#### Nuclide Analysis Results of the Radioactive Materials in the Air at Fukushima Nuclear Power Stations < 1/3 >

#### (Data summarized on January 4)

| Place of Sampling                | The West Gate of Fukushima<br>Daiichi NPS |                             | MP-1 of Fukushima Daini NPS<br>(Reference) |                             |                                   |                             | ② Density Limit Specified by the Reactor Regulation                                |
|----------------------------------|---|-----------------------------|--|-----------------------------|-----------------------------------|-----------------------------|--|
| Time of Sampling                 | January 3,<br>7:00 AM - 12:               |                             | January 3,<br>10:18 AM - 10                |                             |                                   |                             | (Bq/cm <sup>3</sup> ) (Density limit in the air which radiation workers breathe in |
| Detected Nuclides<br>(Half-life) | ①Density of<br>Sample<br>(Bq/cm³)         | Scaling<br>Factor<br>(1)/2) | ①Density of<br>Sample<br>(Bq/cm³)          | Scaling<br>Factor<br>(1)/2) | ①Density of<br>Sample<br>(Bq/cm³) | Scaling<br>Factor<br>(1)/2) | is specified in section 4 of<br>Appendix 2)  |
| I-131<br>(Approx. 8 days)        | ND  | 1                           | ND   | -                           |                                   |                             | 1E-03  |
| Cs-134<br>(Approx. 2 years)      | ND  |                             | ND   | -                           |                                   |                             | 2E-03  |
| Cs-137<br>(Approx. 30 years)     | 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 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.3E-7Bq/cm3 Particulate: I-131: Approx. 5E-8Bq/cm3, Cs-134: Approx.1E-7Bq/cm3, Cs-137: Approx.2E-7Bq/cm3 The detection limits at MP-1 of Fukushima Daini MPS are as follows: Volatile: I-131: Approx. 1E-6Bq/cm3, Cs-134: Approx.1E-6Bq/cm3, Cs-137: Approx.1E-6Bq/cm3, Cs-137: Approx.9E-7Bq/cm3

<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.

Reference

# Nuclide Analysis Results of the Radioactive Materials in the Air at Fukushima Nuclear Power Stations < 2/3 >

(Data summarized on January 4)

| Place of Sampling                | MP-1 at Fukushima Daiichi<br>NPS     |                             | MP-3 at Fukushima Daiichi<br>NPS     |                            | MP-8 at Fukushima Daiichi<br>NPS     |                            | ② Density Limit Specified by the Reactor Regulation (Bq/cm³) (Density limit in the air which radiation workers breathe in |
|----------------------------------|--------------------------------------|-----------------------------|--------------------------------------|----------------------------|--------------------------------------|----------------------------|---|
| Time of Sampling                 | January 3, 2013<br>8:02 AM - 1:02 PM |                             | January 3, 2013<br>8:40 AM - 1:40 PM |                            | January 3, 2013<br>8:28 AM - 1:28 PM |                            |   |
| Detected Nuclides<br>(Half-life) | ①Density of<br>Sample<br>(Bq/cm³)    | Scaling<br>Factor<br>(1)/2) | ①Density of<br>Sample<br>(Bq/cm³)    | Scaling<br>Factor<br>(①/②) | ①Density of<br>Sample<br>(Bq/cm³)    | Scaling<br>Factor<br>(①/②) | is specified in section 4 of Appendix 2)  |
| I-131<br>(Approx. 8 days)        | ND                                   | -                           | ND                                   | -                          | ND                                   | -                          | 1E-03   |
| Cs-134<br>(Approx. 2 years)      | ND                                   | -                           | ND                                   | -                          | ND                                   | -                          | 2E-03   |
| Cs-137<br>(Approx. 30 years)     | ND                                   | -                           | 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. 1E-7Bq/cm3, Cs-134: Approx.2E-7Bq/cm3, Cs-137: Approx.3E-7Bq/cm3
Particulate: I-131: Approx. 6E-8Bq/cm3, Cs-134: Approx.1E-7Bq/cm3, Cs-137: Approx.2E-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> 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 < 3/3 >

