

## Nuclides Analysis Result of the Gamma Rays in the Soil of Fukushima Daiichi NPS<1/3>

1. Results:

(Data summarized on October 17)

(Unit: Bq/kg·Dry Soil)

Place of Sampling		【Fixed Point ①】*1 Ground (Approx. 500m West-Northwest)*2	【Fixed Point ②】*1 Wild Birds' Forest (Approx. 500m West)*2	【Fixed Point ③】*1 Near the Industrial Waste Disposal Facility (Approx. 500m South-Southwest)*2
Date of Sampling		Apr 14, 2014	Apr 23, 2014	Apr 14, 2014
Analyzed by		KAKEN Co.,Ltd	KAKEN Co.,Ltd	KAKEN Co.,Ltd
N u c l i d e s	I-131 (Approx. 8 days)	ND	ND	ND
	I-132 (Approx. 2 hours)	ND	ND	ND
	Cs-134 (Approx. 2 years)	8.6E+03	1.3E+04	4.0E+04
	Cs-136 (Approx. 13 days)	ND	ND	ND
	Cs-137 (Approx. 30 years)	2.7E+04	3.9E+04	1.2E+05
	Sb-125 (Approx. 3 years)	ND	ND	ND
	Te-129m (Approx. 34 days)	ND	ND	ND
	Te-132 (Approx. 78 hours)	ND	ND	ND
	Ba-140 (Approx. 13 days)	ND	ND	ND
	Nb-95 (Approx. 35 days)	ND	ND	ND
	Ru-106 (Approx. 370 days)	ND	ND	ND
	Mo-99 (Approx. 66 hours)	ND	ND	ND
	Tc-99m (Approx. 6 hours)	ND	ND	ND
	La-140 (Approx. 40 hours)	ND	ND	ND
Ag-110m (Approx. 250 day)	ND	ND	ND	

\*1 To avoid the previous sampling ground, sampled from the adjoining area.

\*2 The Distance from Unit 1-2 Stacks

2. Evaluation: The following is the analysis result of  $\gamma$  ray nuclides in the soil measured in Fukushima Prefecture in FY2009.

Radioactive materials of higher density are detected this time supposedly due to the accident.

< Soil Analysis Result Provided by Fukushima Prefecture in FY2009 >

Cs-137: ND - 21Bq/kg, Dry Soil, Others: ND

## Nuclides Analysis Result of the Gamma Rays in the Soil of Fukushima Daiichi NPS<2/3>

1. Results:

(Data summarized on October 17)

(Unit: Bq/kg·Dry Soil)

Place of Sampling		【Fixed Point ①】*1 Ground (Approx. 500m West-Northwest)*2	【Fixed Point ②】*1 Wild Birds' Forest (Approx. 500m West)*2	【Fixed Point ③】*1 Near the Industrial Waste Disposal Facility (Approx. 500m South-Southwest)*2
Date of Sampling		May 12, 2014	May 12, 2014	May 12, 2014
Analyzed by		KAKEN Co.,Ltd	KAKEN Co.,Ltd	KAKEN Co.,Ltd
N u c l i d e s	I-131 (Approx. 8 days)	ND	ND	ND
	I-132 (Approx. 2 hours)	ND	ND	ND
	Cs-134 (Approx. 2 years)	5.2E+04	3.0E+03	1.3E+05
	Cs-136 (Approx. 13 days)	ND	ND	ND
	Cs-137 (Approx. 30 years)	1.6E+05	9.7E+03	4.1E+05
	Sb-125 (Approx. 3 years)	ND	ND	ND
	Te-129m (Approx. 34 days)	ND	ND	ND
	Te-132 (Approx. 78 hours)	ND	ND	ND
	Ba-140 (Approx. 13 days)	ND	ND	ND
	Nb-95 (Approx. 35 days)	ND	ND	ND
	Ru-106 (Approx. 370 days)	ND	ND	ND
	Mo-99 (Approx. 66 hours)	ND	ND	ND
	Tc-99m (Approx. 6 hours)	ND	ND	ND
	La-140 (Approx. 40 hours)	ND	ND	ND
Ag-110m (Approx. 250 day)	ND	ND	ND	

\*1 To avoid the previous sampling ground, sampled from the adjoining area.

\*2 The Distance from Unit 1-2 Stacks

2. Evaluation: The following is the analysis result of  $\gamma$  ray nuclides in the soil measured in Fukushima Prefecture in FY2009.

Radioactive materials of higher density are detected this time supposedly due to the accident.

< Soil Analysis Result Provided by Fukushima Prefecture in FY2009 >

Cs-137: ND - 21Bq/kg, Dry Soil, Others: ND

## Nuclides Analysis Result of the Gamma Rays in the Soil of Fukushima Daiichi NPS<3/3>

1. Results:

(Data summarized on October 17)

(Unit: Bq/kg·Dry Soil)

Place of Sampling		【Fixed Point ①】*1 Ground (Approx. 500m West-Northwest)*2	【Fixed Point ②】*1 Wild Birds' Forest (Approx. 500m West)*2	【Fixed Point ③】*1 Near the Industrial Waste Disposal Facility (Approx. 500m South-Southwest)*2
Date of Sampling		Jun 11, 2014	Jun 11, 2014	Jun 11, 2014
Analyzed by		KAKEN Co.,Ltd	KAKEN Co.,Ltd	KAKEN Co.,Ltd
N u c l i d e s	I-131 (Approx. 8 days)	ND	ND	ND
	I-132 (Approx. 2 hours)	ND	ND	ND
	Cs-134 (Approx. 2 years)	8.7E+03	6.4E+03	6.5E+04
	Cs-136 (Approx. 13 days)	ND	ND	ND
	Cs-137 (Approx. 30 years)	2.8E+04	1.9E+04	2.0E+05
	Sb-125 (Approx. 3 years)	ND	ND	ND
	Te-129m (Approx. 34 days)	ND	ND	ND
	Te-132 (Approx. 78 hours)	ND	ND	ND
	Ba-140 (Approx. 13 days)	ND	ND	ND
	Nb-95 (Approx. 35 days)	ND	ND	ND
	Ru-106 (Approx. 370 days)	ND	ND	ND
	Mo-99 (Approx. 66 hours)	ND	ND	ND
	Tc-99m (Approx. 6 hours)	ND	ND	ND
	La-140 (Approx. 40 hours)	ND	ND	ND
	Ag-110m (Approx. 250 day)	ND	ND	ND

\*1 To avoid the previous sampling ground, sampled from the adjoining area.

\*2 The Distance from Unit 1-2 Stacks

2. Evaluation: The following is the analysis result of  $\gamma$  ray nuclides in the soil measured in Fukushima Prefecture in FY2009.

Radioactive materials of higher density are detected this time supposedly due to the accident.

< Soil Analysis Result Provided by Fukushima Prefecture in FY2009 >

Cs-137: ND - 21Bq/kg, Dry Soil, Others: ND

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

1. Results:

(Data summarized on October 17)

(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	Apr 14, 2014	N.D.	$(3.8 \pm 0.10) \times 10^1$
(2) Yachounomori (W approx. 500m)*1	Apr 23, 2014	N.D.	$(5.0 \pm 0.12) \times 10^1$
(3) Around industrial waste treatment facility (SSW approx. 500m)*1	Apr 14, 2014	N.D.	$(1.2 \pm 0.017) \times 10^2$
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

\*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.