

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

(Data summarized on May 21)

Place of Sampling	The West Gate of Fukushima Daiichi NPS		MP-1 of Fukushima Daini NPS (Reference)				② Density Limit Specified by the Reactor Regulation (Bq/cm <sup>3</sup> ) (Density limit in the air which radiation workers breathe in is specified in section 4 of Appendix 2)
	Time of Sampling		Time of Sampling				
Detected Nuclides (Half-life)	①Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor (①/②)	①Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor (①/②)	①Density of Sample (Bq/cm <sup>3</sup> )	Scaling Factor (①/②)	
I-131 (Approx. 8 days)	ND	-	ND	-			1E-03
Cs-134 (Approx. 2 years)	ND	-	ND	-			2E-03
Cs-137 (Approx. 30 years)	ND	-	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  $O.O \times 10^{-O}$

Data of other nuclides is under examination.

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

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

The detection limits at the west gate of Fukushima Daiichi NPS are as follows: Volatile: I-131: Approx. 8E-8Bq/cm<sup>3</sup>, Cs-134: Approx.2E-7Bq/cm<sup>3</sup>, Cs-137: Approx.3E-7Bq/cm<sup>3</sup> Particulate: I-131: Approx. 4E-8Bq/cm<sup>3</sup>, Cs-134: Approx.1E-7Bq/cm<sup>3</sup>, Cs-137: Approx.1E-7Bq/cm<sup>3</sup> The detection limits at MP-1 of Fukushima Daini MPS are as follows: Volatile: I-131: Approx. 2E-6Bq/cm<sup>3</sup>, Cs-134: Approx.2E-6Bq/cm<sup>3</sup>, Cs-137: Approx.2E-6Bq/cm<sup>3</sup> Particulate: I-131: Approx. 9E-7Bq/cm<sup>3</sup>, Cs-134: Approx.8E-7Bq/cm<sup>3</sup>, Cs-137: Approx.7E-7Bq/cm<sup>3</sup>

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

### 1. Measurement Result:

(Unit: Bq/cm<sup>3</sup>)

Place of Sampling	Type	Date of Sampling	Pu-238	Pu-239+Pu-240
1F, West Gate	Volatile	Nov 12, 2012	N.D. [ $<1.7 \times 10^{-9}$ ]	N.D. [ $<1.5 \times 10^{-9}$ ]
	Particulate		N.D. [ $<1.5 \times 10^{-9}$ ]	N.D. [ $<1.3 \times 10^{-9}$ ]

[ ] shows below the detection limit.

### 2. Analytical Institution

KAKEN Inc.

### 3. Evaluation:

Pu-238 and Pu-239+Pu-240 were not detected in the sample collected this time.

End

## Analysis Result of Sr in the Air at Fukushima Daiichi Nuclear Power Station

### 1. Measurement Result:

(Unit: Bq/cm<sup>3</sup>)

Place of Sampling	Type	Date of Sampling	Pu-238	Pu-239+Pu-240
1F, West Gate	Volatile	Nov 12, 2012	N.D.	N.D.
	Particulate		N.D.	N.D.

### 2. Analytical Institution

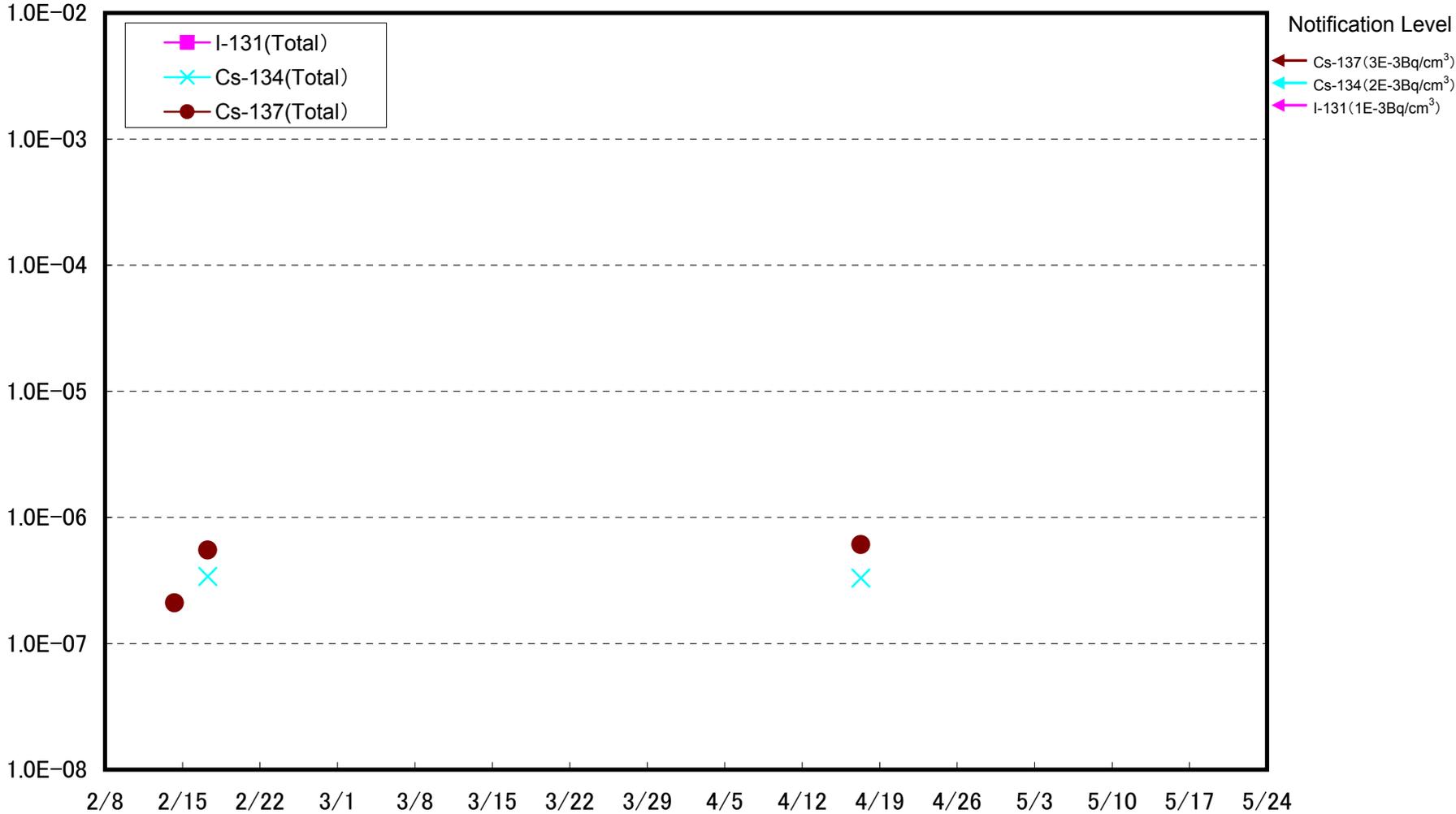
KAKEN Inc.

### 3. Evaluation:

Sr-89 and Sr-90 were not detected in the sample collected this time.

End

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



(Reference) Dust Nuclides Analysis Results of MP-1 at Fukushima Daini NPS (Bq/cm<sup>3</sup>)

