Reference

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

#### (Data summarized on March 19)

Place of Sampling	The West Gate of Daiichi N						② Density Limit Specified by the Reactor Regulation
Time of Sampling	March 18, 2 7:00 AM - 12						(Bq/cm³) (Density limit in the air which radiation workers breathe in
Detected Nuclides (Half-life)	①Density of Sample (Bq/cm³)	Scaling Factor (①/②)	①Density of Sample (Bq/cm³)	Scaling Factor (①/②)	①Density of Sample (Bq/cm³)	Scaling Factor (①/②)	is specified in section 4 of Appendix 2)
I-131 (Approx. 8 days)	ND	-					1E-03
Cs-134 (Approx. 2 years)	ND	1					2E-03
Cs-137 (Approx. 30 years)	ND	-					3E-03

<sup>\*</sup> 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.

The detection limits at the west gate of Fukushima Daiichi NPS are as follows: Volatile: I-131: Approx. 8E-8Bq/cm3, Cs-134: Approx.2E-7Bq/cm3, Cs-137: Approx.2E-7Bq/cm3 Particulate: I-131: Approx. 5E-8Bq/cm3, Cs-134: Approx.9E-8Bq/cm3, Cs-137: Approx.1E-7Bq/cm3 As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

 $<sup>^{\</sup>star}$  In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

<sup>\* &</sup>quot;ND" indicates that the measurement result is below the detection limit.

Reference

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

## (Data summarized on March 19)

Place of Sampling	MP-1 at Fukushima Daiichi NPS		MP-3 at Fukushima Daiichi NPS		MP-8 at Fukushima Daiichi NPS		② Density Limit Specified by the Reactor Regulation (Bq/cm³) (Density limit in the air which radiation workers breathe in
Time of Sampling	March 18, 2014 7:46 AM - 12:46 PM		March 18, 2014 8:20 AM - 1:20 PM		March 18, 2014 8:00 AM - 1:00 PM		
Detected Nuclides (Half-life)	①Density of Sample (Bq/cm³)	Scaling Factor (1)/2)	①Density of Sample (Bq/cm³)	Scaling Factor (1)/2)	①Density of Sample (Bq/cm³)	Scaling Factor (①/②)	is specified in section 4 of Appendix 2)
I-131 (Approx. 8 days)	ND	-	ND	-	ND	1	1E-03
Cs-134 (Approx. 2 years)	ND	-	ND	-	ND	-	2E-03
Cs-137 (Approx. 30 years)	4.0E-08	0.00	ND	-	ND	-	3E-03

<sup>\*</sup> The radioactivity density is the sum of the volatile nuclides density and the particulate nuclides density.

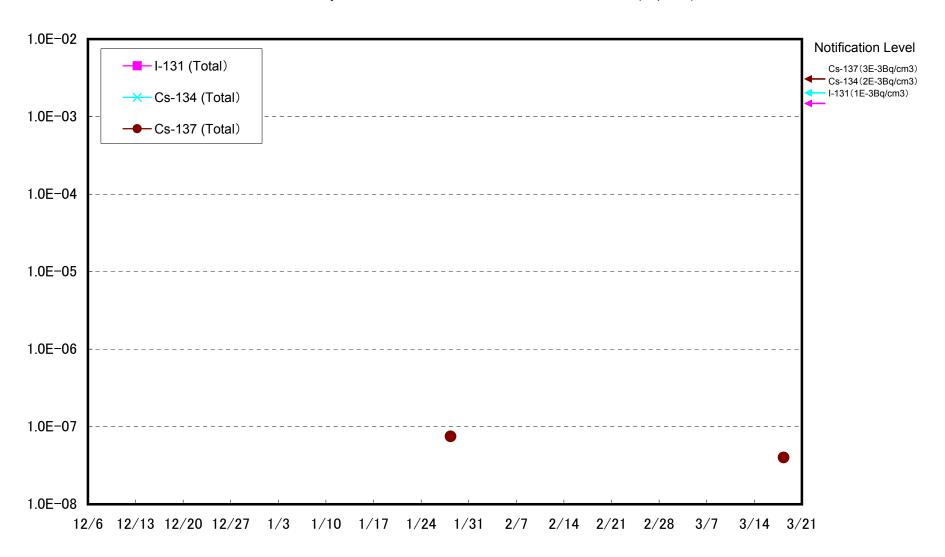
O.OE-O is the same as  $O.O \times 10^{-O}$ 

