Nuclides Analysis Result of the Radioactive Materials in the Air at Fukushima Nuclear Power Stations

Reference

(Data summarized on October 2)

Place of Sampling	The West Gate of Fukushima Daiichi NPS						② Density Limit Specified by the Reactor Regulation (Bq/cm^3) (Density limit in the air which radiation workers breathe in is specified in section 4 of Appendix 2)
Time of Sampling	October 1, 2014 7:00～12:00						
Detected Nuclides (Half-life)	①Density of Sample (Bq/cm^3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm^3)	Scaling Factor (①/②)	①Density of Sample (Bq/cm^3)	Scaling Factor (①/②)	
I-131 (Approx. 8 days)	ND	-					1E-03
Cs-134 (Approx. 2 years)	ND	-					2E-03
Cs-137 (Approx. 30 years)	ND	-					3E-03

* The radioactivity density is the sum of the volatile nuclides density and the particulate nuclides density.

O.OE－O is the same as O.O x 10^{-O}

Data of other nuclides is under examination.

* In the case of 2 nuclides or more, the sum of scaling factors to density limits is compared to 1.

* "ND indicates that the measurement result is below the detection limit value.

The detection limit values are as follows:

Volatile, I-131: Approx. 1E-7Bq/cm^3, Cs-134: Approx. 2E-7Bq/cm^3, Cs-137: Approx. 1E-7Bq/cm^3

Particulate, I-131: Approx. 6E-8Bq/cm^3, Cs-134: Approx. 8E-8Bq/cm^3, Cs-137: Approx. 7E-8Bq/cm^3

As the detection limit value may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit value are detected.

Result of Pu in the Air at Fukushima Daiichi Nuclear Power Station

(Data summarized on October 2, 2014)

1 Results （Unit: Bq/cm^3）

Place of Sampling	Sample type	Date of Sampling	Pu-238	Pu-239+Pu-240
The West Gate of Fukushima Daiichi NPS	Volatile	Apr 14, 2014	N.D. [4.8×10^{-10}]	N.D. [4.0×10^{-10}]
	Particulate		N.D. [4.3×10^{-10}]	N.D. [3.6×10^{-10}]

Fifure in square brackets is detection limit.

2 Analysed by: KAKEN Co.,Ltd

3 Evaluate

Neither Pu-238, Pu-239 nor Pu-240 were not detected.

Dust Nuclides Analysis Result: The West Gate of Fukushima Daiichi Nuclear Power Station (Bq/cm^3)