

Analysis result of Pu nuclide in the soil at Fukushima Daiichi Nuclear Power Station

Data summarized on December 10, 2014)

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)* ¹	Jul 7, 2014	N. D. [1.4×10^{-2}]	N. D. [1.0×10^{-2}]
(2) Yachounomori (W approx. 500m)* ¹		N. D. [1.8×10^{-2}]	$(1.3 \pm 0.16) \times 10^{-1}$
(3) Around industrial waste treatment facility (SSW approx. 500m)* ¹		N. D. [1.7×10^{-2}]	$(3.3 \pm 0.72) \times 10^{-2}$
Domestic soil (1978 – 2008)* ²		N.D. $\sim 1.5 \times 10^{-1}$	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 co.,Ltd.

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

Analysis result of Sr nuclide in the soil Fukushima Daiichi Nuclear Power Station

(Data summarized on December 10)

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)* ¹	Jul 7, 2014	N. D.	$(4.5 \pm 0.10) \times 10^1$
(2) Yachounomori (W approx. 500m)* ¹		N. D.	$(8.5 \pm 0.15) \times 10^1$
(3) Around industrial waste treatment facility (SSW approx. 500m)* ¹		N. D.	$(6.5 \pm 0.13) \times 10^1$
The range of the past measurement results (FY1999 - FY2008)* ²		-	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 the past atmospheric nuclear tests. Therefore, there is a possibility that the higher densities originate from the accident this time.

End