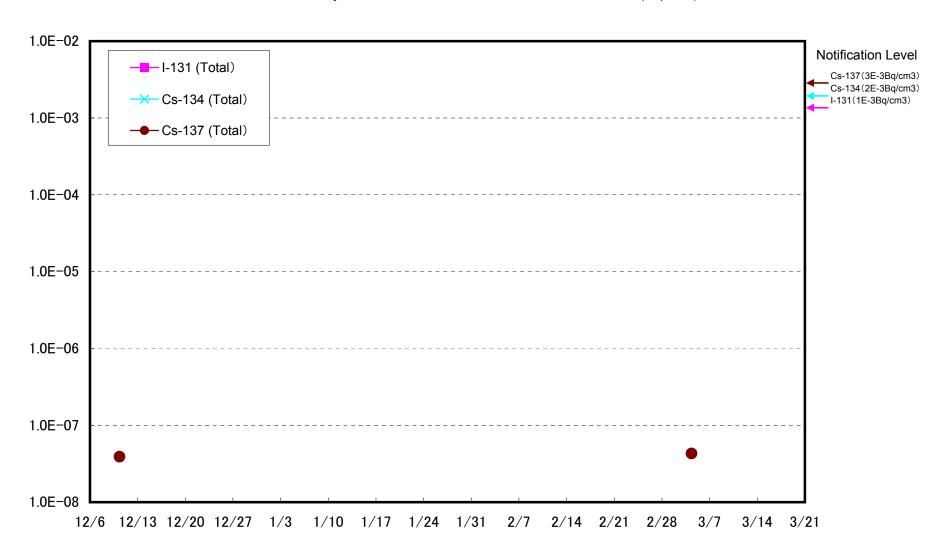
Data of other nuclides is under examination.

The detection limits are as follows. Volatile: I-131: Approx. 5E-8Bq/cm3, Cs-134: Approx.8E-8Bq/cm3, Cs-137: Approx.7E-8Bq/cm3
Particulate: I-131: Approx. 3E-8Bq/cm3, Cs-134: Approx.4E-8Bq/cm3, Cs-137: Approx.4E-8Bq/cm3
As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

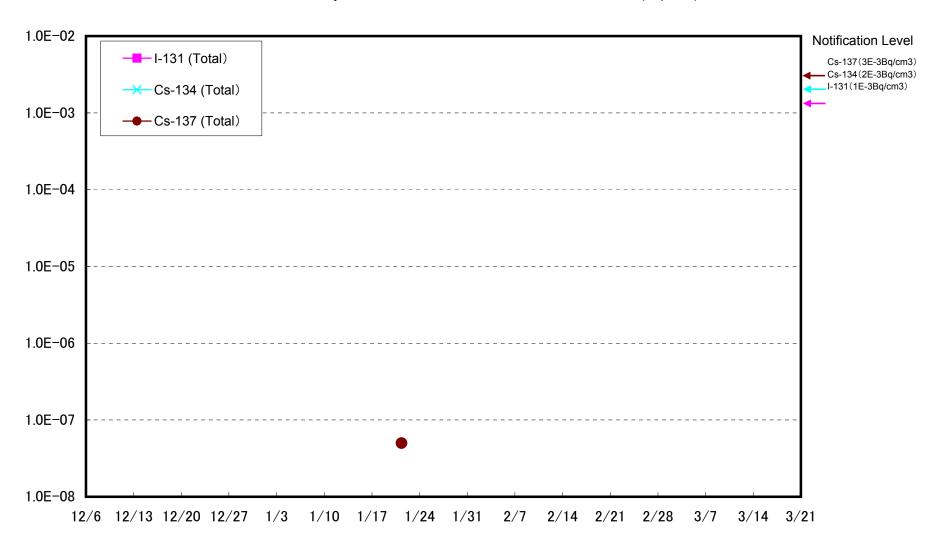
<sup>\*</sup> In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