### (Data summarized on January 4)

| Place of Sampling                | Unit 1 North Side Slope at<br>Fukushima Daiichi NPS |                             | Unit 1-2 West Side Slope at<br>Fukushima Daiichi NPS |                             | Unit 3-4 West Side Slope at<br>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                 | January 3, 2013<br>7:27 AM - 12:27 PM               |                             | January 3, 2013<br>7:42 AM - 12:42 PM                |                             | January 3, 2013<br>7:37 AM - 12:37 PM                |                            |   |
| Detected Nuclides<br>(Half-life) | ①Density of<br>Sample<br>(Bq/cm³)                   | Scaling<br>Factor<br>(1)/2) | ①Density of<br>Sample<br>(Bq/cm³)                    | Scaling<br>Factor<br>(1)/2) | ①Density of<br>Sample<br>(Bq/cm³)                    | Scaling<br>Factor<br>(①/②) | is specified in section 4 of Appendix 2)  |
| I-131<br>(Approx. 8 days)        | ND  | -                           | ND   | -                           | ND   | -                          | 1E-03   |
| Cs-134<br>(Approx. 2 years)      | ND  | -                           | ND   | -                           | ND   | -                          | 2E-03   |
| Cs-137<br>(Approx. 30 years)     | ND  | -                           | 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. 2E-6Bq/cm3, Cs-134: Approx.3E-6Bq/cm3, Cs-137: Approx.4E-6Bq/cm3
Particulate: I-131: Approx. 7E-7Bq/cm3, Cs-134: Approx.2E-6Bq/cm3, Cs-137: Approx.2E-6Bq/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.

 $<sup>^{\</sup>star}$  "ND" indicates that the measurement result is below the detection limit.

Reference

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

### (Data summarized on January 4)

| Place of Sampling                | Fukushima Daiich<br>Side Area near    |                            |                                   |                            |                                   |                            | ② Density Limit Specified by the Reactor Regulation                                      |
|----------------------------------|---------------------------------------|----------------------------|-----------------------------------|----------------------------|-----------------------------------|----------------------------|--|
| Time of Sampling                 | January 3, 2013<br>7:33 AM - 12:33 PM |                            |                                   |                            |                                   |                            | (Bq/cm <sup>3</sup> )<br>(Density limit in the air which<br>radiation workers breathe in |
| Detected Nuclides<br>(Half-life) | ①Density of<br>Sample<br>(Bq/cm³)     | Scaling<br>Factor<br>(①/②) | ①Density of<br>Sample<br>(Bq/cm³) | Scaling<br>Factor<br>(①/②) | ①Density of<br>Sample<br>(Bq/cm³) | Scaling<br>Factor<br>(①/②) | is specified in section 4 of<br>Appendix 2)  |
| I-131<br>(Approx. 8 days)        | ND                                    | -                          |                                   |                            |                                   |                            | 1E-03  |
| Cs-134<br>(Approx. 2 years)      | ND                                    | -                          |                                   |                            |                                   |                            | 2E-03  |
| Cs-137<br>(Approx. 30 years)     | ND                                    | -                          |                                   |                            |                                   |                            | 3E-03  |

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

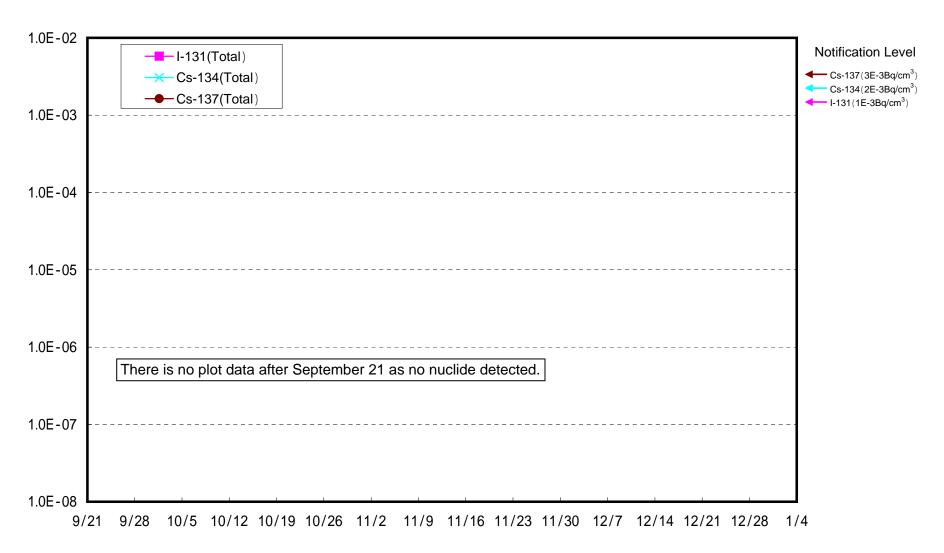
O.OE-O is the same as  $O.O \times 10^{-O}$ 

Data of other nuclides is under examination.

