

Result of Sr nuclide analysis in the soil Fukushima Daiichi Nuclear Power Station <1/2>

Data summarized on October 21, 2014)

1. Results:

(Unit : Bq/kg·Dry Soil)

Place of Sampling The Distance from Unit 1-2 Stacks in	Date of Sampling	Sr-89	Sr-90
(1) Ground (WNW approx. 500m)*1	May 12, 2014	N.D.	$(6.2 \pm 0.10) \times 10^1$
(2) Yachounomori (W approx. 500m)*1	May 12, 2014	N.D.	$(1.5 \pm 0.10) \times 10^1$
(3) Around industrial waste treatment facility (SSW approx. 500m)*1	May 12, 2014	N.D.	$(2.7 \pm 0.10) \times 10^1$
The range of the past measurement results (FY1999 - FY2008)*2		—	ND~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. Analyzed by: KAKEN Co., Ltd

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.

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

Data summarized on October 21, 2014)

1. Results:

(Unit : Bq/kg·Dry Soil)

Place of Sampling The Distance from Unit 1-2 Stacks in	Date of Sampling	Sr-89	Sr-90
(1) Ground (WNW approx. 500m)*1	Jun 11, 2014	N.D.	$(4.0 \pm 0.10) \times 10^1$
(2) Yachounomori (W approx. 500m)*1	Jun 11, 2014	N.D.	$(5.2 \pm 0.10) \times 10^1$
(3) Around industrial waste treatment facility (SSW approx. 500m)*1	Jun 11, 2014	N.D.	$(9.4 \pm 0.10) \times 10^1$
The range of the past measurement results (FY1999 - FY2008)*2		—	ND~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. Analyzed by: KAKEN Co., Ltd

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.

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

Data summarized on October 21, 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}	May 12, 2014	$(5.8 \pm 0.88) \times 10^{-2}$	$(2.7 \pm 0.58) \times 10^{-2}$
(2) Yachounomori (W approx. 500m) ^{*1}		N.D [1.5×10^{-2}]	$(1.9 \pm 0.18) \times 10^{-2}$
(3) Around industrial waste treatment facility (SSW approx.		$(4.4 \pm 0.94) \times 10^{-2}$	N.D [1.7×10^{-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 Inc.

3. Evaluation:

The densities of Pu-238, Pu-239 and Pu-240 detected on May 12, 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.

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