

The result of the nuclide analysis of radioactive materials in the air at the site of Fukushima Daiichi Nuclear Power Station

The result of the nuclide analysis of radioactive materials in the air at the site of Fukushima Daiichi Nuclear Power Station is as follows.

**Reference**

1. Conditions of collection and measurement

(Data collected on April 8th)

|                       |                        |   |  |  |
|-----------------------|------------------------|---|--|--|
| Collection of sample  | Place                  | Fukushima Daiichi: west gate  |  |  |
|                       | Date                   | 4/7<br>2:00 ~ 2:20  |  |  |
|                       | Manner of Collection   | Collecting dust by monitoring cars  |  |  |
|                       | Wind direction & speed | WSW 0.6m/s (as of 2:00)   |  |  |
| Measurement of sample | Date                   | 4/7 12:28 ~   |  |  |
|                       | Measuring method       | Brought the sample to Fukushima Daiichi Nuclear Power Station and analyzed it by the nuclide analysis device of Germanium semi-conductor type |  |  |
|                       | Measuring time         | Volatile: 1,000s Particulate: 2,000s  |  |  |

2. Result

|                             | Nuclide | Radioactivity density (Bq/cm <sup>3</sup> ) | Detection limit density (Bq/cm <sup>3</sup> ) | Ratio to density limit in the air ( / ) |  |  |  |  |  | Density limit in the air to workers engaged in tasks associated with radiation (Bq/cm <sup>3</sup> ) |
|-----------------------------|---------|---|---|---|--|--|--|--|--|--|
| Volatile characteristics    | I-131   | 7.8E-04                                     | 6.1E-06                                       | 0.78                                    |  |  |  |  |  | 1E-03  |
|                             | Cs-134  | 7.5E-06                                     | 5.1E-06                                       | 0.00                                    |  |  |  |  |  | 2E-03  |
|                             | Cs-137  | ND  | -   | -                                       |  |  |  |  |  | 3E-03  |
| Particulate characteristics | I-131   | 1.7E-04                                     | 2.8E-06                                       | 0.17                                    |  |  |  |  |  | 1E-03  |
|                             | Cs-134  | 1.5E-04                                     | 2.9E-06                                       | 0.08                                    |  |  |  |  |  | 2E-03  |
|                             | Cs-137  | 1.5E-04                                     | 2.6E-06                                       | 0.05                                    |  |  |  |  |  | 3E-03  |

Statutory density limit to the 3-month average density of radioactive nuclides contained in the air that humans breathe

. E - means . x 10 -

Data of other nuclides are under examination.