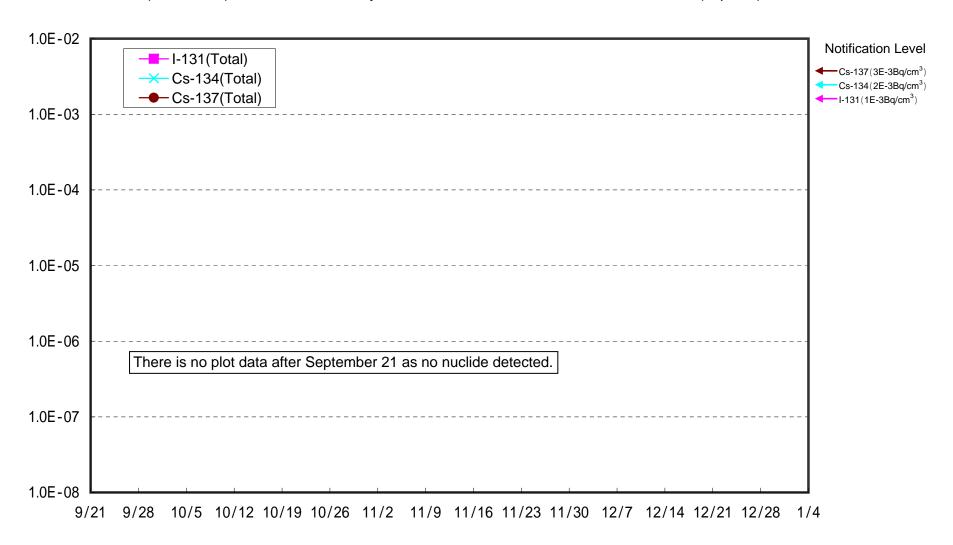
The detection limits are as follows. Volatile: I-131: Approx. 1E-7Bq/cm3, Cs-134: Approx.3E-7Bq/cm3, Cs-137: Approx.3E-7Bq/cm3
Particulate: I-131: Approx. 8E-8Bq/cm3, Cs-134: Approx.2E-7Bq/cm3, Cs-137: Approx.2E-7Bq/cm3
As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.

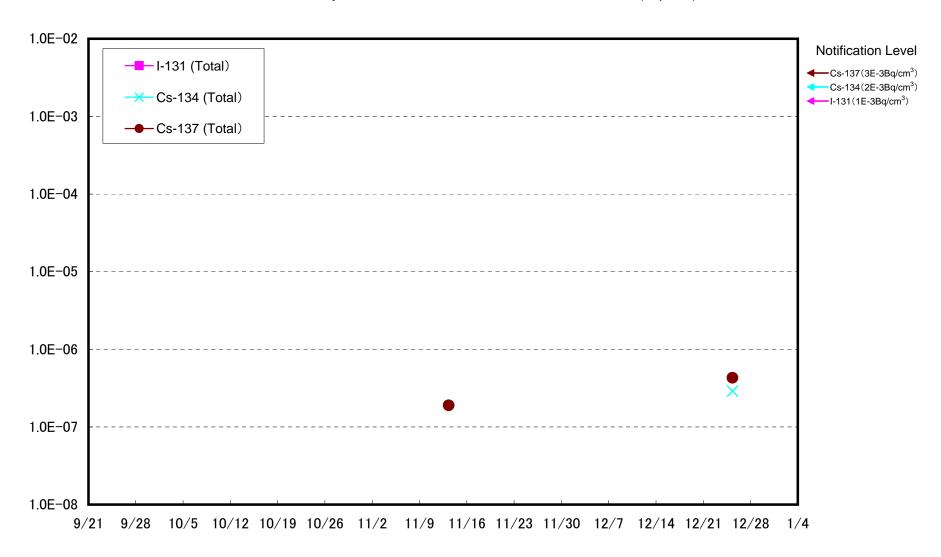
<sup>\*</sup> In the case of more than 2 nuclides, the sum of scaling factors to density limits is compared to 1.