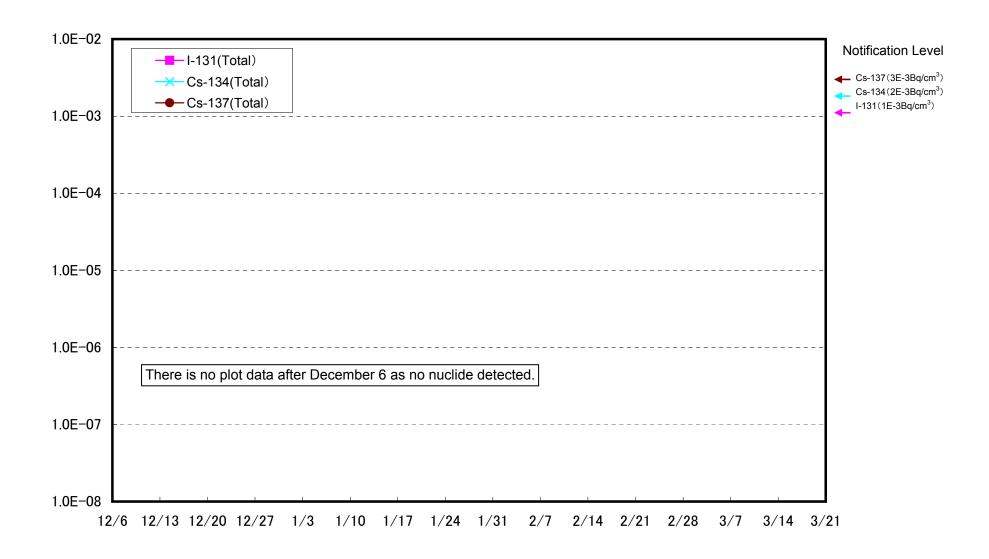
<sup>\* &</sup>quot;ND" indicates that the measurement result is below the detection limit.





# Dust Nuclides Analysis Result: MP-8 at Fukushima Daiichi NPS (Bq/cm³)





# Analysis Result of Pu in the Air at Fukushima Daiichi Nuclear Power Station <1/4>

### 1. Measurement Result:

(Data summarized on March 19)

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

Place of Sampling	Туре	Date of Sampling	Pu-238	Pu-239+Pu-240
1F, West Gate	Volatile	Apr 16, 2013	N.D. [<4.5×10 <sup>-10</sup> ]	N.D. [<4.5×10 <sup>-10</sup> ]
	Particulate	Apr 10, 2013	N.D. [<4.0×10 <sup>-10</sup> ]	N.D. [<4.4×10 <sup>-10</sup> ]

[] 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.

# Analysis Result of Pu in the Air at Fukushima Daiichi Nuclear Power Station <2/4>

### 1. Measurement Result:

(Data summarized on March 19)

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

Place of Sampling	Туре	Date of Sampling	Pu-238	Pu-239+Pu-240
1F, West Gate	Volatile	May 13, 2013	N.D. [<4.4×10 <sup>-10</sup> ]	N.D. [<4.4×10 <sup>-10</sup> ]
	Particulate	May 13, 2013	N.D. [<5.5×10 <sup>-10</sup> ]	N.D. [<5.5×10 <sup>-10</sup> ]

[] 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.

# Analysis Result of Pu in the Air at Fukushima Daiichi Nuclear Power Station <3/4>

### 1. Measurement Result:

(Data summarized on March 19)

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

Place of Sampling	Туре	Date of Sampling	Pu-238	Pu-239+Pu-240
1F, West Gate	Volatile	Jun 10, 2013	N.D. [<3.1×10 <sup>-10</sup> ]	N.D. [<3.4×10 <sup>-10</sup> ]
	Particulate	Juli 10, 2013	N.D. [<4.4×10 <sup>-10</sup> ]	N.D. [<4.4×10 <sup>-10</sup> ]

[] 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.

# Analysis Result of Pu in the Air at Fukushima Daiichi Nuclear Power Station <4/4>

### 1. Measurement Result:

(Data summarized on March 19)

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

Place of Sampling	Туре	Date of Sampling	Pu-238	Pu-239+Pu-240
1F, West Gate	Volatile	Jul 15, 2013	N.D. [<4.3×10 <sup>-10</sup> ]	N.D. [<4.3×10 <sup>-10</sup> ]
	Particulate	Jul 15, 2015	N.D. [<4.0×10 <sup>-10</sup> ]	N.D. [<4.4×10 <sup>-10</sup> ]

[] 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.