

## Result of Sr nuclide analysis in the soil Fukushima Daiichi Nuclear Power Station <1/3>

(Data summarized on June 27)

### 1. Measurement Result:

(Unit : Bq/kg·dry soil)

Place of Sampling The Distance from Unit 1-2 Stacks in parentheses.	Date	Sr-89	Sr-90
(1) Ground (WNW approx. 500m) <sup>*1</sup>	Oct 14, 2013	N.D.	$(2.0 \pm 0.07) \times 10^1$
(2) Yachounomori (W approx. 500m) <sup>*1</sup>		N.D.	$(5.4 \pm 0.11) \times 10^1$
(3) Around industrial waste treatment facility (SSW approx.		N.D.	$(4.7 \pm 0.11) \times 10^1$
The range of the past measurement results (FY1999 - FY2008) <sup>*2</sup>		-	N.D. ~ 4.3

\*1 Sampling was conducted in the area adjacent to the past sampling location to avoid duplication.

\*2 Source "Report on the environmental radioactivity measurement around the Nuclear Power Plant (FY2009)", Committee on the safety technology of Nuclear Power Plants in Fukushima.

### 2. Analytical Institution: KAKEN Inc.

### 3. Evaluation:

The densities of Sr-90 are higher than those of the fallouts observed in Japan after the past atmospheric nuclear tests. Therefore, there is a possibility that the higher densities originate from the accident this time.

End

## Result of Sr nuclide analysis in the soil Fukushima Daiichi Nuclear Power Station <2/3>

(Data summarized on June 27)

### 1. Measurement Result:

(Unit : Bq/kg·dry soil)

Place of Sampling The Distance from Unit 1-2 Stacks in parentheses.	Date	Sr-89	Sr-90
(1) Ground (WNW approx. 500m) <sup>*1</sup>	Nov 11, 2013	N.D.	$(1.5 \pm 0.05) \times 10^1$
(2) Yachounomori (W approx. 500m) <sup>*1</sup>		N.D.	$(8.0 \pm 0.44) \times 10^1$
(3) Around industrial waste treatment facility (SSW approx.		N.D.	$(1.7 \pm 0.029) \times 10^2$
The range of the past measurement results (FY1999 - FY2008) <sup>*2</sup>		-	N.D. ~ 4.3

\*1 Sampling was conducted in the area adjacent to the past sampling location to avoid duplication.

\*2 Source "Report on the environmental radioactivity measurement around the Nuclear Power Plant (FY2009)", Committee on the safety technology of Nuclear Power Plants in Fukushima.

### 2. Analytical Institution: KAKEN Inc.

### 3. Evaluation:

The densities of Sr-90 are higher than those of the fallouts observed in Japan after the past atmospheric nuclear tests. Therefore, there is a possibility that the higher densities originate from the accident this time.

End

## Result of Sr nuclide analysis in the soil Fukushima Daiichi Nuclear Power Station <3/3>

(Data summarized on June 27)

### 1. Measurement Result:

(Unit : Bq/kg·dry soil)

Place of Sampling The Distance from Unit 1-2 Stacks in parentheses.	Date	Sr-89	Sr-90
(1) Ground (WNW approx. 500m) <sup>*1</sup>	Dec 16, 2013	N.D.	$(5.6 \pm 0.13) \times 10^1$
(2) Yachounomori (W approx. 500m) <sup>*1</sup>		N.D.	$(1.0 \pm 0.017) \times 10^2$
(3) Around industrial waste treatment facility (SSW approx.		N.D.	$(3.6 \pm 0.10) \times 10^1$
The range of the past measurement results (FY1999 - FY2008) <sup>*2</sup>		-	N.D. ~ 4.3

\*1 Sampling was conducted in the area adjacent to the past sampling location to avoid duplication.

\*2 Source "Report on the environmental radioactivity measurement around the Nuclear Power Plant (FY2009)", Committee on the safety technology of Nuclear Power Plants in Fukushima.

### 2. Analytical Institution: KAKEN Inc.

### 3. Evaluation:

The densities of Sr-90 are higher than those of the fallouts observed in Japan after the past atmospheric nuclear tests. Therefore, there is a possibility that the higher densities originate from the accident this time.

End

## Result of Pu nuclide analysis in the soil Fukushima Daiichi Nuclear Power Station

(Data summarized on June 27)

### 1. Measurement Result:

(Unit : Bq/kg·dry soil)

Place of Sampling The Distance from Unit 1-2 Stacks in parentheses.	Date	Pu-238	Pu-239+Pu-240
(1) Ground (WNW approx. 500m) <sup>*1</sup>	Jan 13, 2014	$(3.8 \pm 0.86) \times 10^{-2}$	$(2.5 \pm 0.70) \times 10^{-2}$
(2) Yachounomori (W approx. 500m) <sup>*1</sup>		N.D [2.2×10 <sup>-2</sup> ]	$(4.2 \pm 1.0) \times 10^{-2}$
(3) Around industrial waste treatment facility (SSW approx.		N.D [2.4×10 <sup>-2</sup> ]	$(6.4 \pm 1.4) \times 10^{-2}$
Domestic soil (1978 – 2008) <sup>*2</sup>		N.D. ~ 1.5×10 <sup>-1</sup>	N.D. ~ 4.5

[ ] shows below the detection limit.

\*1 Sampling was conducted in the area adjacent to the past sampling location to avoid duplication.

\*2 Source: "Environmental Radiation Database"

(Ministry of Education, Culture, Sports, Science and Technology)

### 2. Analytical Institution: KAKEN Inc.

### 3. Evaluation:

The densities of Pu-238, Pu-239 and Pu-240 detected on January 13, 2014 are the same level as those of the fallouts observed in Japan after the past atmospheric nuclear tests. However, there is a possibility that the higher densities originate from the accident this time, taking the previous analysis results into consideration.

End