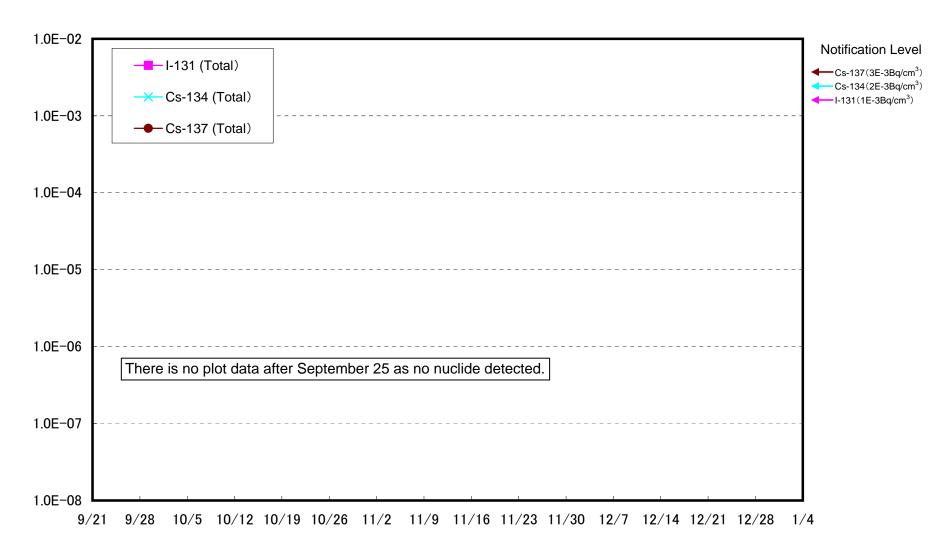
<sup>\* &</sup>quot;ND" indicates that the measurement result is below the detection limit.



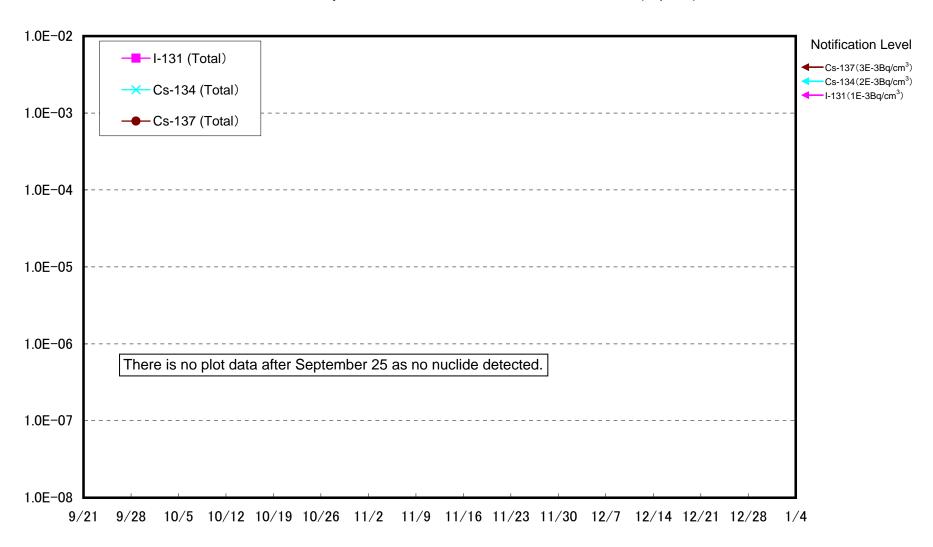
## (Reference) Dust Nuclides Analysis Results of MP-1 at Fukushima Daini NPS (Bq/cm<sup>3</sup>)



