front of the environment administration office of Fukushima Daiichi		In front of Water Treatment Building of Fukushima Daiichi		In front of the switching station of Unit 5 and 6 of Fukushima Daiichi		②Density limit by the announcement of Reactor Regulation (Bq/cm³) (Density limit in the air to which radiation workers
Date and time of sampling	11:26 am to 4:26 am August 17, 2011		10:58 am to 3:58 pm August 17, 2011		10:28 am to 3:28 pm August 17, 2011		
Detected nuclide (half-life)	①Radioactivity density ^{※1 ※3} (Bq/cm ³)	Scaling factor (①/②)	①Radioactivity density ^{※1 ※3} (Bq/cm ³)	Scaling factor (①/②)	①Radioactivity density ^{※1 ※3} (Bq/cm ³)	Scaling factor (1)/2)	breathe in the section 4 of the appendix 2) ^{**2}
I-131 (approx. 8 days)	ND	-	ND	-	ND	-	1E-03
Cs-134 (approx. 2 years)	ND	-	7.2E-07	0.00	3.2E-06	0.00	2E-03
Cs-137 (approx. 30 years)	ND	-	6.8E-07	0.00	3.7E-06	0.00	3E-03

X1 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.

*2 In the case of more than 2 nuclides, summation of scaling factor for each statutory density is compared to 1.

X3 In this analysis, "ND" means that the results fall bellow detection limits.

Detection limits are as follows;

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

Particulate: I-131: approx. 2E-7Bq/cm³, approx. Cs-134: approx. 4E-7Bq/cm³, Cs-137: approx. 4E-7Bq/cm³

However, these nuclides are sometimes detected even when they are below the measurable limits, as the limitis differ in detectors or specifications of samples.