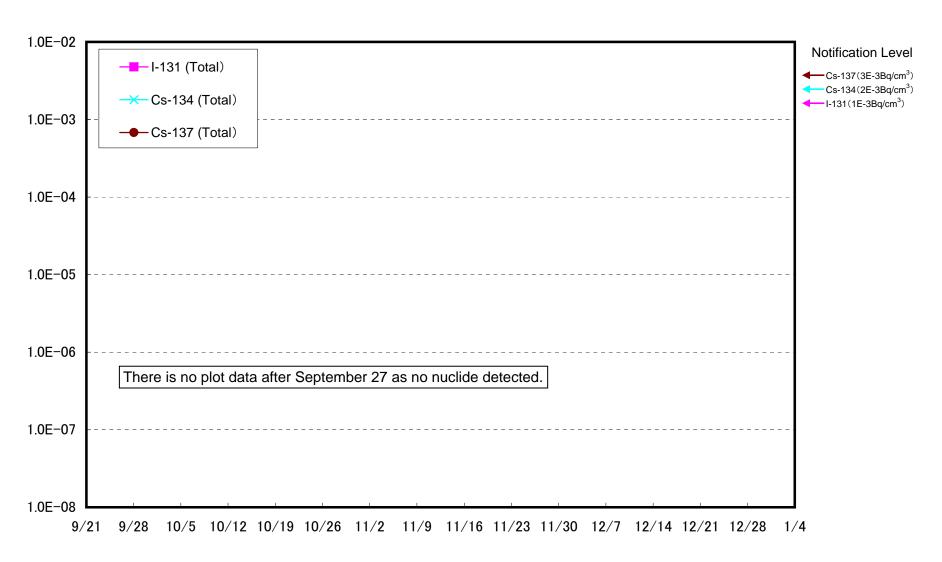


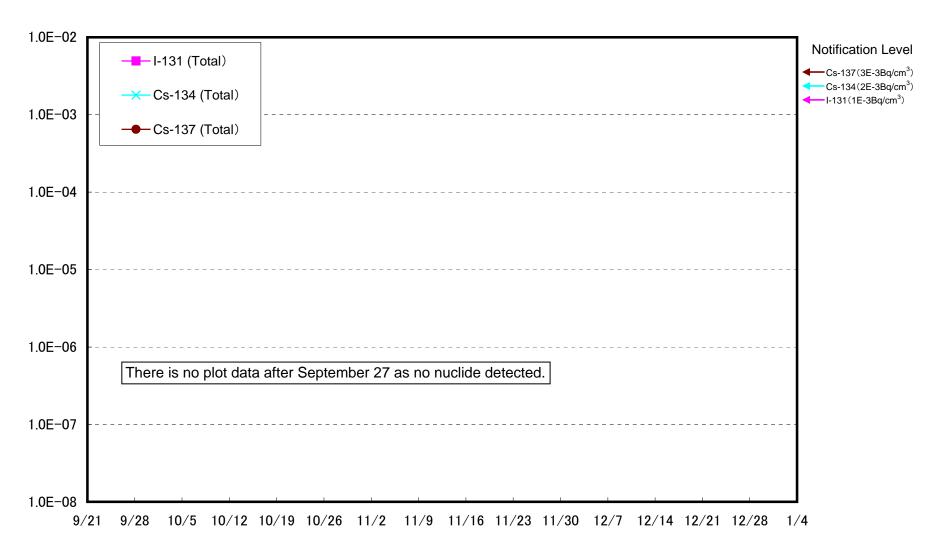


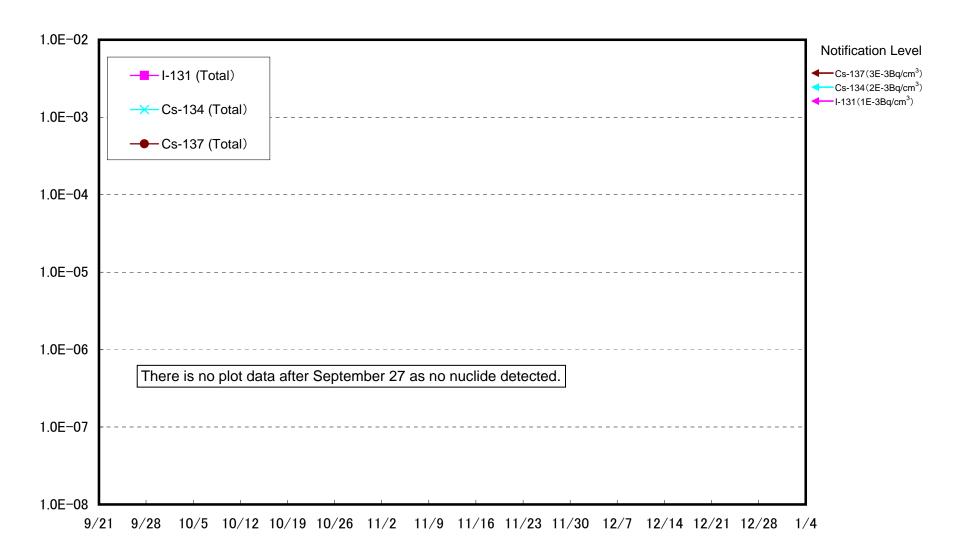
## Dust Nuclides Analysis Result: MP-8 at Fukushima Daiichi NPS (Bq/cm³)



## Dust Nuclides Analysis Results at Unit 1 North Side Slope at Fukushima Daiichi NPS (Bq/cm³)







## Fukushima Daiichi NPS Unit 1-4 Sea Side Results of Dust Nuclides Analysis (Bq/cm<sup>3</sup>)

